Social, Educational, and Cultural Perspectives of Disabilities in the Global South

Sibonokuhle Ndlovu
University of Johannesburg, South Africa

Phefumula Nyoni
University of Johannesburg, South Africa

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In this chapter, the researcher seeks to challenge the view that Western cultures are the 'givers' and the 'teachers' of disability education while African cultures are the 'takers' and the 'taught'. Firstly, the researcher argues that the displacement of African knowledge systems by colonialist hegemony has to be refuted to prepare the foundation of African disability education. Secondly, the study draws lessons from an African culture, particularly the Shona culture, by using selected proverbs to show how disabled persons are respected in communities, how they are given freedom for innovation, and how they are encouraged to participate in daily activities. Thirdly, the research provides responses to standard objections that are raised against the use of proverbs in drawing out philosophical arguments. Lastly, the researcher argues that disability ethical teachings that are enshrined in Shona cultural thought have the potential for global application.

This chapter focuses on the dynamics surrounding inclusionary practices in Botswana's TVET institutions and how these impact on the experiences of students with disabilities. The chapter draws from interviews conducted for a doctoral study informed by the capability approach. The researcher argues that the nature of institutional support can produce enabling and constraining features within the structure and relations at hand. Support for students in TVET is of importance despite aspects such as inadequate resources and untrained personnel on disability matters. The chapter also focuses on the contradictions that have marked the education of students with disabilities. In particular, academics have different perceptions of inclusion and what constitutes good practices of the appropriate inclusion for students with disabilities. A group of 17 students with mild intellectual disabilities formed part of the participants, and the study used in-depth interviews for data collection.

Motivated by the thinness of gender-disaggregated literature on women and disability, the author discusses the position and condition of such women in Zimbabwe. Literature shows that women with disabilities experience double discrimination as women and as disabled persons. The author argues that women are marginalised from access to resources they need for their upkeep, personal security, and further human advancement. Furthermore, disability feeds on the already existing inequalities in society to produce heightened exclusion for them. Women face physical, attitudinal, and environmental barriers; live in poverty; and lack opportunities for gaining an education, finding employment, forming meaningful social ties, and participating meaningfully in their families and communities. This chapter makes calls for committed efforts towards a transition to an inclusive society, one that includes persons with disabilities in every facet of life.

After several years of appeals for the protection of persons with disabilities from discrimination in Nigeria, the federal government of Nigeria in early 2019 passed into law the Discrimination against Persons with Disabilities (Prohibition) Act 2018. While this is considered a welcome development, it remains to be ascertained whether the government has the political will to implement the act. This chapter examines the provisions of the Anti-Disability Disability Discrimination Law in Nigeria. The aim here is to consider how the law can be employed to better the lives of persons with disabilities in areas including but not limited to access to justice, employment, healthcare, education, and transportation. The methodology adopted for the study is a doctrinal review of the law and literature on disability rights, the plight of persons with disabilities, and the effect of the recently passed Act of 2018. The chapter concludes with recommendations.

This chapter critically engages relevant literature on the trajectories of disability inclusion in Technical Vocational Education and Training Centres (TVET) education and training systems. It challenges dominant epistemologies in critical disability studies that have been traditionally fore-grounded, imagined, and constructed within Westernized philosophical paradigms. For centuries, it has been difficult to re-imagine alternative forms of knowledge of impairment, disability, and debility from the subaltern standpoint. The author seeks to highlight the uneven ways through which knowledge systems on Disability Inclusion in Higher Education Institutions (HEIs) oscillates between the so-called problematic dichotomies of the global North and Global South. This is achieved by critically weighing in the contribution and impact of legislation, policies, and newer perspectives on the Scholarship of Learning (SoL) from the global North that influences critical pedagogies on disability inclusion in TVET colleges in the Southern African context.

This chapter focuses on the training needs of teachers teaching children with autism in special schools in South Africa. It outlines the type of training, competencies, and perceptions of teachers teaching children with autism in special schools. A qualitative phenomenology multiple case study methodology was used. In-depth semi-structured interviews, observations, and field notes were conducted with eight teachers from four different schools in Gauteng Province. The study showed that the training received by teachers assisted them with a general overview of autism and how to use various strategies to teach children with autism. Evidence showed that there was a lack of additional training and monitoring of the training provided in some instances. It highlighted teachers' preferences on the sources of training with private providers being preferred over the training received by The Gauteng Department of Education due to reasons that include perceptions of expertise and training procedures.

The chapter explores the diverse interpretations related to the learning of mathematics for learners at lower grade levels. At the core of understanding the dynamics of teaching and assessment of mathematics tasks for lower grade learners lie the general perceptions on the subject and how these have shaped educator and learner approaches to the subject as well as associated nuances of cognitive development. The chapter also explores how educators deal with inclusivity in the context of the curriculum and cognitive capabilities of learners in teaching and assessment. Different interpretations to assessments are also explored. A different approach to assessment that locates learners on a continuum of current proficiency is advocated. A flexible teaching philosophy is proposed which rather than cut the class into a pass/fail dichotomy, acknowledges each learner's right to progress in particular through the use of targeted teaching for challenged learners.

This chapter presents a qualitative investigation of the challenges of common disabilities and their management among learners with disabilities in inclusive primary schools in Busitema Subcounty, Busia District, Uganda. Data collection involved key informant interviews and focus group discussions with a purposive sample of 85 informants including head teachers, teachers, and learners. Thematic content analysis was used to analyze the data. Findings revealed that the main challenges facing the learners were school-based, psychosocial, socioeconomic, socio-cultural, and policy related. Strategies to overcome the challenges were suggested. The authors recommend strict adherence to SNE policy guidelines during the implementation of these strategies.

Disability and sport have received so much recognition basing on the number of declarations, charters, treaties, and policies crafted on the rights of people with disabilities throughout the world. These individuals with disabilities need to be empowered to overcome barriers and constraints that may affect their participation in sport in mainstream schools. This chapter briefly looks at the background of disability sport, concept of disability and sport, definition of sport and disability. The chapter will also look at among other issues, strategies for including learners with disabilities in sport. Other key issues to be highlighted include disability participation in sport, challenges faced by learners with disabilities in mainstream sport, benefits of sports for children with disabilities, barriers to participation in mainstream sport. The chapter concludes by looking at perceptions of teachers and learners on children with disabilities in sport.

This chapter discusses how the normative practices and structures 'disables' students with disabilities in their learning in the context of the South African higher education. Empirically, examples from the students' lived experienced have been drawn from the previous study that has been conducted in one institution of higher education, which is a privileged space, by virtue of being formerly advantaged. Data combines available literature on normativity and disablement of students with disabilities and empirical data, which were collected through interviews with students with disabilities studying specific professional degrees. Decolonial theory informed deeper understanding of the cause of normative assumptions and consequently disablement of students with disabilities. Literature and lived experiences of students with disabilities reveal that despite efforts of disruption normativity and disablement have continued to be reproduced at different levels because systems of domination are so durable and inventive.

This chapter draws on the author's own experiences as a student and educator to provide another perspective of inclusive education in Cameroon. It is a call to attention to the day to day challenges that students with disabilities face in acquiring education in inclusive settings in the country. It may suffice for policy to state that education for persons with disabilities is best provided in inclusive environments based on their perceived advantages. However, an on-the-spot appreciation of the experiences of those in the field may reveal alternative results. This may be due to the milieu, the ignorance or negligence of those put as caregivers, and the non/poor implementation of policy. The author argues that while a significant volume of research is available in the country, presenting these experiences through a living theory methodology brings the reader closer to the personal experiences of students with disabilities and persons working with them. It further highlights issues which are often taken for granted when mainstream methodologies are adopted.

This chapter focuses on the experiences of academics with disability within a Zimbabwean university context. Transforming universities under the Education 5.0 policy in Zimbabwe despite its good intentions has revealed some of the unresolved challenges. This chapter reveals how transformation practices especially with increase in technology use have presented opportunities and challenges for disabled sections of academic society within university spaces. The chapter also highlights how academics with disabilities face and how they ultimately negotiate their way within diverse structures that act as enablers on the one hand whilst being equally a source of barriers on the other. In-depth interviews, observations, and literature are used. The chapter concludes by highlighting how the importance of being conscious to contextual factors and embracing day to day experiences could represent opportunities for broadening access to technology and subsequent inclusion of academics with disability whilst also aiding transformation of universities and the broader Zimbabwean society.

This chapter addresses the problem of literacy and technology for rural impoverished and deprived children in Zimbabwe. While technological innovation is understood as the Western concept, too far-fetched for poor countries in the Global South, this chapter argues that poor disadvantaged countries have their own innovation and technology that befits its context and needs. Decolonial theory is used to analyse a unique programme that has been able to improve literacy and technology levels of rural and impoverished children of Zimbabwe. The finding is that despite remoteness and poverty, a unique kind of innovation and technology is possible to enhance literacy in disadvantaged contexts in the Global South when the locally available resources are mobilised in a scientific way. The chapter hopes to help the understanding that advanced technological innovation is not only a Western concept, but also the South.

This chapter focuses on the relational nature of disability especially with respect to experiences of disabled students with access to assistive technologies particularly within the context of the fourth IR. The chapter presents a background on various interpretations relating to disability and implications to identities within an academic context. The chapter also highlights the various experiences by students in diverse university spaces. Using informal interviews and observations, the chapter explores the nature of the identities of disability, how individuals negotiate the experiences in the diverse spaces of interaction with other beings or technology. Focus is also on relations created as disabled students interact with non-disabled students and lecturers in diverse situations. Conceptually, the chapter draws from the social model on disability in which disability is viewed as a socially constructed phenomenon. In addition, Foucauldian analysis of disability is used to explore notions of how disabled students experience power as thy deal with day to day academic obligations.

Dennis Zami Atibuni, University of Johannesburg, South Africa

The onslaught of the fourth industrial revolution (4IR) requires employees to have a more complex combination of skills—the 21st century skills—than in the past. The corporate world expects employees to amass these skills from the education system, especially through acquisition of postgraduate qualifications. However, acquiring these skills presents challenges to the students as institutions rarely offer these skills at that level. Low competence in these skills, coupled with work-life imbalance, hampers research engagement and hence progress and completion among postgraduate students. In essence, a lack of the 4IR skills is a disabling reality for postgraduate research students. This chapter presents a desk-based conceptual review of the disabling effects of work-life imbalance and inadequate 4IR skills on postgraduate students' research engagement and general academic progress. Implications for policy and practice include routine provision of hands-on experiences on the 21st century research skills and work-life balance in order to step up their research progress.

Emnet Tadesse Woldegiorgis, University of Johannesburg, South Africa

Several studies address the notion of inclusive higher education from the perspective of access questioning who participates, where, and how in the sense of equity, raising issues of enrolment of disadvantaged groups. This chapter approaches the concept of inclusion in the Ethiopian higher education system from an epistemic access perspective. The argument is that discussions on access to higher education for disadvantaged groups should go beyond mere physical access and should be conceptualized in a manner that reflects educational outcomes and post-enrollment experiences. This chapter aims at exploring the notion of inclusive higher education and epistemic access to students with disabilities in Ethiopian public universities. The study is based on in-depth interviews of 25 students with disabilities from five Ethiopian public universities. The chapter argues that the higher education system in Ethiopia should re-approach the notion of access and take a proactive measure to ensure epistemic access to students with disabilities.

Collin Nyabadza, Collin Nyabadza Children's Voice, Canada
Sibonokuhle Ndlovu, University of Johannesburg, South Africa

This chapter presents the support provided by the countries in the West to the underprivileged schools in Zimbabwe, through a non-profit organisation. Theoretical concepts drawn from decolonial theory, Ubuntu philosophy, and social model of disability were used to analyse the kind of support provided by the West to the South, and the activities of the organisation in disadvantaged schools and communities in rural Zimbabwe. Data were collected by scanning the organisation's website, newsletters, published material, and resources on the organisation, including journal articles and books on literature on the specific theoretical concepts. The argument for this chapter is that though it has been conceived that the West through coloniality oppresses the South, there are humanitarian lessons, both the South and West can learn from each other, which can improve both worlds educationally, socially, and culturally.

Preface

The book has two major themes under which different topics fall. The first broad theme mainly focuses on the social and cultural perspectives of disability in the Global South, and in Africa, more specifically. This is because historically, issues of disability have been, firstly presented by persons without disabilities, who spoke for those with lived experiences of disability. Secondly, the social and cultural experience of disability has been written from the perspective of the West: by scholars who were writing the African experience of disability from their own context. Thus, for some time in the past, knowledge production on disability largely and the social and cultural experience, has been produced from the Western perspective. The result of this misrepresentation has presently attracted a lot of attention, debate, and contestations on the social and cultural perspective of disability. It is from this departure that the chapters on social and cultural perspective of disability are a vital component of this book.

The second major theme on the educational perspective of disability presents critical reflections and analyses of educational issues in the light of disability in the Global South. Chapters aligned with the particular theme, present a historical narrative of disability and education in the way of moments, the waves, and events on how education and disability have evolved. Social and cultural understanding of disability at the different times was a factor in informing the narrative of education in the context of disability in different times in history in the Global South. Thus, besides aligning with the major two themes of the book, all chapters are interactive in context, content, and scope, thereby strengthening understanding of disability, socially, culturally and educationally, from the bigger picture of the Global South perspective. The Global South perspective, and focus in its respect is important in the context of disability because truths that have never been told, emerge, whilst also myths that have clouded minds, are clarified. It is in this respect, that all book chapters present critical reflections, analysis, and discussions of different subjects surrounding disability from experiential, philosophical, and epistemological angles. Topics on the Fourth Industrial Revolution, autism, disability scholarship, feminist theory, special education, inclusive education, learners and students with disabilities, at schooling and higher education level, and work-life balance, provide a wide spectrum from which the social, cultural and educational issues in the context of disability could be understood.

Social and cultural practices in the Global South can be understood within different lenses that include the African philosophy of Ubuntu or Botho, which has become an important foundation for justice seeking individuals and communities in Education and the broader society. It is thus important to have scholars from the global South, and Africa in particular who have drawn from Ubuntu to challenge the view that Western cultures are the 'givers' and the 'teachers', of disability education while African cultures are the 'takers' and the 'taught' (See Gwaravanda in Chapter 1). The author's key assertion that the displacement of African knowledge systems by colonialist hegemony must be refuted to prepare the

foundation of African disability education has brought afore the view that lessons can be drawn from an African culture, particularly the Shona culture, through the use selected proverbs to express the respect afforded to disabled persons in their communities. From such a perspective, we get to understand the spaces disabled persons occupy in education institutions and broader society together with the associated freedoms for innovation as well as how they get encouraged to participate in daily activities.

In a related case the case of how the concept of Botho is being applied within an education institutional setting it has been highlighted how, the concept of inclusivity has historically been embedded in the Tswana philosophy (Phasha, 2016). This argument has been extended to show how through Botho, calls have been made for Botswana society to accept all people without judgment (See Mosalagae in chapter 2). An application of Botho within an education context has been said to imply extending opportunities to all students in order to attain social and educational inclusion. The author thus exposes some of the experiences of students with disabilities in the TVET institutions and how the experiences have shaped notions of inclusion for the students. The approach that links society and institutional practices and perceptions is important as it shows how experiences of disability within educational institutions tend to be mediated by what happens in the broader society. This approach thus enables us to understand how the institutional culture and practices as well as the practices of students and academics tend to be influenced by societal practices. It is within such a societal vs institutional context that the contributions by the scholars can be said to resonate with view by Gwaravanda who proposes that the Global North and the South should meet on the common ground for sharing power and knowledge. Subsequently the author argues that disability ethical teachings, which are enshrined in local cultural thought, have potential for global application through the ethics of Ubuntu, which cuts across cultures in Sub-Saharan Africa and to some extent beyond Africa. Thus, the social, cultural and education perspective of disability can also be shared from the Global South as much as they have historically been shared from the North.

At the heart of the African philosophy of Ubuntu, especially when it comes to understanding the experiences of marginalised groups such as women and children is the question of gender. So bad have been the experiences of women such that some African writers have presented the issue as a gender crisis. Chapter 3 by Choguya thus becomes important in discussing the position and condition of women with disabilities albeit from a Zimbabwean context. Taking cue from chapters 1 and 2 the chapter highlights how disability feeds on the already existing inequalities in society to produce heightened exclusion for women in public institutions be it educational or work related spaces. From the social and cultural context of African societies in general, women are marginalised from access to resources they need for their upkeep, personal security, and further human advancement. The author chronicles the physical, attitudinal, and environmental barriers, poverty and lack of opportunities for gaining an education, finding employment, forming meaningful social ties and participating meaningfully in their families and communities as some of the key challenges women face. The key argument presented therefore is that women with disabilities experience double discrimination as women and as disabled persons. This chapter makes a call for committed efforts towards a transition to an inclusive society, in which all persons with disabilities, including women are included, socially, culturally and educationally and in every facet of life.

The legislative and policy dimension on disability in particular with respect to the South is one of the essential aspects in understanding the subject. Whilst legislative and policy measures have historically been associated with countries in the North, there is no doubt that countries in the South are also stepping up and enacting legislation aimed at enhancing the inclusion of persons with disabilities in society and education institutions. This is despite the marked disjuncture between policy or legislation and practice where experiences of exclusion have continued despite existing pieces of legislation that have remained

limited to paper. Through a focus that is mainly grounded on the resultant legislative interventions in Nigeria, Arimoro in chapter 4, examines the provisions of the Anti-Disability Discrimination Law in Nigeria, to assess government legislative interventions in implementing the Act since the period of early 2019 when it passed the Discrimination against Persons with Disabilities (Prohibition) Act 2018 into Law. Focus is on how the law has been employed, to better the lives of persons with disabilities socially, culturally and educationally. Areas of focus including though not being limited to, access to justice, employment, health care, education, and transportation.

Equally important is the focus by Muzite, who in chapter 5 presents a comparative approach on the state of disability inclusion legislation and policies within TVET institutions. In this regard, the author critically compares the contribution and impact of legislation, policies and the newer perspectives on the Scholarship of Learning (SoL) from the global North, to influence critical pedagogies on disability inclusion in TVET colleges in the Southern African context. This is done bearing in mind that the Global North has frequently been found to be more effective in terms of implementing legislation for the inclusion of persons with disabilities compared to the South. This view becomes key in highlighting the uneven ways through which knowledge systems on Disability Inclusion in Higher Education Institutions (HEIs) oscillates between the so-called problematic dichotomies of the global North and Global South. It is within such a critical engagement, that the alternative forms of knowledge of impairment, disability, and debility from the subaltern standpoint, for the social, cultural, and educational development can be equally reimagined from the Global South as well.

Diverse educational perspectives on disability constitute an important dimension of understanding issues of disability. In essence special and inclusive education in education institutions has increasingly become an important issue as countries in the global South have moved to address issues faced by learners even at lower levels of the education system as this usually feeds onto the tertiary levels as well as society in general. The dynamics surrounding training needs for teachers teaching children with autism in special school contexts are thus presented by Ameen, in chapter 6 who has argued that while there is a widespread proposition that all learners can be taught together in mainstream settings, other disabilities such as autism still require special education especially if autistic learners are to fully benefit educationally. With a focus grounded on special schools in South Africa, the chapter presents evidence showing that the educational context in this country still suffers from a lack of additional training and monitoring of the training provided to educators. The type of training, competencies, and perceptions of teachers' preferences on private training providers due to their alleged better competencies is presented. This is despite the training approaches of the private providers of training drawing from western educational philosophies that tend to be out of context in the South African context. Despite some competency limitations among some educators found in special schools such as those dealing with autistic learners, it can be argued that training received by the educators can go a long way towards assisting them with a general knowledge of autism, and how they can draw from diverse pedagogical strategies to teach children with autism. Thus, though the wave of special education may be contested, it can assist learners with disabilities such as autism to also access education, hence the social and cultural development.

It can also be noted that enhancing inclusivity among lower grade learners can, by no means be said to be limited to physical or psychological limitations of learners, but cognitive dynamics among the learners especially those in lower grades. Cognitive nuances and their influence in the learning of the learners in particular when it comes to subjects such as mathematics can be central towards understanding inclusivity at such levels. In exploring emergent dynamics of inclusivity in teaching and assessing mathematics for lower grade learners, Long and Nyoni in chapter 7 present diverse interpretations

related to the learning of mathematics for learners at lower grade levels. At the core of understanding, the dynamics of teaching and assessment of mathematics tasks for lower grade learners lie the general perceptions on the subject and how these have shaped educator and learner approaches to the subject as well as associated nuances of cognitive development. The chapter also explores how educators deal with inclusivity in the context of the curriculum and cognitive capabilities of learners in teaching and assessment. Different interpretations to assessments are also explored. A different approach to assessment that locates learners on a continuum of current proficiency is advocated. A flexible teaching philosophy is proposed which rather than cut the class into a pass/fail dichotomy, acknowledges each learner's right to progress in particular through the use of targeted teaching for challenged learners.

An issue closely related to cognitive elements in understanding inclusion among lower grade learners relates to challenges that are usually encountered when managing disabilities among exceptional learners in inclusive primary schools. Using a case that draws from a qualitative study of primary schools in Busia District, Uganda. Basara, Atibuni and Andama in chapter 8 outline some of the key challenges faced in managing common disabilities among learners with disabilities in inclusive primary schools. Whilst encouraging strict adherence to policy guidelines they also reveal main challenges faced by the learners that include school-based, psychosocial, socioeconomic, socio-cultural, and policy issues. Moments of inclusion in schools ought to be explored beyond the classroom environment as it can be reflected in some extra curricula activities such as sports. Mudyahoto and Gondo in chapter 9, thus argue that there exists a symbiotic relationship between schooling experiences and sports. It can be argued that disability and sport are increasingly receiving much recognition especially looking at the number of declarations, charters, treaties and policies crafted on the rights of people with disabilities throughout the world. A central view is that individuals with disabilities need to be empowered to overcome barriers and constraints that may affect their participation in sport in mainstream schools. Key to the arguments are the issues such as the conceptualisation and background of disability and sport. It is thus critical to understand some of the issues, and strategies for including learners with disabilities in sport together with related challenges. In this regard, perceptions of teachers and learners on the inclusion of children with disabilities in sport can become an important barometer to understand broader inclusion issues of these learners in the classroom and in society in general.

Questions of inclusion cannot be fully answered without engaging with some moments of exclusion in the education of students with disabilities in particular in higher education contexts. In this case issues of disablement of students with disabilities in South African higher education through normativity are explored by Ndlovu in chapter 10 who argues that the exclusion of students with disabilities in higher education results from what can be conceived as 'invisible coloniality'. In this case, processes, social and physical structures, and related practices in higher education are said to have been designed and organised around the normative, and consequently excluding those in the margins, hence disabling them in the process. The moment of exclusion expressed in the chapter has its roots in the social, cultural, and educational perspective of disability, in which students with disabilities are seen as intellectually incapable an assertion that has historically been associated with western anchored ethnocentric forms of understanding ability. This chapter draws from experiences in the South African higher education context, where despite having the most comprehensive policies of inclusion in the whole of Africa; exclusion remains reflective of deeper issues of the gap between policy and practice in higher education. This remains a trend in different countries in Africa and the broader Global South context.

Whilst a focus on exclusion has remained important in laying a foundation for an understanding of what inclusion entails, moments of inclusion of students with disabilities in higher education becomes

an essential subject in particular within the African context. In this regard, Ndille in chapter 11 draws on personal experiences as a student and educator to provide another perspective of inclusive education in Cameroon. The chapter represents a call to attention to the day-to-day challenges that students with disabilities face in acquiring education in inclusive settings in the country. Whilst it may suffice to state that from a policy perspective, education for persons with disabilities is best provided in inclusive environments based on their perceived advantages, an on-the-spot appreciation of the experiences of those in the field may reveal marked contradictions between policy and practice. This may be due to diverse factors that include the milieu, the ignorance, or negligence of those responsible for policy implementation. An experienced based approach assist in engaging with the usually taken for granted features of inclusion.

Of late, the higher education in Africa and the broader global south has increasingly featured technology use in both teaching and learning. It is from this angle that Marazi and Nyoni in chapter 12 have presented important reflections on technology use among academics with disabilities within a transforming university. With a focus on the experiences of academics with disability within a Zimbabwean university context, the authors argue that transforming universities under the Education 5.0 policy in Zimbabwe despite its good intentions has revealed some of the unresolved challenges. The chapter reveals how transformation practices especially with increase in technology use have presented opportunities and challenges for disabled sections of academic society within university spaces. The chapter also highlights how academics with disabilities face and how they ultimately negotiate their way within diverse structures that act as enablers on the one hand whilst being equally a source of barriers on the other. The focus on the chapter broadly represents an important initiative towards understanding how transformation oriented initiatives in the global south have failed mainly due to weak implementation foundations despite policy.

To further understand technology use in particular in the Global South, there is need to understand some of the realities associated with literacy programmes among poor communities. This relates to low resource communities in both urban and rural areas. As argued by Moyo and Ndlovu through focus on Zimbabwe's rural areas in chapter 13, the existence of the problem of literacy and technology for rural impoverished and deprived children need not be downplayed. While technology is understood as the Western concept, too far-fetched for poor countries in the Global South, this chapter argues that technology is not all about advanced technologies from the West as poor disadvantaged countries have their own technology that befits its context and needs. Decolonial theory is used to analyse a unique programme that has been able to improve literacy and technology levels of rural and impoverished children of Zimbabwe. It can thus be argued that despite remoteness and poverty, a unique kind of 'technological innovation' is possible to enhance literacy in disadvantaged contexts in the global South when the locally available resources are mobilised in a scientific way. This becomes an important foundation in challenging and transforming the mentality that technology is a Western concept and external technologies imported from western contexts is a panacea to teaching and learning advancements in the global south.

At the heart of technological innovations in higher education spaces has been the diverse waves of what has come to be commonly viewed as the Fourth Industrial Revolution. It is therefore important to understand the various dynamics of disability for South African university students in a fourth industrial revolution context. The relational nature of disability especially with respect to experiences of disabled students with access to assistive technologies particularly within the context of the fourth IR becomes essential to explore. In chapter 14, Nyoni thus presents a background on various interpretations relating to disability and implications to identities within an academic context. Furthermore, the chapter explores relations created as disabled students interact with non-disabled students and lecturers in diverse situa-

tions. In addition, issues how disabled students experience power as thy deal with day-to-day academic obligations are explored. Such a focus on the influences of power is crucial not only in the local context but within the Global South and beyond were power influences cannot be ignored in shaping relations among different individuals and groups especially where persons with disability are concerned.

Technological advancements within a Fourth Industrial Revolution context are said to have influence beyond the learning environment as it extends to the work place. Atibuni in chapter 15 argues that the onslaught of the fourth industrial revolution (4IR) requires employees to have a more complex combination of skills – the 21st century skills – than in the past. The corporate world thus expects employees to amass the much-needed skills from the education system, especially through acquisition of postgraduate qualifications. However, acquiring these skills presents challenges to the students as institutions rarely offer these skills at that level. Low competence in requisite skills, coupled with work-life imbalance, hampers research engagement and hence progress and completion among postgraduate students. In essence, a lack of the 4IR skills is a disabling reality for postgraduate research students.

In many instances efforts to understand inclusivity usually requires a certain level of rethinking in efforts to establish proactive approaches that can ensure the broadening of epistemic access. Drawing from an Ethiopian context, Woldegiorgis in chapter 16 argues that several studies address the notion of inclusive higher education from the perspective of access questioning who participates, where, and how in the sense of equity, raising issues of enrolment of disadvantaged groups. This chapter approaches the concept of inclusion in the Ethiopian higher education system from an epistemic access perspective. The key argument is that discussions on access to higher education for disadvantaged groups should go beyond mere physical access and should be conceptualized in a manner that reflects educational outcomes and post-enrolment experiences. As it is argued that the higher education system in Ethiopia should re-approach the notion of access and take a proactive measure to ensure epistemic access to students with disabilities, the same lesson can be promoted with other Global South countries and beyond.

Having considered different aspects of inclusivity and legislative features associated with these in diverse contexts, whilst exploring legislative and experiential encounters it becomes essential to explore the different forms of support available for the underprivileged in the South, together with lessons from the West and South. Valuable lessons can be learnt from the different settings despite the history of domination of one by the other. Due to issues of coloniality in which the West has been, since the time of colonialism,, oppressing the South, Nyabadza and Ndlovu in chapter 17, seek to bring to the fore the view that it is at a moment when both the South and West, can learn valuable lessons from each, breaking bounds of anonymity, mistrust and looking down upon other social groups by geographical location. Important lessons can be drawn for genuine transformative initiatives in the global south. It can therefore be argued the social, cultural, and educational perspective in the Global South, can be transformed through genuine support, consequently changing the worldview about both the Global South and the West.

Sibonokuhle Ndlovu
University of Johannesburg, South Africa

Phefumula Nyoni
University of Johannesburg, South Africa

Acknowledgment

Chapter 1

Ubuntu and African Disability Education:
An Ethical Perspective From the Global South

Ephraim Taurai Gwaravanda
Great Zimbabwe University, Zimbabwe

ABSTRACT

In this chapter, the researcher seeks to challenge the view that Western cultures are the 'givers' and the 'teachers' of disability education while African cultures are the 'takers' and the 'taught'. Firstly, the researcher argues that the displacement of African knowledge systems by colonialist hegemony has to be refuted to prepare the foundation of African disability education. Secondly, the study draws lessons from an African culture, particularly the Shona culture, by using selected proverbs to show how disabled persons are respected in communities, how they are given freedom for innovation, and how they are encouraged to participate in daily activities. Thirdly, the research provides responses to standard objections that are raised against the use of proverbs in drawing out philosophical arguments. Lastly, the researcher argues that disability ethical teachings that are enshrined in Shona cultural thought have the potential for global application.

INTRODUCTION

The claim that Africans have no elaborate concepts of disability and disability education should be considered as political statement rather than an empirical sentence. The claim is political since it is based on European hegemonic thinking and not evidence on the ground. A search for evidence against the claim shows that African societies, as organized and functioning human communities, have undoubtedly evolved ethical systems, ethical values, principles as well as rules that are intended to guide social and moral behavior (Oluwole, 1984; Gyekye, 2011). African disability education draws from a rich ethical paradigm and reflects upon *Ubuntu* for the benefit of African education in general. The central argument

advanced in this chapter is that African disability education draws from *Ubuntu* ethics to inculcate disability ethical teachings at three levels namely, individual, family and community levels. Shona proverbs will be used to draw ethical teachings that relate to these three levels. These three levels are not isolated but closely interconnected. In the African context, the community sets ethical standards that are used at individual and family levels. At the same time, individuals can bring in great insights that can be used at both family and community level. Furthermore, family ethical teachings can be useful not only to members of the particular family but also to the community at large. Therefore, there is mutual interdependence and enrichment among the three levels discussed in this chapter. Contrary to the view that African ethics is authoritarian in nature thereby giving little room for individual choices (Van Niekerk, 2007), I argue that the African conception of disability offers a strong objection to such thinking by providing ethical space to individuals as shown by selected Shona proverbs. The contribution of this chapter is that African disability education draws from ethical teachings as shown by ethical insights, concepts and issues that are embedded in selected Shona proverbs. While there is a lot of literature on the nexus between disability and ethics, this chapter focuses on the ethical contribution of Shona proverbs as it draws from Ubuntu ethics and this is the novelty of the chapter.

The chapter is divided into four sections. The first section focuses on the conceptual underpinnings of Ubuntu ethics by drawing from various scholars and showing how these scholarly views can be linked to African disability education. The second section provides a critique of Eurocentric thinking and its hegemonic tendencies concerning both disability and disability education. The third section examines the implications of Shona proverbs in the context of disability education. The last section explores how African disability education can be understood in a Global or pluriversal context.

THE PHILOSOPHY OF UBUNTU

It is important to understand *Ubuntu* ethics within the broader context of *Ubuntu* philosophy for two reasons. Firstly, *Ubuntu* ethics draws from the ontological dimension (Chemhuru, 2014; Chemhuru, 2016) and secondly, *Ubuntu* ethics is known through a relational epistemology (Gwaravanda, 2019a). *Ubuntu* philosophy is a comprehensive philosophy that contains some ontology, epistemology and ethics. The ontological aspect comes from the view that human existence is communal in nature. In Shona, the proverb *munhu, munhu nevanhu* (a person is a person through other persons) (Hamutyinei and Plannger, 1998) stresses this point. The ontological aspect connects to three levels of existence among the Shona. These are the living, the departed *vadzimu* (the living dead) and the yet to be born. This gives a relational aspect that tie up human relations. In Shona, the relational existence is called *ukama.*

Gyekye (2011) refers to the notion of personhood in which one is a person (human being) prior to any process of socialisation or acquisition of habits/character. Since a person (human being), in this sense, cannot be defined by what he acquires, this implies that there are certain ontological facts that constitute a person *qua* human nature that have nothing to do with any social or cultural factors. Scholars of African thought refer to the philosophical inquiry that speaks to what defines a person *qua* human nature in terms of the "ontological" or "descriptive" notion of personhood (Wiredu 1996; Ikuenobe 2016). The ontological notion of personhood is concerned with specifying the descriptive features that constitute human nature. Commenting on this concept of personhood, Ikuenobe (2016: 118) states that: A descriptive conception of personhood seeks to analyse the features and ontological make-up of an isolated [human] individual.

Ubuntu gives a relational epistemology that validates knowledge through others (Gwaravanda, 2019a). The epistemic dimension of *Ubuntu* is not only truth seeking but it also enables members of the community to value dialogue and consensus in establishing truth. Knowledge is gained and evaluated through others and there is no individualism in seeking knowledge. The epistemic dimension is shown by the proverb *zano ndoga akasiya jira mumasese* (the lone thinker left a blanket in brewed beer extracts). The test of the community distinguishes between propositional knowledge and opinion. Without the community of other human beings, the criterion of knowledge cannot be established. (Gwaravanda, 2019a). In the context of knowledge, the claim boils down to the fact that knowledge is acquired, validated and evaluated through others. In this context, the transition is from the Cartesian "I" to the African "we." A quick objection that is often levelled against communalistic knowledge is that knowledge eclipses the individual within the community. However, communalistic thought does not necessarily eclipse the individual for two reasons. Firstly, thinking is done by the individual and when thoughts are judged as significant by others (Eze, 2010), they qualify as knowledge and secondly, individual points of view are acknowledged in the assessment of knowledge (Gwaravanda, 2012). The proverb calls for respectful and polite attitude towards other human beings. To care for one another therefore implies caring for knowledge concerns as well. Without epistemic care, the interdependence between human beings and knowledge would be undermined (Anyanwu, 1989, Ramose, 1999; Bullock, 2018). The point is that knowledge in the African context is always for and by the community. This shows the relational aspect of knowledge.

The ethics of a society is enshrined in the ideas and beliefs about what is right or wrong, what is a good or bad character; it is also found in the conceptions of satisfactory social relations and attitudes held by the members of the society (Ebijuwa, 1996; Bewaji, 2004: Madavo, 2019). Furthermore, ethics is embedded in the forms or patterns of behavior that are considered by the members of the society to bring about social harmony and cooperative living, justice, and fairness (Gyekye, 2011). The ethical dimension of *Ubuntu* springs from the communitarian nature of the indigenous Shona community where the following ethical ideals are seen as important: peace, harmony, solidarity, love, respect, togetherness, oneness, unity, justice, fairness, responsibility and related moral ideals (Chimuka, 2001; Gwaravanda, 2012; Mukusha, 2014; Mudzanire, 2016). I argue that *Ubuntu* rather than ubuntu ethics is more appropriate for this chapter because the concept of *Ubuntu* springs from Shona culture (Gwaravanda, 2019b). Shona culture is the context of disability under discussion. *Ubuntu* also springs from the understanding that human beings tend to do what is good for the community. A person who lives in harmony with others is understood as having *Ubuntu* (Samkange & Samkange, 1980; Mudzanire & Gondo, 2014; Viriri & Viriri, 2018).

A person is a person through other persons. None of us comes into the world fully formed. We would not know how to think, or walk, or speak, or behave as human beings unless we learned it from other human beings. We need other human beings in order to be human (Tutu, 2005:25).

While there is a tendency to emphasise the ethical aspect of *Ubuntu* (Metz, 2010; Behrens, 2013) I argue that *Ubuntu* goes beyond morality since it builds upon metaphysical and epistemological assumptions to give a coherent philosophy of *Ubuntu*. This is the line of thinking developed by Samkange and Samkange (1980) and later on by Ramose (1999). In contrast to the broad understanding of *Ubuntu* philosophy that encompasses several philosophical aspects, there is also a tendency to focus on the ethical aspect exclusively. The ethical focus draws theories (Metz, 2010; Metz, 2013), principles (Molefe,

2016) and concepts (Behrens, 2013) in an attempt to elucidate *Ubuntu* moral underpinnings. I now turn to European hegemony on disability as shown in the next section.

EUROPEAN HEGEMONY AND DISABILITY

European hegemony has been used to understand disability in a manner that has been construed as objective. Objectivity may be defined as neutrality or observer independence. This entails that epistemological claims must be free from subjective or cultural bias. The consequence of this approach is that disability should be studied in a manner that is both objective and transcultural and there is no need to prefix disability with the adjective 'African'. Truth claims should be free from observer bias and not depend on the fact that a particular person is conducting investigation. Every person, including the epistemologist, looks at the world from a particular perspective, shaped by personal and cultural facts (Harding, 1995). Critics of objectivity argue that hidden cultural assumptions distort our investigation of truth. Hidden cultural assumptions that distort the conclusions of science can be made visible by beginning from a marginal perspective. Instead of occupying a 'view from nowhere', thought begins from somewhere. Once that is understood, the task is which somewhere should we examine the world. Philosophy should challenge its own picture of itself by criticising both the project and assumed goal of Western philosophical reflection (Frazer & Nicholson, 1989). Philosophical investigations are subject to historical and cultural particularities. These particularities include cultural conceptions of disability. Philosophy is written and explored within cultural contexts. The timeless nature of reality, justice and truth ought to be challenged. The assumption that reason is a transcendent, non-cultural standard ought to be rejected. Reason is actually justified not as timeless truth but as a local ideal. Reason is used by philosophy to show particular versions of truth. It I easy to write about the 'other' or voice from the margin. What appears about embracing the other is largely rhetoric.

Standpoint theorist see possibility, promise and hope as emanating from the margins (Hooks, 1990). A conceptual scheme is a way of seeing the world. Incommensurable conceptual schemes (MacIntyre, 1985) are schemes that are so fundamentally different from each other that they cannot be compared, or ranked or united into a single scheme. Different cultural traditions provide incompatible ways of separating valid truth claims from invalid ones. These ways are internal to cultures and there is no transcultural way of sorting out the contradictory truth claims. The West should recognise the failures of its own traditions and open up to new traditions especially the ones that promise to overcome our failures by providing clear and careful standards of justification.

Eurocentric thinking is internally limited by its own narrowness and perspective. "Eurocentrism is unable to deal with the complexities of colonialism and its assumptions" (Alfaisal, 2017:43). "It is unable to reject the use of Eurocentric theory or its categories" (Alfaisal, 2017:43). So Eurocentrism is a self-limiting approach which African universities have no justification in following. It is a form of provincialism that has to be evaluated using the lenses of pluriversality. Eurocentric epistemology is a kind of provincialism whose narrowness contradicts the spirit of genuine knowledge. If knowledge should be open ended and tentative, then why should gate keeping be done using the myths of universality, objectivity and neutrality? The idea of the universal is that of a universal rich with all that is particular, rich with all particulars, the deepening and coexistence of all particulars (Cesaire, 2000).

Pluriversality respects both multiplicity and diversity. It picks the best elements from each culture and tradition. This means that it is the sum total of the best elements from each culture and it takes the

dimension of multiple thinking without disregard on any of the cultures. This kind of thinking brings in the idea of pluri-cultural perspectives that engage in honest dialogue for the enrichment of knowledge in particular and humanity in general. Le Grange (2007) writes, "For too long what has been taught and learned in African universities has been dominated by Western science disciplines and more importantly by a representationalist perspective of science or knowledge." What is taken as genuine knowledge in African universities is a perspective that requires revisiting and reconceptualisation. In Le Grange's view, Western science 'is not only local but located' or situated. The locality is hidden in abstract universalism. Abstract universalism is used to dismiss other knowledge systems as non-knowledge. The narrowness and fallacies of Western science should allow indigenous knowledge to stamp authenticity in the African university.

The use of Eurocentric disability theories in African universities disrespects the epistemic concerns of disabled students. While African universities are not uniform in the use of foreign theories in understanding disability in Africa, the tendency is that most of the universities in Africa embrace these disability theories without providing home-grown alternatives that are informed by African culture. In the end, disability education fails to fully accommodate local disabled students because foreign lenses are used to conceptualise disability. For Morreira (2015:4), "many spaces within the university do not recognize the knowledge and cultural capital that first-generation students bring with them to the university as valid forms of knowledge and as valid forms of cultural capital." This gives a mismatch between the learners' epistemological background and university learning. As a result, graduates from a contradictory learning process fail to attain relevance in their own communities because there is unequal participation in the learning process. Letseka (2013:10) argues, "higher education must be made relevant to the material, historical and social realities of the communities in which universities operate." Such unequal participation is described as 'hermeneutical injustice' (Fricker 2007; Masaka, 2017; Masaka, 2018). In instances of hermeneutical injustice, the power imbalance is such that certain people's positions, and the knowledge they bring from those positions, suffers from a deficit of credibility. For instance, if a student of law brings into the learning process the indigenous court system, that knowledge is likely to be dismissed as 'unsystematic and unscientific'. Experiences of learners are therefore dismissed when the Eurocentric way of thinking is given domination in African universities. Although Fricker (2007) defined hermeneutical injustice academically almost a decade ago, this form of injustice is as old as racism and colonialism. "In South African higher education, this is a hermeneutical injustice with its roots in a colonial past, where other knowledge systems and ways of being were systematically disregarded and perceived negatively" (Morreira, 2015:4). Nyerere (1971:27) argues that education should be liberating instead of enslaving. This means that all processes linked to education such as research, teaching and learning must free the mind. Freeing the mind entails thinking in diverse positions that involve criticism and evaluation without any blinkers, whether imposed on acquired.

Three issues can be drawn from Nyerere's observation. Firstly, it is a contradiction in terms to talk of education that fails to liberate the mind. Secondly, education should liberate rather than enslave the mind. Colonial epistemology fails to achieve mental liberation in the African university and it therefore fails to promote intellectual independence and growth. Thirdly, the skills from education are the practical aspects that are relevant for society. If education lacks the practical dimension, then it fails to serve its key purpose. Universities in Africa should be critical about the curriculum by an examination of its theoretical and practical aspects. Theory must feed the practical and the practical must allow further examination of theory. In other words, ideas must be tested in terms of usefulness to the community. As a result, a curriculum that relates to the community is more appropriate than a borrowed curriculum

that tends to be inconsistent with community knowledge systems and experience. For Panikkar (1997) to cross the boundaries of one's culture without realizing that the other person may have a radically different approach to reality today is no longer admissible. Universities in Africa should therefore use the standards of openness and dialogue to assess knowledge claims without dismissing them based on prejudice. If still consciously done, disrespect of knowledge from other cultures would be "philosophically naive, politically outrageous and religiously sinful" (Panikkar 1997:9). The philosophical naivety observed by Panikkar is a result of lack of facts while there is rashness predicated on prejudice. Given the context of colonialism, meaning has to undergo contestation, negotiation and dialogue. In the politics of knowledge, it is irresponsible to dismiss knowledge claims without their contribution taking into account. Panikkar's thinking opens up for the understanding of African disability in this chapter.

THE WORLDVIEW OF SHONA PROVERBS

Wanjohi (1997) sees a worldview as how an individual, a society, a community, or a historical epoch views, sees, conceives or understands the world, and the reaction, which follows therefrom. Apart from individual worldviews, Wanjohi (1997) identifies other worldviews such as scientific, philosophical, religious and cultural worldviews. A worldview can be studied or portrayed by proverbs. Shona proverbs focus on both unperceivable and perceivable reality within the Shona worldview. Unperceivable reality refers to the spiritual world where reference is made to *Mwari* (God) and *vadzimu* (the living dead). The bulk of Shona proverbs focus on the perceivable reality and they refer to, among other realities, human beings, non-human animals, mountains, trees and rivers. According to Bhebe and Viriri (2012), -all this (reference to reality) is an indication of the versatility of Shona proverbs in providing a picture of reality as comprehensive as possible, a worldview. This means that Shona proverbs can be used to understand the thinking and culture of the Shona people. Shona proverbs are generalizations covering virtually all aspects of life including disability. For Bhebe and Viriri (2012) Shona proverbs represent the wisdom of the past in a new situation to justify current behaviour, condition or thinking. The wisdom contained in Shona proverbs can be extended to disability. This means that proverbs can be used as a source of the history of a people. Nyambezi (1990) maintains that,-proverbs show how observant people are, for the habits of birds and animals, and the behaviour of nature in general, do not go unobserved, they reveal what it is that a people adore, what it is that they hate, what they respect and what they despise. The aspect of respect becomes very critical in the context of disability since proverbs on disability tend to emphasise respect for the physically and mentally handicapped. This means that the Shona people's wisdom as shown by proverbs, represents moral lessons, science, philosophy, art, history, religion and social vision- in short, truth that is derived from experience (Bhebe & Viriri, 2012). Moral lessons, social vision and truth derived from experience are elements applicable to proverbs on disability as shown in the next section.

SHONA PROVERBS ON DISABILTY

In this section, three proverbs will be examined to show the thinking of the Shona people about disability. It can be argued that the contributions of the selected to disability shows a cultural grounding that is reasonably authentic. The authentic cultural contribution is free from the influence of colonialism,

Christianity and Islam, the three forces that have diluted authenticity in African thought patterns. Although it may appear like a category mistake to place colonialism at the same level with religious forces, the three have similar effect in distorting the African mind-set. Proverbs have been picked as sources of African thought on disability because they existed prior to the influence of colonialism, Christianity and Islam. For Hamutyinei and Plangger (1987 pp. xx):

…there remains a rich repository of practical as well as ethical advice in…Shona proverbs. Important to remember is the fact that they allow people to refer to delicate or forbidden matters in discrete and indirect ways. Outside the family circle, rebuke is never administered directly, but a proverb that names no names will always make the point. Wit, too, can be useful educationally and good laughter is not far away from many proverbs.

Three issues can be drawn from the above observation. These include ethical advice, objectivity and educational content of proverbs in general and Shona proverbs in particular. At individual level, the Shona proverb which provides moral support to the disabled is *Chirema ndechine mazano chitotamba chakazendama nemadziro* (the disabled person is creative; he or she can dance while balancing against the wall). The proverb is given in the context of physical disability without mental disability. *Mazano* (ideas) are products of thought and the assumption behind is that of an active mind. The reasoning that the proverb follows is that physical disability does not logically entail mental disability. Instead, the physically disabled person is still capable of rational thought and innovative ideas. Evidence of innovation in the proverb is 'dancing while balancing against the wall'. The innovation of the disabled person is usually original because the disabled person does not copy or imitate anyone. 'Dancing' represents all other forms of physical tasks. The ethical point implied in the proverb is that the disabled person must be accorded respect and he or she must be given equal opportunities with the able-bodied so that they do not feel excluded or marginalised. The educational implication of the proverb is that disabled persons must be given room for innovation and they must be included in extra-curriculum activities such as sporting, singing and drama, among others. The innovation can be striking that some can even use their toes for writing and drawing.

At the level of the family, the proverb *munhu, munhu, chirema chinotungamira nzira* (a human being is a human being, even the disabled person can provide directions for the path) is relevant for disability. In the context of the proverb, the disabled person must be allowed to participate in everyday activities. Participation is a form of inclusion that gives the disabled person a sense of worth and a feeling of belonging. *Munhu munhu* (a person is a person) may appear to be a tautological truism but it serves the purpose of emphasising on the dignity of a disabled person. According to the proverb, a person has intrinsic value and dignity and these essential attributes are not negated or reduced by disability. As a result, the proverb advocates for the respect of disabled persons. Disabled persons must not be treated as less human. Humanity lies in the intrinsic dignity of a person and not in the extrinsic physical disability. Personhood is therefore prior to disability and disability cannot eliminate or reduce personhood. This ontological foundation of personhood provides grounding for the ethical dimension of disability.

From an ethical point of view, disabled persons have intrinsic dignity just like any other human beings and as such, there is need to include them in formal educational systems. The basis of the inclusion is twofold. Firstly, the inclusion is derived from the principle of equal dignity for all persons irrespective of disability. The equality in dignity paves way for the right to education for all. Given this foundational principle, there is no moral justification for the exclusion of the disabled in educational endeavours.

Secondly, inclusion of the disabled is defended along the lines of *Ubuntu. Ubuntu* virtues of empathy, sympathy, compassion and care towards the disabled persons allow their inclusion in education. Exclusion of disabled persons in schooling is not only inconsistent with Ubuntu in general but becomes a negation of Ubuntu virtues in particular.

At community level, the Shona provide attitudes that are important in accommodating the disabled. The Shona are against stigmatisation of disability as evidenced by the proverb *seka urema wafa* (laugh at someone's disability only when you are dead). Conceptually, the living does laughter and it is impossibility for a dead person to laugh. So the point of the proverb is that one should not laugh at anyone's physical or mental disability because the same fate can affect anyone in future. Morally, the disabled person is not responsible for his or her sate of disability; hence, there is no need to laugh at them. The disabled persons are given the same status as the able bodied within the community. The logic of 'I am because we are, since we are, therefore I am' equally applies to the disabled persons. The values of togetherness, unity, solidarity and belonging that bind communities together irrespective of disability are important. In the context of disability education, the lesson that can be drawn from the proverb is that teaching and learning social environments ought to be conducive for the disabled.

OBJECTIONS

The first objection against the uses of proverbs in the intellectual study of disability comes from the universalist view of philosophy. The universalist view of philosophy considers philosophy as a discipline like mathematics, physics and chemistry whose subject matter is beyond cultural concerns. Philosophy must be scientific, objective, and transcultural. Each of these attributes has important implications in the shaping of the general conception about philosophy of disability. Philosophy as a scientific discipline ought to be systematic in approach with logical connections of its subject matter. It has to be based on claims that are verifiable and reasonable. Objectivity implies that philosophy is shaped by reason and not personal emotions and feelings. It involves an impartial exercise of reason. As a transcultural discipline, philosophy must draw from common features that define humanity without trapping itself in the danger of cultural relativism. Relativism of knowledge may bring issues that are seen as true from an African point of view while isolating and excluding non- African perspectives. Relativism is the view that knowledge varies with cultures and each culture has its own ways of validating knowledge. Relativism is a threat to the Western canon of knowledge that gives credit to universality, objectivity and neutrality as the key traits of knowledge. Relativism is considered not only as a digression from knowledge but also as a discredit to existing knowledge claims. The objection asks whether it makes sense to Americanise or Anglicise philosophy of disability. In view of this, it is argued that a cultural approach to philosophy fails to escape three problems of African philosophy that Wiredu (1996) identifies. Wiredu identifies anachronism, authoritarianism and supernaturalism as problems of African culture and these are likely to affect the project of studying disability using proverbs. Wiredu however pointed out what he considered to be the three problems of African culture inimical to the development of a scientific attitude in Africa. By implications, the three problems weigh heavily against cultural disability education studies. They are; anachronism, supernaturalism and authoritarianism (Wiredu, 1996). These problems do not only affect African philosophy in particular but they also affect conceptions of knowledge in general. The objection maintains that Africanising philosophy will result in a less critical and less polished output because of the weight of these three ills.

The objection on universality of philosophy understands philosophy in a narrow one-dimensional sense. A broad view of philosophy accommodates both the universalist and the particularist way of thinking. Contrary to the universalist school above, the particularistic school maintains that African indigenous cultures constitute a solid philosophical foundation of African philosophy. These philosophers include Kwame (1992), Gyekye (1995, 1997), More (1996) Mbiti (1999). These thinkers argue that the definition of African philosophy must be broad enough to accommodate indigenous cultural worldviews. Gyekye (1995) pays attention to the problem of language in African thought. It is the job of the African philosopher to explicate, reflect on and interpret the concepts in African thought. Language suggests a philosophical perspective. Modern African philosophy needs to have its roots in African experience, cultural values and thought categories and reflect these, only then can it be called African philosophy (Gyekye, 1995). If a philosophy produced by a modern African has no basis in the culture and experience of African peoples, then it cannot appropriately claim to be an African philosophy, even though an African philosopher (Gyekye, 1995) created it. For anything to be philosophical it has to do with the reflection on the experience of a society, group or an individual. This implies that the content of African philosophy should focus on past and present experience of Africans with a view to drawing directions for the future. Such reflection must be critical and logical. A study of disability using Shona proverbs therefore provides an authentic African philosophy on disability. "African philosophy is the philosophical reflection on, and analysis of, African conceptual systems and social realities as undertaken by contemporary professional philosophers" (Kanu, 2014: 91). Using the same line of reasoning, African philosophical conceptions of disability must therefore draw from African culture and experience.

The second objection to the use of proverbs states that the project is an attempt to replace the Western canon of knowledge with the African epistemological paradigm and the hegemonic tendencies, prejudice, exclusivism and undemocratic conceptions of knowledge. The objection goes 'two wrongs do not make a right.' The problems of Eurocentrism are problems of dislocating, marginalizing and silencing other epistemological paradigms. So, replacing Eurocentrism with African thought systems *such as proverbs* may just create similar problems in a different direction altogether. Instead of using a cultural approach to the study of proverbs, the objection requires the use of multiple knowledge systems by use of pluriversal approaches to knowledge. This means that philosophy should draw from major traditions of the world at a global scale for the purpose of enrichment and debate within the philosophy of disability. One issue that is not generally taken up when discussing the cultural approach to philosophy project or, in particular, the problems and challenges of Africanising the philosophy of disability is whether we are not conceding too much to the West when we insist that the content of cultural philosophy of disability is one that is opposed, by and large, to Western philosophy.

In reply to the second objection, it can be clarified that a cultural study of disability can be understood in three senses. The first sense that the objection attacks is where cultural philosophy of disability consists of de-Westernisation and replacing the dominant Western philosophy with a 100% African philosophy of disability. The second model is the addition approach where Western philosophy is the framework of analysis of disability and African issues are added to a dominantly Western model. The last model, which is defended in the research, involves making the African epistemological paradigm the centre of analysis of disability. Logically, centralization implies the existence of other paradigms, including the Western one. Given the above explanation, it can be argued that the objection assumes one sense of a cultural approach, which is truly problematic as the objection shows.

PLURIVERSAL THINKING AND DISABILITY EDUCATION

Taking the pluriversality as an ontological starting point, implies not simply tolerating difference in thinking about disability education but actually understanding that reality is constituted not only by many worlds, but by many kinds of worlds, many ontologies, many ways of being in the world, many ways of knowing reality, and experimenting those many worlds. Acceptance of Pluriversality implies that there is no one way of thinking about disability. There are multiple and alternative ways that have to be considered with equal validity if we are to exercise knowledge democracy. The discussion then has an ontological fundament with epistemological (Mungah & Tshombe, 2017) and methodological consequences. In order to give difference a space in disability education, we have to reconsider the ontological premises that have conditioned the development of the discipline, accepting a one-world reality as a natural and universal fact.

Drawing from other worldviews – mainly indigenous relational worldviews such as Shona proverbs, the pluri-versality implies the existence of many worlds somehow interconnected, in other words the human world is connected to the natural world and also to the spiritual world. This means these three kinds of worlds coexist in time and space like a web. The analogy of a web indicates connections and interconnections rather than a linear conception of disability. It entails a vision where the earth is a whole living being always emerging, encouraging the discovery and the imagination of different forms of planetarization in which human beings, along with other beings can coexist enriching each other (Akena, 2012; Mungwini, 2017). The inclusion of other forms of thought, including Shona cultural thinking to disability studies widens the perspectives. These perspectives come into dialogue for the purpose of enriching each other. Such processes cannot be subsumed in the epistemic frame of modern social sciences, which are characterized by anthropocentrism, which exclude the connection between human and non-human as part of a whole, a same reality. The narrow conception of disability fails to capture important ontological assumptions that have implications on disability.

Knowledge democracy entails acceptance of multiple canons of knowledge. These multiple canons of knowledge have to be accepted as equally valid. The unfair dismissal of non-European systems of knowledge as mere opinion should be challenged. There is need to go even further that the simple tolerance of difference according to the one world rule; we need to consider how these different worlds can coexist not submitted in one reality, but in incommensurability. Furthermore, tolerance of other views in inadequate since it implies accommodation of different opinions while one clings to his or her conception of reality. Beyond mere tolerance, there must be respect of other knowledge paradigms. Respect for other knowledge paradigms implies studying seriously, what other paradigms offer and draw implications without prejudice.

The idea of the universe is very powerful, and has been imposed as a reality through different processes, some more violent than others. However, the idea of the universe has to be replaced by pluriverse. Reality is multiple rather than singular. For Pannikar (1997), conceptions of universality are within a cultural context. However, Pannikar (1997) proceeds to argue that since no culture is universal, then no concept is universal. Pannikar's argument is valid and I argue that there is no logical basis of universality. What has forced the idea of universality is a social construction, a situated creation of our minds in connection with our environment and according to our frameworks of knowledge, or ontologies. Reality is the product of intersubjective practices (Haraway, 1998), and so there are many ways to create reality and many possible realities, and there are of course, different kinds of subjects, not all of them human.

Given that the pluriverse already exists, it can be argued that there is need to consider that the pluriverse is not something that needs to be created, it is something that needs to be recognized. It has been covered and needs to be fully displayed, taken to practice, without considering it something fixed or given (Dussel, 2012). If the universe appears normal is because it has been represented constantly in daily practices in the North and other regions as a result of colonization and the diffusion of specific values according to a certain rationality.

Reliance on the conceptions of the universe to understand multiple realities is not only logically fallacious, but it is also undemocratic. It is logically fallacious in the sense that it assumes oneness of the universe which is yet to be proved. It is undemocratic because it uses the politics of knowledge to dismiss other understandings of reality without evidence but on the basis of prejudice (Ndofirepi & Gwaravanda, 2018). This undoubtedly helps make sense and contextualize many of the actions and reactions of different actors in the world. Disability can be analysed and understood in a radically different way just by first accepting the existence of other worlds and their entities, and then by trying to see what these concepts look like or refer to from distinct ontologies. Furthermore, intellectually rich conceptions of disability can be obtained by comparing various conceptions of disability in the context of knowledge democracy.

Global thinking goes beyond restrictive categories and traditional concepts of thinking about disability. Then, the pluriverse covered and silenced by the modern myth about disability needs to be fully disclosed, allowing the coexistence of other narratives and worldviews that are not necessarily encompassed by Western ontology. Then, thinking the global in terms of many worlds, many worldviews is not just about taking a critical stand against mainstream theories, it is to assume a politically emancipatory position that includes processes of knowing and also defending other possible ways of being in the world (Grosfoguel, 2011). The implication of thinking that Grosfoguel (2011) provides is that there are ontologically configured in processes of choosing and decisions that produce the establishment of reference frameworks that people use to situate themselves in the world. Accordingly, these reference frameworks are very different to a person in the Shona worldview than to a person raised in a Western city; those frameworks are historically contingent, not natural, neutral or universal. These frameworks give different conceptions of disability.

CONCLUSION

I have argued in the chapter that a cultural perspective of disability studies draws ethical principles and concepts from the rich source of Shona proverbs. To pave way for the cultural study of disability, I started by critiquing the Eurocentric epistemological paradigm with its claims to universality and objectivity. Eurocentric hegemony marginalises other cultures in general including the Shona contribution to disability in particular. The Shona worldview sees a connection between the ontological, epistemological and ethical dimensions. Three proverbs have been selected to show disability ethical teachings that cut across individual, family and community levels. At the individual level, Shona thought provides room for innovation and creativity among disabled persons. The second level is the family level where disabled persons are given opportunity to participate in daily tasks as a way of improving their sense of belonging. At the level of the community, the Shona provide the right attitude that facilitates the acceptance and respect of disabled persons through a well thought proverb. However, the division among the levels has been done for the purpose of this chapter yet Shona proverbs on disability form a coherent thread that is rich in philosophical insights. While this chapter has focused on the ethical contribution of Shona

proverbs to disability as part of Shona philosophical thoughts, further research can still be done by examining Shona proverbs as a foundation of disability rights education.

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Chapter 2

Institutional Dynamics and Support for Students With Disabilities in Botswana's Technical Vocational Education and Training (TVET) Colleges

Macdelyn Khutsafalo Mosalagae

https://orcid.org/0000-0002-9429-3232

University of Witwatersrand, South Africa

ABSTRACT

This chapter focuses on the dynamics surrounding inclusionary practices in Botswana's TVET institutions and how these impact on the experiences of students with disabilities. The chapter draws from interviews conducted for a doctoral study informed by the capability approach. The researcher argues that the nature of institutional support can produce enabling and constraining features within the structure and relations at hand. Support for students in TVET is of importance despite aspects such as inadequate resources and untrained personnel on disability matters. The chapter also focuses on the contradictions that have marked the education of students with disabilities. In particular, academics have different perceptions of inclusion and what constitutes good practices of the appropriate inclusion for students with disabilities. A group of 17 students with mild intellectual disabilities formed part of the participants, and the study used in-depth interviews for data collection.

INTRODUCTION

The education of students with disabilities in Botswana has been a concern for both the Government of Botswana and NGOs. To show their concern, non-governmental organizations such as churches, have established vocational training and rehabilitation training centres for students with disabilities. These institutions were designed to equip such students with skills for self-independence, as well as to enhance

their competitiveness in the labour market. For the government, establishing 'special education units' in primary and junior secondary schools was an initiative to help students access the curriculum to acquire the necessary skills. The integration of students with disabilities in higher education, particularly in vocational education, has long been neglected. However, with the implementation of Botswana's Inclusive Education policy in 2011, the Ministry of Education responded by identifying a number of professional institutions that had to meet the needs of students with various disabilities. Some examples are Marobela Brigade for the Deaf, Chobe and Machaneng Brigades for learning disabilities, Gaborone Technical College for mild intellectual disabilities, and Jwaneng Technical College for the visually impaired. Sadly, of all the institutions identified, only two currently offer programs for students with disabilities. This is because the appropriate inclusion of students with disabilities has not been defined because what constitutes a complete inclusion of students with disabilities in policy documents and TVET institutions is not clear (Mosalagae & Lukusa, 2016). In addition, those responsible for implementation are skeptical about inclusion because students with disabilities are labeled as "untrainable'. However, in response to global concern for Education for All (UN, 1990) and the Dakar Framework for Action (UNESCO, 2000), in 2012 the Government of Botswana enrolled students with disabilities in one of the technical colleges.

This chapter argues that good inclusion practices have a positive impact on children's quality of life. These inclusive ideals and practices, well supported at institutions, have produced positive results, particularly for students with disabilities. This chapter presents the experiences of students with disabilities in Botswana. The author show how the institutional dynamics of a Technical and Vocational Education and Training (TVET) college have demonstrated its support for students with disabilities through its inclusion program. Inclusion, in the context of this chapter, refers to Mel Ainscow's typology four and five of inclusions. The fourth typology considers inclusion as the promotion of a school for all. Emphasis is placed on developing a common school for all and creating teaching and learning methods within that particular school (Ainscow, 2006). Typology five refers to inclusion as an education for all that aims to increase access to and participation in education (Ainscow, 2006, 2016; Ainscow et al., 2013).

The main purpose of this chapter is to show how a TVET institution, has helped to support students with disabilities through the various inclusive support strategies they have employed. Although the study includes two research sites that are both professional institutions of a different nature (one being a brigade and the other a technical college), the chapter reports on the experiences of a group of participating students from the technical college. The findings showed that inclusion practices do not depend on institutions in the disability category, but on how each institution provides support to students with disabilities to enable them to prosper in life.

BACKGROUND

In 2012, the Department of Technical Education and Training of the Ministry of Education admitted the first cohort of students with disabilities in one of the urban technical colleges. These students were enrolled in two programmes, - Access to Hospitality Operations and Access to Retail Business. The duration of both programmes was 18 months. These courses, which were below the certificate level, were designed to initiate students to the core skills of hospitality and retail operations. According to the classifications of persons with disabilities and the report of the education psychologist, all students fell under the classification of persons with a mild intellectual disability, which was a prerequisite for their admission to college. These students came mainly from special education units (a separate classroom

in schools for learners with disabilities), with the exception of two students (one from home and one from a higher education institution). Although the programmes were initially developed for students with mild intellectual disabilities from special education units, rehabilitation centres and straight from homes, students' disabilities ranged from bipolar, Down syndrome, dyslexia, behavioural problems to mild intellectual disabilities. It is necessary to explain what disability means in this chapter in order to appreciate the type of disability dealt with in the study.

Disability Defined

Disability is a term that is ambiguous and defined by different models. For the purpose of this chapter, disability is defined from a social model in which it is socially constructed. This involves institutional structures, environments and attitudes that impede the full participation of individuals (Mitra, 2006). The social model is appropriate given that the chapter focuses on empowering students with disabilities. While there are debates about labelling individuals, the classification of disability in this chapter is warranted to understand the level of categories associated with the chapter. From this point of view, the disability category for this study was mild intellectual disability. According to the International Classification of Disabilities (ICIDH; World Health Organization (WHO), 2001), persons with mild developmental disabilities have an IQ of 50 to 70. Although this is an international classification, in Africa, there is no classification; we are either "normal" or "abnormal". For example, from an Afrocentric viewpoint, disability may be caused by unhappy ancestors, by not observing taboos, by beliefs in sorcery and as a divine intervention from God. In Botswana *Bogole* (being disabled) is defined from a charitable model in which the society shows sympathy to those with disabilities. So, Bogole in Botswana culture implies a social identity as compared to a clinical status. Thus, it is from this context that the Batswana's way of viewing disability is in line with "normalcy and relational to personhood more than it does to idealised body type or capacities" (Livingston, 2005, p. 10). Subsequently, the use of the term "mild intellectual" in this chapter does not necessarily mean a clinical status, but rather a social identity.

Methods

The study used an interpretive design which sought to construct the meaning of what inclusion is from students and people working with them such as lecturers. This chapter reports findings from 10 students who were currently enrolled during the time of data collection of the study, as well as being the second cohort to have been enrolled; At the time of the interview, students were returning from six months of work - hotel and retail experiences around the country, depending on the district or place they come from. The study also interviewed five employed and two unemployed graduates of the first cohorts of the programme. The study context was a technical college in an urban city of Botswana. Technical colleges in Botswana are government-owned professional establishments that provide programs for technicians. The colleges offer Botswana Technical Education Programmes (BTEP). These are programmes developed in Botswana and approved by the Qualifying Authority of Botswana (BQA). The college is one of only a handful of technical colleges that offers a diploma program outside of the programs in which students with disabilities were enrolled.

The data were analysed thematically, and four themes emerged. The context of the themes related to educational justices the TVET College offered to students with disabilities in terms of their experiences in the institution, how they benefited from attending a TVET college and the results of TVET on their

lives. These experiences are elaborated on in detail in the discussion section. What then is happening in other countries as far as institutional support is concerned?

Institutional Support in Global and African Contexts

The emergence of institutional support can be credited to the social model of disability in which hindrances in the environment are improved for persons with disabilities (Mantsha, 2016). Increased support in various contexts is the result of many pieces of legislation. For example, in the United States (U.S.), legislation such as section 504 of the Rehabilitation Act 1973 provides for equal educational opportunities for persons with disabilities (Mantsha, 2016). Similarly, in the UK, the transition from the Disability Discrimination Act to the Equality Act of 2010 (US Department of Education, 2011) ensures that courses are inclusive and environments are user-friendly for people with disabilities. Australia's Disability Discrimination Act (1992), as noted by Healey, Fuller, Bradley and Hall (2006), also reflects the international community's interest in supporting people with disabilities.

There is a similar pattern in African countries where regional laws and legislations continue to influence institutional support. For example, in South Africa, Article 9(2) of the Constitution requires the State to achieve equality, while Articles 9(3), (4) and (5) bind the State to non-discrimination (Ministry of Education, 2001). Tanzania introduced its National Disability Policy in 2004 (United Republic of Tanzania, 2004), whereas Ghana is guided by the 2006 Disability Act (Ghana Center for Democratic Development, 2006). In the case of Botswana, Education for Kagisano (social harmony) of 1977 (Government of Botswana, 1977) and the Revised National Policy on Education of 1994 (Government of Botswana, 1994) commits to the right to education of all learners regardless of disability, gender and race.

Based on the various international and regional perspectives of institutional support in higher education, international and national research has shown that institutional support has a positive impact on students with disabilities in higher education. For example, in Norway, a study on students with disabilities carried out by Brandt (2011) found that the reform of Norwegian higher education makes the learning potential of students with disabilities necessary. On the contrary, where practices and legislations are not effective - as seen in Thailand - students tend to be negatively affected (Cheausuwantavee & Cheausuwantavee, 2012). In Israel, the experience of students with disabilities in higher education indicates that flexible admissions and overtime at examinations tend to function best as support for students (Davidovitch, Schacham, & Margalit, 2012). Research conducted in Tanzania by Matonya (2012); Chakaita (2010) in Zimbabwe, Mutanga (2015) and Mantsha (2016) in South Africa found that Africa has a different story to tell from Europe. There is a lot of dissatisfaction on the support given. In South Africa there is inadequate provision along racial lines (Muthukrishna, 2000), and inequalities along the types of disabilities in the case of Botswana (Mokhuphadyay, 2015). Although it appears that there is a discrepancy between the global north and the global south, the state of support between the two are parallel as they are both rights-based.

The Practice of Inclusion in Botswana's TVET Colleges

The inclusion of marginalized communities and people in Botswana follows the global pattern of action in response to Development Goal No. 4 and the Education for All. While Botswana has not ratified the United Nations (UN) Convention on the Rights of Persons with Disabilities (CRPD) and the African Protocol on the Rights of Persons with Disabilities (Ndzinge-Makhamisa, 2019), like other governments,

it has been forced to act on the objectives of the initiative of becoming inclusive. It should also be noted that although the Constitution of Botswana does not include an explicit provision emphasizing the rights of persons with disabilities, non-discrimination and equity of persons with disabilities are enshrined in the Constitution (Ndzinge-Makhamisa, 2019). Although this is Botswana's current status, the concept of inclusivity is not a 'newcomer' to Botswana as it is embedded in the Tswana philosophy of *Botho* (Phasha, 2016). Botho calls for Botswana society to accept all people without judgment. Botho, when applied to the school context, implies that all students have the possibility of social and educational inclusion. It is thus through this Botho philosophy that inclusion in Botswana takes place. However, while inclusive education is practiced in Botswana, notably in primary and secondary schools, it is limited in higher education. Therefore, there is little knowledge of inclusive education in the vocational training system.

The TVET system is new in implementing these practices and ideals because inclusive education policy in Botswana was only implemented in 2011. Not surprisingly, since inclusive education policy is in its infancy, institutions have difficulty interpreting the philosophy and practices of inclusion. Nevertheless, international policies that are prevalent such as the Salamanca Framework of 1994; the Millennium Development Goals of 2000, the Sustainable Development Goals of 2015, (UNESCO, 2017) have been instrumental in guiding TVET to provide opportunities for quality and equity in education of students with disabilities. Consistent with the mandates of these policies, Botswana has generally been excluded from practice because it still follows the "special education unit" approach. This approach implies the creation of separate classes for students with disabilities, which is also predominant in the TVET institution. Although separating students is justifiable, it does not demonstrate the ideals of inclusive practices. However, the isolation practices used by the institution appear to have fostered an enabling environment that has improved students' abilities. What then was the author's conclusion? This question is answered in the next section.

THE CAPABILITY APPROACH

The capability approach, as explained by Amartya Sen (1985), is an ethical approach which focuses on the wellness of a person. Wellness is seen in one`s functionings (what a person can do) and capabilities (one's being). While the focus is on the beings and doings of a person, the approach is not fixated on personal ownership of resources. Instead, it is interested in whether the person has the freedom to realise what they have reason to value (Sen, 1985, 1992, 1999). Therefore, the capability approach proposes other thoughts of looking at people's freedoms beyond just being in schools but using education as a way of rethinking people's potential freedom (Hart, 2012). For this chapter, these freedoms in and through education (Hart, 2012) are how the institution has provided opportunities for developing freedoms that have helped students with disabilities achieve what they have good reason to value. The conclusion is that institutional momentum and support are determinants of good inclusive practices. The capacity-based approach is promoted in this chapter as a framework used as a lens to find the support a TVET college has given to students with disabilities.

The Capability Approach and its Role in the Analysis

The capability-approach emphasizes the importance of having reasons for an individual's appreciation of something. Is it appreciated for what it is, or is it valued as a means of facilitating what one values?

The primary purpose of the capability approach is to expand the capabilities and the freedom of choosing from these capabilities (Sen, 1992, 1999). In the context of this chapter, a TVET institution is assessed on what it has done for students with disabilities in terms of its contribution to student welfare. The chapter therefore examines the dynamics in place that have encouraged the inclusion of students in TVET. In this chapter, the framework has helped to examine what social arrangements (in this case institutional support) intend to do when it comes to the development of an individual. The approach was used to examine existing institutional policies on the education of learners with disabilities. The author saw a need to reconsider the impact of the schooling policy, curriculum and teaching and learning strategies on the student. For the reason that education has a specific function of increasing capacity and determining the actual well-being of people, as highlighted by Terzi (2014). In addition, the review also examines which resources, for example, specialist teachers, assistive technologies, books and curricula are available to help students with disabilities. Through the pedagogies and resources lecturers put in place for their actual teaching, the approach assessed whether learners with disabilities attending TVET institutions have been empowered by those social arrangements to be functional in their lives. Education should provide real opportunities to achieve educational capabilities and capacities on abilities and knowledge that allow learners to participate in mainstream social settings (Robeyns, 2017; Terzi, 2007). In relation to the study, the approach was used to find out from learners the values TVET has imparted to them and whether what is available is helping them to function effectively, act and engage in activities they want, and become what they aspire to be. The capabilities approach was used in the analysis alongside an Africa philosophy.

Botho's **Philosophy and its Place within the Analysis**

Botho is an African philosophy which finds resonance in most African cultures, particularly in southern Africa. Though Botho's philosophy runs through many African cultures under different names, one quality that is emphasized is, humanness. Botho plays a decisive role in considering the inclusiveness of students with disabilities who are sometimes not seen in communion with others because of their differences. Inclusion in Africa is an outlook of complexities surrounding the continent which varies from disabilities, class, conflicts, cultural and ethnic orientation, to mention a few (Muthukrishna & Engelbrecht, 2018). Based on that observation, Pather (2019, p. 789) notes that, "in Africa, as an antithesis of exclusion, inclusion can be seen as a fight for freedom to find a local solution". It can therefore be argued that at the centre of finding a local solution in the context of this chapter is the local institutions' dynamics linked to ways in which support to students with disabilities can be enhanced. In Botswana, the value of social harmony (*kagisano*) has shown that there are African philosophies and theories which can help in understanding the value of inclusion. Among the *Kagisano* principles, Botho stands out as a concept which will be used by Botswana and most African countries to make the struggle for African freedom possible. African freedom in this chapter refers to Afrocentric initiatives and policies such as connecting learning and African cultures as well as pedagogies drawn from African legacies as opposed to the global epistemologies of the North. While this study concentrates on the application of the Botho philosophy in the context of TVET, its relevance is not limited to this context.

Throughout the analysis, Botho is propagated in the findings of the research given the current high-profile debate with regard to African inclusivity. Clearly, there is a link between Botho's African philosophy and inclusion. Finding ways for institutions to support students resonates with the values of inclusion, Botho and the capability approach. The failure of institutions to implement measures to

support pupil learning appears to be social inconsistencies in practice. Marginalised groups tend to be treated unequally in an assumed equal community. Therefore, the use of Botho as a measure of analysis is essential in determining whether the TVET dynamic is aligned with the principles of inclusion, including accessibility and accommodation. These two principles are very important for determining whether students' educational needs have been met. Given the roles of the capability approach and Botho philosophy in the study the author discusses the findings.

PRESENTATION OF FINDINGS

In this section the author present the findings guided by the fact that inclusive education by its very nature should dismantle every form of exclusion that underlies the oppression of vulnerable populations (Slee, 2019). In the context of education, this perspective emphasizes that educational institutions, both micro and macro, should ensure that barriers to the inclusion of vulnerable people are removed. Following this commitment, TVET colleges in the Botswana context provided the students with the opportunities of "experience in education" to use Hart's (2019) words. According to Hart (2019), experience in education speaks of how students encountered schools, that is, any impediments or benefits in relation to the school environment and their physical and psychological status. The following are the findings.

TVET Institutions and the Engendering of Egalitarianism

The chapter focused on inclusivity within the context of what the students experienced in TVET institutions as reflected in the diverse perceptions they shared. On analysis, one of the findings relates to how the students experienced their full humanity where they all felt part of others. For example, in the TVET college, the students experienced a sense of belonging. Whereas students at the TVET institution had separate accommodation specially designed for them, they did, however, live with other non-disabled students to form a student community. The institution's effort to integrate students has led to social inclusiveness. Students with disabilities reported having a positive relationship with students without disabilities. One of the questions students were asked was about their relationship with the collegiate community, and an example of what they said was:

Box 1. Graduate employed participant' interview excerpts

> **Respondent 1:** *My college experience was excellent. We used to interact well with other students who were not in our department. It was a good relationship because we are the same. Just that I am mild intellectual disability does not mean that I am different.*
> **Respondent 2:** *Other students treated us well, and we are different except for adults who used bad words on us. Otherwise, I had no complaint to other students. I took them as my family.*

The above excerpts show that relationships with others were positive and, in the process, students became friends and were able to take the opportunity to seek assistance from their non-disabled friends when the need arose. Although in the beginning the acceptance of students with disabilities by their non-disabled peers came from sympathy, it nevertheless reflects a spirit of social inclusion that can be

linked to Botho. From a capability's perspective, this kind of support fosters the capability of Respect, Dignity and Recognition (Nussbaum, 2000; Walker, 2006). From a Botho perspective this kind of support resonates with appreciation of other persons despite their differences; thus, fostering the spirit of communalism. The spirit of communitarianism is aligned with inclusive values because communities are not meant to exclude theirs. Likewise, it is expected that learning institutions will adopt diversity.

TVET institution has continued to promote a sense of belonging by providing a forum for students with disabilities to express their concerns and grievances. The institution created a portfolio in the Student Representative Council (SRC) of a special needs minister. The post was held by a student with disabilities from the special needs department who was to represent other colleagues. By so doing, the institution incorporated the students with disabilities as part of the management. This type of support meant that students' freedom to have a voice in the school was respected and that students were viewed as bona fide members of the school community with rights just like non-disabled students. Having a voice meant that students were allowed to participate in the collegiate community activities, their needs were attended to and they were recognised as people capable of making decisions for themselves and the rest of the student community. Given this opportunity translates to equal participation and collaboration. Students with disabilities were not judged as incapable of being representative of other students. Equal participation in the collegiate community was based on a democratic principle of fairness and justice in which the college recognized that disability was not inability. The institution support qualifies the notion that inclusive education is a franchise of education in and for democracy (Apple, 2018; Slee, 2018).

From a capability lens, having a voice is synonymous with the capability of freedom. This capability means that students had opportunities to choose what they wanted to do and be. Therefore, they had choices in what they valued. Such a capability entails students being capacitated to socially participate in the community. In line with the Botho principle, social participation in the concerns of the community was allowed as recognition of all opinions were embraced. This is especially true in Botswana where there is a *kgotla* system in which meetings are called to discuss community matters and people are given freedom of expression to find community solutions. Botho appreciates the contribution of everyone in society. For instance, in Setswana culture there is a saying that '*mafoko a kgotla a mantle otlhe'* meaning that everybody's voices or opinions are equal. The possibility that each person should be valued is "equivalent to the acknowledgement of diversity in the community, and it promotes equal treatment of all children in the educational systems" (Phasha & Moichela, 2009, p. 375).In the context of this chapter mafoko a kgotla a mantle othle points to tolerance and inclusivity.

External Support as an Experience

Another social arrangement which the institutions put at the disposal of students with disabilities was external support - support beyond the academic space. For example, there was a resident psychologist as a member of the department and a college counselor for the entire college who both provided psychological therapy. The officers played a key role in helping students adjust and cope with the college experience, primarily because students had never lived apart from the care of their parents or guardians. The use of a college counsellor helped to restore the students' psychological condition. For example, when students were asked about challenges they experienced in college one answered;

The excerpt from the previous interview shows that the student was initially in a bad psychological state and lacked self-esteem. However, the support provided by the institution allowed the student to develop emotionally and ultimately gain self-esteem. Not only was their emotional condition a challenge

Box 2. Graduate unemployed participant interview excerpt

> **Respondent 3:** *My challenge was personal. I am not an open person, and sometimes I would die inside. However, I was able to talk only to a counsellor because I was afraid that if you tell people your stuff, they will laugh at you. I had lost self-esteem, but eventually, I developed it.*

for students, but coming to a large college and living in institutional housing on their own seemed to come with problems. To help students cope with any stress and anxiety of leaving home, the college psychologist helped with coping mechanisms and skills. Although the college had a matron who was the resident guardian for the students and assisted them beyond the college counselor's operating hours, for example after school and on weekends, students must develop independent and interpersonal skills.

Other external support to help students cope with college life was the Special Needs Department initiative, which encouraged every student to join at least one college club. The initiative was intended to help students access other external sources of support to help them make the most of their collegial experience. The initiative was valuable because extracurricular clubs such as the Christian movement helped students interact positively with the environment. In other words, this faith group has proven valuable to the lives of students who have learned to adapt and be resilient in different situations - adaptability, which means knowing how to change their behaviours based on their life and disability. Resilience was useful because students had to be flexible enough to overcome negative college experiences and personal situations. The students exercised their spiritual freedom when they believed that apart from their lecturers and other members of the college staff, there was a supreme God who would take care of them and assist them in their moments of need. For instance, two participants in the study commented:

Box 3. Graduate unemployed participants interview excerpts

> **Respondent 4:** *I fell pregnant during college and developed stress because I knew I was alone besides my boyfriend; However, I did not lose hope as I knew that the Lord would be with me and it helped me to accept the situation that I was in, that is, taking care of my child on my own.*
> **Respondent 5:** *As a Christian, I live with the belief that God will always help me because I have the potential and He gave me that because he created and it does not mean that because I have a disability, He does not love me.*

The above narratives show that faith, especially Christianity, has become a vehicle through which students draw strength and emotional maturity to deal with their disabilities. The support of the faith group allowed the students to deal with different situations with a reflective spirit. From a capability lens, students developed both spiritual and mental well-being (Nussbaum, 2000; Walker, 2006). This institutional support fosters capacity building, such as the ability to live in harmony with others. This was made possible because of the care and support one receives and the capability of affiliation. Similar to Botho, there is also an element of spirituality. Showing a positive attitude to others and living in harmony with others is seen from a Setswana culture as having the spirit of Botho. Analysing the students' experience from the perspective of Botho implies that the essence of one being is seen in the inner self of the total being. Thus, acts of kindness towards others are not only seen as the personality of an individual; there is the reflection of the outer force from the community ancestors who give one a good personality. Botho would then become an instrument for having educational agencies because external

support gave students the opportunity and space to develop skills and use them effectively in a different field of their lives. For instance, one student alluded to the fact that at work he was supported and that his self-esteem developed because he had a team to complement his reading challenges. He explained;

Box 4. Graduate employed participant interview excerpt

Respondent 5*: Sometimes I work at the front office, so if there are paper works that need to be filled my workmate will fill what needs to be filled, and I do what is within my capacity. This is about teamwork; if it were not about it, I would not be where I am.*

In the absence of support initiatives, as identified by Respondent 5, it is clear that he would not have adapted. He would have been reluctant to work because of his dyslexia. So, there is a relationship between resiliency and the use of external support structures and educational agency.

Epistemological Access Experience

One of the educational experiences students with disabilities encountered was the opportunity to have epistemological access. According to Sen (1985, 1992, 1999), there is no guarantee that people will have access to education merely because they have attended school. This means that attending school does not guarantee that a person has skills and knowledge. Sen maintains that the school must have the necessary resources to meet the needs of the individual. Resources here are not possessions or stockpiles, but opportunities that encourage one to become. For example, in TVET schools, students had epistemological access through the use of the mother tongue as the language of instruction. Students learned both Setswana, Botswana's national language, and English, the official language. Students appreciated this; and one unemployed graduate noted:

Box 5. Graduate Unemployed participant interview excerpt

Respondent 6: *The use of Setswana language in teaching us helped me a lot because I could understand better.*

The use of Setswana as a teaching medium was a college arrangement which was made only in the Department of Special Needs to help students understand. In this study, the mother tongue was not used as it is in code-switching where the teacher uses English or maybe switches to mother tongue to stress a point. It was also not trans-languaging where the input of teaching is the mother tongue and the output is answering in English. On the contrary, the entire lesson was taught in Setswana, for those who could not comprehend. Therefore, within the lesson, two languages would be used concurrently to accommodate the needs of the students as some of the students only knew English even though they were local people.

While the language of instruction was Setswana, unit packs and assessments were written in English. Therefore, the use of English during modules such as communication skills was to give students cognitive command of the academic language where they had to learn the language to be able to understand the theoretical subjects. English was also used for the understanding of the tasks at hand and to develop some competencies. Thus, assessment in the TVET institution sought to assess for competencies in the modules and was not graded. The assessor's feedback was given in three ways: achieved independently, achieved with support, and not yet achieved. This approach of assessing students measured the student's capabilities. For example, if the student has to know how to make the dough, it is one of the competencies the student should have and not the classification of how the students know it. The institution's evaluation methodology focuses on subject knowledge as a key pathway to securing capabilities (Hart & Brando, 2018).

Not only did language play a role in enhancing epistemological access, but the college had special educators who carried out repetitive teaching after the professional lecturer's lesson, as well as remedial lessons after Lunch for people who needed support. This arrangement for support was corroborated by one of the students:

Box 7. Currently enrolled students' interview excerpt

Respondent 4: *I had challenges in understanding what we were taught, and I would ask from my classmate. If not, our teachers used to call us and help us where we did not understand.*

Vocational education tends to be expensive because it is an outcome-based education. Therefore, it requires more material for learning. For example, if you learn plumbing, plumbing materials are always necessary since the work is more practical than theoretical. In the case of the study, where students were studying Access to Retail and Hospitality Operation, this meant that if they were to prepare a three-course meal as the focus of the day, then all the ingredients in the menu had to be there. Embarking on repetitive or restorative learning was expensive because the college needed to reconstitute the ingredients. Thus, the college had to anticipate these lessons which helped the students to be free to learn at their own pace and understanding as well as practice to enable the acquisition of knowledge. The provision of learning resources, along with support staff, enabled students to have good experience of the college. Similar observations were made by Mantsha (2016, p. 44) who asserts that "appropriate support systems in teaching and learning are vital in ensuring equal access for students with disabilities". In addition to the special educators who helped the participants, the college was supposed to have a lecturer's assistant to give advice and help to individual students, but the special educators filled the void by teaching with professional educators. This institutional support helped students commit to the task with the confidence that special educators would help them achieve some competency. In doing so, it supported Brunner's assertion that adult support and guidance promotes student engagement in tasks. From a capabilities approach, the task results in some form of capabilities and functionings. It speaks of good practice of inclusive education which promotes this kind of provision to help students reach their potential. Reaching one`s potential from a capabilities approach is an achievement of agency.

Educational Access as Opportunities

Access to education provides a person with the opportunity to enter a school to learn (Hart, 2019). This chapter focuses on how TVET has enabled students with disabilities to access the institution for new learning. Through the capability approach, the chapter looked at what social arrangement was in place in the TVET institution for students with disabilities. The data revealed that the admissions policy of the institutions had the provision of different admission criteria specifically for students with disabilities. Instead of the student being submitted to entrance examinations where only those with a certain percentage score were admitted, disabled students were exempted. The admission criteria were having an essential awareness of literacy and numeracy. These criteria meant that students were provided with access to education (Hart, 2019). Although access to education does not necessarily mean access to learning, the students of this study had epistemological access. This admission requirement meant that students were not subject to anything beyond their intellectual ability, which was already their challenge. One of the stakeholders interviewed exclaimed that:

Box 8. Stakeholders' interview excerpt

> *Respondent 7: We practice affirmative action by exempting student with disabilities from an entry exam, and each department has to have 5% of vulnerable students in implementing equal opportunities policy.*

Enrolment in TVET as a professional institution stressed the importance of giving the student access to participation, practically, as the programs were outcome-oriented. Following Hart's (2019, p. 592) assertion that "capabilities could include the freedom to be educated by enrolling in one of these institutions and participating as a learner". Being educated in the context of this chapter means having the opportunity to access the curriculum insofar as its skills, knowledge and attitude are expanded during and after school. By so doing the institution gave students opportunities for the development of functionings.

Excellent facilities have enabled students to participate in learning within the institution. The researcher discovered that the infrastructure had been modified prior to the implementation of the programs. For example, for students studying the Access to Hospitality course, the cooking stoves have been changed. Oven handles were changed from iron to steel material as well as lowered to cater for those who might be using wheelchairs. The kitchen doors were also widened to allow access for those using wheelchairs or walking crutches access. Also, the hospitality training centre had a two-sided kitchen as it was shared with non–disabled students. This provision meant that students with disabilities could access the centre if they wanted an extra lesson or if they needed remedial help. Most importantly, students had the space for more practice and learning at their own pace; the freedom to have more practice improved skills and knowledge acquisition. Hostels for accommodation were also modified to allow all kinds of disabilities. Those changes gave students access to learning because there was physical access to the institution. For example, it allowed students to move freely between classrooms for help when working in group assignments.

The available opportunities aimed at enhancing access to education at a TVET college have contributed to the capability to be educated. Students indicated that they developed skills they did not previously have because they spent so much time in the respective teaching units and were kept at home. While the students were admitted with only the necessary skills in literacy and numeracy, attending TVET has exposed them to more advanced skills. TVET in Botswana has a mandate of training for employability and self-independence. To achieve this mandate, students were taught what was known as key skills, where they covered modules such as numeracy, literacy, communications, interpersonal skills and entrepreneurship. To put the competencies into practice, the institution organized what it called market days. A market day was an opportunity for students to showcase their skills. For example, students studying Access to Retail Business who did office equipment and procedure as a module would make a makeshift internet café shop and offer laminating, photocopying and Internet services. In the process, students would integrate other competency modules such as customer service, numeracy as they deal with money exchange, and problem-solving skills where customers were dissatisfied with the products, to mention only a few. This support has helped to refine the skills acquired by students before starting placements and preparing for the future.

The initiative aimed to equip students with skills that would instill the employability characteristics necessary for industry or encourage independence. For example, interpersonal skills taught students how to live well with others, as well as the ability to get to know one another and solve problems for themselves. Moreover, modules such as Entrepreneurship taught students the art of business. Such modules were aimed at helping students start their own businesses when they could not be employed. For instance, when students were asked how the college had prepared them, they stated:

Box 9. Currently enrolled students' interview excerpts

Respondent 8: College has prepared me for the future very much; because what I have done, I am going to use it for my life for a long time, for example, filing, and bound books.
Respondent 9: The College has given me a little bit of independence. At first, I was not independent, and I relied on my parents. I have learnt how to use my freedom nicely.

Participation in these market days enabled the development of functionings and capabilities. For example, respondent 8 referred to the use of acquired knowledge going forward. This means that the capability to inspire as well as knowledge and imagination had been achieved. Similarly, Respondent 9 appreciated the independence the institution had facilitated. As a result, the students were able to operate independently and had gained the freedom to make informed choices and decisions about themselves because they had been given the freedom to do so. The TVET Employability and Independence Training mission supports the key objective of the capabilities approach of providing the student with opportunities to flourish. In support of this assertion, Hart and Brando (2018) suggest that schools that teach beyond outcomes enable students to be and become what they value and aspire to be. This allows students to broaden their knowledge beyond their current strength, which brings us to the next opportunity.

Industry Partnership and Institutional Collaboration

According to Hart (2019), the outcome opportunities imply the 'aftermath' of attending school. In other words, this refers to what an individual takes out of school. Consequently, for the purposes of this study, outcomes were measured in terms of how the TVET institution corroborated the industry. Botswana's TVET institutions have a Programme Advisory Committee (PAC) that advises on the skills required of graduates at the end of their studies. This committee plays a key role in maintaining industry collaboration with institutions, and the institution uses the network for student placement, which in some cases results in ongoing employment for students. Therefore, external support from colleges did not only apply at the time of student enrollment; institutions still support graduate students. The institution's Department of Special Education is still in contact with the students and continues to check on them and find employment for them where possible. This support demonstrated the importance of the college's relationship with students. For example, one of the employed graduates declared:

Box 10. Graduate employed participant interview excerpt

> **Respondent 5**: *I am very grateful to this college because they took a risk by admitting me to their college when I had no idea of reading. I am indebted to them because I would not have reached where I am without their support. I am working because they found employment for me, and they still support me through frequent visit at my workplace despite that I have left college.*

This support demonstrates the good partnership and school network that the institution had with the industry. The ability to progress from institution to employment has helped students thrive (Hart, 2019) when they acquire the independence of their parents or guardians. The evidence showed that graduate students who were working had identified gaps in the industry, which they hoped to fill. For instance, one of the graduates said:

Box 11. Employed graduate participant' interview excerpt

> **Respondent 7:** *I want to open a business. But I am still trying to establish my kind of restaurant and create a different restaurant. And employ other suffering youth of Botswana.*

Box 12. Currently enrolled students' interview excerpt

> **Respondent 8:** *We live in peace with each other and care for each other like we are family. If I don't have toiletry I know that I am free to get it from my colleagues because they know that next time if they don't have I also help. Even in class we know that we learn differently. So, if I find numeracy difficult my classmates' helps me and I help them in hospitality where I am able.*

The student's desire to help others stems from the experience of college days in which they lived in harmony with each other and were able to care for each other. To corroborate this conclusion one of the respondents stated:

This spirit of empathy was promoted by the college program in which students learned interpersonal and intrapersonal skills (PIPS). The modules taught the students to build a camaraderie between themselves and others in peaceful harmony in the school and society. The ability of the student to have empathy for other students by thinking of opening her business is a sign of a "broader human flourishing beyond personal well-being achievement to encompass affiliation with others and inter-dependent notions of agency and well-being with fellow humans (other species and the environment)" (Hart, 2019, p. 593).

As mentioned earlier in the discussion, the institution had measures in place to support students to live a successful life. Thanks for this institutional support, the students were pleased to have attended a TVET college because of the experiential opportunities. The institution cannot necessarily be guaranteed that students would use work skills or conversion factors to do anything with the skills they have acquired; nevertheless, students have been offered opportunities. The discussion demonstrated the positive nature of the TVET institution; however, it is not enough. Further steps to enhance the good experiences identified are needed.

WHAT HAVE WE LEARNT FROM TVET SUPPORT DYNAMICS?

Good initiatives to support students with disabilities at the TVET institution mentioned above have benefited students. The discussion shows that good institutional support presented itself as opportunities in learning. Learning opportunities were important for the students in this study, especially because they had minor intellectual disabilities. Being mildly intellectually disabled is sometimes assumed as being limited and probably not capable of learning independently. However, the momentum of support has created a learning space for these individual students. Creating learning spaces brings the freedom to learn without being compared to others and the possibility to take initiatives in one's own learning. The space provided allowed students to become active participants and social actors. The capability approach expanded the view of understanding how the dynamics supported students to flourish. It has shown that the opportunities offered brought about agency. Agency achievement is "the realisation of goals one has reason to pursue which need not be guided by her own well-being" (Sen, 1999, pp. 56-57). This has been shown by respondent 10`s comments:

The response above has proven that it is time to put aside notions of looking at students with disabilities as incapable agents and focus on creating platforms where they can express their views on what they value. In the final analysis, the capability approach has shown that there is a relationship between agency achievement and inclusive support in the development of students' well-being.

Box 13. Currently enrolled students' interview excerpt

Respondent 10: *I want to go to a rehabilitation centre to do carpentry to open my own business because I have done retail business. Since I have learnt units like customer care, entrepreneurship and others, I believe I can put them to use. I will now know how to make furniture and know how to talk to customer if I want to sell to them.*

SOLUTIONS AND RECOMMENDATIONS

Taking into consideration the key issues discussed in this chapter, the following solutions and related recommendations need to be noted:

The innovative strategies used by the TVET institution are exemplary, and other TVET institutions may wish to compare these practices as a starting point and adopt them to provide equal opportunities for all students wherever they may be. It is hoped that over the next ten years, the education of students with disabilities will no longer be considered an issue of government or higher education, but that this institution will be able to conduct internal research to inform its practices.

In order to see further experiments discussed, in particular outcomes in the field of education, TVET needs an alumni office where they would retain alumni data and develop a research instrument to find out what the students are doing. It is necessary for Botswana, where there are youth grants on offer from the government that a special dispensation be made for people with disabilities. Students should be assisted with capital to convert their skills into profitable use in the business world.

The use of the capability approach has aided in identifying significant capabilities and functionings developed in students through the institutional dynamics implemented. The support of an inclusive environment facilitated competences during and after college; therefore, there is a need for educational curricular to adopt the capability approach to inform practices and policies.

FUTURE RESEARCH DIRECTIONS

The institution reported on was based in an urban location; the same research in a different context may be ideal to find out if the same functionings and capabilities will also be identified.

The chapter report was limited to one institution, and therefore future research on other institutions is recommended. This will help in a more diverse research and larger samples for the purposes of various support and educational conclusions.

More research, focused on identifying other excellent institutional support, may be useful to help the current TVET practices.

The capability approach and the Botho philosophy was used to interact with the findings and was instrumental in outcomes that would inform policies and future directions in the human development and capabilities. Further research on contemporary institutional dynamics is important as post research of this sampled population is needed.

CONCLUSION

An increase in the number of students with disabilities enrolling in higher education has been noted internationally and nationally in the last three decades. In the past the number of students with disabilities in higher education was not recorded. This is because students with disabilities, especially in Africa, were unlikely to achieve success beyond secondary education. Another problem is that their number was unknown because institutions lacked institutionalized support and services. In recent years, the situation has changed because the institutions have support units for individuals with disabilities. Despite these disability support units, challenges remain at these institutions regarding how the few registered students

with disabilities can be supported. This is why this study examined the dynamics that a TVET institution had put in place to support students with disabilities as part of their inclusiveness.

The chapter has given a qualitative insight into the experiences of the currently enrolled students and graduates with mild intellectual disability. In-depth and focus group interviews were used as data collection tools. Seventeen students with mild intellectual disability participated. The findings of the research reveal that even though inclusive education is limited in practice in vocational education, the TVET institution provided some support for students. By considering the capability approach framework, the researcher has given an insight into an excellent social arrangement that was in place for students to acquire experiences in education, both in accessing education and in outcomes. The researcher recognises that these good practices were possible because the TVET institution was a pilot college for programmes for students with disabilities. However, the institution should be applauded for expanding capabilities (Sen, 1999) which showed the extent to which students with disabilities were assisted in becoming what they valued. The capability approach also highlighted the development of achieved functionings and capabilities. The insights revealed good practices that could be used by other institutions as well as informing policymakers on how vocational education can be structured to develop more freedoms. The institution may not have been a perfect institution in implementing inclusive practices that yield agency achievement, but it has progressed to effecting institutional dynamics that focused on the well-being and flourishing in the lives of students.

The chapter highlighted practices that could inform best practices from other TVET institutions for comparative analysis. Also, this chapter helps stakeholders become conscious of the role of good support practices that are instrumental in students' well-being achievement. More importantly, policy and program designers can align their policies and programs with what helps a student have a clear path of aspirations and contribute to capacity development. Hart (2019, p. 594) asserts that "educational policy must go hand in hand with practice developments". The researcher believes that if TVET can focus on this assertion, it would help in changing the current status of TVET, which is based only on training individuals for employment. Besides, the normative perception that students with disabilities are not trainable needs to be challenged and inclusive human development approaches should be promoted. This chapter has shown that indeed students with disabilities have the right to have the capability to be educated. It can be achieved by institutions that implement such inclusive learning practices discussed that promote what students want to become and aspire to be.

ACKNOWLEDGMENT

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KEY TERMS AND DEFINITIONS

Agency: What one has to do to follow their goals, which they perceive as important.
Botho: A Tswana word for humanness.
Brigade: Community vocational schools offering programmes for artisans.
Capabilities: The opportunities an individual have to do some things of value to themselves.
Capability Approach: A framework focusing on what people are capable of.
Functionings: Things that an individual may value and have a reason to value.
Technical College: Vocational institution offering programmes for technicians.
Well-Being: Being able to use capabilities to practicalities in one's social and personal life.

Chapter 3
Double Jeopardy:
The Intersection of Disability and Gender in Zimbabwe

Naume Zorodzai Choguya
University of Zimbabwe, Zimbabwe

ABSTRACT

Motivated by the thinness of gender-disaggregated literature on women and disability, the author discusses the position and condition of such women in Zimbabwe. Literature shows that women with disabilities experience double discrimination as women and as disabled persons. The author argues that women are marginalised from access to resources they need for their upkeep, personal security, and further human advancement. Furthermore, disability feeds on the already existing inequalities in society to produce heightened exclusion for them. Women face physical, attitudinal, and environmental barriers; live in poverty; and lack opportunities for gaining an education, finding employment, forming meaningful social ties, and participating meaningfully in their families and communities. This chapter makes calls for committed efforts towards a transition to an inclusive society, one that includes persons with disabilities in every facet of life.

INTRODUCTION

Globally, disability is estimated to affect over one billion people. A multi-country study on the prevalence of disability in 54 countries using World Health survey data reported disability to be at 15%; and higher in developing than developed countries (Mitra & Sambamroothi, 2013).The 2010 report on the global burden of disease also revealed that disability is increasingly becoming an important dimension. The prevalence of disabilities is estimated to be highest in sub-Saharan Africa. Women and girls are reported to be the largest group in the global disability population. They have been historically subject to discrimination both on grounds of their disability and gender. Accordingly, this chapter discusses the position and condition (socio-cultural, gender and economic dimensions) of women living with disabilities in Zimbabwe. Its main argument is that women with disabilities (WWDs) face double discrimination. Disability remains

a significant cause for concern, for many women in low-income countries as it is responsible for their further marginalisation in society (UNESCAP, 2005). Discrimination is a fact, officially recognised by Article 6 of the 2006 UN Convention on the Rights of Persons with Disabilities (CRPD).

The World Health Organisation (WHO) 2011 reports that, over a billion people (15% of the world's population) has a form of a disability and the rates of disability are increasing due to population ageing and increases in chronic health conditions among others. WHO (2015) recognizes disability as a global public health issue, a human rights issue and a development priority. Disability is a global public health issue because people with disability, throughout the life course, face widespread barriers in accessing health and related services, such as rehabilitation, and have worse health outcomes than people without disability. It is also a human rights issue because adults, adolescents and children with disability experience stigmatisation, discrimination and inequalities. They are subject to multiple violations of their rights including their dignity, for instance through acts of violence, abuse, prejudice and disrespect because of their disability, and they are denied autonomy. Disability is a development priority because of its higher prevalence in lower-income countries and because disability and poverty reinforce and perpetuate one another. Poverty increases the likelihood of impairments through malnutrition, poor health care, and dangerous living, working and travelling conditions. At the same time, disability may lead to a lower standard of living and poverty through lack of access to education and employment, and through increased expenditure related to disability.

Yet, little is known about people with disabilities' (PWDs) and their disadvantaged economic and socio-cultural status, especially in developing countries. Herein disability denotes "the negative aspects of the interaction between an individual (with a health condition) and that individual's contextual factors (environmental and personal factors)" (WHO, 2001, p. 213). Interactions include impairments (affecting the body), activity limitations (affecting actions), and participation restrictions (affecting experience of life). It implies having "difficulties with activities of daily living, difficulties with instrumental activities of daily living, and mobility limitations" (Wong et al, 2013). This definition is rooted in the disability as a social issue perspective. This perspective challenges the very assumption of 'normality' and redefines disability as social oppression (French, 1994). The argument is that the problem does not lie with the disabled individual but with the society. This chapter conceptualizes disability as a social category in its own right; that is, individuals may have diverse impairments, but are all subject to processes that result in their exclusion and marginalization.

Disability disproportionately affects women, older, and poor people. Women and girls with disability are likely to experience "double discrimination", which includes gender-based violence, abuse and marginalization. As a result, WWDs often face additional disadvantages when compared with men with disability and women without disability. In its outcome document of the high-level meeting on disability and development in 2013, the United Nations General Assembly noted that an estimated 80% of people with disability live in developing countries and stressed the need to ensure that persons with disabilities are included in all aspects of development, including the post-2015 development agenda. Unfortunately, the path between discourse and practice is rarely clear especially for the estimated one billion PWDs globally facing barriers and challenges to inclusion in mainstream development efforts; and for whom disability-specific projects and interventions are far and few between (Karr, van Edemaa, Sims, & Brusegaarda, 2017). They face widespread barriers in accessing various services. The barriers lies in, for example, inadequate legislation, policies and strategies; the lack of service provision; problems with the delivery of services; a lack of awareness and understanding about disability; negative attitudes and discrimination; lack of accessibility; inadequate funding; and lack of participation in decisions that

directly affect their lives. Many of the barriers they face are avoidable and the disadvantages associated with disability can be overcome (UNPRPD, 2019).

PWDs are estimated to make up 10% of Zimbabwe's population and are thus a key constituency (UNDP, 2009 & DFID, 2010). However, they remain invisible in all levels of society and face numerous challenges in accessing healthcare, jobs, education, and justice. In Zimbabwe WWDs are considered one of the most vulnerable population groups (2013 National Survey on Living Conditions among Persons with Disabilities in Zimbabwe- UNICEF, 2013). Moreover, they are particularly vulnerable to discrimination due to their marginalized gender. According to UN Women, one in five women in Zimbabwe live with disabilities (UNESCO, 2015). They remain an invisible and "left behind" population group across all levels of society and face "double marginalization." Such women are at a heightened risk of gender-based violence, exploitation and exclusion.

Generally, disability affects the health and wellbeing of women. It impacts on physical functioning, leading to social exclusion and limited access to resources and opportunities needed for survival. Disability also creates the need for both formal and informal care (WHO, 2011). However, prevalence of disability among women in sub-Saharan African countries has not been systematically investigated. Gender has been associated with disability and the resultant gender differentials are a result of the socio-economic gradient between men and women. WWDs are recognised to be multiply disadvantaged, experiencing exclusion because of their gender and their disability and particularly vulnerable to abuse, discrimination, and stigmatisation.

This chapter explores and analyses the intersectionality of disability and gender, in Zimbabwe and the reasons women and girls with disabilities are amongst those at most risk of being 'left behind'; being mindful to avoid a victimhood narrative whilst highlighting the realities of discrimination and abuse. It outlines positive pathways to equality and inclusion for women and girls with disabilities, offering some insight and recommendations on further actions to tackle the power inequalities that result in their exclusion.

METHODOLOGY

This chapter utilises desk research approach, which reviews books, documents, newspapers, magazines, articles and journals to understand the nature and extent of the problem under discussion. Desk research is the analysis of information that already exists, in one form or another. The researcher mines such already existing data: "extracts" relevant data or information; summarize it; logically analyze it; and report results. In many instances, the issue, problem, question, which prompted the idea for a research project is resolved or answered by studying previous research reports in the literature or analyzing, either statistically or logically, or both, data drawn from existing databases. In this research however there was a process to carefully search and list the most relevant and up-to-date material on the topic at hand. Due care was taken to use work that has been published in scholarly journals and or from reputable organisations. The review process used a thematic analysis method to extract or obtain data from published reports. This is a qualitative analytic method for identifying, analysing, interpreting and reporting patterns within data.

DISABILITY IN THE ZIMBABWEAN CONTEXT

Zimbabwe's disability prevalence is high among females (10 percent) as compared to males (8 percent) (Zimbabwe ICDS, 2017). Though personally experienced, disability is a public issue of great significance especially because persons with disability are more likely to experience poverty. Moreover, stigma, discrimination and inaccessibility that define their lives entail that they are less likely to access basic services, thus further contributing to their marginalisation and exclusion. Literature from developed and developing countries alike (Disability and Development Report, 2019; Women with Disabilities Australia (2007) suggests that PWDs are disproportionately represented among the world's poor and tend to be poorer than their counterparts without disabilities. Estimates are that one in five people of the world's poorest people is a person living with disabilities. Though disability is a crosscutting developmental issue, persons with disabilities remain invisible in the societies they live and continue to be largely absent from international development efforts.

Disabled people have unique experiences due to social exclusion, marginalisation, vulnerability, isolation and other social, economic, political and cultural factors that render them more vulnerable. Poverty in particular combines with these factors to render WWDs at even greater risk of heightened vulnerability, marginalisation and exclusion. In Zimbabwe, women and girls are the poorest of the poor. The 2002 Household and Population Statistics revealed that women make up 55% of disabled people in Zimbabwe (Lang & Charowa, 2007). Nonetheless, they are marginalised and discriminated against due to cultural, social and economic reasons that undermine the rights of women (Charowa, 2005). To date only a few and isolated studies have been conducted on WWDs in Zimbabwe making it difficult for one to come up with a comprehensive analysis of the situation of WWDs in the country. One striking reality however is that women face double discrimination first as women and as disabled persons. This situation has grave implications for their security and quality of life.

An organisation called Disabled Women's Organisation (DWSO) established in 2003 by Gladys Charowa represents and advocates for the rights of such women and girls in Zimbabwe. This organisation has 3,021 registered members and seeks to empower women and girls with disabilities economically and physically. It has programmes, which include HIV&AIDS education, wheelchair distribution and economic empowerment and counselling. However, there are no real statistics regarding how many PWDs are in Zimbabwe. Nonetheless, estimates of 1, 5 million PWDs exist (Dube & Charowa, 2005). Against this background, membership of DWSO is very low as it therefore works with a number significantly small of people with disabilities. Disability statistics, which are potentially powerful both in demonstrating differences and in analysing mechanisms for the relationship between poverty and disability, are far from robust or comparable the world over (Eide & Loeb, 2006) and Zimbabwe is no exception.

The National Council of Disabled Persons of Zimbabwe formed in the early 1980s has been influential in promoting full integration of PWDs by creating an environment striving for equality (Nyathi 1986). On the 23rd of September 2013, Zimbabwe ratified the United Nations Convention on the Rights of Persons with Disabilities. Nonetheless, formulation and or ratification of policies alone do not translate into improved lives of PWDs. These policies have to be translated into practice and scholars have since lamented the discrepancy between their formulation and adoption and the actual implementation. The world over, while the need to adopt and adapt the international conventions to bring the preferred change has been made, efforts have to be made to make sure that an enabling environment is created, for the full realisation of rights, privileges and provisions for PWDs. As citizens, they have the right to access resources and amenities just like anyone else. Therefore, any subsequent policy should empower

PWDs based on their lived realities. Disability-inclusive development hinges on participation, which in this context is active participation of PWDs to overcome their isolation and invisibility accessibility as well as non-discrimination, which entails the fair treatment of all citizens with people with disabilities. Direct or indirect discrimination is unacceptable.

Once a model country in so far as disability rights in Africa were concerned, Zimbabwe was notable for having a high-level disability advisor to the president and even had a Zimbabwean activist as the chairman of Disabled Peoples International (DPI) for many years. Zimbabwe was applauded for progressive legislation and policies. A little over a decade into the country's independence, Zimbabwe was one of the first countries to adopt disability legislation in 1992. However, since then, instead of improvements, PWDs are facing increased difficulties including to find income generation opportunities and employment and to access education and health services. More so despite being appointed by the President the role and function of the Special Advisor on Disability and Rehabilitation is not clear formally or practically.

The Disabled Persons Act (DPA) of 1994 prohibits the denial of disability rights in access to public service, employment and education. Zimbabwe's Constitution also forbids discrimination on grounds of physical disability. 2013 saw the enacting of a new constitution, which recognises the rights of children, youths, people with disabilities, disabled women, workers and vulnerable groups. However, in a patriarchal society as is Zimbabwe where women are second-class citizens, being affected by disability further marginalises them from the very resources they need to empower themselves and achieve better quality of life. Despite the provisions in the constitution for PWDs, the realisation of these provisions remains a colourful dream for many. In Zimbabwe, UNICEF, (2013) and Mtetwa (2018) laments that despite having the Disability Act, no formal policies and implementation strategies are in place to ensure the Act's enforcement.

The multifaceted and protracted crisis in Zimbabwe has had a negative impact for women with and or affected by disability. As the political and economic situation deteriorated, in early 2012 some disability organisations were even banned by the government. This is against the background of little attention paid to people with disabilities in home-grown programmes (IRIN, 2012). Government humanitarian relief programs sometimes exclude persons with disabilities, claiming that they "belong to social welfare". Additionally, there are no legal provisions mandating PWDs to participate in policymaking or to work with governmental institutions, but disabled people's organisations (DPOs) have sometimes been consulted, when laws and regulations with a disability aspect are being prepared. This therefore has implications for the discrimination and or integration of disability issues in programmes meant to benefit the populace. Moreover, such consultations ought not be taken at face value, as there is need to determine whether the consultation is meaningful or just token participation.

Disability issues enjoy a low priority and command little government attention in Zimbabwe. The country's, Ministry of Public Service Labour and Social Welfare is responsible for the rights and needs of PWDs. However, there are no budgetary allocations for addressing the needs of this group. Collectively, with the Ministry of Health and Child Welfare, the ministries are responsible for the provision of assistive devices to citizens with disabilities (Lang & Charowa, 2007). However, both Ministries are failing to deliver according to their responsibilities. On the other hand, the Ministry of Women Affairs, Gender and Community Development, are yet to include women and girls with disabilities in its programs. This just goes to show that at the policy and national resource allocation level there is little consideration for and efforts towards the provision of the basics for such special needs people. The rights of PWDs are spelled out in the Disability Act (1994). Although strong and promising in formulations, the act has little, if any, effect on the ground. In 2008, a process of reviewing several pieces of legislation pertaining to

disability was initiated, including the Disability Act and the Mental Health Act to align them with the Convention on the Rights of Persons with Disabilities. However, Zimbabwe is known for having sound policies on paper but it is their implementation where discrepancies manifest (Lang, 2009).

DISABILITY ISSUES, CONTROVERSIES AND PROBLEMS

Conceptually, there are two main contrasting models on disability, the medical and social models (Oliver, 1996; 1983). The medical model of disability which tends to regard disabled people as 'having something wrong with them' and hence the source of the problem. This individual, medicalised model of disability has dominated disability policy and service provision (Oliver 1996) and to a great degree permeates Zimbabwe's disability legal regime. Then there is the social model of disability, which forms the foundation of international law. The Union of the Physically Impaired Against Segregation (UPIAS) in 1976 is credited for forwarding the social model of disability. They present that:

In our view, it is society, which disables physically impaired people. Disability is something imposed on top of our impairments by the way we are unnecessarily isolated and excluded from full participation in society (UPIAS 1976:14).

In terms of the medical model, disability is considered the sole problem-affecting persons with disabilities, which limits them from enjoying their rights, requiring the rehabilitation of this class of persons to manage their disability. The social model of disability, while acknowledging the impact of disability, problematises the entire environment created by the society as disabling and hindering persons with disabilities from participating in political, social and economic activities on an equal basis with the rest of the population. In accordance with the social model, the major intervention mechanism is the removal of all barriers that inhibit persons with disabilities from participating in life's activities on an equal basis with others. In this regard, there is need for Zimbabwe to review its medical-model tainted regimen and practices and adopt the internationally prescribed social-model perspective. The social model of disability is thus an attempt to switch the focus away from the functional limitations of individuals with an impairment on to the problems caused by disabling environments, barriers and cultures. It refuses to see specific problems in isolation from the totality of disabling environments. The endorsement of the social model does not mean that individually based interventions in the lives of disabled people, whether they be medically, rehabilitative, educational or employment based, are of no use or always counter-productive (Oliver, 1996). From a social model perspective, providing a barrier free environment is likely to benefit not just those with a mobility impairment but other groups as well (e.g. mothers with prams and pushchairs, porters with trolleys) whereas physical rehabilitation will only benefit those privileged enough to be able to access it. The social model is critical about the efficient use of scarce resources a state of affairs of most developing countries.

Intersectionality as articulated by Crenshaw (1989) highlights the "multidimensionality" of individuals' lived experiences and the systems of oppression shaping them. Intersectionality is particularly illuminating in exploring the co-construction of gender, and disability in shaping individual, collective, and structural conditions. Despite its analytic power to incorporate analysis of diverse forms of power and inequality into the framework, disability remains consistently missing from most contemporary intersectional studies in sociology. Thus, Berne (2015) holds that the first principle of disability justice

is a commitment to intersectional work. A gendered analysis suggests that the higher prevalence of disability is not a facet of being female *per se*, but a result of social and cultural norms relating to gender, such as 'systemic exclusion from health care and education, poorer nutrition and gender-based violence' (Gender and Development Network Gender and Disability Group, 2017). An intersectional approach assumes that women's experiences and choices shift and change depending on the complicated and constantly changing relationship between their individual and collective characteristics and the power relationships within social structures. Intersectionality also provides space for us to consider how women can be simultaneously advantaged and disadvantaged depending on the relationships among various identity markers and power structures that underlie social inequalities.

DISABILITY AS A SOCIAL ISSUE

Gender is one of the most important categories of social organisation, yet people with disabilities are often treated as asexual, genderless human beings (Manimekalai & Murugan, 2019). However, women and men with disabilities have different life experiences due to biological, psychological, economic, social, political and cultural attributes associated with being female and male. Patterns of disadvantage are often associated with the differences in the social position of women and men. These gendered differences are reflected in the life experiences of women and men with disabilities. WWDs face multiple discriminations and are often more disadvantaged than men with disabilities in similar circumstances (Disability & Development Report 2019; Phillips 2012).

Culture is a significant driver in the marginalization of persons with disabilities. In certain Zimbabwean societies, disability is associated with witchcraft; is considered to be a curse and the birth of a disabled child as a bad omen for the family. This hostile view of disability translates to the low social acceptance and isolation experienced by persons with disabilities. Communities play a key role in perpetuating the discrimination and stigma; hence, the fear and shame surrounding disability propels parents to leave their children in solitary thereby segregating them from other children and the wider community. This form of protective abuse increases the likelihood of sexual violence and solidifies their invisibility in public sectors especially within the sexual and reproductive health (SRH) and justice domains (UNESCO, 2019). WWDs are often denied equal enjoyment of their human rights, in particular by virtue of the lesser status ascribed to them by tradition and custom, or as a result of overt or covert discrimination. WWDs face particular disadvantages in the areas of education, work and employment, family and reproductive rights, health, violence and abuse.

PWDs encounter multiple attitudinal, environmental and institutional barriers that militate against their effective inclusion with Zimbabwean society. Discrimination often starts at home, early in the life of disabled women. For instance, in Global South the birth of a child with disability is considered a curse resulting in infanticide; institutionalisation of the child or being hidden away in the home, invisible to society (Development Pathways, 2018). This discrimination is accompanied by reluctance on the part of the families' decision makers, to make resources (tangible and intangible) available to WWDs. This further undermines their life chances and the disabled status further entrenches their social isolation. WWDs face barriers in living a fulfilling life more than their male counterparts. Dube & Charowa (2005) found similar views and highlight that families and society have not accepted persons with disabilities. As a result, they are hidden away from society to avoid family and social disgrace. It is a common per-

ception within Zimbabwe that disabled people are passive and economically unproductive, and therefore constitute a "burden" upon society (Charowa, 2007).

Individualisation of disability as is found in the Western/European-dominated discourse on disability (Mollow, 2004) has evident limitations when the problems are structural and political. Sociological studies on medicalization from the 1970s and early 1980s shared a negative view of the process. The "medicalization thesis" critiqued medicine's universalist and imperialist aspirations, the reductionist focus linked to those premises, and the emphasis given to the study and treatment of symptomatology located in the individual, at the expense of social factors involved in health and disease processes (Ballard & Elston, 2005). In this regard, recent developments of the conceptual understanding of disability to incorporate social and political structures are more than welcome. Phenomena at this level are accepted as central parts to the disablement process. Whilst cultural, political and structural phenomena can cause poverty and disability, there is a lack and limited understanding of their contributions. In poverty-stricken contexts, political and structural changes are cardinal in allowing people to live their lives in dignity and to be able to fulfil their potential, contributing to their families and to the community.

The constructs of deformity and disability are complexities that are inextricably bound up with the histories and cultures of Zimbabwean society. Issues of disability in Zimbabwean society are associated with a discourse of silence. The result is that often the deformed and disabled children are kept away from physical and conversational contact with society in general: they are kept indoors, away from the prying and surveillant gaze of 'the normal' (Lang & Charowa 2007). Women too suffer the unjustifiable consequences of being disabled. The UNDP (2008), argues that WWDs are twice more prone to divorce, separation, and violence than able-bodied women. The Disability and Development report 2019 echoes similar findings. UNICEF (2012) highlights that in Zimbabwe; up to 87 per cent of WWDs are suffering from sexual violence; as many as 29 per cent may have HIV & AIDS; and 34 per cent of girls and 22 per cent of boys with disabilities never attend school. This is too significant compared to the 90-92 per cent primary school attendance for the population without disabilities. Moreover, WWDs have limited access to the labour market because of the double disadvantage of being both female and disabled (Disability & Development Report 2019; ZHDR 2017), The International Labour Organisation (2000) argues that unemployment among PWDs is as high as 80 per cent in some countries. Often employers assume that persons with disabilities are unable to work.

NAVIGATING HEALTH AND WELLBEING WHILE LIVING WITH DISABILITIES

In Zimbabwe, the Disability Act mandates the National Disability Board with the responsibility to develop measures and policies on the rights and welfare of persons with disabilities; maintain a register of persons with disabilities and disability-related organisations; and advise government and non-governmental organisations on the welfare and rehabilitation of such persons. However, despite these provisions, WWDs bemoan their positions with regards to access of health facilities and services. For instance, Rugoho & Maposa (2017) present that WWDs in Zimbabwe face numerous challenges in accessing sexual and reproductive health. Cultural belief still regards them as not sexually active. The government has also failed to promote policies that facilitate access to sexual and reproductive services by WWDs. They are still perceived as non-sexual or as not having the capacity to engage in sexual activities (Chikumbu, 2014). Women and girls with disabilities face multiple barriers in accessing SRH services. The wide-

spread misconception of their asexuality result in healthcare providers ignoring their SRH needs despite the fact that they are just as likely as anyone else to engage in sexual activities.

According to Leonard Cheshire International (2019), most donors in Zimbabwe (67 per cent) indicate that they do not fund disability issues. Those that do however; focus on advocacy and human rights on a very small scale.) There are no donors targeting income-generating projects aimed at empowering persons with disabilities. In a low resource setting as is Zimbabwe, this has implications for the general well-being, socio-economic status and quality of life of these special needs peoples. The alarming rates of illiteracy, economic dependency, and social exclusion faced by WWDs have grave consequences for their health and wellbeing. They experience extreme discrimination, which is compounded by their disability. For instance, studies across the globe have shown that maternal health facilities around the world lack staff with knowledge of providing care to pregnant WWDs and that information on that topic is scarce (König-Bachmann, Zenzmaier, & Schildberger 2019; Gibson & Mykitiuk 2012; Gavin, Benedict & Adams 2006).

Women, particularly girls with disabilities, face unique issues due to the intersection of gender and disability. According to Zimbabwe's Ministry of Health & Child Care's Living Conditions among Persons with Disability Survey (2013), girls with disabilities are especially vulnerable to gender-based violence (GBV) as they are twice as likely to experience sexual abuse relative to their male and female counterparts without disabilities. There are numerous factors contributing to this heightened vulnerability to GBV namely social isolation, the lack of support systems, and negative perceptions propagated by the shame and stigma surrounding disability, all of which together create a high-risk environment in which abuse can go undetected (UNESCO, 2019).

Physical access to healthcare facilities is also a critical issue as many are not equipped with ramps or assistive communication devices such as braille signs; as a result, disabled women and girls face numerous difficulties in receiving proper services. Moreover, the mere act of getting to a facility is challenging, as accessible transportation itself is limited, and even when disabled women and girls manage to receive transportation, many face abuses. Despite the lack of SRH rights and heightened vulnerability to GBV, women and girls with disabilities have limited access to justice (UNESCO 2019). That they are viewed as broken objects has made their plight remain on the periphery of policymakers (Choruma, 2007).

DISABILITY AND GENDER BASED VIOLENCE

As Zimbabwe tries to curb its high levels of gender-based violence, advocates say that services and systems aimed at helping abuse victims are failing to recognize the specific needs of women and girls with disabilities. Activists in Zimbabwe say that women and girls with disabilities are more often the victims of violence. Furthermore, they get little or no access to support services and legal assistance aimed at GBV victims (UNPRPD 2019). Part of that is due to the fact that research on how GBV affects WWDs is fairly new, so there are no reliable figures to measure how widespread the problem is "Due to the discrimination and stigma linked to disability, cases of GBV among women and girls with disabilities are rarely given the attention they deserve," says Rejoice Timire, director of the Disabled Women Support Organisation. "Most of the perpetrators are their caregivers," the very people who are supposed to speak for these women, says Timire. "Hence the cases remain unreported." (Nyakanyanga, 2017).

When it comes to GBV – from reporting the crime to finding justice to counseling – WWDs in Zimbabwe struggle against a system that fails to recognize their specific needs. They are rarely consulted

on policy development and programming aimed at tackling GBV, and activists say there are no accommodations made to help women and girls with disabilities get access to police or legal counsel. A lack of personnel who are trained in dealing with disability issues, as well as limited education opportunities for disabled people, makes it difficult for women and girls with disabilities to report sexual violence, and for authorities to follow up on cases quickly.

According to the United Nations Population Fund (2015), one in three women aged 15 to 49 in Zimbabwe have experienced physical violence and about one in four women say they have been the targets of sexual violence at least once since the age of 15 (UK Government Home Office Country Police and Information Note, 2018). Thus gender-based violence as a cause for concern as it is becoming widespread. Sexual violence, which is fuelling the spread of HIV and AIDS in the region and which affects all women alike, is reportedly on the increase amongst women and girls with disabilities. Domestic violence against women continues to be a serious problem across racial, ethnic, and economic lines (Charowa, 2007). This holds true also even for children living with disabilities. Save the Children Fund, Norway (December 2004) revealed that the sexual abuse of children with disabilities is on the increase in Zimbabwe. The study found that 87.4 percent of girls with disabilities were reported to have been sexually abused. Approximately 48 per cent of them had an intellectual disability, 15.7 per cent had hearing impairments and 25.3 per cent had visible physical disabilities. 52.4 per cent tested positive for HIV. Women and especially young women (15-24 years) remain among the majority (59% women and 41% men) of those in Zimbabwe living with HIV (Spotlight Initiative Country Programme Document (2018)

Zimbabwe has not made progressive efforts to mainstream the rights of WWDs into SRH services and information. Rugoho & Maphosa (2017) discuss the challenges women continue to face in that regard. The DPA of 1994 that the country has been applauded for is elusive and has yielded less progress for WWDs (Khumalo, 2008, Lang, 2009). Spotlight Initiative Country Programme Document (2018) also raises several challenges including policy and implementations mitigating the realisation of women's rights. Choruma (2006:15) argues that, "the sexuality of PWDs is poorly understood and often not recognised or discussed by society and family members, and therefore PWDs are not commonly regarded as a community that is vulnerable to HIV or affected by AIDS." Moreover, the plight of disabled women who are sexually abused has been exacerbated by lack of support structures and lack of information on how they can protect themselves and their sexual rights. Superintendent Andrew Phiri of the Zimbabwe Republic Police said at the 2012 International Day of the Disabled Commemorations held on the 3rd of December that there were no statistics on cases of sexual abuse of disabled women and that most cases go unreported[1]. Superintendent Phiri highlighted that victims might not be aware that they can report cases of their abuse. He reiterated that in most cases, perpetrators of the violence are known. Moreover, care providers of the abused often seek to quickly benefit from such situations, thus families choose to settle the cases at family or village level to avoid police intervention. Often, families will seek police help only when the perpetrator has failed to "pay" for the abuse.

WWDs are therefore not normally regarded as being at risk of or vulnerable to HIV. Extreme poverty and social sanctions against marrying a disabled person mean they are more likely to become involved in unstable relationships than able-bodied people (Relief Web Zimbabwe 2012). The Zimbabwe Agenda for Accelerated Country Action for women, girls, gender equality and HIV 2011-2015 report reported increased vulnerability of disabled women to sexual abuse. Thus, there is need for concerted efforts towards zero tolerance on sexual abuse and awareness raising on the part of WWDs so that they know their rights and report the incidences to the police.

THE QUEST FOR EDUCATION VERSUS DISABILITY

Zimbabwe has always prided itself of high levels of quality education and one of highest literacy rates on the continent. While many gains have been made, both attitudinal and physical barriers still keep WWDs from reaping benefits of education reforms (Mapuranga, Musodza & Gandari, 2015). The global literacy rate for adults with disabilities is as low as 3 per cent and 1 per cent for WWDs (UNDP 1998). UNESCO (2001) presents that ninety per cent of children with disabilities in developing countries do not attend school. In Zimbabwe, the neo-liberal prescription of the Economic Structural Adjustment Programme (ESAP) saw the introduction of user fees in the previously government subsidized social service provision areas such as health and education. Since then, in the education sector schooling fees have risen sharply due to high inflation, and as a result, many families cannot afford to send all of their children to school and much less those children with disabilities. In this regard, girl children and women are more disadvantaged. In the case of inadequate resources in the family, female's education is often sacrificed more so if one is disabled. UNICEF and Ministry of Labour and Social Services, (2010) notes that compared to their peers, children with disabilities (CWDs) are less likely to access health, education, are more vulnerable to violence and abuse and often excluded from opportunities to participate fully in their communities (UNICEF Zimbabwe and Ministry of Labour and Social Services, 2010).

Of Zimbabwe PWDs a quarter of these people are intellectually Disabled (ID), 30% of these ID people are children. Yet, most state run schools and hospitals in Zimbabwe have very few officials trained to handle people with IDs and with hearing speech functional disabilities (Mandipa, 2014). The schools are thus inaccessible to PWDs without no guiding rails, in urban schools the elevators (if there are working at all) without recorded voices for persons with both ID and visual impairments. The rails are too narrow to accommodate wheel chairs and the toilets cubicles are too high for people with both intellectual and physical disabilities (Mapuranga, Dumba, & Musodza, 2015). Munyuki (2013) shows that 34 per cent of female disabled children have no access to any form of schooling at all compared to only 22 percent of males. Whilst Zimbabwe has been applauded for its literacy levels and ranked among the best on the continent CWDs are generally restricted to schools funded by churches. The country has a record of 93 per cent literacy among its school-going children but a sizeable proportion of the 200,000 CWDs do not attend school at all. According to the Norwegian SINTEF Disability Living Conditions Survey (2001), 28 per cent of children with disabilities never attended school, in comparison with 10 per cent of non-disabled children, 34 per cent of girls with disability and 22 per cent of boys never attend school compared with 12 and 8 per cent of non-disabled. Children with hearing, visual and intellectual impairments are significant more likely never to attend school compared to children with physical impair-ments. The Government of Zimbabwe has described underdevelopment, poverty and HIV/AIDS as the three intractable enemies of the Zimbabwean child (SOS, 2014), to this list disability ought to be added.

Access to education has implications for the economic empowerment and livelihood options available to these children in their adult life. Disabled people are less likely to complete primary education than their non-disabled counterparts are. This in turn further reinforces their marginalisation and social exclu-sion, because of lack of education and requisite skills; it is far more difficult for those with disabilities to secure long-term sustainable employment. Therefore, the negative cycle of poverty and disability is compounded. Nyikahadzoi et al, (2013) supports this arguing that Zimbabwean society continues to ex-clude disabled children from attaining education. They further argue the gender and the ability to speak of the child living with disability, as well as the parents' attitude and their membership to a support group

heavily influences the schooling of children with disabilities. They lament the lack of clear policies and enforcement of regulations towards the realisation of human rights among children living with disability.

The UNPRPD (2019) Aspirations, Needs and Concerns of Women and girls with disabilities in Zimbabwe study also highlights the aspirations of disabled women to get an education. At the same time, studies have demonstrated a strong link between disability and poverty (Mtetwa 2018; Muderedzi et al 2017; Muderedzi & Ingstad, 2011).This is what the author discusses in the context of Zimbabwe next.

INTRICATE RELATIONSHIP BETWEEN POVERTY AND DISABILITY

There is a growing consensus amongst activists, researchers and others that disability and poverty are 'dynamic and intricately linked phenomena' (Mitra, Posarac & Vick 2011:1). Disability leads to poverty through several of exclusion processes, whilst poverty is a threat to daily life activities, social participation and health, consequently creates disabling conditions and disability. These findings are similar to those of Palmer (2012) who in a conceptual review of disability and poverty found strong links between poverty and disability regardless of the definition of poverty. Some authors challenge the very distinction between disability and poverty – poverty is disability (Hansen & Sait, 2011; Husum & Edvardsen, 2011). With the broadening of the understanding of both concepts, overlap between the concepts and possibly some form of convergence is emerging. Thus, combating poverty equals the reduction of disabling mechanisms. This may be a very fruitful and not least politically powerful perspective in contexts where poverty is endemic and the consequences of poverty are particularly severe for individuals with disabilities and their families.

The poverty-disability nexus is further interesting in relation to the post 2015 development agenda and the efforts of the international community to eradicate poverty. The UN Monitoring Report (UN 2011: 7) states that 'A growing body of research now shows that the most pressing issue faced by millions of PWDs worldwide is not their disability but rather poverty. Much of this poverty is the direct and indirect result of exclusion and marginalisation of persons with disabilities due to stigma and prejudice about disability'. Though poorly understood, the links between disability and poverty are more complex and nuanced than previously anticipated and warrant further research. The International Classification of Functioning, Disability and Health (ICF) combined a social and a medical model on disability, shifting the balance from bodily functioning to social participation as an outcome of the meeting between an individual and his or her context (WHO, 2001). The Convention on the Rights of Disabled People (CRPD) (UN, 2008), as well as the World Report on Disability (WHO 2011), confirmed this putting disability clearly into a human rights perspective, a stance which is directly relevant for poverty alleviation efforts.

The structural level is another level for explaining the persistent relationship between disability and poverty. Muderedzi & Ingstad (2011) describe and analyse how political and structural forces violating basic human rights in Zimbabwe are a direct cause of persistent poverty, with dire consequences particularly for women and children with disability. One of the most promising theoretical approaches to analysing links between disability and poverty is the introduction of the concepts of 'social suffering' and 'structural violence' (Farmer, 2004; Kleinman *et al*. 1997). Social suffering is imposed on people by conditions outside their control, and can be political, economic, ecological and others. Structural violence plays out where some social structure or institution purportedly harms people by preventing them from meeting their basic needs, i.e. the violence of everyday life that causes social suffering. By seeing suffering as socially induced, the blame and guilt are placed on the outside forces rather than on

the individuals and their families. Moreover, in some areas, mothers are usually blamed and stigmatised for the birth of a disabled child thus, it is not unusual in some areas for disabled women to be kept hidden, and never receive visitors. It is costly to be disabled. The financial resources required to get the necessary aids and appliances to enable normal function are just not there. The economic environment is not enabling enough for one to access these. Marongwe & Mate (2008) found similar sentiments and reported an inadequate supply of aids and appliances required by people with disabilities such as wheelchairs and prosthetics. Those that were available were priced beyond the reach of many Zimbabweans.

The relationships between poverty (social disability) and (medicalised) disability result in simultaneous deprivation composed of ideological reinforcement, punitive experience, psychological extinction, stimulus deprivation and a cognitive and verbal development which probabilistically affects the participation. This sets up barriers to the participation of disabled people of all types, but especially girls and women. Poverty may increase the risk of disability through malnutrition, inadequate access to education and health care, unsafe working conditions, a polluted environment, and lack of access to safe water and sanitation. Disability may increase the risk of poverty, through lack of employment and education opportunities, lower wages, and increased cost of living with a disability. Education is considered an important strategy in capacitating women with disabilities

The issue of culturally based myths and beliefs about disability negatively affect social relations of WWDs and the rest of society. Cultural practices as perceiving persons with disabilities as perpetual children and as asexual human beings exposes them to continued abuse, unwarranted confinement and lowered self-esteem (Chakuchichi et al, 2003). It is therefore imperative that societies accept that PWDs are at increased risk of HIV & AIDS exposure because of cultural practices. It can be argued that negative perceptions and practices in society about PWDs can be changed if PWDs are accorded equal participation in all mainstream intervention initiatives.

Key indicators on education, physical health, employment, socio-economic status, access to information, social participation, among others all point to the existence of substantial gaps in services to disabled people. Disability is associated with a lower level of living when compared to non-disabled persons and women with disabilities are worse off than males. Rural urban disparities also manifest with the rural disabled having an even lower level of living than their urban counterparts. Thus, disability is clearly associated with lower levels of living and poverty in these contexts.

RECOMMENDATION FOR A SOLUTION

In Zimbabwe, the implementation and monitoring of policies and laws is poor. For instance, Lang & Charowa (2007) present that there is no implementation or monitoring plan that guides the implementation of the DPA; there are no Parliamentarians to represent the needs of persons with disabilities in government; there are few programs set aside for women with disabilities yet they constitute more than half of the population of persons with disabilities; and that there are no provisions for the mainstreaming of women with disabilities concerns into sexual and reproductive health services.

Moreover, the political and economic environment within the country hinders sustainable commitment to disability issues. Zimbabwe ratified the CRPD and its Optional Protocol on 23 September 2013 (Mandipa & Manyatera, 2014). This was more than 7 years after the Convention had entered into force. The government ought to take more responsibility for the protection of disabled women and girls. Though Zimbabwe has ratified the United Nations CRPD, the convention is yet to be domesticated. The country's

Disabled Persons Act (DPA) is ineffective. And while the department of social services has put in place community childcare workers as a way of trying to curb the abuse of young girls, few are trained on how to handle cases involving girls with disabilities. However, embedding such norms requires ambition, political will and a willingness to accept a rebalance of power in structures and systems – at the expense of privilege and the *status quo*. This may include protective and positive action. A holistic, multi-sectoral and joined-up approach Disability and gender should not be siloed into particular policy areas, such as health or welfare. The intersection of disability and gender reaches across the political, economic and social spheres, across all contexts and across age and other intersectionalities. Additionally, action to further the equality and inclusion of women and girls with disabilities requires action from a broad range of actors, including government, civil society, the private sector, financial institutions and others.

FUTURE RESEARCH DIRECTION

There is need to:

1.   Provide sensitisation and training opportunities on gender, disability and the intersection of the two in low-income contexts, to leaders and staff in government departments
2.   Apply a power analysis in all work that touches on the intersections of disability and gender; and broaden its analysis of stigma and discrimination to include the impact of political and economic philosophies, national and global, as well as religious and traditional beliefs;
3.   Recognise the capacity and agency of women and girls with disabilities has to be recognized
4.   Understand 'problems' as systems and structures that do not work for women and girls with disabilities, rather than the identities of disability and gender themselves
5.   Analyse any assumptions of 'vulnerability' within disabled women and girls, and address the source of threat as the impediment.

In summary, there is need to gather data disaggregated by disability and gender, and disability type, where possible, and analyse intersectionalities in order to inform government policy and practice. Efforts are required to continue to press, at inter-governmental fora, for data collection on disability in relation to Sustainable Development Goal indicators, and for implementation of policies, to address patterns of inequality on the grounds of disability and gender identified through data. There is need to include older persons in data gathering so that older women's disabilities are represented. Lastly, Researchers ought to invest interest in the sexuality of women with disabilities to remove myths, cultural beliefs and general negative perceptions that make them more vulnerable to abuse. Though poorly understood, the links between disability and poverty are more complex and nuanced than previously anticipated and warrant further research

CONCLUSION

Women with disabilities have been shown to be amongst the poorest of the poor in developing counties, of which Zimbabwe is one. Due to sex and disability, amongst other variables, WWDs are susceptible to multiple forms of discrimination as evidenced by their poor access to education and health care,

discrimination in employment and social exclusion. Even in the developed countries, the indicators on income, education, and employment levels of disabled people show consistent, but not necessarily large gender differentials. Studies demonstrate substantial gaps in services, for instance, assistive technology, with nearly half of those who need a device not having access to one as well as the poor social status afforded to disabled women. Women and girls with disabilities are generally marginalized and denied rights enshrined in the CRPD and continue to face multi- and intersecting forms of discrimination in communities due to the interface of their gender and disability in communities. They face a plethora of challenges among which include harmful cultural beliefs characterizing the normative environment, stigma and discrimination, limited accessibility or non-availability of inclusive Sexual Reproductive Health and justice delivery services or information in accessible formats.

UNESCAP (1995) notes that the difficulties faced by disabled girls can start at birth, and that if disabled girls are allowed to survive, they can face discrimination within the family, receive less care and food, and be left out of family interactions and activities. They also have less access to health care and rehabilitation services, and fewer education and employment opportunities. Disabled girls and women are at high risk of being abused physically and mentally, sometimes by those within the household. Where abuse from outside the family occurs, it is often unreported because of the additional shame to the family, which is already stigmatised for having a disabled daughter. People with disabilities are at high risk of abuse due to stigma, discrimination as well as lack of social support for those who care for them. This is especially so for people with communication impairment who are at greater risk as they may not be able to disclose abusive experiences. There is thus need for disability inclusive approaches to development.

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ENDNOTE

[1]   https://reliefweb.int/report/zimbabwe/disability-and-gbv-double-edged-sword

Chapter 4
Nigeria's Legislation Against Discrimination of Persons With Disabilities:
An Assessment

Augustine Edobor Arimoro
 https://orcid.org/0000-0002-8698-9328
Nottingham Trent University, UK

ABSTRACT

After several years of appeals for the protection of persons with disabilities from discrimination in Nigeria, the federal government of Nigeria in early 2019 passed into law the Discrimination against Persons with Disabilities (Prohibition) Act 2018. While this is considered a welcome development, it remains to be ascertained whether the government has the political will to implement the act. This chapter examines the provisions of the Anti-Disability Disability Discrimination Law in Nigeria. The aim here is to consider how the law can be employed to better the lives of persons with disabilities in areas including but not limited to access to justice, employment, healthcare, education, and transportation. The methodology adopted for the study is a doctrinal review of the law and literature on disability rights, the plight of persons with disabilities, and the effect of the recently passed Act of 2018. The chapter concludes with recommendations.

INTRODUCTION

It is important that every society protects the rights of persons with disabilities (PWDs) (Arimoro, 2019a). This is mainly because about 16 per cent of the world's population is challenged by one form of disability or another (Raub, Latz, Sprague, Stein, & Heymann, 2016). Indeed, every individual on earth at some point, will be faced with a form of disability, this may be caused because of age or ill-health. Nigeria has at least 25 million persons with different forms of disability out of a population of nearly 200 million (Haruna, 2017). This figure represents about 13 per cent of the population of the country

(Arimoro 2019b). Many of the PWDs in Nigeria face several forms of human rights abuses including stigma, discrimination, violence, and lack of access to healthcare, housing, and education (Ewang, 2019). In the light of the foregoing, it is therefore substantial to ensure that PWDs are free from all forms of discrimination and abuse.

A disability, in simple terms, is a "physical or mental impairment that is perceived to limit one or major life activities of an impaired person" (Ugonna, 2016). According to Yohanna (2018), disability knows no race, age, gender, or status and may be hereditary or congenital. Furthermore, a person may become disabled because of an injury or ill health. Disability is a social issue (Ezeigwe, 2015) It results from the interaction between people with a "long -term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on equal basis with others.[1] The United Nations (UN) in recognition of the rights of PWDs, championed a charter for the advancement of the rights of such persons through the Convention on the Rights of Persons with Disabilities (CRPD) (Raub, Latz, Sprague, Stein, & Heymann, 2016). The CRPD and its Optional Protocol (OP) was adopted on 13 December 2006 at the UN Headquarters in New York, and was opened for signature on 30 March 2007 (Arimoro, 2019b). As of 2018, a total of 177 countries including Nigeria, have ratified the CRPD. Nigeria ratified the UN CRPD on 24th September 2010 and hosted the Africa Regional Community-Based Rehabilitation Conference on 7th October 2010 thereby putting the PWDs issues on the agenda of the country for policymaking. Despite the ratification of the CRPD, Nigeria continued to pay lip service to issues relating to PWDs for another eight years. Lack of political support meant that the objectives contained in the UN CRPD could not be attained (Eleweke, 2013). Not until the eve of the February 2019 Presidential Elections saw President Muhammadu Buhari sign the Discrimination against Persons with Disabilities (Prohibition) Act 2018 into law (Arimoro, 2019a). The passing of the Act now provides legislative support for PWDs in Nigeria.

This chapter examines the Act of 2018 (which was signed into law in 2019) and considers the extent to which the full implementation of the law addresses the issues regarding the non-accommodation of PWDs in diverse aspects of life in Nigeria. In addition, the chapter suggests strategies for the implementation of the Act to ensure that the objective of the full integration of PWDs into the society is achieved. For the sake of emphasis, this chapter reviews the Nigerian Disability Act of 2018, it is therefore limited and not a critical discourse on disability rights in general.

DISCRIMINATION AGAINST PERSONS WITH DISABILITIES ACT 2018

The Discrimination against Persons with Disabilities Act 2018 (DAPDA 2018) legally protects PWDs from discrimination in the workplace and in the wider Nigerian society. The Act provides for the full integration of PWDs into the society and at the same time establishes a National Commission for Persons with Disabilities (NACOPD)[2]. NACOPD was created for the purpose for overseeing the education, healthcare, social, economic, and civil rights of PWDs. Particularly, the Act prohibits all forms of discrimination on the ground of disability and imposes a fine of N1,000,000[3] for corporate bodies and N100,000[4] for individuals or a term of six months imprisonment for its violation concurrently. Further, the Act guarantees a right to maintain a civil action for damage by the person injured against any defaulter. The Act also provides for a five-year transitional period within which public buildings, structures or automobiles are to be modified for accessibility and usability by PWDs. In effect, since the Bill was sign into law in 2019, it is hoped that the DAPDA 2018 would be fully operational in the year 2024 since it

has a five year window within which it would come into full effect. The vexed question remains, in the light of developments around the world and the need to cater to PWDs, should Nigeria wait until 2024 to ensure the full integration and inclusion of PWDs?

The DAPDA 2018 is divided into eight parts with 51 sections. The first part deals with the prohibition of discrimination, while the second part provides for the accessibility of physical structures for PWDs. Parts three and four list the provisions dealing with road transportation, and seaports, railways, and airports, respectively. Part five details the rights to education, health, being first in queues, accommodation and in emergencies. Part six features the opportunity for employment and participation in public life for PWDs. In part seven the Act creates the NACOPD whose details on the appointment and duties of executive secretary and other staff are provided in part eight. It is worthy of note that the passing into law of the DAPDA 2018 is only a first step in Nigeria fulfilling its obligations under the CRPD (Ewang, 2019). This chapter aims to show how authorities can and should put measures in place for the full implementation of the DAPDA 2018 in order to ensure that PWDs are accommodated in terms of equality and that their rights are protected.

PRELUDE OF THE ACT 2018

Despite the fact that Nigeria ratified the CRPD in 2007 and its Optional Protocol in 2010 (Ewang, 2019), the political class did not show the will to pass a domestic law protecting the rights of PWDs in the country. There was a failure to show commitment to protecting PWDs (Imam & Abdulraheem-Mustapha, 2016).

Following Nigeria's ratification of the CRPD, civil society groups, disability rights advocates and PWDs called on various Nigerian administrations to implement the CRPD in Nigeria. This required the passing of a domestic disability rights law to show firm commitment on the part of the federal government of Nigeria. Prior to the enactment of the DAPDA 2018, there was a Decree promulgated by the military administration of General Ibrahim Babangida in 1993. Unfortunately, that 1993 Decree was not included in the Laws of the Federal Republic of Nigeria upon the transmission from military to civilian administration and as such, the Decree was of no effect (Michailakis, 1997).

The National Assembly of Nigeria[5] transmitted the Bill for the protection of PWDs to former President Goodluck Jonathan for presidential assent on 30 January 2015 (Onyekwere, 2015) but was not signed until the current President, Muhammadu Buhari gave assent to the Bill on the eve of the 2019 presidential elections (Ewang, 2019). Given the prevalence of issues such as lack of access to education and exclusion, lack of opportunities such as training, employment and accommodation in public facilities for PWDs in Nigeria (Smith, 2011), there was continued pressure by disability rights advocates and the community of PWDs on the President Buhari administration to sign the Bill into law. Prior to the signing of this Bill, the president had stated in January 2019 that he was not aware of the delay in passing the law. This was an indication that the government was not truly committed to passing the law (Jannamike, 2019). The Joint National Association of Persons with Disabilities (JONAPWD) issued a statement in January 2019 where the described a statement credited to President Buhari as shocking. During a televised Town hall meeting by the Nigerian Television Authority tagged "The Candidates," the President had said he was not aware that the Bill had not been signed. (Jannamike, 2019). It is pertinent to note the lackadaisical approach towards protecting the rights of disabled persons in Nigeria before the signing of the DAPDA 2018 is as a result of the "lack of political will, courage and commitment" (Haruna, 2017:110). It does appear that the rush to sign the Bill into law shortly after Mr President claimed he was unaware of the

Bill in the first place could just be motivated by the need for political patronage as the presidential elections were scheduled to hold only in a few weeks after the Town hall meeting.

CHALLENGES OF LIVING WITH A DISABILITY IN NIGERIA

The common forms of disability in Nigeria include in no order: visual impairment, hearing impairment, physical impairment, and communication impairment (Umeh & Adeola, 2013). It is not out of place to consider the problems that the Act of 2018 is meant to address in the first place. This background would help in assessing whether the Act as it is addresses the concerns of PWDs in Nigeria.

In the Nigerian setting, the challenges of disability do not only affect the individual concerned but also indirectly affects family members (Ashi, Olayi, & Ikwen, 2015). Even though PWDs are commonly referred to as "physically challenged" to avoid stereotyping, there is still a lot of prejudice against them (Ashi, Olayi, & Ikwen, 2015). Further, because of a poor social welfare system in Nigeria, PWDs are very vulnerable to harm and exploitation (Smith, 2011). Many PWDs depend on begging to survive and are often vulnerable to abuse. Again, given the fact that disability is a factor that promotes poverty, PWDs in Nigeria are usually excluded from the mainstream of the society (Amusat, 2009).

SOCIETAL ATTITUDE TOWARDS DISABILITY IN NIGERIA

Living with disability in Nigeria is quite challenging due to the attitude of the society towards PWDs. An attitude has been defined as "combination of beliefs and feelings that predispose a person to behave in a certain way" (Noe, 2002: 108). Apart from a hitherto lack of effective government policy towards PWDs in the country, stigma and negative attitudes towards PWDs is largely informed by lack of public awareness (Sango, 2013). It is worthy of note that the negative attitude towards PWDs in Nigeria results from stigma, neglect and communication barriers (Ezeigwe, 2015). Furthermore, it is argued that culture and religion are possible reasons for the stigmatisation of PWDs in Nigeria (Etieyibo & Omiegbe, 2016). There are those in the Nigerian society who believe that disability is a curse and PWDs are hopeless (Etieyibo & Omiegbe, 2016). It is claimed in some parts of Nigeria that people with mental illness are killed as part of rituals, a practice that flow from beliefs that many holds about PWDs (Omiegbe, 2001). The term "culture" in the context used here, refers to tradition passed on from one generation to another. It is a way of life of a people transmitted over time (Arimoro, 2019a). On the other hand, religion is defined as "a personal set or institutionalised system of religious attitudes, beliefs, and practices" (Arimoro, 2019a). Religion is the process of revelation and contains the concept of the faithful receiving a message from a Supreme Being (Arimoro, 2018). As a result of religious beliefs and practices in Nigeria, several PWDs are victims of stigmatisation (Arimoro, 2019b). For example, there is a belief among many adherents of African traditional religion in Nigeria that anyone suffering from epilepsy, for instance, is possessed by evil spirits or is serving a retribution for offences committed by that person's ancestors or parents (Sango, 2013). In the same vein, PWDs are usually prevented from participating in social activities during festivals (Arimoro, 2019a). It has been noted that some Christian groups consider disability as a curse and teach this. They opine that disability is a punishment from God and because of this, many adherents of those groups discriminate against PWDs (This Day, 2017).

It is important to distinguish between cultural and religious discrimination against PWDs. Although the terms culture and religion are related, they are distinct and must not be confused together. Whilst culture has to do with tradition over time, religion is a belief in the messages or instructions from a deity (Arimoro, 2018). Furthermore, while cultures apply to geographical locality, religion is mostly universal. For example, marriage rites among the Yoruba people of south western Nigeria is a tradition around that area. On the other hand, religion for example, saying *salat* five times a time is a universal practice of Muslims and cuts across tribes. The practice of making disabled children beg for alms in northern Nigeria, even though common among Muslims, is not a religious practice but a cultural one (Etieyibo & Omiegbe, 2016). Persons with "hunchbacks" and albinos have been subject to cultural stigmatisation in Nigeria. Etiyebo & Omiegbe (2016) note that persons with "hunchbacks" are vulnerable to being killed for ritual purposes. Male suitors are reluctant to marry women with albinism as the proportion of those married is very low (Ojilere & Saleh, 2019). Some African beliefs promote the stigmatization as well as the marginalization of PWDs through exclusion and the depiction of PWDs as objects of ridicule or persons who are victims of demonic forces (Ndlovu, 2016).

As a result of discrimination, PWDs in Nigeria suffer from lack of inclusion and denial of equality and access to programmes and services (Eleweke, 2013). For example, conventional schools in Nigeria do not have the resources to support inclusion of children with special needs. It is a common case that a child with a special need must attend a special school and where such schools are not available, the child may not attend school. For example, a study carried out at the Obafemi Awolowo University (OAU), Ile Ife, Nigeria to assess the availability of assistive facilities for students with disabilities (SWDs) in the school reveals that there are limited assistive facilities for SWDs (Ijadunola, et al., 2019).

ACCESS TO PUBLIC BUILDINGS

A public building is regarded as one that is owned by the state or public authority and that is available for use by members of the public (Naoun, 2015). It is important that public buildings are accessible and barrier free to PWDs. It is imperative that the society makes room for the integration of PWDs and as such, PWDs such easily access public buildings. According to the United Nations (2003-04), the provision of a barrier-free environment should take into account among others, the inside of the building, the immediate vicinity of the building, the local roads and paths as well as open spaces and recreational areas.

It is important that such facilities should be accessible for PWDs. As such, in the design, construction or alteration of public buildings, steps must be taken to make such facilities accessible for PWD. Planning for public facilities should consider ramps, stairs, elevators, platform lifts, windows, doors, entrances, drinking fountains, signage etc with PWDs accessibility (United Nations, 2003-04).

A study of public buildings in Nigeria shows that most buildings were not designed to be accessible for PWDs. The buildings looked at during the study include the Lagos State Secretariat, Ikeja, Alausa Secretariat Mosque, Ikeja City Mall, Renaissance Hotel, IGI Company and Elephant Cement House. Majority of the principal entrances were restrictive. In addition, the sidewalks which are tarred were not wide enough to allow physically challenged and visually impaired people enough access and manoeuvres (Akinpelu & Sadri, 2017).

Even as recent as 2018, public buildings in Nigeria were not constructed with PWDs in mind. When this is compared with the decision taken in India where the court per AK Sikir, J and A Bhushan J held in *Rajive Raturi v Union of India and Others* (2006) that proper access to public facilities to the visually

impaired is a statutory obligation of the central and state governments in India. In the case of Nigeria, public buildings like libraries, stadia, banking halls, schools and bus stops lack disabled access. There is also a lack of conscious effort on the part of the public authority in Nigeria to improve on sanitation as well as disabled access to public sanitation facilities (UNICEF, 2008). Hence the need to ensure policies that will require the provision of these facilities to accommodate PWDs for old and new public buildings. For example, in the design and construction of all government buildings including streets, sidewalks, and walkways, PWDs should be accommodated (Arimoro, 2019). Banks, cinemas, stadia, theatres, schools, and hospitals should be redesigned to enable access by PWDs. There is also a need to provide for sitting arrangements for PWDs in public vehicles and other modes of transport to ameliorate the hardship PWDs go through accessing public transport services. There is also the need to have wheelchair friendly Automatic Teller Machines (ATM) and Point of Sale Machines (POS) services in the country. In the current situation, PWD have to seek the assistance of others to make use of such facilities and have to reveal sensitive information like their personal identification numbers (PIN) to those helping them. This article acknowledges the attempt by one of the banks in the country to introduce wheelchair friendly ATMs in Lagos (ENCA, 2015).

LACK OF FACILITIES AND SUPPORT FOR ATHELETES WITH DISABILITIES

While Nigeria's Paralympians have outshone their able-bodied counterparts year after year, athletes with disabilities (AWDs) face challenges such as lack of proper training facilities, adequate funding, and sponsorship (Obiezu, 2019). For example, one of Nigeria's champions at the Paralympics, Abdulazeez Ibrahim had this to say in an interview he granted the Voice of Nigeria in 2019 "I'm a champion, but when you see me along the road, I'm not looking like a champion. But go abroad, you see their champions. They are disabled, see their lives, see their cars. It is different. Every day, we always make Nigeria proud, and they do not make us proud. Why?" (Obiezu, 2019: para 5). Sadly, this is the situation with several other AWDs in Nigeria. It remains to be seen how the Disability Act of 2018 will address issues of discrimination against AWDs especially with regards to provision of facilities and funding. While their able bodied counterparts get more attention from both the national and subnational governments, AWDs in Nigeria are often neglected. There is a need therefore to ensure that AWDs get the same level of attention that the other Nigerian athletes get from the government. In addition, the policymakers in the country should put in place policies as well as incentives that will encourage the private sector to support AWDs.

ACCESS TO EDUCATION

The right to Education is one of the fundamental rights enshrined in the 1948 Universal Declaration of Human Rights. It is one of the fundamental objectives and directive principles of state policy of the national and sub-national governments (section 18 and Second Schedule, Part II of the 1999 Constitution (as amended)). As such, all children should not be deprived of access to education (Matera, 2014). Unfortunately, the right to education in Nigeria is not justiciable (section 6(6) of the 1999 Constitution (as amended)). The Constitution does not recognize the right to education explicitly but rather requires the government to direct its policy towards ensuring that there is equal opportunity for all citizens at all

levels (Umeh, 2018). It is common knowledge that several Nigerian children with disability do not attend school because they lack an option for them especially when they cannot attend regular schools (Ofuani, 2011) It has been noted that 'there are few educational institutions, a limited number of adequately trained teachers and a lack of facilities in Nigeria..' (Ofuani, 2011: 656) to meet the needs of children with disabilities. It is noteworthy that many disabled children reside in rural areas where there are no special schools for PWD. In addition, many parents lack information with regards to what options are available for their children. In the same vein, older children have no information regarding vocational training for PWD, if at all there are any (Hicks, 2011). It is sad to note that children with disabilities continue to be left out of school. Hicks further notes that one out of three children in the world who do not have access to primary education has a disability.

Even where special schools have been established by the authorities, the schools continue to grapple with the problem of funding and from the scarcity of trained personnel to teach special needs children (Eskay, Eskay, & Uma, 2012). Another challenge is the lack of sufficient materials for the training of children with disabilities for example braille text and computers. This is against the backdrop of section 7 of the revised National Policy on Education (2008) which explicitly recognises that children and youth with special needs shall be provided with inclusive education services (Ajuwon, 2008). It is worthy of note that some Africa countries including South Africa and Kenya have taken proactive steps in inclusive education (Ofuani, 2011). In Nigeria, the federal government designed a National Policy Programme known as "Special Education" (Adetoro, 2014). Special education was designed to cater for three categories of persons i.e. PWD (including those with physical, visual, hearing, mental, emotional, social, speech, learning and multiple impairments); the disadvantaged (including children of nomadic pastorals, migrant fisher folk, migrant farmers and hunters); and the gifted and talented (involving children and adults who have high intelligent quotient and endowed with special traits) (Adetoro, 2014). It is pertinent to note however, that this policy is contradictory since separating children with special needs from others does not promote inclusivity in the first place (Adetoro, 2014).

INVOLVEMENT IN POLITICS

It is sad to note that PWDs are noticeably absent as far as politics and public offices are concerned in Nigeria (World Pulse, 2013.) A close examination of the present administration of President Muhammadu Buhari shows that there is no disabled person appointed to the cabinet. The same goes for nearly all the state executive councils making the federation (US Mission Nigeria, 2018). There has been calls to support the involvement of PWDs in politics in the country especially as the country was preparing for the 2019 (US Mission Nigeria, 2018).

Presently, barriers exist with regards to PWDs aspiring to elective positions in the country. This is connected to the huge financial resources required to contest elections in Nigeria (Ameh, 2018). For example, the ruling party, the All Progressive Congress (APC) proposed initially to sell forms to aspirants for political positions in the following order N1million for state assembly, N3.3 million for the house of representatives, N8.5 million for Senate, N22.5 million for the governorship and N55.5 million for presidential nomination forms respectively (Ameh, 2018). It is difficult to see how PWDs can afford such a cost in an environment such as Nigeria. It is of the essence that PWDs are given the equal right to vote and be voted for in the country (Lord, Stein, & Fiala-Butora, 2014).

AN EXAMINATION OF THE DISABILITY ACT 2018

Having provided a background in the discussion above, it will suffice at this point to consider the focus of the chapter which is an examination of Nigeria's Disability Rights Act 2018. The Act was signed into law on 23 January 2019 and the full citation is the Discrimination Against Persons with Disabilities (Prohibition) Act 2018 (DAPDA 2018). The Act according to its explanatory memorandum provides for the full integration of persons with disabilities into the society and establishes the National Commission for Persons with Disabilities and vests the Commission with the responsibilities for their education, health care, social, economic and civil rights. It remains to be seen how effective this law would be during the transitionary period provided in the Act.

The law prohibits all forms of discrimination on ground of disability (section 1). It makes the discrimination against PWD a crime. Where it is committed by a body corporate, the fine on conviction is N1,000,000 (about $2,500) and where an individual is convicted, the penalty is a fine of N100,000 or six months imprisonment or both (section 1(2)). The law further stipulates that a victim of discrimination may also bring a civil action against the perpetrator of the act of discrimination. While this is commendable, it remains to be seen how feasible it would be for PWDs who are usually poor. There is need therefore to provide a form of assistance in terms of reduction in filing fees as well as for free legal services provided for PWDs who wish to bring action in a civil court under section 1(3) of DAPDA 2018.

The Act empowers the Federal Ministry of Information to make provisions for the promotion of awareness regarding the rights, respect and dignity of PWD as well as the capabilities, achievement and contributions of PWD to the society. Well the idea behind this is lofty. There is a need to also have a ministry dedicated for the welfare of PWD.

With regards to accessibility to physical structure, the Act in sections 3 to 8 make specific provisions. It is now a right in Nigeria for a PWDs to access any physical environment and buildings on an equal basis (section 3). By virtue of this provision therefore, it is incumbent on all providers of services including banks, hotels as well as private businesses to make their buildings compliant with the law. The challenge here is with getting private businesses to comply with the provisions of the Act. It is possible to achieve this by making it mandatory before granting building approvals. This would then require that there is a disability champion in the department that approves building plans. Hopefully within the period of five years after the signing of Bill into law, which is regarded as the transitory period, the modalities to ensure compliance should be put in place. Section 7 of the Act specifically mentions the mandatory requirement of ensuring that all buildings comply with the Act. It also criminalises a failure to comply with this requirement.

Sections 9 to 12 of the Act deals with road transportation and the right of PWDs to enjoy road transportation just like other citizens. The Act requires that government transport service providers make provisions for lifts, ramps, and other accessibility aids to enhance the accessibility of their vehicles, parks, and bus stop to PWD. The same rule applies to all transport service providers under section 11 of the DAPDA 2018.

Very importantly, the Act provides in section 12 provides for reserved spaces marked for PWDs. This is would require a great deal of planning especially in the Nigerian setting where there has not been any significant consideration for the plight of PWD in the past. The provision of a stipulation of a fine for those who take up the reserved areas marked for PWDs is a welcomed development. A person without disability who parks a vehicle in a reserved space is said to commit an offence punishable on conviction with a fine of N5,000.

Section 13 stipulates that seaports facilities and vessel shall be made accessible to PWDs. It also states that railway stations, trains and facilities in the trains shall be made accessible to PWDs. The five-year transitionary period also applies to this section. According to section 14 of the DAPDA 2018, all airlines operating in Nigeria shall:

1. Ensure the accessibility of their aircraft to PWD;
2. Make available presentable and functional wheelchairs for the conveyance of PWD who need them to and from the aircraft;
3. Ensure that PWD are assisted to get on and off board in safety and reasonable comfort; and
4. Ensure that PWD are accorded priority while boarding and disembarking from the aircraft.

Giving the notoriety of involving PWD in begging in some parts of the country, the DAPDA 2018 specifically prohibits the employment or involvement of a PWD in begging (section 16). It also prohibits the use of a condition of disability as a guise for the purpose of begging in public.

Even though the right to education is not a justiciable right in Nigeria, section 17(1) of the DAPDA 2018 stipulates a right to education without discrimination in any form. It is commendable that the Act in section 18 proclaims inclusive education. In simple terms, under section 18, all public schools shall be run to be accessible to all including PWD. However, it is important that government provides training for teachers as well as employ teachers who are 'special education' specialists in regular schools. In the same vein, braille, sign language and other skills for communicating with PWD shall form part of the curricula of primary, secondary, and tertiary institutions.

However, the provision of section 19 that states that the education of special education personnel shall be highly subsidised as provided for in section 19 of the DAPDA 2018 is so vague. How is the Government going to do that? Will there be a disability champion at the ministries of education (both at the national and subnational levels) to ensure compliance across the entire country?

The Act provides free healthcare for PWD (section 21). By the provisions of that section, the Government shall guarantee that PWD have unfettered access to adequate health care without discrimination. Even though the title of the section is free healthcare, surprisingly subsection (2) only states that a person with mental disability shall be entitled to free medical and health service in all public institutions. Furthermore, section 22 requires that a person with mental disability obtain a permanent certificate of disability from the Commission. The wording of this section is shocking as it appears to envisage that a person with a mental disability may not make a recovery.

With regards to employment and participation in politics, section 28 provides for freedom from discrimination for PWDs and a PWDs shall be encouraged to fully participate in politics and public life. Here again, if the government is sincere about this, there should be appointment of PWDs in the cabinet. However, even after signing the law during the eve of his election into office, President Buhari did not appoint any PWDs into his cabinet.

Section 31 establishes the National Commission for Persons with Disabilities (NCPWD). The head office of the Commission shall be in Abuja. Unfortunately, there is no clear list of functions for the Commission when compared to other Commissions established by law in the country. The lack of clear assignment for the NCPWD is worrisome. The impact of the NCPWD would be felt more if there is a clear-cut role to be played by it in championing the course of PWD in Nigeria.

CONCLUSION

The passing into law of DAPDA 2018 is meant to ensure that PWD in Nigeria are free from discrimination. Over the years PWD in the country have championed the need for a law to address the several forms of discrimination and injustices meted out to PWD. Some of the areas that have formed the core of the discussion in this chapter include right to employment, right to participate in politics and to be part of public office, access to public buildings and the right to education.

While the signing into law of DAPDA 2018 is commendable. It is worthy to note that there cannot be a comprehensive assessment of the Act within the five-year transitionary period. This may just be as usual for the next five years as it may be difficult to enforce the provisions of the Act. It is noteworthy that some of the wordings of the Act merely show 'political promises' rather than clear areas which the law can enforce. It is also worrisome that the Commission that is established by the DAPDA 2018 has no clear-cut functions.

It is therefore recommended that the authorities make a political commitment to ending the discrimination against PWD in Nigeria and to ensure that Government on its part begin to put in place modalities for the realisation of the goals of the DAPDA 2018. For example, the Government at the different levels in Nigeria should take steps to provide employment for disabled persons, make public places accessible to PWD and remove all filing fees for cases instituted by PWD in the courts where such action is brought to challenge any form of discrimination.

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ENDNOTES

[1]   See Article 1 Convention on the Rights of Persons with Disability.

[2]   See the explanatory memorandum to the Discrimination against Persons with Disabilities (Prohibition) Act, 2018.

[3]   The equivalent of $2,754.82 (USD) as of 10 September 2019.

[4]   The equivalent of $275.48 (USD) as of 10 September 2019.

[5]   Nigeria operates a bicameral legislature made up of the Senate and the House of Representatives.

Chapter 5
A Global Comparative Study in Disability Inclusion Legislation and Policies in the TVET Education

Precious Muzite

https://orcid.org/0000-0002-5967-1250
University of Witwatersrand, South Africa

ABSTRACT

This chapter critically engages relevant literature on the trajectories of disability inclusion in Technical Vocational Education and Training Centres (TVET) education and training systems. It challenges dominant epistemologies in critical disability studies that have been traditionally fore-grounded, imagined, and constructed within Westernized philosophical paradigms. For centuries, it has been difficult to re-imagine alternative forms of knowledge of impairment, disability, and debility from the subaltern standpoint. The author seeks to highlight the uneven ways through which knowledge systems on Disability Inclusion in Higher Education Institutions (HEIs) oscillates between the so-called problematic dichotomies of the global North and Global South. This is achieved by critically weighing in the contribution and impact of legislation, policies, and newer perspectives on the Scholarship of Learning (SoL) from the global North that influences critical pedagogies on disability inclusion in TVET colleges in the Southern African context.

INTRODUCTION

Whilst there is a lot of research on how Higher Education Institutions (HEIs) such as universities in South Africa, and elsewhere in the world, create exclusion and institutional despair for learners with a disability, very few studies have captured the hope and despair in the narratives of youths with physical and learning impairments, in technical and vocational education and training (TVET) colleges. TVET colleges form part of the world's post-school education system. Their key objective is to provide vocational or intermediate skills education to secondary school leavers with a minimum level of education.

These colleges offer an alternative conduit to acquiring skills and improving education for school leavers to universities. In the global south, countries such as South Africa, TVET colleges are part of the solution to the pervasive legacy of inequality, unemployment, and poverty. Yet it has been a daunting task to attract the young cohort of learners to these institutions. This is partly because hegemonic public perceptions on these institutions have not been that encouraging as there are societal beliefs that teaching and learning at TVET colleges are not rigorous enough and that those who enroll at these colleges are the "not-so-clever youth" who would have failed to attain good grades, which meet the minimum requirements for university entrance. Moreover, the holders of qualifications from TVET colleges are not considered as being "not educated enough" and as coming from poor families. There is indeed a level of stigmatization of TVET college students and graduates. More so, for students with disabilities whose needs are often sidelined in the context where resources to cater even for the able-bodied are limited. This chapter documents disability inclusion in Technical Vocational Education and Training colleges from a global perspective outlining the complexities and the tenacities of deciphering policies and Scholarships of Learning (SoL) from the Global North as universal truths in the Global South.

BACKGROUND

This chapter was extracted from my ongoing Ph.D. thesis, which focuses on the narratives of inclusion, exclusion, and disclusion of learners with physical and learning impairments studying at four TVET colleges in Johannesburg, South Africa. First and foremost, the study recognized that critical research on disability inclusion pedagogies and practices in TVET education and training system from the global South has largely been underrepresented. For example, there is a plethora of literature on scholarships of learning and inclusion in Higher Education Institutions in Southern Africa. (Form report 2010, Chataika 2004, Matshedisho 2006). However, the term 'higher education institutions' in the majority of these studies has been used to mean mainstream universities. An assessment of research policies and legislations on Southern African inclusive pedagogies in higher learning institutions will reveal that there are tensions and several unresolved issues. There seems to be a tacit agreement among academic researchers that research on TVET colleges is not 'academic' enough to warrant the effort whilst most Ph.D. and Masters Researchers scramble for research on mainstream universities.

Research carried out by prominent authors in TVET education such as McGrath (2002, 2004), Powell (2013) portrays this negligence of researchers through a critical assessment and review of research on South African further education and training colleges in the post-apartheid South Africa (1994 and onwards). Only a mediocre ten masters and doctoral thesis were produced that had FET colleges as their subject area in the period of reconstruction (1994-2003). Whilst there has been a steady inclination in research on TVET colleges since then, much of the research tends to skate over inclusion and disability but focus much on poverty alleviation and job creation (Powell, 2013). The result is that social inclusion and disability inclusion is under-represented.

An instrumental stance has been adopted that emphasizes structure, the college system, the institution, and the economy is foremost. This is done at the expense of human agency, particularly of the students who study at the colleges and the staff who work there (Powell 2013, p.24).

This statement seriously challenges global South Disability studies and academics in higher education institutions (HEIs) in the Southern African region institutions to roll up the proverbial sleeve and start engaging with critical work as there seems to be a serious lack of a critical interrogation with the Scholarship Of Learning (SoL) on disability inclusion within the TVET education and training context.

DEFINING INCLUSION

Perhaps a critical take on disability inclusion in education should start with the politics of nomenclature. This is because the term 'inclusion' similar to the term 'disability' has been shrouded in inconsistencies when scholars attempt to define it. Most scholars (Baglieri et al 2011, Slee 2011, Watson 2016 and Walton 2015) highlight 'inclusion' in education as an act of including someone or something as part of a group, list, etc., or a person or thing that is included. This definition already implies the power dynamics at work; whereby powerful groups who represent able-bodied entities have the power to include marginalized entities at their discretion. This has the adverse effect of dispossessing the marginalized their agency and self-advocacy to empower themselves, often having to rely on someone or the powers that may be to 'include' them. Walton (2016), Matshedisho (2017) concur on the vagueness of disability inclusion in educational theory and practice, particularly in a South African context. They attribute this to the sense that disability inclusion in Higher tertiary education context in South Africa is still deeply enmeshed in medical and benevolence/charity discourses which merely seek to include disabled bodies in higher tertiary education and training spaces as a gesture of kindness and good-heart without engaging critically to include conceptualizations that challenge curricula, structures, systems and include students from different classes, races, ability, and ethnicity and so on. There is a lack of a critical approach that critiques the term 'inclusion' as argued by critical writers such as Baglieri et al (2011), Slee (2011), and Watson (2016). In its 'laymen' form, inclusion only speaks of including the 'abject' bodies of students with disabilities in higher tertiary spaces without what Baglieri (2011) termed 'social and academic inclusion'.

This chapter, therefore, acknowledges Baglieri, Slee, Watson's, and Walton's (2015) concept of inclusion which goes further than the mere physical inclusion of learners with disabilities from higher tertiary institutions but also acknowledges the power dynamics that exist between those who are 'included' and those with powers vested upon them to 'include'. The chapter also critically interrogates whether the colleges encompassed inclusion in its complexities; that is of all marginalized people including the disabled, the excluded based on class, race, gender, sexuality, and ethnicity politics. Although such an eclectic and critical form of inclusion warns against using categories of disabilities in the inclusion debate, I propose to adapt Bhaktar's critical realism which augers a return to the 'contested body' (Williams 1999) which has been elusive in post-structuralism debates on inclusion in Higher Education Institutions discourse. This is even though it is at the fine intersections of the body, socio-cultural, and historical contexts that exclusion and disclusion occur.

A brief assessment of key findings and lessons coming out of the 'global' context particularly in the UK, USA, China including the Asian Pacific regions, India and Pakistan will follow in the next section. The intentions are not to give an exhaustive synopsis of all the issues about disability inclusion in higher education institutions in the global context. Rather, the author intends to bring to the fore a comparative thematic summary on disability inclusion that 'zones' in on TVET colleges in the global context. The chapter argues that a conflation on issues of inclusion in the mainstream 'global' university and those

in TVET colleges in the Southern African context is not only a misguided practice. An abominable social and political construction is designed to deny TVET colleges a first-class status. However, before dipping into the 'thick' of the immense critical literature, it is important to foreground the increasingly tenacious tensions that exist in the ways researchers tend to disseminate seminal literature on disability inclusion in education. My intentions in this chapter are to challenge dominant epistemologies in disability discourse that for decades have fallen short by giving straitjacket narratives of the experiences of students with impairments studying at higher tertiary institutions. This has been at the expense of alternative and indigenous experiences of learners with impairments studying at higher tertiary institutions around the world.

It has been quite a few decades since Gustavvson (2004) posed a quintessential question that challenged the role of theory in critical disability studies as either springboards or mere straitjackets to the lived experiences of millions of people living with disability across the globe. The results of such an inquiry were epic as they ushered in the new phenomenological perspective of conceptualizing disability such as the radical person-centered methodology. Until then, the role of theory, policies, legislations, and practices used in the TVET system from the global perspectives had largely gone unchallenged. It has become common practice for any academic research focusing on the pedagogies of inclusion in higher tertiary institutions in the global South to start with comparative analysis from the so-called 'global context', which has largely been a euphemism for the North or West. Most leading dissertations have channeled expertise from the global North and have applied it with a greater deal of success to the Southern African context (Chataika 2007, Chataika et al 2012 & Ndlovu 2017). The assumptions have been that studies and epistemologies of education and disability inclusion emanating from the North or West act as springboards of knowledge to the rest of the world. Moreover, 'Rest of the world' has so many countless times meant the Global South. The global North is a revered space where modern concepts of disability inclusion are often deciphered as expert knowledge and sophisticated ideas that have been tried and tested. Therefore, the knowledge that is likely to come out of there is often left unchallenged.

CONVENTION ON THE RIGHT OF PERSONS WITH DISABILITIES

The globe, although split into dichotomies that can be problematic in a postmodern era as outlined earlier, can be coaxed into giving us a critical comparative analysis that can be helpful when assessing trends and trajectories in disability inclusion in education. This is particularly true within the concept of a 'globalization of inclusive education' (Panther & Nxumalo 2012), which offers numerous countries opportunities to be one large ecosystem that shares inclusive policies, professional development hubs, and pedagogies that offer best practices. The right of people living with disabilities to education is a central feature of global policy and legislature, thanks to the Salamanca Declaration of 1994 and article 24 of the United Nations Convention on the rights of persons with disabilities (UNCRPD, 2007) which advocated an inclusive education policy to remove discriminatory practices against learners who experience barriers to learning and development (UNESCO, 1994). Many countries, although already some legislations enforcing inclusive education in place, ratified the convection and as of 2008, seventy-six countries had signed to formally agreed to the instrument (UNICEF, 2008, cited in Ndlovu, 2016).

THE UNITED GLOBAL SUSTAINABLE DEVELOPMENT

The recent United Nations Global Sustainable Development Goals has effectively and smoothly taken the batter stick to embrace disability inclusion principles in education (Groce & Train, 2009). What perhaps stands out from the UNCRPD is that the UNGSG recognizes the role played by vocational training in the education of young adults. This is expressed in the Global Sustainable Development Goals 4 and 8; specifically targets 4.5:

By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations" and 8.5: "By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.

Despite a lot of African countries ratifying the UNCRPD and the UNGSG, there seems to be a huge gap and inconsistencies particularly between policy, research, and practice. According to Chataika et al (2012), the real dilemma seems to emanate from conflicting contexts that come when a one-size-fits-all policy is taken by African countries in an attempt to meet the criterion of a globally designed policy. These irregularities have devastating implications as "many disabled people in Africa still struggle to have access to education, despite it being a basic right (Chataika et al 2012). The dynamics have been much different in the developed world as many westernized nations have applied the convention with varying degrees of success. The following sections are going to first look at the way TVET knowledge and policies are constructed in the United Kingdom, The US, China, India, the Pacific regions, and the southern African context.

THE UNITED KINGDOM

The United Kingdom (UK) is a union of Great Britain (England, Scotland, Wales) and Northern Ireland is governed by a parliamentary democracy. This complexity and the recent practice of devolution of power to include policy and practice particularly in the Scottish Government and Northern Ireland Assembly has meant that the nations within the UK have enjoyed a greater deal of autonomy in drawing up legislation and policies that affect how skills development is delivered. The UK does not have a single written constitution (The European Centre for the Development of Vocational Training 2005).

Legislation Enforcing Disability Inclusion in UK

Seemingly fragmented, UK governance is considered one of the best in the world, and its skills development policies in higher learning and vocational education offer some similar patterns from which important lessons can be drawn from; particularly in the inclusion of students with impairments in higher learning. The UK case study has enabled most disability-inclusive scholars and activists to juxtapose and draw a parallel line between strong anti-discrimination laws and the progress of institutions in compliance and dealing with disability equity issues. Stringent disability-inclusive legislations meant that higher tertiary institutions such as the University of Bradbury had to increase moves towards more critical inclusive

policies and practices that take consideration of a diverse student body (Fotim 2011). Closer scrutiny at most literature coming from the global South illuminates some familiar patterns. Most studies from the global South have hailed (with various degrees) the United Kingdom as an epitome of an inclusive education strategy and has set the standard which all nations should emulate (Chataika 2007, FOTIM report 2011). The standard set by the UK for inclusive education policy and strategy was so high that the blue-prints of the South African policy were woven around it, with the Foundation of Tertiary Institutions of the Northern Metropolis (FOTIM) report of 2011 tasked to investigate describe, and analyze the role and functioning of specialized Disability Units (DUs) at the different tertiary institutions in South Africa.

A focus again on the UK success story to inclusive education at higher tertiary institutions unearths some interesting findings. The UK success has been greatly attributed to the early establishment of concrete and specific legislature that lobbies for disability inclusion in education such as the 1992 Further and Higher education act, the Disability Discrimination Act (1995), the UK (Disability Discrimination Act (1995) and the more recent Equality Act (2010). The UK ratification of the United Nations Convention on the rights of persons with disabilities (UNCRPD) in 2007 served only to cement and fortify policies that had been existent for decades.

In comparison, most nations from the global south including, countries in the Southern African Development Community (SADC), we're still reeling and grappling from the grip of colonialism, apartheid, and segregation, that issues of disability inclusion were marginalized due to a focus on the competing rights such as liberation, access to basic rights such as food, shelter, health, and education (Matshedisho 2006). It is a widely accepted fact that the trajectories and pathways of disability inclusion in the 'developing 'world has fundamentally rested on how soon those nations have escaped the tyranny of colonization through political independence and nation-building. For example, Zimbabwe and Swaziland are the only SADC countries to have developed disability-specific legislation. Zimbabwe promulgated the Disabled persons' Act of 1992 following national Independence in 1980 while Swaziland established the *Persons with Disabilities Bill* in 2014.

INCREASED VISIBILITY OF DISABILITY OFFICES

These 'best' practices include increased visibility of disability support offices for current and potential students through developing internal and external partnerships within institutions. In some cases, such as at the University of Bradbury, disability support offices were privately owned by non-profit organizations to increase the span of outreach to students with impairments (Fotim 2011). Best practices also included encouraging students with impairments to self-disclose their 'status' and to further self-identify possible accommodation needs for them. However, as most studies illustrate, the path to self-disclosure for students with an impairment has not been an easy one. UK trends have shown that students were reluctant to self disclose their impairment 'status' for fear of stigmatization and discrimination.

NEW COLLABORATIVE APPROACHES

Vocational education and training in the UK are highly decentralized. This means that the responsibility of foreseeing vocational skills development is not rested solely on TVET colleges but rather shared among all higher education institutions such as mainstream universities, sixth-form colleges, tertiary colleges

and further education colleges (both general and specialist) provide both IVET and CVET, catering to young people and adults (European Centre for the Development of Vocational Training Cedefop 2008). This decentralization of vocational education means that several organizations work alongside learning providers in delivering skills. These organizations include employers, government bodies, funding bodies, teaching providers, inspection agencies, and learners, etc.

UK trends have also shown that increased government assistance in terms of new strategies and funding of higher education institutions was a major pull factor for attracting new students with impairments as well as the retention of old students. The Fotim report (2011) cites an example of the higher education funding council of the UK between 2003-2005, which funded 23 pilot projects at universities across the UK on resources relating to the learning and teaching of students with impairments. New government strategies implemented include the 'New deal' which is a government welfare work strategy designed to move people into work quickly, and provide those who need it with extra help to improve their employability ((European Centre for the Development of Vocational Training Cedefop 2005). Part of this 'New deal' includes the 'New deal' for people with impairments that assist young people with impairments secure employment after vocational training. What is remarkable about the UK New deal transitional program is that it starts at a very early stage in providing specialized support within inclusive settings in the life of the young people with impairments studying vocational education and it continues throughout the whole process of skills development and employability. The new deal is also an all-rounder inclusive strategy as it also includes the family of the learners with impairments. This is crucial as families often provide impeccable insights into the young person's unique strengths, capabilities, and needs.

THE UNITED STATES OF AMERICA

The United States had a total of 12.5 million students enrolled in TVET education or Career and Technical Education (CTE) as they are known in the US (UNESCO World TVET database: US 2014). This is the largest recruitment in vocational education in the world. Whilst the UK system favors decentralization and ad-hoc policies of disability inclusion in higher tertiary education institutions, the US on the contrary, portrays a very efficient, embedded, and highly systematic strategy for disability equity (Chataika 2007). It seems that the trump card of the US system is the American with Disabilities Act (ADA, 1990) which was introduced earlier than the UK disability Discrimination act (1995). The ADA also went to greater lengths at being inclusive of higher tertiary institutions from the start. This was made possible by the following clause;

No otherwise qualified individual with a disability…shall, solely because of his or her disability, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance (ADA, 1990 in Chataika 2007, p. 26).

Career and Technical Education (CTE) in the US are funded by the federal, state, and local levels also fit into the designated programs targeted by the ADA. The UK Disability Discrimination Act (1995) in contrast did not come equipped with including higher tertiary education institutions such as mainstream universities, let alone CTE colleges and other institutions offering vocational training. Universities were only added to the DDA after the Tomlinson (1996) report half a decade later. All this meant that higher

education institutions including CTE colleges had somewhat of a head start in implementing disability-inclusive strategies and policies guided by the DDA.

LESSONS LEARNT FROM THE US

The US case study indicates that progress in disability equity at Higher education institutions is expedited when strong anti-discrimination laws exist. Furthermore, The US has illustrated that the development of early anti-discrimination laws generally leads to a greater possibility and chance that those laws will be revised and morph out into more sophisticated policies in terms of their ability to encompass and cater to a wider range of marginalized students. The US, by having solid anti-discrimination laws as working documents has had the chance to constantly and rigorously revise those laws and policies in the quest for more inclusive legislature and strategies. This has worked out well for them as the US is now considered one of the leaders in the new Scholarship of Teaching and Learning (SoTL) that seeks to move away from essentializing policies of inclusive education through realizing the agency and uniqueness of each individual.

Most importantly is the emergence of newer perspectives of scholarships of learning which has led to the popularity of Universal Access Design. The universal access design advocates that inclusion should cease to treat the group of students with disabilities as the exception but rather as a continuum of learner differences that often share similar difficulties. The perspective challenges that all students from the differing axis of marginalization face in higher education. Universal access meant that the US was able to create 'reasonable accommodation' for all its students through "developing flexible classroom materials, using varying technology tools and varying of information or instruction" (Fotim report 2011, p.31). This meant that all students with learning difficulties such as those from disadvantaged ethnic groups, lower classes, and 'slower' learning were catered for.

Like the UK, the US has supportive systems that accommodate students with and without impairments throughout the learning phases to prepare for higher learning, vocational training, and employability. The Tech- Prep program links the high school to advanced technical education by combining academic and vocational courses (UNESCO World TVET database: US 2014). This enables a smooth transition from higher school to higher education for students with and without disabilities. This transition has been encumbered by difficulties as has been experienced in South African (Ndlovu & Walton, 2016).

To prepare students for employability, a federal program called the Career Pathways (CPs) helps students (with and without impairments) at secondary and higher learning in specifying the knowledge and skills needed to better prepare for occupations within different career clusters. Other federal programs specifically targeting students with impairments in transitioning from secondary levels of education to higher learning and employability are the Jobs Corps and the Job Accommodation Network. The Jobs Corps assist students with disabilities to obtain a General Education Development GED) certificate whilst the Job Accommodation Network provides technical assistance services provided to employers to help attract, hire, and retain young workers with disabilities (UNESCO World TVET database: 2012).

CHINA AND THE ASIAN-PACIFIC REGIONS

China and most of the Asian countries in the pacific region have a well-developed and complex TVET system as compared to the rest of the world. This is mainly because TVET education in China has been put on the forefront and has been tasked with enhancing the employability of its labor force and contributes to one of the world's fastest-growing economies' social and economic development. About 42.6% of students enrolled in higher training are enrolled in some sort of short-cycle education involving TVET colleges. An interesting dynamic is that 51% of these are females (UNESCO TVET profile, 2018). The complexity of the TVET education system in China is outlined in the multi-layers and levels that encapsulate vocational education. Firstly, there is the primary vocational training, which is offered at the lower secondary level. Admission for this qualification is open to any age, which allows it to appeal to younger learners. This qualification acts as a middle man between secondary school and the often long and winding road of higher learning. It illustrates the Chinese government's dedication to developing technicians and experts who can directly feed into the sass-pool of the insatiable growing industry. Most graduate learners for primary vocational training can secure a job easily (UNESCO TVET profile, 2018).

Secondary vocational education is at the upper secondary level and graduates often will be able to secure a high-level technical job or advance further in TVET education. Higher vocational education, which very few countries offer is at the post-secondary non-tertiary level and it is equivalent to grade 12 statuses in South Africa as it can lead to entry to a degree program. The vocational education degree is offered at the tertiary level and it signifies expertise and excellence in a particular vocational trade. Although China does not have specific policies on the inclusion of people with disabilities in education, general laws, and legislations make up for this absence. The Law on the Protection of Disabled Persons Act (promulgated in 1990) clearly states that the State "guarantees the right to education for disabled persons... and provide[s] compulsory education for children and youth with disabilities... and the State charges no tuition for those disabled students receiving compulsory education." Other laws such as the Law of Education, the Law of Vocational Education, and the Law of Higher Education, contain special provisions for people with disabilities. Yet, China does have serious concerns in the actual inclusion of students in higher education institutions which range from the mandatory physical examination requirements of some universities to see if a learner with an impairment can be accommodated, lack of accessible conditions, and reasonable accommodations on campuses.

LESSONS FROM CHINA AND THE ASIAN-PACIFIC REGION NATIONS

TVET education in China is at present solely sponsored and policed by the Chinese government. However, the centralization of authority and power of the government on the affairs of TVET education has also hampered growth in two ways. Firstly, limitations of government funding have often meant that TVET colleges in China have often had overly rely on government funding, which in most cases has not been adequate. Secondly, the Chinese government has overly focused on the productivism approach to TVET education, similar to the South African approach, which has focused on churning out skills for nation-building at the expense of the quality of skills development and issues of inclusion. Here inclusion is used in its broader sense to include all previously marginalized students, including students with differing impairments. Traditionally, China has had an unbalanced development of TVET education in the East, middle and West provinces.

Important lessons from Asia and the Pacific region is that women with disabilities "remain hidden and silent" despite the Proclamation of the Full Participation and Equality of People with Disabilities in the Asian and Pacific region which has 39 countries (including China) as signatories (International Labor Organization, 1999). The article articulates picturesquely how, despite a fair representation of women overall in TVET education (as shown with the Chinese statistics), women with disabilities are still very much an excluded demography. The exclusion is a threefold typology consisting of attitudinal neglect by society, their work being subordinate to dominant masculinities (which are at most able-bodied males), and lastly through marginalization by poverty. There is, therefore, a need to emancipate women with disabilities in the Asian-Pacific region and indeed, elsewhere in the world through education, vocational training, and employment (International Labor Organization, 1999).

GREENING TVET

China and the Asia-Pacific region have been global leaders in a growing popular trend called 'greening TVET'. The concept juxtaposes the concepts of ecological sustainability, economic profitability, and social inclusion (Klaus-Dieter Mertineit & Thi Huyen 2016). The emerging trend has been so far very successful in interlocking environment issues with social Justice Dialogues as the policymakers in this region have come to appreciate that a solitary push on ecological sustainability agendas is futile without acknowledging the inclusion of previously marginalized identities of people. This has led to the increase in 'green training' and 'green jobs' which are ecologically sustainable, economically profitable, and social justice sound; for example, encouraging the inclusion of learners with disabilities in the TVET education, training, and employability aspects.

INDIA AND PAKISTAN

India is destined to be an economic powerhouse. The emergence of its economy as a competitive global player has turned attention to the education system to provide the valuable workforce needed to drive the economy (Kotamraju & Stone 2014). The Indian education and TVET system are modeled along the British system and it has enjoyed major successes in the international arena with the Indian Institute of Technology and Indian Institutes of Management is internationally acclaimed. Despite these isolated success stories, most studies point out that India is deeply divided in terms of the education gap that exist between students of different ethnicities, class, and ability These inequalities have led to massive illiterate rates across India. These in turn has led to massive jaw-dropping dropouts in primary and secondary levels as Tognatta and Maynard (2014, p. 20) reiterates, "Nearly 50% of fifth graders in India are unable to read second-grade material, and the dropout rate at the secondary level is nearly 30%".

Policymakers in response have drafted laws and policies to retain learners in TVET education and training at both secondary level and post-secondary levels. These include the Persons with Disabilities (PWD) Act of 1996 which marked a special era of change in education through advocating for the integration of children with disabilities into mainstream schools (Das & Sharma, 2015). There was also the Rashtriya Madhyamik Shiksha Abhiyan introduced in 2009, which was a government initiative meant to introduce the vocational subject at the secondary school level. Like most countries in the developing world, India lacks a critical inquiry into disability inclusion in TVET education. Most debates in this

country have been weaved around the productivism approach, which sharply focuses on the supply and demand of labor without engaging critically with the issue of social inclusion and exclusion of learners.

Whilst inequalities along with ethnicities and the caste system in the Indian education system, in Pakistan, on the other hand, it is mainly gender discrepancies that act out to exclude other learners with only 22% of its female population in the labor force (Tarbiyat- Social Inclusion through TVET). Besides, there is a stigma against people living with disabilities that there are less competent and are costly to educate and train for employment. People with disabilities often stay hidden from society and consequently, there are very few credible statistics of learners with impairments in higher education institutions. Whilst women and people living with disabilities are excluded from mainstream higher education institutions, these vulnerable groups stand a greater chance of accessing TVET education, which in Pakistan is considered second status education or a back door to university learning.

THE SOUTHERN AFRICAN REGION

The Southern African region consists of South Africa, Zimbabwe, Zambia, Lesotho, Botswana, Namibia, Angola, and Malawi. These countries often get pooled together since they share similar geography, climate, political histories, and investments. Although dissimilar in geographic sizes, patterns of economies, and periods of independence, Southern African countries share very similar memories and histories of British colonial conquest (except for Mozambique and Angola, which were colonized by the Portuguese). This means that most of these countries also inherited by default "deeply racialized notions of ability and 'appropriate' employment in their TVET systems" McGrath 2005, p.1). Also, most traditional research on TVET colleges in Southern Africa similar to the global context has been within neoliberalist constraints (Powell 2013), focusing on poverty alleviation and job creation which researchers feel will subsequently address social inclusion. Sadly, this has not been the case as investigations into social inclusion; including disability has been underrepresented shown in this remark, "An instrumental stance has been adopted that emphasizes structure, the college system, the institution, and the economy is foremost. This has been at the expense of human agency, particularly of the students who study at the colleges and the staff who work there" (Powell 2013, p.25).

Although the scholarships of disability inclusion in the Southern African context has been greatly influenced by westernized rhetoric, there has been however a steady shift in this discourse, Scholarships of learning in the Southern African context has now been infiltrated by de-colonial thinking which at large have challenged he western canon of conceptualizing disability inclusion in education. This has been done by envisaging indigenous knowledge systems of disability inclusion. For example, in Botswana something remarkable is happening that transcends any signed ratification or policy. The inclusive principles towards people living with a disability that is beginning to be embedded in the culture of the Tshwana speaking people in Botswana, who form the majority of the population. The Tshwana culture is fined tuned to embrace disability holistically instead of differentiation between impairment. The term *segole* is used to describe this uncategorized way of referring to disability (Mosalagae and Lukusa 2016). Notions of inclusivity existed in Tshwana culture way before the first pen was penned down in international ratification with the concept of *Botho* which has translated to different meanings across sub-Saharan Africa. What is remarkable about the Botho philosophy in Botswana is the processual shared humanness that transcends any individuals' physical impairment. Mosalagae and Lukusa (2016) dare novice researchers in inclusive education in Botswana and the rest of Sub Saharan African to ditch

one-size-fits-all approaches to inclusive education that come with international ramifications and instead make use of the already culturally ingrained and contextualized inclusive practices.

GLOBALISED PLURIVERSALISM OF SCHOLARSHIP OF LEARNING

Great De-colonial scholars such as Walter D. Mignolo and Maldonado-Torres (2007) believed that authentic learning in any institution of learning in the global south could only come about when the pursuit of knowledge was free and independent (Mbembe 2017). Similarly, Pather and Nxumalo's (2013) work on inclusive education in Swaziland challenges the dominant and one world view of knowledge on inclusive education. These scholars assert that "[i]nclusive [e]ducation development should be shared across cultural boundaries to support local practitioners in addressing local needs in a more sustainable way" (Pather & Nxumalo 2013, p.421). It is important to note that for these researchers, the term 'localized open learning' did not necessarily translate to the reinvention of the wheel and the epistemicide of all known western philosophies. Rather, it meant something much deeper. Localized open learning to disability issues meant something similar to Boaventura de Sousa or Enrique Dussel's concept of a 'critical cosmopolitan pluriversalism' which is not a mere extension or annihilation of the western canon but it is a "process of knowledge production that is open to epistemic diversity" (Mbembe 2017, p.6).

GLOBAL SOUTH SCHOLARSHIP OF LEARNING: PROJECTS OF RE-CENTERING

What then does it translate to in this chapter? The consequences of such a critical inquiry are that they destabilize and re-establish critical disability studies and disability studies in education as projects of re-centering. In this chapter, the process of re-centering works mainly in two ways. Firstly, through being sensitive to the uneven power dynamics that exist in knowledge fields from the global south and north, the researcher kept a critical third eye open for insinuations implying these power differences. The second way involves the use of a person-centered methodology which articulates Ngugi wa Thiong's notion of decolonizing through focusing on the experiences of the 'African child and in this particular case, the African child with physical and learning impairments studying at TVET colleges. Equally important to note is that a critical disability inclusion inquiry in TVET education and training form the Southern African region should learn from the pathways that inclusion debates from the global world-wide stage have forged and should avoid its pitfalls. Inclusion debates in the global North universities have been divided with those auguring for neo-liberal forms of inclusion that only focus on the relative accessibility to teaching and learning for students with impairments on one hand. On the other divide is the growing body of global South radical inclusion scholars who look past the mere participation of students with disabilities at higher institutions but also interrogates the systemic way in which the same institutions systematically act to exclude and disclude 'previously 'marginalized indigenous and differently-abled student body; whilst at the same time claiming to 'include'. Walton (2015) uses the term 'disclude' to refer to the precarious nature of being 'excluded whilst being present' that students with impairments go through at institutions of higher learning.

The idea that some policies that claim to include previously marginalized people actively act out to perpetuate the exclusion of the same vulnerable people is not a new concept and by far not exclusive to

critical disabilities studies. The exclusion of 'dispensable' bodies that seem to be invisibilized despite being in full sight has been explored in-depth by De-colonial scholars and critical race theorists (Fanon, Grosfuguel, Steyn, Mbembe, Gatsheni-Ndlovu). It has been implicated right down to Fanon's zone of non – being and what it means to be human. Likewise, critical inquiries in disability inclusion from the global South need to adopt the same radicalized stance of inclusion which is wary of frivolous terms of inclusion that are in reality an apparatus of neo-colonial and neo-liberal forms of exclusion. For example, since 1994 the new democratic South Africa has been in the process of social, political, economic, and educational transformation aimed at developing an egalitarian and healthy society. Twenty- six years down the line, the general education system, which under the previous system of apartheid instituted separate education for each of the various ethnic groups (black, colored, Indian and white), now makes bold claims of having been 'transformed' into one unitary, non-racial department. This is despite calls from recent critical research that shows that the South Africa higher education experience is still deeply divided along with racial, gender, cultural, class and ability constructions (Fotim report, 2011). It seems an understatement to say that the largely westernized notions of inclusion and strategies in the Southern African context are not working. The most successful inclusive strategies that will have a larger impact in sub-Sahara Africa are the ones that are tailor-made, context-specific, and highly malleable to shifting underlying cultural values and beliefs (Mosalagae & Lukusa, 2016).

CONCLUSION

The above literature synopsis does show how scholarships of learning from the global South can draw from global scholarships in some form of globalized pluriversalism. However, global South disability scholars need to be wary of the uneven power dynamics existing between the so-called world orders and dichotomies of the 'global North' and 'global South'. Most fundamental, there needs to be a paradigm shift in Scholarships of Learning and pedagogies of disability inclusion in TVET systems in Southern Africa, a shift that recognizes contextualized inclusive strategies. Only then, will the global South Scholarships of Learning and Global North scholarships work together to co-create new knowledge systems, as equals.

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Chapter 6
Training Needs for Teachers Teaching Children With Autism in Special Schools

Nausheen Ameen
University of Johannesburg, South Africa

ABSTRACT

This chapter focuses on the training needs of teachers teaching children with autism in special schools in South Africa. It outlines the type of training, competencies, and perceptions of teachers teaching children with autism in special schools. A qualitative phenomenology multiple case study methodology was used. In-depth semi-structured interviews, observations, and field notes were conducted with eight teachers from four different schools in Gauteng Province. The study showed that the training received by teachers assisted them with a general overview of autism and how to use various strategies to teach children with autism. Evidence showed that there was a lack of additional training and monitoring of the training provided in some instances. It highlighted teachers' preferences on the sources of training with private providers being preferred over the training received by The Gauteng Department of Education due to reasons that include perceptions of expertise and training procedures.

INTRODUCTION

The increase in the number of children with autism globally has become common according to Jang, Matson, Adams, Konst, Cervantes, & Goldin (2014). The current prevalence rate is one out of fifty-nine children are diagnosed with autism (Centre for Disease Control and Prevention, 2014). However, in South Africa little is known about the prevalence rate for children with autism. (Elsabbagh, Divan, Koh, Kim, Kauchali, Marcín, & Yasamy, 2012). Springer, van Toorn, Laughton & Kidd (2013) who argues that research on how autism is presented in South Africa is limited, supports this finding. In a report by Statistics South Africa in 2014, the prevalence, of disability, according to the South African Census (2011), was approximately 7.5% of the South African population. Erasmus, Kritzinger, & Van

der Linde, (2019), further verified this in research that there are no accurate or reliable statistics on the prevalence of children with autism in South Africa.

In South Africa and particularly in Gauteng the two schools for autism are in urban areas and inaccessible to most children who needed it (Bateman, 2013; Van Biljion, Kritzinger & Geertsema, 2015). Access to diagnosis, interventions and educational services continue to be a significant challenge. The two schools specialised and mastered specific teaching strategies for children with autism over the years. It was against this background of transformation that the training needs for teacher teaching children with autism in the Gauteng was explored as new schools for autism opened in other areas providing access to education for all children in Gauteng.

At the dawn of independence in 1994, South Africa created opportunities for extensive educational policy development and legislation. It aimed at transforming the education system into one that reflected democracy, equity and social justice as outlined in the National Constitution (South African Constitutional Assembly, 1996). The education system aspired to educate all children. It opened a range of alternative educational possibilities for children with disabilities, including children with autism. The hope was that through education, children can develop and understand themselves and the world (Donald, Lazarus, & Moolla, 2017). It can improve the quality of life, and benefit society generally (Swart & Pettipher, 2016). An adequate education system, driven by responsive teaching strategies, brings about responsibility and independence and contributes to a community and a country.

As a way of alleviating the plight of children with autism and other learning barriers in South African schools legislation advocating for inclusive education has been passed since 2001. These include the Education White Paper 6 on Inclusive Education, 2001); the Policy on Screening, Identification, Assessment and Support (SIAS) (2014); and the White Paper on the Rights of Persons with Disabilities (2015).These legislative documents provide guidelines to ensure inclusive education and support in special schools and special school resource centres (2014). The guidelines for responding to learner diversity in the classroom through the curriculum and assessment policy statements required that all special schools, including schools specialising in education for learners with severe intellectual disability, should follow the Differentiated Curriculum Assessment Policy Statement (DCAPS), (2018). The DCAPS (2018) together with the SIAS (2014) are there to accommodate the different levels of support needs for individual children, which includes children with autism.

Inclusive education requires that all teachers be skilled in practice of curriculum differentiation the DCAPS (2018) and the SIAS (2014). The DCAPS (2018) aims to strengthen the curriculum emanating from the NCS Curriculum Assessment Policy Statement (CAPS).The DCAPS (2018) provides clearer guidance to teachers on how to differentiate instruction using teaching strategies for learners with barriers in a systematic and orderly way. The SIAS (2014) aims to provide support for learners experiencing barriers to learning. The ultimate goal of education is support all children become responsible, independent, contributing members of a community and a country (Lal, 2005). Interestingly a study by Taylor & Seltzer (2011) found that individuals who have autism without an intellectual disability are three times more likely to be unemployed and participate less frequently in recreational activities than individuals with autism and intellectual disabilities. They further indicated that there is a lack of vocational support opportunities for job training as most individuals receive instructions in general education classes. This finding is supported by (Camarena & Sarigiani, 2009; Van Bergeijk & Volkmaar, 2008) who argued that the situation is exacerbated by insufficient academic and behavioural support to children with autism. With children with autism is it further exacerbated with comorbidities that some of them experience. Given the complex nature of autism, teachers often face challenges when managing and

teaching children with autism. These challenges made teacher apprehensive and even despondent when teaching children with autism. Evidence shows that teachers feel unprepared to support children with autism socially, academically and behaviourally (Horrocks, White, & Roberts, 2008). That being the case, teachers sometimes fail to utilise suitable teaching strategies to assist children with autism because they has received insufficient training on the topic and in this case insufficient training on autism, the DCAPS (2018) and SIAS (2014) policy.

Autism is classified under the umbrella term of Neurodevelopmental disorders (American Psychiatric Association [APA] 2013. Autism has two symptom domains - social communication and repetitive patterns of behaviour, restrictive interests and insistence on sameness. The diagnosis of autism includes severity markers, which are based on the degree of impairment in the domains of social communication and restricted and repetitive behaviours, according to the American Psychiatric Association [APA] (2013). Children with severity on level one require little support and might not show prominent language deficits (APA, 2013). They can communicate although they find it difficult to hold a conversation with another person (Laugeson, Frankel, Gantman, Dillion, & Mogil, 2012). Children diagnosed on level two and three would require more support and assistance (APA, 2103). The self-centeredness, the "autism" in children, was recognised as the primary deficit and the terms "autistic" and "autism" came to denote the disorder. Similar patterns were identified in children throughout the world (Freeman, 1997).For teachers to support children with autism it is important that teachers are trained on autism and related topics that will assist teachers to support children in the classroom. Rogers and Vismara (2008) argue that despite the theoretical knowledge of autism, some teachers struggle to provide the appropriate teaching and learning in line with a curriculum or level of support needs for children with autism. This is further attributed to the insufficient training, monitoring and support structures. The type of training provided to teachers are important as it will empower them to be confident have a comprehensive understand of challenges children with autism experience. This chapter will further explore the nature of the training provided to teachers in for autism in Gauteng.

The study used a qualitative approach, which considered human thoughts and behaviour in a social context and covers a wide range of phenomena (Leedy, & Ormrod, 2014). The phenomenological, multiple case study research design was the most suitable design to follow in this study (Yin, 2017). Data collection involved in-depth semi-structured individual interviews with eight participants at four special schools for autism in Gauteng. In the study semi-structured interviews, classroom observations that was recorded in a notebook and field notes were used to gather data (Creswell & Baez, 2020). The data collected through semi-structured interviews provided the researcher important information on the teachers' perspectives, feelings, beliefs and thoughts about the training needs to teach children with autism (Rudestram & Newton, 2001).

BACKGROUND

Autism has become one of the most reported disabilities thanks to increased levels of research. It is seen across racial, ethnic and socioeconomic groups (APA, 2013; The National Institute of Neurological Disorders and Stroke, 2013). It is said that autism affects one to two percent of children worldwide. There is a 3-4:1 male to female ratio. Autism with intellectual impairment is reported at 1:2 and autism with no intellectual impairment is 9-10:1 (Alaerts, Swinnen, & Wenderoth, 2016). Autism has become a prevalent disability in school settings and because of its associated core impairments; it impacts on

children's learning abilities and overall autonomy. The preparation and training of teachers are therefore important. One of the contributing factor of teachers feeling frustrated when teaching children with autism is the insufficient training and support provided by respective educational departments for teachers. It is argued by Rogers and Vismara (2008) that despite theoretical knowledge of autism, some teachers struggle to provide appropriate teaching and learning. In-depth training should cover areas of physiological causes, diagnosis of autism, teaching strategies and policies.

NATURE OF TRAINING ACQUIRED BY TEACHERS TEACHING AUTISM

Eight participants provided the researcher with rich data to fulfil the purpose of the research questions. Seven participants, at the schools, were female and one participant was male. They were trained either at a university or teaching college. Most of the participants worked at mainstream schools before being employed as teachers at a special school. Seven of the participants had never taught children with autism before. The participants were purposefully chosen to answer the question about teacher training for children with autism. For reasons of confidentiality teachers were identified with a numbers and schools with alphabets in no order of preference accept that two teachers were interviewed at each school.

The information acquired from the study becomes useful as it discusses the relevance in teacher training related to autism. For effective teaching and learning to take place in special school for children with autism, teachers should have an in-depth knowledge on the disorder. Children with disabilities according the protocol for the African children on human and peoples' rights on the rights of persons with disabilities in Africa, emphasises the importance of training education professionals, including people with disabilities on how to educate and interact with children with specific learning needs. Having a psychological or special needs background has proved to be of assistance especially when it comes to observing children with autism to decide on the type of teaching strategy to use in the classroom. For instance, Participant 1, School A added that having an observation book is useful to document a child who is displaying challenging behaviour, which is a prevalent deficit with children with autism. This will provide the teacher the insight into the needs of the child. Through this process a report can be shared with relevant therapists to further support the child. Emphasis should therefore be placed on training teachers on guidelines to support children with autism and their individual deficits. Some of the in-depth training should be on the (DCAPS, 2018) curriculum, (SIAS, 2014) policy paying particular emphasis Individual Support Plans (ISP) and the autism.

Participant 1 from School A, mentioned the importance of close observation and recording of the children. Giving an example of children of separated parents she indicated that it is possible to see changes in behaviour particularly exhibited by the child when visiting the other parent. Importantly in her view what children encounter outside the school tends to affect their performance at school. If they are negatively affected their performance in school is affected. On the other hand a positive encounter motivates the learners and encourages participation in classroom activities. Through observation triggers are identified and support can be provided. It was further managed by school Participant 1 from School A tracing the learners' behaviour trends can be shared with specialists and other teachers and identifies possible solutions.

IMPORTANCE OF BACKGROUND KNOWLEDGE FOR TEACHERS

It was highlighted by participant 2 from School C that for a teacher to be able to teach or engage with children with autism prior knowledge of the disorder is important. The characteristics of children with autism are important to know. The participant further reasoned that if a teacher does not have knowledge about the disorder, it becomes difficult to support and cope with children in the class. If teachers are accustomed to teaching neuro-typical learners by standing in front of the classroom and giving instructions it becomes problematic. Instead, children who are autistic are easily distracted and in most cases visual learners. A teacher teaching children with autism also needs to obtain information on how to use alternative strategies or methods to teach children with autism. This will allow teachers to modify activities and materials to meet the needs of children with autism. One possible intervention would be to look at particular fascinations on specific objects or ideas and narrow focus or intensity towards a specialised interest.

When teaching children with autism, an in-depth understanding of the disorder as well as the comorbid factors associated with it needs to be understood. Antshel, Zhang-James, Wagner, Ledesma, & Faraone, (2016)) define comorbidity as the co-occurrence of two or more disorders in the same person. A comorbid condition is a second order diagnosis and has core symptoms that differ from the first disorder. Comorbid psychopathology is common with children with autism. The concept of comorbidities is becoming more accepted by medical professionals and communities. The main difficulty in diagnosing comorbid psychopathology is the lack of diagnostic instruments designed to screen for these disorders in individuals with autism. Recently, instruments have been designed for reliability and validity. Medical conditions which have a strong association with autism are epilepsy, sleep disturbance, gastrointestinal and immune malfunctioning, to name but a few (Mannion & Leader, 2013). The comorbidities associated with autism need to be understood by teachers so that the situation can be managed at school. The obligation is upon the teacher to find more information from parents if children are diagnosed with a comorbid conditions so that it can be communicated with other teachers. Participant 2 from school C indicated:

'Teachers in autism schools are mostly trained as general teachers who can handle different learners but not autism specific cases.'

Asked if they knew enough about autism and associated comorbidities. Participant 2 from School A indicated that they have the basic training and experiences on autism but are met with many challenges due to children comorbidities that they have not been trained on. Participant 2 in School A thus had this to say on the matter:

'Although it is never enough, I am where with my understanding of autism as it is a learning curve. You cannot be an expert because the following year you will experience a child's behaviour that you have never heard or even read in books so with autism every day is a new learning experience'

Participants generally across all the four schools showed a basic understanding of autism. They understood that it was a neurological disorder that affects children socially, behaviourally and communication wise. When asked how they came to know that autism is a neurodevelopmental disorder Participant 1 from School B indicated through the knowledge on special educational needs and inclusive education. She alluded to the fact that they have never gone into detail about neurological development disorders.

And further indicated that it is important for teachers to understand the neurological developmental disorders to assist the learners with autism. Another participant, from School A, explained that they understood autism and that children experience problems with communication, and behaviour whilst at the same time exhibiting a lack social skill and other competencies. The intellectual abilities of some children with autism indicates that there are high, moderate and low levels of support needs of children with autism and that each and every child level of support needs are different. School A, participant 1 thus stated the following:

'In my class I have learners with high levels of support needs and it is difficult to work with them. Some children can speak one or two words and others can't even say a word. As a teacher it is important to use different strategies in order to accommodate each child in the classroom. They don't, like change so as teachers we try by all means to help them'

For other respondents, autism is amongst the very complex forms of severely intellectually disabled children. Participant 2 from School B mentioned that autism is way too complex than explained in textbooks. Teaching children who have high support needs becomes very practical. Participant 2 in School A, explained that failing to collaborate with parents will result in the teacher embarking on a fresh start every day. This consequently takes longer for the child to learn whatever you require them to learn. Participant 2 in School C indicated the factors such as the genetic and environmental factors are contributors of autism. The participant further explained children with autism have repetitive movements, flapping and sensory difficulties. Some children with autism find it difficult to withstand bright light, being touched or eating food with different textures. Children with autism do not like change and need to be carefully introduced to it. Participant 1 in School D mentioned that could be a contributing factor to a behaviour challenge. Understanding the importance of preparation as a teacher is important as a change in school, or a simple routine in the day could be challenging for a child with autism. For non-verbal children visuals are used order to prepare them. For example if the child is going to visit the dentist showing the child a picture of the dentist and what might happen is important.

TRAINING AND STRATEGIES AVAILABLE TO TEACHERS

In a number of instances, teachers are employed to autism specific schools with a basic education. This means that they hold qualifications such as degrees or diplomas in Education. These qualifications are combined with specific training to support children with autism. The training provided is on teaching strategies for children with communication difficulties like the Makaton which is a form of sign language. Another training provided to teachers in schools for autism is the TEACCH program. It is a program to assist teachers to teach within a structured and organised environment. This was in the case of the newly established schools.

Participants from School C and D indicated that they in the process of providing teaching with the necessary resources and skills to support children with autism. In Participant 1 from School C indicated that because they are a newly established school in existence less than five years they are still at phases 1 and 2 of the Makaton training. This is in contrast to Schools A and B who are in existence over ten years where the teachers have long been trained on all the stages of Makaton and other competencies whilst others within those schools are now qualified trainers. This does have implications in the teach-

ing and general management of children with autism. Both the teaching methods such as TEACCH and Makaton are common across all four schools but they are at different levels of training. In terms of the training teachers received to support children with autism. Participant 1 in School C indicated that most of their training presented was on skills on how to deal with the social, communication, sensory and behaviour challenges. These are aspects that are considered important areas to attend to when teaching children with autism. Participants across all four schools indicated that relevant practical workshops that specifically speak to autism are crucial. Some of the workshops they were trained on are as follows:

THE TEACCH PROGRAMME

A core diagnostic feature in autism, is repetitive and stereotypical behaviour (APA (2013). Research done by Suprihatin, & Tarjiah (2019) supports numerous studies that children with autism face the world differently in communication, interaction and behaviour. Some children with autism might communicate verbally or non-verbally or not speak their entire lives. Studies have shown that children with autism respond well to structured educational programs which suit their specific needs (Lal, 2005). Some of the most successful teaching strategies used for children with autism and their challenges are programs that follow the behavioural approach and or one on one or small group sessions. Some of these challenges children with autism experiences are difficulty with abstract, language-based, conceptual tasks. As teachers, therapists or parents of a child with autism it is important to understand the strengths and deficits that are associated with autism as a disorder. In order for teachers to address these difficulties teaching strategies like verbal explanation, demonstration and modelling may not be successful. However, tasks that are visual in nature and rely on eye-hand integration, spatial, or motor capacities are better comprehended and enjoyed by children with autism Suprihatin, & Tarjiah (2019). Structured teaching procedures provide familiar, predictable and a structured environments that reduces anxiety, promote independence, increase flexibility and tolerance for change.

The core approach within the TEACCH programme is structured teaching (Suprihatin, & Tarjiah 2019) It focuses on supporting children with autism to understand their ecosystem, live independently through a systematic and predicated structure (Holmes, 2013). It also supports communication, cognition, perception, imitation and motor skills traditionally for children with autism, but could benefit an inclusive setting.

The effectiveness of the TEACCH programme has been previously synthesised by positive studies by parents across different ages and within various social settings (Virues-Ortega, Julio & Pastor-Barriuso, 2013). Research done by (Scholper, Mesibov, & Hearsy 2010) mentions that structured teaching has two components. The first being to improve individual's adaptation skills by using their special interests, and the second to adjust the environment to accommodate individual deficits caused by autism. The main components of structured teaching are: (a) organisation of physical environment, (b) visual schedules, (c) activity systems and (d) task organisation /visual structured activities. It is useful as it outlines the chronology of activities whilst bringing clarity to the teaching environment if all the activities are spread out over the day. As previously mentioned in the chapter the TEACCH programme rely heavily on visual support.

The TEACCH program has been implemented worldwide and in Gauteng, South Africa, autism specific schools and units in special schools for severely intellectually disabled (SID) children. What is also important is that the programme 'enables learners with Autism spectrum Disorder to function

meaningfully, productively and independently as possible' (Mesibov & Howley 2003, p 3). It is an evidence-based service, training and research programme for individuals of all ages and skill levels. The TEACCH system allows for conducive learning environment and produces autism-friendly processes and styles. The idea is that children with autism process visual information more easily than verbal information. The programme works in a structured space. It considers the levels of severity of the child taking into consideration visual processing, memorising routines and special interests.

MAKATON (Gesture Prompts of Sign Language)

One of the deficits of autism is communication (APA, 2013). An evident-based teaching strategy to address communication is Makaton. It is a simplified version of the British sign language to support language and communication development combining speech and manual signing (Erasmus, Kritzinger & Van der Linde, 2019). This has proven to be an effective teaching strategy to address social and communication deficits in children with autism. Furthermore, Kontra, Goldin – Meadow, Beilock (2012) illustrates that observing the movement hands to form particular signs during speech supports comprehension. The experience of the motor movements of the Makaton signs and stories with different senses may strengthen the associations in the brain. Some children with autism generally experience impairments with adequate social skills like maintaining reciprocity, inability to interact and interests in others often suffer social consequences. According to Flynn & Healy (2012) the implications of this becomes worst with age and in adulthood. It affects them socially, emotionally and intellectually. When combined with other teaching strategies like Picture Exchange Cards (PECS) and used jointly the reinforcement levels of success for children with autism are increased (Doak, 2018).

Makaton consists of about 350 signs, structured in nine distinct stages providing comparable and gradual language development (Byler, 1985). The vocabulary consist of concepts that is used to express vital needs and initiates mutual communication. Grove (1980) further emphasises that the concepts can be both concrete and abstract. Makaton is unique as it can be personalised for the individual and that not all works can be signed but key concepts (Walker, 1987). At all times, communication by the teacher should include speech. If you work with the signs it will be signs and speech, or symbols and speech. The signs and symbols are there to support speech, not replace it. All attempts at communication are rewarded, even if the answer is not quite right.

DIR®/Floortime™

For many children with autism various aspects of play are difficult. For most children the phenomenon of play is natural. They move through the various stages of play development and add complexity, imagination and creativity to their thought processes and actions. But in the case of children with autism these stages are difficult to achieve (Hess, 2013). Some of the challenges are motor planning, expressive, receptive communication, imitation and gross motor movements are some of the difficulties (Hess, 2013). Communication and Social impairment is one of the deficits of autism (APA, 2013). The Developmental, Individual, Relationship-based (DIR) Model, designed by Stanley Greenspan (1989), is a is a interdisciplinary framework that enables, parents, specialists and teachers to construct an holistic assessment and teaching strategy that incorporates the child and the family and addresses the core deficits like social and emotional skills, language and cognition through interaction (Greenspan, 2012). Relationships developed in using DIR®/Floortime™ as a teaching strategy allows the child to move

up in the developmental ladder master the functional emotional developmental capacity that they are capable of (Greenspan, 2012).

The DIR®/Floortime™ enables children to build a healthy foundation for social, emotional and intellectual capacities through. The acronym "DIR" highlights three important components of the programme. The "D" is the development of the child and core to reaching the child's developmental milestone. The "I" refers to the individual difference in the processing abilities and the "R" is the building of relationships (Greenspan, 2012). According research by Cullinance, (2012) there are six milestones that are important for a child's emotional and intellectual support that both teachers and parents need to understand. The milestones are self-regulation and interest, intimacy, two-way communication, complex communication, emotional ideas and emotional thinking (Cullinance, (2012). Each child is unique and has individual differences. While some children with autism might be hypersensitive to touch and sound, others may be hyposensitive and may seek other sensations.

Ansari, (2015) recognised autism as a disorder with distinct brain function. Current research is focused on understanding the deficits in neuronal communication as the base for a number of behaviour manifestations of the disorder (Cullinane, 2012). Developmental interventions have advanced to that the can incorporate and integrate sensory-regulatory communication and motor system. This is done through neuro-imaging and research is bringing about a clearer understanding how emotional experiences impact the development of the brain (Eigsti, & Shapiro, 2020). Research by Siegel (2001) should how relationships in infancy change brain structure impacts on social and emotional development. A recent research study by Casenhiser, Stieben and Stanker (2012) at the York University in Canada, investigated the behavioural and neuro-physiological outcomes of DIR®/Floortime™ intervention and potential and electroencephalography (EEG) measures. It was found that as a result of individual brain processing differences, children with autism do not master the early developmental milestone that are the foundation for learning. The process of establishing as a relationship through DIR/Floor time that can enable the development of basic social, emotional and communication skills (Hess, 2013). The child learns to interact and make choices. DIR®/Floortime™ time is flexible and can be done throughout the day. The effective use of play and engaging with children DIR®/Floortime™ by teachers and parents as a teaching strategy can promote cognitive development and identifying developmental play goals for the children with autism (Liao et al., 2014).

Participants noted diverse types of training received for the above teaching strategies. Training was viewed as infinite due to the ever-changing nature of autism and the complex and diverse nature of the learner behaviours as well as the interventions required. The training exhibited by the teachers is also so diverse. Participant 2 from School D reflected this when they thus argue:

'I was also trained in Makaton but remember training is not something that would say ah I am trained and then I am out, it's an on-going thing; I also did full time it was a floor time'

Asked when the training was adequate to support children with autism. The participant explained that they receive basic training. The training needs to more practical in nature so that they understand how to implement it in the classroom, as children with autism are so diverse.

EFFECTIVENESS OF TRAINING OF TEACHERS

In addition to the need for knowledge on autism, there was emphasis on continuous training through workshops in order to enhance their effectiveness. Participants highlighted the significance of on-going training, workshops and sign language. Participants also noted that such training enhances the knowledge of teachers and their capacity to deal with children with autism. Asked on the effectiveness of the training received, Participant 1 from School A managed that Makaton helped to communicate with the children, signing and talking subsequently supports the children with communication. It was further explained that it is a strategy, which is widely used together with other methods such as TEACCH. The TEACCH programme is important for structure and routine and is useful in a teaching environment. The TEACCH programme plays an important role in defining the effectiveness of teaching. It provides guidance in setting up the classroom, work stations and addressed sensory issues to promote independence to children in the classroom. Participants in all four schools saw the Makaton and TEACCH strategies as two of the most effective methods to use in a school for autism. For instance, Participant 1 from School C worked at a CARE Centre for Autism Research and Education. In both places, training was outsourced and the facilitators were brought to the school to train particularly from Autism South Africa. When joining the school the teacher was sent for further training of which he/she mentioned that it was the same facilitators who conducted the training. This illustrates that there are limited specialised training available for teachers at schools for autism.

Both the participants from School C were also trained on Augmentative Alternative Communication (AAC). The training exposed the teachers to a variety of equipment that learners can use to engage especially those that are non-verbal. According Participant 1 from School C the use of the devices becomes crucial particularly when dealing with the non-verbal learners as one can assist them without having to sign. Instead of signing learners can be able to use pre-recorded materials. Teachers however still have to plan even in the case of using equipment. Prior to using the device one has to embark on introducing children to the devices, showing them how to use them. The key words or the vocabulary is recorded onto the device is usually related to the lesson in order to provide the teacher with an answer. To respond children can use a simple method like tapping or pressing and if they can't use their body they can perhaps use other forms of communicating their response.

There are many other methods to use for children with diverse challenges for example an eye gaze can be used to allow children to participate using their eyes and looking at a screen and making choices. It is important to understand that for teachers to use these devices in the class they need to be trained. The methods and adequate knowledge on the devices are crucial to produce the desired outcomes for children with autism. In addition to Makaton and AAC training, Participant 1 in School C received previous training on Applied Behaviour Analysis, (ABA). This form of training is important as it enables the teacher to train the child to respond and is rewarded once the skill is mastered. Other training received was a method called hand over hand. The teacher holds her/his hand over the child's hand until the child is able to do or respond to the question independently.

Participants teaching children with autism in all four schools prioritised self-training above what their schools provide them. Participant 1 in School C found it important to improve on competencies in autism. It was found that having a background in psychology or inclusive education on its own was not adequate. This prompted Participant 1 from School C to enrol for a Post Graduate Certificate in Education, where they learnt the teaching methods and later with autism training more about autism. A combination of such diverse training then became a firm foundation for teaching children with autism.

Six out of the eight participants placed greater emphasis on the need for more experience combined with adequate training. School C, participant 2 indicated that although there are challenges with attaining the requisite levels of understanding learners with autism, a teachers needs to have the requisite skills, and the expertise to deal with the challenges facing learners with autism. Participants therefore expressed the importance of 'learner driven learning', which implies that the teacher learns a great deal through interacting with the children. For instance, Participant 2, School D had this to say:

'today the child is like this you wonder why the child is like this, if you see the other one doing the same thing you now know how you are going to help that child'

It is important to understand that, comparatively Participants in Schools C and D which are newly established schools believed that their training was inadequate as some indicated that they had not received any autism specific training. The huge challenge was also that participants in school C and D did not seem to understand what form of training they required, as they did not understand the requisite competencies for teaching children with autism. Asked if there was anything specific training teachers need to be trained on, some of the participants believed that knowing the brain would assist them to understand the child fully. One of the participants thus highlighted that they felt that it will assist to identify the needs of the children as their current challenge is that they have limited knowledge on the understanding of the brain. Asked if there was anything specific teachers need to be trained on Participant 2 from School D one of the newly established schools teachers responded as follows:

'I think understanding the brain will help a lot because we'll be able know where the problem comes from and identify the needs of the learner but if there is a problem we don't know how to help'

Participants across all four schools emphasised that despite the challenges they faced with the type of training received they felt they were providing support to children with autism. This was the progress that children where making in the class. They indicated that one could for instance see a child progressing from being non-verbal to verbal depending on the effectiveness of the intervention. They indicated the need for a holistic approach. The need for working in collaboration with other teachers as well as other experts such as the therapist was expressed by Participant 1, School C who thus argued:

'I don't work in isolation, the same things or the type of training is also spread to the therapist and other stakeholders within the institution or the school, hence I am saying that you find that the child is non-responsive at all from the beginning but with consistency and reinforcement like praising and rewarding the child positively then you find that the child is able to'

Other issues where progress have been noted included working from a holistic approach with children having social deficits, working with the therapists started engaging with other children. Participant 1, School B had this to say:

'…but after interventions; socially the child starts to have friends and starts to be naughty like any other child whilst at the beginning the child would just sit in one place, shy not knowing anyone and you see that confidence coming out and the independence as well'

A combination of training presents teachers the opportunity to understand children with autism better and ultimately assist them in deciding on the most effective strategies to use in the class. This is reflected from School A, participant 2 who had this to say when asked about the importance of prior knowledge:

'Yes! With prior knowledge after the trainings, you understand it more and you get to find a way to be more effective you know just by adding your previous knowledge and the new one and you get to understand okay! That is why that child was behaving like that or you know, you get to combine information on what you know with new information just to understand autism'

The issue of effectiveness of reinforcing teaching strategies daily in the classroom was emphasised by a number of participants. Participant 1, School D who thus said the following:

'It is effective in a way that if you engage on a daily basis with these learners you see the results, it's like when you have a driver's licence and you are not driving every day you become redundant so with these learners even if you were given a small training but inter action with them every day will even increase your knowledge because you also learn from them, you learn every day'

Three participants felt that the effectiveness of the training dependents on how you use it. Participant 1, School A felt that the effectiveness of their training could be successfully put to test in the classroom during engagements with the children, without which it becomes impossible to measure the effectiveness of such training and the knowledge acquired. The participant had this to say:

'You know all the training has been effective, the only thing that after training we need to implement so that we can be able to see that whatever we have achieved we work for us with the learners, if we are not implementing we are not able to see the effectiveness in the classroom where you are engaging with learners most of the time. Trial and error trying to know this is what is going to work for me or not because. After training you need to present the different strategies for the different challenges of the learners and so if you are not hands on you will not see and it will not work'

Asked on the effectiveness of the training received, School B, participant 1 indicated that the training as facilitated by Non-Government Organisations (NGO's) and was effective. The participant went on to explain that Non-Government Organisations (NGO's) has been training people about autism and was responsible for their initial training, whilst also revealing their forthcoming training under her. All the participants mentioned the most effective training which they received was the Makaton training. As a Participant 2 in School B thus highlighted that the training enhanced his/her communication with the children. Five out of the eight participants however complained about the training that it focused on mainstream teaching with little or no focus on autism. Two participants indicated that they attended the training as they were nominated as representative from the school. This was echoed by one of the participants from School C who said this:

'Mostly they are just giving us what to do mainstream wise but when I am an autistic teacher they don't assist, I may know they are from the mainstream and when questions are asked they don't come back to me'

In terms of training received from the specialists like Non-Government Organisations (NGO's), responses are very solutions focussed. When asked about the difference between the training of the Gauteng Department of Education (GDE) and those of Non-Government Organisations (NGO's) it was based on the type of assistance received and on possible solutions for challenges. The participants in all four schools emphasised that they prefer specialists like Non-Government Organisations (NGO's), whom they perceive as being very practical and offering autism specific training as opposed to trainers from the department of Education. The challenge that participants found was the Department of Education's training focussed on mainstream schooling. The recommendation from participants were that the Department of Education trainers must be specialists before engaging with training on autism for teachers. It is in that context that Participant 1, School D had the following to say:

'I think whoever is there on top when they say this district will start assisting, have centres for autism schools, they should also train them because now if they say go do this training, she will do the training thinking that everybody is mainstream and what about me?'

In terms of the relevance of the expertise held by Non-Government Organisations (NGO's), respondents felt that Non-Government Organisations (NGO's) have a comparative advantage compared to the Department of Education due to the following:

1. They are more experienced,
2. They are familiar with autism related issues,
3. They have the resources, (both financial, human and infrastructural as well as information wise)

In elaborating the difference between the training that Non-Government Organisations (NGO's) and that provided by the department, Participant 2, School C felt differently about the training by saying there is no difference. Schools have to sometimes finance extra training through their own school budgets. She indicated that in terms of the quality of the training or knowledge base, the Gauteng Department of Education training is at the same standard of that of training outsourced. Although the participants response is slightly different from what the previous participants had to say there were deficits in terms of the competency levels of training by Gauteng Department of Education trainers.

There was indeed concurrence with all participants from the four schools that the Department of Education trainers spent lesser time on issues yet they expect teachers to be competent enough to deliver. The efficiency and effectiveness of departments trainers were therefore reported as being inconsistent. Participants further indicated that whilst the department trainers had some knowledge it does not exhibit the level of competency one would expect. In a response from Participant 1, School C indicated that Autism South Africa's trainers, perhaps trained internationally and had the experience that is expected to train. When participants where asked if they would need in-service or additional support in the classroom. Participants from Schools C and D indicated that they would require additional training on autism and practical support in the classroom after the training ideas.

RECOMMENDATIONS FOR A SOLUTION

Asked on the type of training they thought one needed as a teacher teaching children with autism Participant 1, School A indicated on-going training was important They added that it is important to attend workshops on autism. In-service training should be done at schools where teachers are experienced in teaching children with autism. During training teachers would receive documents about autism and how to teach autistic learners as well as managing different activities. All the Participants from the four schools mentioned that the Department of Education provides them with workshops that adds to their existing body of knowledge in autism.

In response to the question of other types of training still needed Participant 1 School A indicated that they still required training on behaviour challenges. The participant added that it could be crucial to have more training on behaviour problems because of the complexity surrounding managing learners with autism. This is said to be quite a serious challenge especially with the senior phase. Participant 1, School C mentioned that going through training such as the Makaton and SIAS (2014) training, laid the foundation for planning and providing support for the different levels of support to learners. It also provided the teacher the opportunity to decide on the strategies to use in the classroom. Participant 1, School C indicated that it was done by different organisations specialising in autism. Their training is informative and practical in nature.

Participant across the all four schools emphasised the importance of workshops for teachers teaching children with autism. Emphasis was also put on the need for proper training to equip teachers with relevant strategies because providing teachers with resources without training is not helpful. Some of the multiple workshops Participant 2, School D indicated how necessary it was to attend workshops on Alternative Augmenting Communication (AAC). This is an alternative method of communication that is available. Participant 2 in School D added that more training is required in AAC devices as it supports children with communication deficits.

FUTURE RESEARCH DIRECTION

It is known not only in South Africa but throughout the world that there is an increase in children diagnosed with autism. The complex nature of the disorder provides room for large amounts of future research on this topic. A study on a larger scale could be done on training needs for parents and families with a child with autism. It could explore the correlation between what is being taught at school and that at home. An exploratory study could examine training, monitoring and the implementation of the training for teachers and the benefits it has for effective teaching and learning in the classroom.

CONCLUSION

Teaching children with autism is an area of specialisation that needs teachers' to be trained in the field of autism. According to researches, Ametepee & Anastasiou (2015), there is a lack of effective teacher training and policies that embraces specific child centred strategies. Teachers will through specific training, acquire the necessary skills for them to teach effectively in a school for children with autism. It is further stated by Forlin, Earle, Loreman, & Sharma, 2011), that it is important for the collaboration

between universities and educational systems to ensure a cohesive transition from an undergraduate teacher preparation to becoming a competent and effective trained teacher for children autism. Thus, Rose & Garner (2010) emphasised on the importance of practical, school-based experiences in addition to theoretical base from universities. Bailey (2015) stated the importance of training teachers appropriately and with specific skills will enhance teachers' self-esteem and confidence when teaching children with autism. Without properly qualified teachers and training, it will be difficult to successfully achieve the desired outcomes to support children with autism. Monitoring the implementation of the training is just as important to see if teachers understood what they were trained on and can implement it. This will allow the Department the opportunity to provide additional training and further support where necessary. Training should be an educational priority.

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Chapter 7

The Dynamics of Inclusivity in Teaching and Assessing Mathematics for Lower Grade Learners

Caroline Long

https://orcid.org/0000-0002-2804-3817
University of Johannesburg, South Africa

Phefumula Nyoni
University of Johannesburg, South Africa

ABSTRACT

The chapter explores the diverse interpretations related to the learning of mathematics for learners at lower grade levels. At the core of understanding the dynamics of teaching and assessment of mathematics tasks for lower grade learners lie the general perceptions on the subject and how these have shaped educator and learner approaches to the subject as well as associated nuances of cognitive development. The chapter also explores how educators deal with inclusivity in the context of the curriculum and cognitive capabilities of learners in teaching and assessment. Different interpretations to assessments are also explored. A different approach to assessment that locates learners on a continuum of current proficiency is advocated. A flexible teaching philosophy is proposed which rather than cut the class into a pass/fail dichotomy, acknowledges each learner's right to progress in particular through the use of targeted teaching for challenged learners.

INTRODUCTION

The mantra of researchers, educators in South Africa is that "our learners do not know any mathematics" and that they are far behind their international counterparts (Long, 2011). Often these statements, with supporting evidence from test results, or classroom observations, or anecdote, are explained by socio-economic context, by language difficulties, by poor teaching and by lack of resources (Sfard, 1991 & Long, 2011). A generalizing claim that learners can hardly understand mathematics, can however be challenged from a number of perspectives, the first of which is that there is a natural engagement of a child with his environment, and this engagement is almost certain to engage mathematical thinking through a constructivist process involving the learner drawing from their previously held knowledge.

One of the key features of this chapter is to explore how the teaching and learning of mathematics has been viewed as a complex process beyond the ability of many individuals. This is in particular with regard to the subject having continuously attracted controversy and sparked debate across many sections of society. What has been agreed among the different scholars however has been that the teaching and learning of mathematics across the different phases has been found to be demanding for both learners and educators (Sfard, 1991 & Long, 2011). Sfard (1991) thus adds that specific details related to mathematical thinking, the omnipresent and perceivably overwhelming difficulties experienced by learners of mathematics are as bewildering as they are noticeable. Whilst the aforementioned views seem to be alarming when it comes to the learning of mathematics, the noticeable challenges that usually accompany the teaching and assessment of the subject is equally concerning. With the learning of mathematics being a two-way process in which factors that are linked to both the learners and educator could influence the process, it becomes important to ensure that any focus on the subject of learning mathematics embraces a holistic approach. In this regard, a holistic approach will thus assist in exploring how issues that relate to the school environment such as educator competences and the curriculum on the one hand and external factors linked to the home environment of the learner contribute towards the learning of mathematics. In the South African context, it is important to note that inclusivity has been associated with a curriculum that has been transformed and founded on liberating epistemologies. It follows that despite the links to liberating epistemologies and the envisaged inclusiveness especially in their foundations in constructivism, a curriculum such as curriculum 2005, had short comings at the implementation phase. It can thus be argued that notwithstanding the progressive pedagogies where more attention to the conditions of responsiveness involved educators being alerted to differences in the ways in which learners engaged and responded to the content and context of learning, a serious limitation presented itself in particular with respect to the educational role of the educator. Of further concern was the curriculum's lack of clarity on the theoretical foundations of the key elements of a pedagogy informed by a constructivist approach to learning and its relation to learning mathematics in particular.

This chapter also focuses on the diverse interpretations that relate to the relationship between the learner and educator in knowledge construction. The concept of cognition is thus explored within the context of inclusivity in educator teaching and assessment approaches. Due to the contested nature of inclusivity, which is one of the critical aspects of focus in this chapter, research has shown that in many instances curriculum coverage is used as a measure for determining if learners have attained the breadth of the curriculum. A somewhat different measure is required to gauge the 'cognitive depth'. In many cases, a focus on breadth of coverage works against depth of conceptual understanding. Long & Dunne (2014) have however cautioned that such constructs that draw on breadth and depth do not adequately address the challenges of teaching mathematics from the perspective of the learner. They support their view by

arguing that whereas an educator may well have covered most of the content envisaged in the class, a key question remains whether the learners have engaged with the underlying mathematical structures to such a depth that they build the foundations for more advanced mathematics. In addition, they have indicated that it is equally essential for the educator to understand whether the concepts as acquired by learners are likely to lead to a frustrating outcome or not, with particular emphasis on a potential inability for them to make the transition to advanced mathematics. This chapter is grounded on reviewing literature from previous empirical studies. The key areas of the chapter include the following; an overview on the concept of inclusivity and narratives around the subject of mathematics in society; different frameworks involved in understanding mathematics teaching; the teaching and learning dimension of mathematics and finally the assessment aspect in mathematics teaching.

BACKGROUND

Inclusivity and Diversity in Education-An Overview

Debates on inclusion and access to mathematics knowledge are usually associated with diversity. Diversity and inclusion are usually understood as two concepts with close association since any conversations about one of them usually draws in the other. The relationship between diversity and inclusion is such that when exploring inclusion within the classroom context it becomes a foundation of promoting diversity and providing support to learners from diverse backgrounds. Inclusion in this chapter involves an appreciation that learners with different abilities are put together within a classroom setting with targeted teaching used to ensure that their performance is optimised. In this regard, this further implies avoiding grouping learners by ability but instead ensuring that learners facing challenges in grasping mathematical concepts are put on an equal level in terms of the nature of content. It needs to be highlighted however that despite the promotion of inclusion and diversity being essential in the context of mathematics education, in some instances where classes are overcrowded or where there is high absenteeism, factors work against the promotion of these constructs, and lead to negative perceptions about schooling.

There are different ways in which inclusivity is understood in education. Whilst the word is commonly found in contexts where reference is made to extending access to students or academics from disadvantaged backgrounds or those with impairment, not much has been explored in what it entails in the actual teaching, in particular where teaching of mathematics is concerned. Often, inclusivity has been conceptualised through legislative frameworks that have targeted previously disadvantaged groups. Whilst the progressive legislation particularly within the South African context has been widely celebrated, Chiwandire & Vincent (2017) have argued that the legislation or any policy framework targeting exclusion has had minimal impact on improving the challenges to meeting the inclusivity requirement. Whilst this view of inclusivity is usually associated with settings where persons with disabilities are involved it is crucial to indicate that any quest for enhancing inclusivity in the teaching of mathematics cannot be left only in the education policy documents. Teaching and learning policies are mere means for achieving an end as the actual teaching is dependent on a multiplicity of factors some of which are located within the school setting whilst others can be traced to practices and experiences outside the classroom. Inclusivity in such cases can thus be explained on the premise of understanding issues from a holistic perspective and being integrative when it comes to finding teaching and learning related solutions.

Other efforts aimed at understanding inclusive education have centred on the methodologies used. From this perspective, inclusive education has been explained as a quest for the critical expression of educational theory in efforts to generate theories on teaching methodology on the one hand and empirical research on the other (Laubenstein, Guthöhrlein, Lindmeier, Scheer, & Sponholz, 2019). In efforts to comprehend the concept of inclusivity in schools, an essential question that is usually posed is on how frameworks linked to conceptualising inclusivity and related teaching and learning practices can be enhanced in efforts to deal with difficulties encountered within both the school and home environment. In this case, the process of inclusivity is defined by the measurable outcomes that can be used to symbolise a learner's achievement that they attain during interactive learning that involve both the school and home settings. The chapter attempts to explore this aspect further by looking at the various forms of assessment and how inclusivity or a lack of it can be reproduced through certain types of assessments. While this critique of assessment is acknowledged, assessments are accepted as an integral part in measuring learner achievement, something which is essential for the learner, educator, parents, and other stakeholders involved in the education process.

In other contexts such as Brazil where people commonly draw from progressive movements to give expression to issues and address societal challenges through this platform, inclusive education is understood within the ambit of a progressive movement. Inclusive education is therefore defined as a movement responsible for promoting access to regular schools though with a specific focus on learners in special schools. This chapter however focuses on inclusion in terms of mathematics teaching and learning. In understanding the concept of inclusion in mathematics, Laubenstein et al. (2019) have indicated that some important questions need to be considered. For instance, the question of 'inclusion into what' has been seen as an important foundation towards understanding inclusivity in teaching and learning mathematics. The reason why such questions are crucial is linked to the concept of inclusivity itself not being clear as it is interpreted differently from individual to individual and from context to context. Laubenstein et al. (2019) also caution that inclusion cannot be referred to as if it is any simple and straight-forward attractive educational activity. In lay terms, inclusion can be said to refer to a process that involves embracing individuals or groups into an activity or procedure. For Skovsmose, inclusion ought to be understood as inclusion of some order of things. From this perspective, it is argued that it might not be a colonial order of things that is being tackled but rather any order of things. Whilst such an order may be acceptable from one viewpoint there is a tendency to find it questionable and unacceptable from other standpoints hence setting up inclusion to be a complex and contested issue. The contestations of inclusion as a concept and as a practice also show how it is dependent on people's experiences and responses in different settings.

To try to unpack the multidimensional nature of mathematical knowledge and processes surrounding its acquisition at different levels of the subject's teaching and learning, this chapter has adopted the idea of descriptions that Skovsmose present as three narratives linked to the social functioning of mathematics. In this case, diverse possible social interpretations and functions of mathematics education are presented. The key issue that the interpretations explore in this chapter involve tackling the question of how inclusive mathematics knowledge acquisition and teaching is experienced in the case of learners and educators respectively. This further entails answering the question of what learners are included into, and under what circumstances in the case of the learning process. The narrative approach therefore engages with three unique perspectives that according to Roos (2017) can be used to understand the possible social functioning of mathematics. An overview of the narratives is accordingly presented in the sections that follow.

Mathematics as a Scientific Subject Celebrated in Different Settings

In one of the narratives aimed at understanding mathematics, Skovsmose (2019), views mathematics as a field of human knowledge that ought to be widely celebrated. In pursuit of the different domains under which mathematics is understood in different settings in society, it is crucial to consider the individuals and groups who have embraced celebrating the subject in particular due to what they consider the range of attractive qualities it embodies. Under this description, mathematics is widely seen as an accurate science with a philosophy that can establish definitions with precision. In addition, the philosophy of mathematics is celebrated for having theorems that can be proven. The advocates of having mathematics being a celebrated subject further hold the belief of the subject not only being a source of inspiration but also inclusivity since it can be applied in a wide range of contexts (Schwab, Sharma, & Hoffmann, 2019). In this broad spectrum that involves viewing mathematics from an inclusive dimension, mathematical calculations are viewed as being a consistent and highly reliable source of solutions. This thus constitutes of an approach that views mathematics as a celebrated scientific good with a capacity of inclusivity in terms of providing solutions to human challenges. When it comes to the teaching of the subject educators thus come to view themselves as emissaries who are there to assist learners to master the discipline. The approach therefore does not accept views that try to reduce the subject to a personal or socially significant matter. Whilst there are many people who hold this view, this has become a source of grave concern in particular in contexts such as South America, or Africa. In South Africa in particular the teaching and learning of mathematics is linked to social, cultural and other context specific features, where the subject has harboured the identity of a challenging subject that is fast turning into the preserve of a privileged few. It is from this vantage point that calls for the celebration of the subject as being embracing in addressing people's challenges have been criticised and in instances out rightly dismissed as too narrow in scope. The criticism has therefore resulted from the contextualised manner in which the teaching and learning of the subject has been handled together with the related perceptions.

A Post Structural View of Mathematics - Debunking the School as a Democratic Institution

The issue of celebrating mathematics as a scientific subject capable of providing solutions to people in different contexts has been broadly explained through the post structuralist ideas of Michel Foucault (Foucault, 1991). In this way despite schools being widely celebrated as spaces for knowledge acquisition that may ultimately lead to emancipation for many learners, the process of schooling itself may not be as liberating as commonly believed to be. From a Foucaultian approach, the way schooling is experienced in some contexts can be equated to prisons, something that paints an ominous picture of schooling (Foucault, 1991). Although schooling, in particular when it comes to the learning of mathematics, could be seen as an opportunity for learning through enhancing innovativeness and problem solving whilst opening the learners to a landscape of knowledge, the Foucaultian approach sees the teaching and learning of mathematics as another well-organized way in which learners are adjusted to another given social order (Skovsmose, 2019).

From a Foucaultian perspective it can be argued that although being capable of fulfilling certain goals, mathematics education can equally be viewed as generally riddled with power dynamics. Various actors in society that include mathematics educators, learners, and other interested parties in society are usually engaged in a contestation regarding the position of mathematics in and outside the school environment.

The subject's education in this regard has been found to be concerned with serving the interests of those wielding power in society. Within the education context, it is also essential to comprehend the position of the learner-educator within a learning environment in particular with a focus towards understanding how far a learner's experiences within the classroom and at home could influence the learning of mathematics. Some critics are concerned that current mathematics education research and standards are largely concerned with children's learning of the cultural values and ways of knowing of the discursive community of mathematics (Popkewitz, 2004; Pais, 2012).

Despite criticism levelled on the embeddedness of cultural values on mathematics teaching and learning, this chapter however highlights that embedding mathematics education into the cultural values and ways of knowing may not be a bad idea in itself as it could form part of an agency that learners and educators can draw from in their quest to have capacity to deal with some abstract mathematical concepts. Some critics however still insist that the concern of current mathematics education research and standards with children having an appreciation of cultural values and philosophies of knowing through a discursive community only exist as a theoretical illusion devoid of practicality. They argue that the mathematical standards in practice serve a different function (Popkewitz, 2004). This differentiated function is said to bring out a false impression of the child who is lured into social submission. The argument is further extended to indicate that the notion of an all-inclusive mathematics tends to mask the hidden negative learning outcomes which result in many learners being churned out of an education system into what they call a garbage bin of society (Pais, 2012). This process that involves the yearly churning out of learners into society with some having achieved and other failed represents a reality that at the core of mathematics knowledge acquisition lies an illusionary deceptive conception of the individual being capable Whilst in some settings mathematics can be celebrated and in others viewed as being linked to social submission by learners, a third view linked to the idea of narratives by Skovsmose tends to suggest a possibility that mathematics could become a key source of empowerment.

Views that are closely linked to the Foucaultian perspective though drawing from the aforementioned narratives by Skovsmose (2019) relate to mathematics being seen as a possible source of empowerment. Drawing from the ideas of Paulo Freire who is concerned with processes surrounding learner's ability to acquire literacy, it becomes fundamental to understand how the empowerment process could entail diverse interpretations of knowledge that on one hand involve critical political interpretations and political involvement (Freire, 1972). This approach accordingly draws from a process in which a learner becomes an active participant in their learning. Learner activism is usually key because it enhances their opportunity to actively draw from the interpretations and knowledge they would have attained from their social and cultural backgrounds. Equally, such an approach can also ensure inclusivity and social justice within the learning process which can ultimately result in the empowerment of the learners.

Cognitive Capabilities of Learners in Mathematics Knowledge Acquisition

To understand what it means to acquire mathematics knowledge in particular from a cognitive point of view, the ideas of Vygotsky can be used. For Vygotsky, learning and human cognitive development are culturally mediated processes where social, cultural and historical factors play a critical role (Daniels, 2001). This implies that, it is under particular social circumstances that pedagogies emerge and get shaped. Socio-cultural circumstances that include the nature of families and their status in home and community settings also tend to define how learners perceive and conceptualise mathematics. In this case, such background has a bearing on how learning is approached in particular with regard to learner commitment

to schooling and the nature of assistance received. In addition to these factors are the historical factors that are equally linked to the influence of the historical legacy which hinges on the level of economic and infrastructural development prevalent in a learners environment at home and in the school setting.

The features of learners commonly known as 'learner garbage' have been found to be essential when it comes to understanding their acquisition of mathematical knowledge. Learner garbage can therefore be linked to their cognitive capabilities. Learner cognitive capabilities can be explained within a constructivist framework. In this way, learners are said to have capacity to be mathematics doers and thinkers with an ability of constructing mathematical knowledge (Pais, 2012). Learner experiences that are important to explore in particular when it comes to the cognitive development of mathematics education comprise of their lived experiences in their home environment which includes the nature of support they receive. This also broadens to encompass cultural practices, knowledge and interests that parents and communities may have. The aforementioned factors show that learners to a larger extent do not enter the school setting as 'empty vessels' as they are endowed with skills and knowledge which they derive from their interactions with persons at home and community members.

Understanding learner cognitive capabilities within the context of constructivism not only assists in grappling with the notion of a learner being an intelligent individual who actively engages with his or her world but it also assists in tackling the central assumption that learners are endowed with a capacity to interpret new information drawing from prior knowledge. It can consequently be argued that existing learner cognitive functions usually develop in order to accommodate new knowledge (Renkl, 2009). The conceptualisation of new knowledge by learners can consequently be viewed as responsible for processes that involve knowledge construction and transformation as opposed to mere acquisition and accumulation of knowledge. This approach to cognition emphasises the need to encourage and allow learners to problematise the mathematics subject matter and in particular the subject's problem solving dimension. Encouraging learners to problematise mathematics is construed as essential since every mathematics concept is arguably embedded in situations and problems. Consequently, a particular problem may be tackled through many distinct mathematical concepts. Above all, it can be argued that from a cognitive perspective, concepts do not develop in isolation but rather simultaneously and in conjunction with other concepts (Long and Dunne, 2014).

IMPORTANCE OF EDUCATOR TEACHING PRACTICES IN ENSURING EFFECTIVE TEACHING

Contextually-Based Teaching and Numeracy Knowledge Acquisition

Contextually based teaching refers to the form of teaching where the educator starts by tapping into information held by learners. Not only is the educator expected to draw from learner data but they are also expected to use the information to ensure effectiveness in their teaching (Balt et al., 2019). A learner centred approach can therefore be said to form an essential part of good and effective teaching.

The links between teaching and effectiveness have been explored by Biesta (2009) who has adopted an interpretive paradigm. He has explained that 'effectiveness' whilst being a well sought-after virtue is never a sufficient reason for adopting a particular approach or procedure. The concept is said to represent an instrumental value where there is some effort to uphold values that explain how certain ends can be attained whilst it does not emphasise how desirable such ends are. Normative judgements are therefore

an essential aspect in determining what can be considered educationally desirable. The core focus of this argument is that calls aimed at striving for the pursuit of such goals as effective schools, effective teaching, and effective assessment are rather meaningless unless efforts are made to qualify whatever one aims to achieve and related reasons linked to its desirability. In response to effective education one needs to thus deal with questions that deal with the 'what' and for 'who' aspects of issues (Biesta, 2009).

The rise of the measurement culture in education has had a profound influence on educational practice across a range of sectors such as educational policy and practices of schools and educators at local level. Those advocating for the transformation of education into an evidence based profession believe that it is through large scale experimental studies together with randomised controlled field trials as the golden standard. Their belief is that through careful measurement of the correlation between educational inputs and outputs. that the field of education can experience the progressive, systematic improvements that have periodically been associated with other areas of society such as medicine, agriculture, technology and since the dawn of the 20th century (Biesta, 2008). However, the argument against evidence-based research that applies to education applies equally to other fields. The values attributed to the measurement need to be scrutinised. For example, highly mechanised agriculture may produce great volumes of food, however, much of the population is excluded from this economic field.

School effectiveness and improvement has as a result hinged on the idea that educational outcomes can and should be measured (Biesta, 2008). At the centre of the measurements has been the use of league tables that have commonly been used in getting information on the relative performance of individual schools or education institutions in different regions. It is crucial to note that data used in the production of the league tables have been used to identify 'failing schools' and in other instances 'failing educators' within the schools. This means that measurement of outcomes and their correlation with education input can be viewed as a key component of understanding educational practices that seek to draw inferences from evidence (Biesta, 2008). It is however vital to understand that whilst the use of measurements has presented enormous opportunities for discussions and making informed educational decisions to be informed by factual data as opposed to opinions or assumptions, factual data on its own may not assist with reaching the desired logical conclusion in the qualification of educational issues. As a result, it is therefore important to go beyond the technical validity of measurements, that is, to establish whether the intended values have been measured. Above all, it becomes crucial to ensure that there is a clear understanding of the influence of values in educational decisions.

A concept encompassing effective teaching as presented by Biesta (2009) is that of good education. Good education is said not to be about suggesting alternative futures for education but rather to provide clarity on the education processes and practices that are responsible for diverse functions in the education system. Distinguishing the different functions accordingly assists in understanding how putting emphasis on one function might affect the quality of education when it comes to other functions (Biesta, 2009). It is therefore essential to ensure that when educational approaches and needs are explored, a holistic approach that draws from a combination of qualifying and quantifying principles is adopted.

Applied to the classroom context good teaching goes beyond the notions of mainly focusing on the curriculum, it also requires data gathering. Data gathering is founded of the premise that at the beginning of any new year learners usually hold starting points within the learning process. Whilst it is usually a challenge to effectively gather enough data to come up with an accurate picture for understanding the level of learners considering their heterogeneous nature, engaging on a developmental approach towards understanding the learning domain could provide a frame that can be used in qualifying the learner's learning process. The data gathering approach can further be essential when it comes to numeracy where

educators who are required to comprehend how learning typically progresses whilst equally recognising the significance of prerequisite skills for future learning. The critical role played by early numeracy in particular as an indicator for later school performance of learners at lower grade levels has equally been proven through a number of longitudinal studies (Biesta, 2009).

Educator beliefs and perceptions together with what some have referred to 'baggage' have been found to influence educator handling of learners and the teaching process. The commonly held view expounded by Biesta (2015) is that many educators continue to view education mainly in terms of its qualification function where emphasis is mainly on accomplishing the syllabus demands. It has been argued that some educators have been influenced by the beliefs they held about learners to classify them into the less and more abled category. The effect of this categorisation has been found unhelpful to those perceived as less abled in the class and those more able as this gives the "more able" a false sense of their value (Biesta, 2015). Use of such language, has created a challenge as it points to educators' reliance on the view of ability as a unitary, fixed concept despite wide acknowledgement of a wide range of intelligence and learning approaches within the education context. There are thus contested views on what ability entails, which is compounded by disparities that feature when measurements of learner ability are applied in efforts to distinguish achieving learners from those who are said to have failed to meet the benchmark.

The Role of the Classroom Environment in Mathematics Knowledge Acquisition

The role of the classroom environment cannot be downplayed when it comes to understanding mathematics education. At the fore of creating a friendly environment where learner achievement is enhanced, is the question of learner expectations on their preferred environment (Roos, 2017). In most instances, learner expectations of the environment are usually linked to the educator traits that include the ability to explain and simplify issues to the extent that learners could connect to the educator and the lesson and easily grasp issues. A process capable at creating a learner centric classroom setting usually involves the educator being able to adopt a sequential approach. It can therefore be argued that any perceptions where learners group or at individual levels may feel uncomfortable or discontent with the classroom, this may consequently disrupt the knowledge acquisition process.

Creation of a learner centric environment can also be enhanced through efforts that seek to promote inclusivity. At the centre of this process lie the efforts of the educator that relate to the handling of lessons in particular in light of the diverse nature of the learners. Questions on how inclusive education can be promoted are common although in many instances, educator approaches linked to handling of the lesson come to the fore (Schwab, Sharma, & Hoffmann, 2019). The authors also highlight that although few studies have focused on the question of student perspectives on what they consider an inclusive classroom setting, in efforts to understand the concept of inclusivity further, focus needs to be made on the educator traits. This is mainly because the educator is usually required to adapt their teaching to meet any emerging obligations. Inclusivity as an educator driven process as a result involves the educator providing alternatives meant to accommodate learners depending on their learning capability and needs whilst also ensuring that the classroom environment accommodates learners in their diversity.

Approaches to assessment in mathematics teaching and learning

Whilst there are various approaches to assessment the world over, in practice there have been differences at individual and institutional level. With the chapter having adopted a constructivist approach to understanding *assessment* it ought to be mainly viewed as a continuous process in which educators solicit information that is subsequently used to understand the progress made by a learner. From this perspective, assessment is seen as a means to an end as opposed to it being an end. It can thus be argued that assessment is at the centre of any teaching and learning process (Chisholm, 2004).

The historical trajectory in the emergence of mathematics education in particular during the era of Begle where the necessity of turning mathematics education into an empirical science was implemented with the hope of mapping a way forward whilst also identified. This was envisaged to build the empirical scientific rigor of mathematics education along the physical and natural sciences where a carefully correlated pattern of observation and speculation had seen the pattern successfully followed and intertwined with theory building (Long, 2011). Despite such a development however, the lack of valid measurements for the particular purpose for which tests are meant has continued to be a key challenge faced in empirical research. Long (2011) presents an important view by stating that the pervasive commonness of testing may account for the fact that questions linked to the validity of the testing process are usually ignored by many in the education field. A significant proportion of the sections of the mathematics education community have been found to either totally reject testing or having feelings of mistrust of the processes based on perceptions or their previous encounters. It is in line with the forgoing arguments that this chapter explores the developmental approach to assessment as one of the important forms of assessment in particular when it comes to mathematics.

Developmental Approach to Assessment

It can be argued that assessment is one of the key elements in measuring any initiative be it at qualitative or quantitative levels. What however needs to be understood is the multiplicity of assessment mechanisms that have been applied in different subjects and in different contexts. Mathematics teaching is also associated with different assessment mechanisms that include the traditional approach. In its traditional form, assessment needs to be viewed as a process through which students are judged in terms of how well they would have learnt or taught (Balt, Ehlert & Fritz, 2019). Such a process is understood to come at the end of a series of progressive cycles that are linked to a curriculum. The curriculum provides guidelines on the content that educators are expected to deliver with learners expected to acquire it whilst they subsequently get assessed on how well they would have learnt what educators would have taught them (Masters, 2017). Usually such an approach to assessment becomes ideal in situations when learners would have begun on the same level within the learning process something that is usually difficult to construe in practice. Since it is impossible for learners to begin the learning process at the same level, it is equally unjust to judge their abilities from such a vantage point as it has potential to result in the educator targeting the key challenges that each leaner would have encountered that led to their ability to meet the 'achievement requirement'. There are as a result, suggestions that educator's assessments ought to broaden beyond normal summative approaches in assessing learners. Summative assessments are limited in scope in that their focus is on the outcome of a program, something that tends to omit some crucial features of the progressive teaching and learning environment. On the contrary, formative assessments are found more suitable as they encompass both formal and informal assessment procedures that

educators can conduct during the learning process. This gives room for the modification of the teaching and learning activities in efforts to improve student achievement. In this manner, not only is inclusivity enhanced but social justice becomes entrenched into the teaching and learning process in general.

A developmental approach to assessment has its main principles that include an acknowledgement that all learners have a capacity to make progress at any given point. This principle is grounded on the view that provision of targeted teaching on learner's specific levels of development can enhance their learning and ensure achievement of intended results. A second and related principle is linked to the nature of assessment in which a developmental approach is favoured over a deficit-oriented marking. Emphasis is mainly on tapping on the actual abilities of learners as opposed to a quest to meet external obligations in particular those set by the curriculum (Balt et al., 2019). The principle that focuses on the leaner abilities also stresses on teaching to specifically focus on the skills that learners require, for them to be certified as competent enough to progress to the next level. Importantly, is the fact that such skills do not need to be strictly drawn from the particular grade level curriculum. This thus leads to the issue of the third assessment principle where emphasis is mainly on skills as opposed to the scores. This is mainly because reliance on standardised scores has tended to exclude the qualitative intuition representing a learner's actual abilities and what they are ready to deal with in their next engagement. An understating of assessment from the aforementioned principles is critical since it enables one to comprehend a learners' educational growth through a comparison of their current skills to their previous skills instead of reliance on drawing inferences on their performance using for instance, a norming sample which calls for the tracing of a behaviour pattern that is typical of the particular cohort of learners (Balt et al., 2019).

Reliability and Validity Features of Assessments

Reliability and quality constitute key features in every measurement process. This is the reason why the two qualities have been found worth exploring when it comes to assessments within the education context when it comes to teaching and learning mathematics in particular at low grade levels. Reliable assessments are critical in determining the validity of inferences and decisions and ensuring their relevance for the purpose they are meant to serve. Reliability as one of the main aspects of features of meaningful assessments involves consistency of scores across replication of an assessment which represents precision (Balt et al., 2019). Evaluation of the consistency of scores has been found to be another key feature of enhancing reliability in assessments. The assessment or a distinct but equivalent version of it is usually repeated within a short space of time with an assumption that the construct targeted for measurement remains constant during the period and the initial administration has no influence on the subsequent one. It follows that greater variation across the two administrations are an indication of more error in the test scores, a subsequent indicator of lower reliability or precision.

At the centre of the assessment process lie the validation procedures. Validity in its integrated form is another critical component in the development and evaluation of assessments which refers to extent tom which evidence and theory support the analysis of test scores for the anticipated usage of tests. A validation process usually starts from clearly qualifying the constructs (intangible concepts) an assessment seeks to capture and the resultant analytical outcomes drawn from the test score.

Towards an Inclusive Teaching Philosophy for Learners in Lower Grades

Scholars have revealed that the primacy of the educator as a key driver in learning mathematics ought to be closely examined (Davis, 2001 & Lamon 2007). This implies that the learning of mathematics is not just dependent on the educator as a figure or resources at their disposal but learning is also highly dependent on the educator's competency and teaching methods adopted as well as how the teaching methods are used. Good teaching traits that acknowledge the heterogeneous nature of learners can be said to form a crucial aspect in establishing an inclusive approach to teaching and learning mathematics for implementation in the current and future context of the subject. Inclusivity from an educator perspective can thus be explained from the view of Long & Dunne (2014) who have described a good educator as an individual who does everything according to expectations, whilst also embracing a flexible approach that targets learners according to their capabilities as well as inspiring them into loving the subject and actively participating in the learning process and tasks.

The issue of learner assessment has also been found to be crucial in addition to the primacy of the educator, texts and teaching plans. Learner assessment thus constitutes an important tool through which the educator conducts assessments on the acquisition of concepts (Davis, 2001). What is crucial to note is that the educator driven learner assessment are done in order for the educator to have an indication of a probable position of a learner along a developmental route. In addition, assessments provide requisite information on the learner's progress and potential challenges the learner could be facing. It is important however to ensure that inclusivity is enhanced in assessments as they also play a critical role in giving assurance to learners on their current progress whilst also signifying proximate imperatives for continued learning (Long, 2011; Long, Wendt & Dunne, 2011). A different approach to assessment is accordingly advocated which locates the learners on a continuum of current proficiency is proposed as opposed to the usually adopted approach associated with benchmarking challenged learners against top achievers in a process that produces a pass/fail dichotomy. An inclusive approach would therefore entail an acknowledgement of each child's right to progress through mechanisms that are put in place during the course of the curriculum to ensure that assessment is used as a means to an end and not an end in itself. This would entail ensuring that targeted approaches are used throughout the teaching and learning cycle to ensure that requisite measures are adopted depending on learner capabilities and needs.

CONCLUSION

The chapter has provided an overview on how the subject of mathematics is perceived by different individuals and groups in society. These perceptions involve mathematics being celebrated as a social good that is essential in providing solutions to people's day to day challenges. On the other hand the subject is abhorred as riddled with power dynamics and therefore having a potential of being used to exploit vulnerable members of society in particular when it comes to the educator learner relations in cases where diversity in learner capability is poorly moderated.

The chapter has also highlighted how embracing inclusivity in the teaching and learning of mathematics is essential despite the contestations emanating from its broad and diverse application in different settings. Despite the contestations surrounding the usage of the concept, the chapter has adopted a broad understanding of inclusivity that includes viewing it as a teaching and learning approach grounded on actual teaching that is informed by a multiplicity of factors some of which are located within the school

environment and others in the outside context. Such factors have come to influence how the subject has been perceived by actors in the education context and in society in general. The ways that mathematics and knowledge acquisition is perceived among educators and other actors has had a bearing on the teaching, learning and assessment approaches adopted by educators. Educator traits and beliefs have been found to have an effect on learner attitudes and performance in mathematics. The chapter therefore focused on the question of how diverse frameworks related to understanding inclusivity and related teaching, learning and assessment practices influence learner capability.

The chapter highlighted that although there are diverse forms of measurement and assessment across the world, assessment lies at the heart of any teaching and learning process. Following the chapter's adoption of a constructivist approach towards understanding assessment, it becomes essential to view it as a means to an end as well as a continuous process in which educators draw from available learner performance scores understand learner the progress over a particular period In efforts to understand the influence of measurements in mathematics education in particular within the context of inclusivity, the chapter embraces an understanding that transcends a mere focus on measurable outcomes that can be used to symbolise a learner's achievement as influenced by the interactive learning associated with the school and out of school settings. The background on measurements and how they are construed in different contexts is explored within the precinct of diverse assessments being used by educators. The issue of a developmental approach to assessment is explained as one of the essential means of attaining inclusivity in mathematics teaching and learning. At the heart of enhancing inclusivity through learner centric approaches to teaching and assessment it was found that educator capabilities are essential in particular when it comes to creating a friendly environment where strategies aimed at enhancing learner expectations and their achievement are adopted. Above all the chapter highlighted the close association of inclusivity and diversity as means in which to ensure that learners are embraced a heterogeneous group with their needs equally needing a target approach that appreciates their differences in learning capabilities.

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KEY TERMS AND DEFINITIONS

Abled: This entails a classificatory procedure where educators classify learners into the less and more abled category to the effect that some have tended to see it fit to exercise exclusion and inclusion based on the classification.

Assessment: These are evaluation processes and protocols that form an integral part in measuring learner achievement. They are essential for the learner, educator, parents, and other stakeholders involved in the education process.

Cognitive Capabilities: Learner cognitive capabilities can be explained within a constructivist framework where learners are viewed as having capacity to be mathematics doers and thinkers with an ability of constructing mathematical knowledge.

Curriculum: This is a policy related document that provides guidelines on the content that educators are expected to deliver within a specific duration with learners expected to acquire it whilst they subsequently get assessed on how well they would have learnt what educators would have taught them.

Educator Beliefs: These refer to the perceptions and interpretations of educators regarding mathematics as a subject which includes learner knowledge acquisition as well as teaching and assessment approaches an educator would prefer adopting.

Foucaultian Approach: A post structural approach perspective propounding the view that although being capable of fulfilling certain goals, mathematics education can equally be viewed as generally riddled with power dynamics to the extent that it can be liberating whilst also oppressing in other ways.

Inclusivity: Involves exploring ways in which mathematics teaching and learning is defined from a more holistic angle broader than policy directives whilst appreciating that learners with different abilities are put together within a classroom setting with targeted teaching being used to ensure that their performance is optimized.

Mathematics: This entails the subject which is broadly seen as a science of numbers and other abstract concepts with numerical significance.

Measurements: The chapter provides a broader conceptualisation of measurement that whilst acknowledging the involvement of validation through quantitative means and qualifying through value based frameworks also calls for going beyond the technical validity of measurements, in order to establish whether the intended issues have been measured as well as ensuring that there is a clear understanding of the influence of values in educational decisions.

Rasch Model: This is a model that is grounded on measuring assessments by predicting the probability of success of an individual on an issue depending on the responsible individual's aptitude and the issue's level of complexity whilst also taking into consideration the construct being measured.

Chapter 8

Challenges and Management of Disabilities Among Exceptional Learners in Inclusive Primary Schools in Busia District, Uganda

Michail Peter Barasa
Busitema University, Uganda

Dennis Zami Atibuni
University of Johannesburg, South Africa

Edward Andama
https://orcid.org/0000-0002-5437-4134
Busitema University, Uganda

ABSTRACT

This chapter presents a qualitative investigation of the challenges of common disabilities and their management among learners with disabilities in inclusive primary schools in Busitema Subcounty, Busia District, Uganda. Data collection involved key informant interviews and focus group discussions with a purposive sample of 85 informants including head teachers, teachers, and learners. Thematic content analysis was used to analyze the data. Findings revealed that the main challenges facing the learners were school-based, psychosocial, socioeconomic, socio-cultural, and policy related. Strategies to overcome the challenges were suggested. The authors recommend strict adherence to SNE policy guidelines during the implementation of these strategies.

INTRODUCTION

The universal declaration of human rights of 1948 has accorded a critical space for the realization of free access to universal special needs education as a main agenda of the world conferences (Kiyuba & Tukur, 2014). A case in point is the 1989 Convention on Children's Rights. During this convention, most countries signed to, and voted on this right as a statutory declaration. This was followed by the two world conferences in 1990, the Jomtein conference and the world summit for children, which resulted in many countries emphasizing Universal Primary Education (UPE). A target of ten years had been set to achieve global primary special needs education for exceptional learners. After the set ten years had elapsed in 2000, it was evident that the target was far from reach, and the progress was slow (Delamonica et al., 2014). Learners with disability or any special needs and those who could not be catered for by the dominant education system (*i.e.,* exceptional children) were separated and taught in "special" institutions. The realization that education practices were inappropriate was solidified and a new re-conceptualization of beliefs and values was set (Artiles et al., 2016).

Exceptional children are those who differ from regular or "normal" children by exhibiting below average mental characteristics, sensory abilities, communication abilities, social behaviour and physical characteristics (United Nations Convention on the Rights of Persons with Disabilities [CRPD], 2017, Article 1). According to Grogan (2016), such deviation must be of such an extent that the child requires a modification of school practices, or special needs educational services to develop their full potential for normal functioning. Individuals in this category are often referred to as "persons with disabilities". The CRPD further asserts that persons with disabilities include those who have long-term physical, mental, intellectual or sensory impairments. These impairments often hinder their full and effective participation in society on an equal basis with others.

The concept of disability entails lots of categories of people whose activities are limited by a number of factors including physical handicaps such as visual or hearing disabilities, chronic illness, mental health and communication disorders, intellectual disabilities, genetic disorders, disfigurement, and those with problems associated with aging or delay in achieving development/cognitive capabilities (Combrinck, 2018). Retief and Letšosa (2018) offer a socialized definition of disability, referring to it as a situation caused by social conditions, which requires for its elimination (a) that no one aspect such as incomes, mobility or institutions is treated differently; (b) that disabled people should take control over their own lives; and (c) that professionals, experts and others who offer to help must promote such control by disabled persons. Another socialized definition is advanced by Uganda Society for Disabled Children (USDC, 2011) which defines disability as inability to perform in a manner considered "normal" in a particular society or community. This inability can arise as a result of impairment or other causes.

Learning disabilities may refer to underdeveloped skills in one or more areas, usually related to neurological disorders. A learning disability makes students to consistently perform below the level of their intelligence relative to their regular peers (Combrinck, 2018). It is added by USDC that the most common learning disabilities include autistic spectrum disorders (ASD) which include autism, atypical autism, Rett syndrome, and childhood disintegrative disorder, obsessive-compulsive behavior (OCD), attention deficit hyperactivity disorder (ADHD), and Tourette syndrome (Halfon, 2012).

In Africa, children with disabilities are often perceived as a "burden to society" because their potential is rarely recognized by families, communities and authorities. Due to negative attitudes, lack of resources, poverty, and lack of proper service standards, children with disabilities remain excluded from basic early childhood education, healthcare and rehabilitation services (ACPF, 2014). UNICEF (2013)

affirms that children with disabilities face different forms of exclusion as a result of the kind of disability they have, where they live and the culture or class to which they belong. In this case, children with disabilities make up one of the most socially neglected groups in society today (Helander et al, 2011). It was noted in a World Bank report (2012) that many children with disabilities do not access special needs education, do not appear in school registers and are not catered for in government plans. In Uganda, as in other countries, there are a variety of disabilities and factors to account for their existence. The common ones are visual impairments, physical disabilities, hearing impairments, multiple disabilities, mental and psycho-socio disabilities, intellectual disabilities and albinism (National Union of Disabled Persons of Uganda [NUDIPU], 2011). Noticeable of disability, is association to communicable diseases, congenital abnormalities and injuries.

In tandem with global and continental trends, numerous efforts have been made in Uganda to provide education for children with disabilities (CWDs) since the 1950s when the British Empire Society for the Blind – presently known as Sight Savers – was founded, which led to the construction of the school for the blind in Wanyange Girls Secondary School in 1962. This was an early attempt to integrate blind and sighted pupils in Uganda (Eilor, 2014).Since then a number of units have been opened in mainstream Ugandan schools. Consequent to the above developments, the principle of integration was accepted. Negotiations between the Republic of Uganda and the Kingdom of Denmark through the technical support from Danish International Development Agency (DANIDA) resulted in the establishment of Uganda National Institute of Special needs education (UNISE) at Kyambogo University which consequently advocated for the setting up of Educational Assessment Resource Services (EARS) in 1992. Further agreements were reached with DANIDA which resulted into the establishment of EARS at the Ministry and District level throughout Uganda to cater for and address the needs of CWDs.

Mainstreaming was advanced as one of the strategies for provision of education to the exceptional learners. Mainstreaming suggested that people with disabilities have a right to life experiences similar to other individuals (normal or ordinary) in society. As Grue (2013) explains, the goal of mainstreaming was to return learners with disabilities to the mainstream of education. This usually only applied to some learners (those with mild disabilities), as learners would still have to prove their readiness to enter the education mainstream. This was required because upon entering the mainstream, learners had little or no access to support services. When entering a mainstream class, the child with a disability had to prove their readiness to fit in, yet the schools or classrooms never adjusted to fit the needs of the incoming students. One could say that mainstreaming actually reinforced the medical paradigm by focusing on the problem within the individual and the individual's need to be fixed or cured (Dunn, 2015).

In furtherance of education for CWDs, the Uganda Government White Paper on Education (1992) streamlined key policy issues among which all-inclusive education services were recommended as the best approach to accessing education (Najjingo, 2009). This trend was followed by legislation for inclusive education which shows that Uganda education has moved away from the traditional specialized model and the aim is now total inclusion in public main stream schools. The World Bank (2012) posits "inclusion" to mean sharing equality, removing barriers to participation in society and contributes to it at their own particular level of ability. It is the opportunity for persons with disability to participate fully in all the educational, employment, consumer recreational, community domestic activities that reflect every day society (World Bank, 2012). Combrick (2018) describes inclusiveness as the integration or incorporation of children with disabilities in the mainstream special needs education system. The principle of integration is that schools should accommodate all children regardless of their physical, intellectual,

social, emotional, linguistic competences or other needs (United Nations Education and Scientific Cultural Organisation [UNESCO], 2013).

Ideally, inclusive education should imply that all students have equal opportunities to develop their abilities and talents as individuals and in cooperation with others (Bjørnsrud & Nilsen, 2011). This should result into improved educational quality especially, in terms of effectiveness, efficiency, equality, relevance and sustainability. In inclusive education, all learners, irrespective of whether they have disabilities or not, should be able to learn together in ordinary preschool provisions, schools, and community educational settings with appropriate network of support services (Maiwa, 2017). According to Armstrong and Barton (2010), inclusive education is a set of principles, which ensures that the learners with disability are viewed as a valued and needed member for the community in every respect. Therefore, these may mean disabled and able young people learning together in ordinary school, college under appropriate networks of support.

It is imperative that children under inclusive education learn together, moreover, each individual should be valued and actively engaged with during the teaching/learning process. (Spratt & Florian, 2013). Inclusion is therefore a dynamic process which involves all children in the life and learning of the school. Therefore, for this study, our interest was on the inclusion of CWDs in public / regular classes or inclusive schools. In Uganda all public Universal Primary Education (UPE) schools are supposed to be inclusive by policy. Public primary schools refer to primary schools owned by the government of Uganda administered directly by the Ministry of Education and Sports (MoES, 2017). They offer primary education – seven years of schooling before entering secondary education (*i.e.*, Senior One). The UPE guidelines give priority to girl children and children with disabilities (PWDs) in (Grogan, 2016). Watson (2018) suggests that for the environment and society to be inclusive, children with special needs must have equal access to the physical (built) environment- indoors and outdoors. In addition, appropriate health services should be available to them including financial benefits as and when they can require them. Unfortunately, the movement for inclusive education system is unable to willingly meet the needs of all education, hence if this system is not well planned and followed strictly and seriously, it may lead to challenges faced by children with disabilities in public/ mainstream schools.

The Status of Inclusive Education in Uganda

The inclusive special needs education policy clearly states Uganda government's dedication to providing primary special needs education to all children regardless of origin, social group or gender (According to the Uganda Human Rights Commission [UHRC, 2011]). The policy further calls for inclusion of children with special needs in all government funded primary schools. However, this policy does not say what inclusion means with regard to the CWDs. Learner enrolment data for Ugandan primary schools for 2015 shows that enrolment of disabled children was 1.79 per cent of total enrolment, whereas at secondary level, it was 0.6 per cent (Uganda Bureau of Statistics [UBOS, 2016]). Moreover, this gap in enrolment widens as boys and girls with disabilities progress through educational phases, highlighting the fact that serious attention is needed to ensure learning opportunities for all. To this end, no such provisions have been made. The laxity has seen an ever endless rate of dropouts and hence declining enrolment among CWDs (Sarton & Smith, 2018).

An estimated one-third of all out-of-school children at the primary level in Uganda have a disability (Girl child Education Movement [GEM, 2016]). This paints a relative picture of how children with disabilities cannot miss in inclusive schools regardless of type or level of severity. The UHRC (2017)

reports approximately 25% of CWDs enrolled in schools under the UPE program. The other population of children could be on the street begging for money to help their families. Some of them are possibly staying at home with their parents who don't prioritize them as other children. However, the accuracy of this data cannot be guaranteed due to the fact that data collection methods could have been erratic, and data mostly captured for learners with disabilities refers to children with visual or hearing impairments only. In addition, most data on disability is at the national level, posing a problem at the district and local levels, especially when it comes to planning and targeting of services for those with disability (Ministry of Finance, Planning and Economic Development, 2018).

The numbers and categories of learners with disabilities in public schools are unclear and the challenges they face are largely not known. Without this knowledge, it is next to impossible to offer practicable strategies to help these learners go through the school system. We therefore argue that if these challenges are managed well in public schools or inclusive schools, education – particularly inclusive education – is able to reduce their being discriminated against. Such non-discrimination would enable children with and without disabilities to grow up together and gain skills to allow them to become positive role models and join the employment market. Thus they would be able to eradicate poverty. This chapter reports on three main study objectives: (a) to find out common disabilities experienced by learners in inclusive primary schools in Busia District, (b) to document challenges faced by learners with disabilities in inclusive primary schools in Busia District, and (d) to find out the management strategies used to abate the challenges learners with disabilities face in inclusive primary schools in Busia District.

Theoretical Grounding of Disability Studies

Some of these theories that are dominant in our times include: the Social Inclusion Theory, Capability Theory, Theory of Stigma, Critical Disability Theory, and Social Model Theory of disability. The Social Inclusion Theory by Clough & Corbett (2000) states that inclusive education is not merely about providing access into mainstream schools for pupils who have previously been excluded. It is not about closing an unacceptable system of segregated provision and dumping those in an unchanged mainstream system. If schools are to follow the social inclusion approach, then, several aspects of existing school systems have to change. Such factors include physical factors, curriculum aspects, teaching expectations and styles, and leadership modes. The change is to cater for the participation of all the children so that nobody will feel excluded (Clough & Corbett, 2000).

The Capability Theory (Nussbaum, 2006) is a purely political philosophical theory on social justice. According to the theory there is lack of rightful justice to people with physical and/or mental impairments. According to the capability approach, the freedom to achieve well-being is of primary moral importance, and is to be understood in terms of people's own roles. (*i.e.* their real opportunities to do and be what they have reason to value). Godwin (2014) employed the capability theory by Nussbaum (2006) and asserted that, the approach has been developed in a variety of more specific normative theories, such as (partial) theories of social justice or accounts of development ethics. Though social justice is required for CWDs and special needs, this theory does reflect very little on the inclusive school situation of children with disabilities. For such criticism, this theory may not be applicable for the case of learners with disabilities.

Theory of Stigma (Mungai, 2014) posits that in every society some persons have more influence than others and that those with power generally impose their norms, values, and beliefs on those that are without power. Those with power (the non-disabled) set the standards that are to be expected of all individuals within a given culture. They also determine how each member of that culture is to be categorized such

that if one does not concur with those standards, then that individual is perceived as being 'deviant'. The theory identifies three forms of stigma which act to mark the less powerful as 'different': a) Abominations of the body or various physical deformities, b) Blemishes of character or weak will, domineering or unnatural beliefs, values and attitudes, c) Tribal stigma or race, nation and religion (Ahmed, 2018).Each of these instances of stigma marks the individual who bears them as having 'undesired differentness'. That individual, thus, becomes perceived as being 'deviant' or not quite human (Goffman, 1963). These different forms of stigma show how stigmatization creates a shared, socially maintained, and determined conception of a normal individual (the normate), sculpted by a social group attempting to define its own character and boundaries. Dominant groups construct stereotypes which stigmatize groups that they deem inferior and thus facilitate the exercising of authority over them (Mungai, 2014). However the limitations to this theory is that it leaves out the curriculum issues of the child's learning and physical environment surrounding the learner at school. And besides the above factors, there are other school related factors like; school structures, scholastic resources and devices which are not catered for in this theory.

Social Systems Theory by Hepworth et al.(2013) claims that there are immediate structures that are around clients, for example, family, organizations and institutions. The theory describes person-situation interactions. The theory helps us understand how people with disabilities interact with the environment in which they live and also how the environment affects them, understands the social construction of society. The theory is criticized for not embracing the physical structure rather the school infrastructure and other educational resources which turn to challenge children with disabilities and special needs educational needs. This means that the system is always separated from the surroundings. The weakness of the social systems theory to a large extent is that people with disabilities experience segregation in life For example, the education system is one of the most prominent areas where these groups of individuals experience exclusion (Kiyuba & Tukur, 2014). There is a close relationship between education and inclusion in society. Education opens up the doors to a better life since the barriers of social, cultural, and economic conditions or an irreversible biological process, are to a large extent reduced. This is true for everyone, including those who are in a more disadvantaged condition which could be as a result of gender, social class, ethnic belonging or disability.

Critical Disability Theory adopts a version of the social model based on the principles that (a) disability is a social construct, not the inevitable consequence of impairment, (b) disability is best characterized as a complex interrelationship between impairment, individual response to impairment, and the social environment, and (c) the social disadvantage experienced by disabled people is caused by the social (physical, institutional and attitudinal) environment which fails to meet the needs of people. Critical disability theory's central concerns with disabled people's (individual) rights to autonomy and (social) rights to full participation in society are reflected in the tension between the social welfare- and rights-based approaches to disability policy. It does not reject liberal rights: It exposes the ways in which liberal rights theory has failed to respond adequately to the needs and interests of disabled people.

The Social Model Theory (Bouillet, 2015) encourages the society to view the barriers that prevent PWDs from participating in any situation as what handicaps them. According to the model, the discriminations against PWDs are socially created. Through fear, ignorance, and prejudice, barriers and discriminatory practices develop which disable and handicap them. The PWDs are often made to feel that it is their own fault that they are different. Impairment does not make them less human beings. In an inclusive setting, it is the school's responsibility to re-adjust to meet the learner's need but not the learners to adjust to meet the school's requirements (cite). In the social model, it is well understood that children with disability could experience difficulties in the education system. This could be due to extensive,

demanding, rigid and inflexible curriculum, inaccessible school environment, lack of adequate resources and materials, negative attitude among others. However, the inclusive education approach suggests that, those difficulties should not be explained simply in terms of children's impairments. It discourages the view that the learner faces such problems due to his/her impairment. Under those circumstances, the option is not to establish a separate special school, which would further separate these children from their peers and families, neither is it cost-effective. Instead, the school should not be seen as creating barriers to learning for the learners with special needs by failing to create an enabling and supportive environment for them. A more appropriate response is to understand the barriers to learning and work out systematically to alleviate them.

This study used the social model of disability because it favors the ideas of inclusive education and encourages the removal of barriers that hinder the children with special needs from accessing quality basic education. This model first sees the strength of the child, rather than the disability. It advocates for the inclusion of all children, however "severe" the disability or handicapped one is in the mainstream education system. The social model applies in this study as that many children with special needs especially those with disabilities are locked out of education opportunities due to barriers related to school, teacher and other socio-cultural factors. To work towards inclusion is to work towards the removal of such barriers. That could be done by trying certain intervention measures which could lead to removal of the barriers. When this is done, it is expected that the handicap-ness would be limited even though the impairment would still be there.

Methodology

The study adopted case study design under the qualitative research approach. The qualitative approach was chosen to provide an in-depth examination of people's experience in detail by using in-depth interviews and focus group discussion for data collection; and thematic content analysis for data analysis (Bailey, Hennink & Hutter, 2011, p. 9) in the natural setting. The natural setting in this case was the schools where children with disabilities were attending classes. Children with disabilities were observed in their schools to find out what challenges they faced, how they were taught, and their views on how best they could be helped to overcome some of the challenges. Since people have different ways of seeing and perceiving the world (Creswell, 2009), it was necessary to get different points of view from the head teachers and teachers regarding challenges their learners faced and how they tried to overcome them.

The target population of this study consisted of pupils with disabilities ranging from the age of six to seventeen years and their head teachers and teachers in regular primary schools in Busitema Sub-county in Busia District, Uganda. This sub-county was chosen because amidst many other economic factors such as mining, hunting and smuggling, which affect learning of children at schools, there are also children with disabilities that seem not to be catered for in these inclusive UPE schools. And the head teachers and teachers chosen were the ones who worked directly with the learners with disabilities. The main study was conducted in eight UPE schools, drawing a purposive sample of 68 composed of 36 learners with disabilities, eight head teachers, and 24 teachers. The study used face-to-face interviews to obtain information from the respondents. Qualitative analysis from interviews added to the interpretation of data collected by survey. Interviewing helped in providing very complete responses that provides in depth information necessary for deep exploration and clarity (Harrell & Bradley, 2009).

The qualitative data collected was first transcribed in levels of the informants and finally coded and grouped according to the study objectives and emerging themes. Analysis was done through discursive

and thematic methods (Javad & Zarea, 2016). On the other hand, thematic analysis ensured that clusters of text with similar meaning were presented together (Gale, Heath, Cameron, Rashid, & Redwood, 2013). In this study, ethical codes in terms of data collection, data presentation, and analysis of findings were observed.We made an effort to respect the rights of all participants throughout the study. We ensured and assured the respondents that all their responses would be treated in strict confidentiality. Materials adopted from other sources such as journal articles, books and book chapters among others were acknowledged. The findings of the study are presented in the sections below.

COMMON DISABILITIES IN INCLUSIVE SCHOOLS

The participants enumerated a number of disabilities that compromised the learning progress among learners. These included hearing impairment (HI), visual impairment (VI), intellectual disability (MR), physical disability (PD), social emotional and behavioral problems (SEB), speech and language problems (SLP), autism, epilepsy, cerebral palsy, and albinism. The disabilities were arranged according to the

Table 1. Ranking of Disabilities

Type of disability	Learners ranking *n*(%)	Teachers' ranking *n*(%)	Head teachers' ranking *n*(%)
Hearing impairment. (HI)	22(68.7)	22(91.6)	7(87.5)
Intellectual disability	20(62.5)	18(75.0)	7(87.5)
Social emotional and behavioral problems	16(50.0).	23(95.8)	6(75.0)
Visual impairment	15(46.8)	20(83.3)	6(75.0)
Speech and language problems	19(59.3)	15(62.5)	5(62.5)
Physical disabilities	10(31.2)	15(62.5)	5(62.5)
Epilepsy	12(37.5)	8(33.3)	4(50.0)
Autism	15(46.8)	6(25.0)	3(37.5)
Albinism	8(25.0)	10(31.2)	4(50.0)
Cerebral palsy	2(6.2)	5(20.8)	2(25.0)

prevalence and ranked in descending order (see Table 1).

The data collected in Table 1 indicates a number of disabilities among children with disabilities in Busia District: hearing impairments, intellectual impairments, social emotional and behavioral, problems, visual impairments, speech and language difficulties, epilepsy, autism, albinism and cerebral palsy. Previous studies in inclusive primary schools in other contexts (*e.g.,*Ed Smeets & Roeleveld, 2016) have revealed a cohort of special needs education needs, learning difficulties, disabilities or disorders very similar to these in our study. The MoES (2017) bulletin of marginalized children in Uganda also attests to the existence of these conditions. Such conditions are known to affect a child's ability to read, write, listen, speak, reason or do math (Watson, 2018), hence resulting in learning disorders such as Dyslexia, Dysgraphia, Dyscalculia, auditory processing disorder, and nonverbal learning disability. Apart from

the disabilities revealed in this study, the World Bank (2011) report indicates other conditions which could impair children's learning, if not identified. These include multiple disabilities, traumatic brain injury, deaf- blindness, emotional disturbances, mobility and physical impairments, spinal cord disability/ head injuries- brain disability, cognitive or learning disabilities, invisible disorders and psychological disorders, for example, mental health impairments.

Challenges Faced By Learners with Disabilities

The children with disabilities, teachers and head teachers interviewed gave a number of challenges facing children with disabilities in their learning. These are presented in Table 2.

Table 2. Ranking challenges faced by LWDs in inclusive schools

Management strategies	Frequencies of respondents n (%)
a). School based/ institution related challenges	48(%) = 75.5
b). Psychological/ Psychosocial related factors	35(%) = 54.6
c). Social – economic challenges	32(%) = 50.0
d). Social – Cultural challenges	30(%) = 46.8
e). Policy framework related challenges	25(%) = 39.0

Findings in Table 2 above revealed that the main challenges facing the learners were school-based, psychosocial, socioeconomic, socio-cultural, and policy related. These findings concur with those of other scholars such as Aylward, Cohen and Sawney (2013), Colley (2018), Godwin (2014), Homby (2014), Kelly (2011), Oswald (2017), Kasoo (2013), Price (2014) and World Bank (2014). UNICEF (2018) mentions challenges faced by children with disabilities in developing countries ranging from school- based, social, economic, cultural and political contributions which puts a child with disabilities at risk. A teacher of learners with multiple impairments revealed that:

This [learners having disabilities] is a challenge for me because I want to use modern teaching materials such as projectors, TV, and audio. Most of the time I use locally made teaching materials, which sometimes do not attract my students. We do not get any budget from the government to buy teaching materials, thus the only way to support my pupils is to use the local teaching materials found in our area.

This agrees with the Critical Disability Theory which elucidates that if critical issues/factors influencing the wellbeing and inclusion of a child with disability are not put right then what turns out of such factors are merely challenges or conditions that hinder them to fit in an inclusive setting. These observations are in line with Ogot's (2015) assertion that accessible environment helps to keep CWDs in school unlike where schools had inaccessible environment. In agreement with Skjorten (1995) and Kimbugwe (2012), the challenges faced by the children with disabilities such as high cost of instructional materials further curtailed their access to all inclusive education services.

Management Strategies for Challenges Faced By Learners with Disabilities

The learners with disabilities, teachers, and head teachers gave a number of strategies that could help abate the challenges faced by CWDs in primary schools in Busia District. These views were tallied and presented according to the ranking as shown in Table 3.

Table 3. Ranking of responses on management strategies.

Intervention strategy	Responses of CWDs, teachers and head teachers	Ranking *n*(%)
School- based challenges	Removing physical barriers Transform classrooms Adequate educational resources/ materials Building teacher capacity Guidance and counselling Providing additional support Employ flexible and responsive team work	52(%) = 82.2 41(%) = 64.0 41(%) = 64.0 37(%) = 57.8 32(%) =50.0 28(%) = 43.7 17(%) = 26.5
Psychological/psychosocial related challenges	Strict school policy and regulations Leadership for social justice Peer tutoring Involvement in co- curricular activities Early intervention Guidance and counselling	40(%) =62.5 37(%) = 57.8 28(%) = 43.7 27(%) = 42.1 22(%) = 34.3 15(%) = 23.4
Social economic related challenges	Needs- based planning Construction of ramps and pavements Provision of adequate educational resources provision of adequate support staff and training Mobilize the community and Government for financial resources	39(%) = 60.9 35(%) = 54.6 31(%) = 48.4 28(%) = 43.7 17(%) = 26.5
Social – cultural factors	Involve religious leaders in mobilizing and sensitizing parents Appreciate and recognize the child's efforts and wellbeing Involve parents in guidance and counselling Appreciate and recognize the child's effort and wellbeing Sensitize to reduce abusive language Liaise with teachers for early intervention	37(%) = 57.8 35(%) = 54.6 34(%) = 53.1 28(%) = 43.7 24(%) = 37.5 19(%) = 29.6 19(%) = 29.6
Policy frameworks	Streamline the budget vote for children with disabilities Regulate the recruitment and posting procedures for SNE teachers in every school. Strengthen laws on the construction of school facilities.	34(%) = 53.1 33(%) = 51.5 27(%) =42.1

The findings in Table 3 show that the strategies suggested were meant to address the *school-based, psychosocial, socioeconomic, socio-cultural, and policy related* challenges. The strategies mainly emphasise fostering inclusive education. Inclusion is about accommodating everyone in a school and this requires considerable changes in perspective and management within the school (Bailey, Hennink,& Hunter, 2011). However, Marshall and Goodall (2015) contend that inclusion perpetuates challenges of disability as 'all children in the same classroom' may not require the same attention; some CWDs may require separate specialist support in different settings. Especially children ranked with intellectual disability require a distinguished approach of the curriculum. Individualized educational plan (IEP) is a pedagogical model enabling curriculum access for all children through flexible accessible learning environments (Rose et al., 2014).This matches with the critical disability theory which asserts that dis-

ability does not reside within the individual, but in a curriculum which is unsupportive of, and inflexible to, a diverse range of abilities.

The management strategies presented by respondents showed much emphasis on the school related challenges. Head teachers and teachers proposed the strategy of training itinerant teachers or resource persons to work within a group of schools to help fill the gap of inadequate staffing especially on children with varied learning disabilities. This implies that children with disabilities are varied in nature and a single regular teacher may not be able to handle all cases of special needs in the particular class. Hence if an itinerant teacher or teacher assistant is availed, then the diversity of such learners can be managed (UNICEF, 2018). By and large, the strategies speak to the need for a flexible integrated curriculum of disability management that is adapted to suit learning needs of particular individual children with disabilities. Such a curriculum necessitates thoughtful planning, which itself requires a needs-based focus, short of which inclusion becomes another empty label, with children continuing 'to experience exclusion' (Anderson, 2013). When describing 'authentic inclusion', school administrators should not consider the diverse needs of all children with disabilities. Rather there is need to emphasise a needs-based focus, which suggests all children should be active in the school community through effective planning, teaching and support. These can be implemented through purposive budgeting of necessary school funds with an aim of considering children's needs.

A starting point for developing an inclusive culture as suggested by Rimmerman (2013) is to build some degree of consensus around inclusive values within the school community. For instance, respect for diversity from teachers may itself be understood as a form of participation by pupils within an inclusive school. An inclusive culture therefore, according to Degener (2017) is a culture that acknowledges that children with disabilities are everyone's responsibility and hence it follows that there should be a zero reject policy in school admissions.

CONCLUSION

The study established that indeed disabilities do exist among school learners, the most common ones being hearing impairment, intellectual disabilities, social emotional and behavioural problems, visual impairment, speech and language difficulties, physical disabilities, epilepsy, autism, albinism, multiple disabilities among others. This contests the data commonly found at the national level, which considers only children with hearing impairments, visual impairments and physical disabilities to be the only disabilities commonly found in Uganda.

Challenges faced by CWDs in inclusive schools spanned economic, social-cultural, policy framework, and school related factors, which impacted negatively on their academic pursuit. These problems are in line with the Critical Disability Theory, which asserts that it is the society, which disables people but not the impairment factors. The theory also stipulates that in an inclusive setting, it is the school's responsibility to re-adjust to meet the learner's needs but not the learners to adjust to meet the school requirements. The most outstanding challenges were school-based factors, which included unconducive learning environment, inadequate teacher training and support staff, inadequate educational resources, and poor teacher and peer attitudes.

Many management strategies of challenges faced by CWDs in inclusive schools were suggested. These included removing physical barriers within the school premises, transforming classrooms especially that are crowded and work towards availing adequate resources in terms of staff and educational

materials/ devices. On the other hand, inclusive schools should be presented as those which promote inclusive decision making and participation, and which creates a variety of avenues for parents, staff and students, to become part of the governing structure this enables children with disabilities and special needs to catch- up with the very fast moving changes in their environment which if not well addressed.

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Chapter 9
Disability and Sport:
The Lived Experiences

Tapiwa Mudyahoto
Great Zimbabwe University, Zimbabwe

Thembelihle Gondo
Zimbabwe Open University, Zimbabwe

ABSTRACT

Disability and sport have received so much recognition basing on the number of declarations, charters, treaties, and policies crafted on the rights of people with disabilities throughout the world. These individuals with disabilities need to be empowered to overcome barriers and constraints that may affect their participation in sport in mainstream schools. This chapter briefly looks at the background of disability sport, concept of disability and sport, definition of sport and disability. The chapter will also look at among other issues, strategies for including learners with disabilities in sport. Other key issues to be highlighted include disability participation in sport, challenges faced by learners with disabilities in mainstream sport, benefits of sports for children with disabilities, barriers to participation in mainstream sport. The chapter concludes by looking at perceptions of teachers and learners on children with disabilities in sport.

INTRODUCTION

Models that define disability are medical/personal tragedy theory, and socially constructed theory. Medical model perceives disabilities as an impairment owned by an individual resulting in a loss or limitation of function. Socially constructed model is whereby the responsibility for the disability lies with society rather than with the individual, society disables people, limits their worth, places additional burden to their own impairment and creates non-disabled values, norms and beliefs. Disabilities can either be permanent, temporary or episodic and this can affect people from birth or can be acquired in life through injury or illness. Sports have the potential to transform the way in which skill-based competencies are evaluated by exposing children to sport played by individuals with limited functioning (Grenier, Col-

lins, Wright & Kearns (2014). Again, Grenier and colleagues (2014) also observed that disability sports promote practice of reverse integration, which includes the participation of individuals without disability in sports specifically designed for the disabled.

In view of the aspect of discrimination, teacher attitudes and practices are considered as social barriers, (Barnes & Mercer, 2004; Oliver, 2004). Model facilitates independence for people with disabilities by removing barriers that typically disable the individual through inaccessible environments. Disabling barriers are those contextual elements that restrict education and life opportunities for individuals with disabilities (Davis, 2006). Students with physical disabilities after receiving medical analysis are valued in relationship to functional ability rather than medical profile. Disability sport and characteristics of coach may affect players living disabilities together with characteristics of preferred methods of coaching by athletes (Culver & Werthener, 2018, Martin, 2017; Townsend, Cushion & Smith, 2018). The social model sees disability as a product of society meaning society decides categories that are enabling and disabling (Antenack & Livneh, 2000). Thus, focus of attention shifts from the individual to the barriers that the individual faces and it is these barriers that need to be identified if they are to help individuals in disability sport. Once these barriers are removed then individuals will progress to participate in disability sport. Hence this chapter discusses the challenges faced in mainstream sport by children living with disabilities in four secondary schools in Masvingo District, Zimbabwe. The chapter further among other issues sought to unravel the extent to children living with disabilities are involved in sport, attitudes of teachers and pupils towards children living with disabilities in sport and the intervention strategies that can be used to improve the participation of children living with disabilities in the same area

Sport and Disability Definitions

Sports is referred to as athletic activities requiring skills or physical prowess and often competitive in nature (Gava, Kurisa, Mambeu, Mareverwa, 2017). Accordingly, the Oxford Thesaurus of English (2004, pp. 899) sport can be defined as 'physical recreation, physical activity or physical exercise.' In a way, any activity involving physical exertion and skill in which an individual or team compete against another or others for entertainment purposes. Such sporting activities in inclusive settings can help reduce the stigmas and discrimination associated with disability because it transforms community attitudes, about persons with disabilities by highlighting their skills and reducing the tendency to see disability instead of the person. However, for the purpose of this chapter, sport refers to any form of organised school sport or physical activity which can be competed at school, district, national or international levels.

Sport disability is a condition in which people who suffer from it have some limitations in performing certain tasks or activities It can further be explained as someone who has a major life impairment preventing them from participating easily in major activities such as walking, seeing, hearing and thinking. According to Landsberg, Kruger and Nel (2005), disability is a medical problem, a defect lying within the individual. While Smetzer (2007) views disability as a social political model by which illness or disability is the result of a physical condition intrinsic to the individual. This therefore implies that disability is a challenge of an individual, directly caused by diseases, trauma, or other health conditions which may require medical care. Taking from the definitions above, in this chapter disability will be understood as an impairment, loss, or lack of normal function, restricting active participation in sports and the social and physical environment.

Background to Disability and Sport in Zimbabwe

Disability and sport participation in Africa, particularly in Zimbabwe has remained very low as a result of unclear constitutional policies, lack of human and material resources, negative attitudes, as well as mainstream teachers' unpreparedness to have children living with disabilities take part in sporting activities (Hay, Smith & Paulsen,2001). According to the population Census Report of 2012, the estimated population of people living with disabilities ranges between 900 000 to 1.4 million.

Part of the Zimbabwe Constitution spells out that the state and all institutions of government at any level within its limits of resources available must assist persons with physical or mental disabilities to achieve their full potential and to minimise the disadvantages suffered by them. Yet, in the same document, Amendment No 20. Act of 2013 merely scratches on the issue of disability and sport. As can be observed from the statement, the Constitution is focusing only on two forms of disabilities. Further, the Constitution does not specify how other forms of disabilities may be catered for in sport. The Constitution is neither mandatory nor forceful in compelling institutions and their agencies to ensure that children with disabilities are taken care of in sport. The phrase, 'within the limits of the resources available 'gives institutions a leeway to have or not have disability and sport at their institutions basing on availability of resources. Since the constitution does not mention what the government would do to assist the disadvantaged children, therefore government stands aloof and expects action from institutions. Hence, the Act is too general as it needs to state how each category of disability may be assisted both in class and sport. The Constitution is also silent on whether children with disability shall do sport on their own or mixed in the mainstream. These issues seem to have been left out to the discretion and interpretation of the reader, which is creating a scenario which we are in now, where each institution is doing its own thing as teachers are not trained to handle such cases.

On the other hand, The Education Act of 1987 amended in 1996 points out that every child has the right to school education, but school education is incomplete without sport, since sport is part of the school curriculum in Zimbabwe. The Act is even silent on children with disabilities, neither does it give guidance on how children with disabilities shall be included in sport nor state whether they should do sport amongst themselves. All issues are subsumed in the phrase 'every child in Zimbabwe shall have the right to school education' (Mudyahoto, 2016). The setting up of categories for competitions, making adaptations and modifications of rules, pitches, courts etc to suit learners with disabilities is left to the teacher. The Act should have come up with suggestions, for categories such as hearing and visual impairments, developmental/intellectual and the physically challenged to do sport amongst themselves or with those without disabilities.

The Zimbabwe Disabled Persons Act of 1992 addresses the rights of people with disabilities only in relation to education, employment, recreational facilities, community and social services but still fails to articulate how children living with disabilities shall be included in sport. The Act is not pro-active by encouraging the government to provide children with disabilities with financial, human and material support to enhance their participation in sport. The Act has also not been explicit on issues of disability inclusion in education, therefore it has been referred by many scholars as a white elephant. Thus, the concept of disability and sport was merely derived from the principles enshrined in various conventions and treaties without Zimbabwe recognising her potentials and feasibility to implement the concept.

The History of Sport for the Disabled in Zimbabwe

In some Zimbabwean societies even today, some parents of children without disabilities are not keen to have their children be in some inclusive settings, as they believe disability is a result of witch craft or some form of punishment from God, hence they fear that their children without disabilities may get infected as they interact with peers with disabilities during sport. (Chimedza & Peters, 2001; Chimedza & Sithole, 2001). Some parents from the Shona and Ndebele cultures in Zimbabwe believe disability as being caused by contagious diseases resulting from evil influences such as devils and demons residing within a child living with disabilities. Further, they also believe that children with disabilities require cleansing through traditional rituals before being included in schools.

Disability in Zimbabwe like in most developing nations has caused tremendous psychological, physiological, social as well as economic challenges. Before the attainment of her independence in 1980, the provisions of children living with disabilities in the education sector was in a haphazard state. Hulley (2014) points out that various churches and charitable organisations were doing uncoordinated activities, with each doing its own things. Christian missionaries, mainly from Europe, initiated all formal education including education for children living with disabilities. Thus, in Zimbabwe, the Dutch opened a school for the blind in Masvingo and later a philanthropic organisation such as the Jairos Jiri Association also took part in the establishment of schools for children with disabilities (Chimedza & Peters, 2001).

The establishments of Jairos Jiri centres in Bulawayo, 1950, Kadoma,1964 and Masvingo,1939 served as an eye opener in recognition of the rights of people with disabilities, though they were partially being fulfilled in the country. To some extent, there seem to be some acknowledgements of the civil rights of people with disabilities in terms of educating them. Despite there being some form of awareness and acceptance in including people with disabilities in schools, there is still much to be done in terms of including these children in sport.

The Concept of Inclusive Sport, in Four Secondary Schools in Masvingo District, Zimbabwe

Inclusive education in sport is a process of prioritizing access for all to ensure participation in sport UNESCO,(2006) views it as an extension of general inclusive education or a process of addressing and responding to the diverse needs of all children by increasing participation in learning and reducing exclusion within and from education. However, in sport, the concept looks at providing a child with disability with equipment where possible, as well as adapting the games to enable him/her to take part in sport, as sport is part and parcel of the school curriculum. Inclusive sport mainly focuses on including children with disabilities in all games offered at school without considering whether one has a disability or not.

Therefore, the concept of inclusive sport sees children with disabilities in mainstream schools as full participants, having access, or opportunities to take part in all sporting activities done in their respective schools. For example, children with visual impairments, physical disabilities, or any other sensory challenges taking part in soccer, rugby, volleyball, cricket hockey or any other. Thus, in a way a child with disabilities should take part in all sporting activities, together with those without disabilities. The idea being that, since society is inclusive, the school, as a miniature society, must also be inclusive, thus preparing for life in society. Separate schooling is seen as cultivating alienistic or segregatory tendencies and therefore, ends up being a more serious disability than disabilities themselves.

In sport inclusion, it is the school that must adjust, include or accommodate children living with disabilities to take part in sporting activities. The child living with a disability must unconditionally be enrolled as he /she is, and the school must take responsibility to do all it can to ensure that the child with a disability also takes part in sport with those without disabilities. The major goal is to enable all children to belong to the same educational and sporting community that validates and values their individuality (Stainback, 2011 cited in Knight, 2013). In as far as inclusive sport is concerned; all schools should come up with adjustments and provision of equipment to allow children with disabilities to take part in sport. Sport inclusion can also be viewed as, a continuing process of increasing participation of students in the cultures and curricular of mainstream schools and communities (Booth, 2018). Some see it as moving away from benevolent humanitarianism to a discourse of rights, such as the rights to participate in the mainstream sport, the right to respect, and the right to what Norwich (2000, pp.10) calls 'individually relevant learning.' Thus, Bunch (2008) concurs that inclusive sport or education is a new human rights and social justice approach to education and disability. It is a symbol of respect for all humanity.

From the foregoing, one may argue that inclusive sport is about social justice and equity and it takes learners with disabilities into account for example, their potentials and diverse needs. In some way, inclusive sport can be said to be an idea that describes the placement of children with disabilities in regular teams. Gilhool,(2012) says the term also implies an educational model were diverse children with disabilities play soccer, hockey, rugby, volleyball and many other sporting activities alongside their age-mates without disabilities in all sporting programs with the aid of appropriate devices and services.

Under these circumstances, the learner does not have to adapt to the school system, but rather the school sporting system has to change in order to meet the sporting needs of all the children in its community (Kisanji, 2010; Armstrong, 2005). In other words, inclusive sport involves restructuring the sporting cultures, policies and practices in schools so that they respond to diversity needs of students in their locality (Booth & Ainscow, 2002).The guiding principle in inclusive sport is that all learners have the right to take part in sport and that this helps to achieve equality.

The notion of inclusive sport brings up a range of assumptions. Some of the assumptions underpin the construction of the concept 'inclusivity 'and the direction an institution might follow to achieve inclusivity (Nunan, George, & McCausland, 2000). According to Vaughn (2010), two views about inclusivity illustrate this range of assumptions in education that, inclusion in education is enabling all individuals to participate fully and work harmoniously in ordinary school settings, whatever their needs. The other view sees inclusion as just an ethical approach to education and society, an attempt to put values into action with equity, participation, and respect for diversity, community rights, compassion and sustainability (Booth & Ainscow, 2000). This principle entails the disestablishment and closure of separate schools. In a way, inclusion means re-engineering of ordinary schooling and it tends to mean a transfer of resources to the ordinary school, so that every school, college or university can accommodate every individual irrespective of race, gender, socio-economic status, ethnicity, age and disability (Nunan et al., 2000). Inclusion ensures that all learners belong to a community. Thomas and Loxley (2001) observe that in a broader sense, inclusion entails transferring the support services to the learner, rather than taking the learner to the support services, ensuring that only the learner gains as a student in the class than compete with his/her peers.

Thus, inclusion is a situation where the school community adopts the needs of its students and staff. It is also taken as, widening access to opportunities to produce specific professional knowledge and practices. However, Margison, (2009) challenges this and argues that, widening accesses to opportunities might not make sharing of resources equitably in any way because those positioned to take up the

enhanced opportunities are those already advanced. From the writers' views, Margison's argument depends much on the leverage the advantage one may have, with the right framework, this may not be allowed to happen.

Another approach to inclusive sport, views it in the educational sense as concerned with the successful participation which guarantees greater options for those in education and beyond (Nunan et al., 2000). Accordingly, the construction of inclusivity tends to focus on physical or sensory factors that may directly or indirectly affect participation and access to playgrounds or being included in sporting activities. The approach tends to represent an array of options as well as affirming the decisions that guarantee basic human values of democracy, participation and equality (Inglehart & Welzel, 2005). While this approach to inclusivity is about achieving equitable learner outcomes, it also is integral to the overall professional outcome. Vaughn (2010) describes the other view of inclusion as traditional and as premised on the development of tolerance, sensitivity and empathy with the broader community.

Relationship between Disability and Sport in Main Stream

Steward (2015) observed that the relationship between disability was both contradictory and complex since disability is associated with individual weakness, whereas sport is associated with strength, aggression and power over an opponent and these characteristics are hardly found in individuals with disabilities. Hahn (2019) commented that, children living with disabilities' participation in sport are an attempt to emulate non-disabled values and there is generally a struggle by children living with disabilities for acceptance in a predominantly able-bodied world. Another observation by Barton (2014) was that disability sport is merely an imitation of non-abled sport in which disabled people were encouraged to accept a set of non-disabled values. Hahn (2019) also observed that sport for disabled people focused upon attempts to adapt non-disabled people's activities for individuals with impairments. Thus, activities for disabled persons were seen to be an adapted version of those originally designed for non-disabled people. This was an attempt to try and achieve equality in sport even though non-disabled athletes suffer from a varied factor ranging from economic, physical as well as emotional price even if they may be willing to reap some benefits with their non-disabled peers.

Sport in Mainstream Schools

Sports in mainstream schools is partly supported by the contact theory and Banduras' social learning theories which state the positive contact between different groups of people can reduce negative biases, stereotyping, expectations and discriminatory behaviours (Roper, 1990). Bandura's social learning theory postulates that learning, both cognitive and behavioural take place through modelling, and imitation of others (Lampart, Graves & Ward, 2012). According to these two authors inclusion in mainstream sport capitalise on these theories because children living with disabilities get in contact and can observe their non-disabled peers as well as coaches, then imitate them, thus, living as near 'normal' as possible.

Sport for children with disabilities in mainstream schools have numerous benefits, as generally sport has proven to be an environment that benefits and promotes quality of life as well as health benefits (Zabriskie, Lundberg & Groff, 2005). Sport participation in mainstream schools for children with disabilities has been associated with increased body/mind wellness. According to the National Centre on Health, Physical Activity and Disability (NCPAD), sport and physical activity cannot only increase longevity of both children with and without disabilities but can also improve their overall quality of life as well

as have fun (NCPAD, 2015). Some of the benefits of participating in sport in the mainstream include, physical fitness, increased self-esteem, learning to accept failure, working as a team, acceptance of rules, increased bone density, weight management and decreased blood pressure (NCPAD, 2015). Rimmer & Rowland (2008) go further to say psychological benefits of participating in mainstream sport include the acquisition of positive social support. Participating with those with similar experiences and working together towards achieving a common goal builds lots of confidence and make the child with disability live a life as 'near normal' as possible.

In the Zimbabwe context, some children with disabilities do not experience the thrill of sport in mainstream setting due to some physical challenges leading to limited locomotion (Mudyahoto, 2016). Such children's chances to play in the mainstream fields with others are very limited, probably due to the fact that teacher trainers are not fully prepared to meet the children's demands since they do not have the knowledge of what to coach and how to coach various disciplines in sport. Inclusive sport in the mainstream is not properly taught to children with disabilities as teacher trainers/coaches focus on competitions with other school teams. Churcher (2014) confirms that sport in the mainstream has been viewed as nothing other than wastage of time, and educators fail to clearly define its importance and benefits especially to children with disabilities.

Thus, each school is expected to be inclusive in sport. However, experience has shown that while schools accommodate learners with different forms of disabilities, very few if any have given a thought as to how they can make inclusive sport possible. It is therefore the writers' contention that sport in the mainstream has not been well thought of to enable children with disabilities to participate effectively. The writers assert that sport in the mainstream has not yet been fully received as an integral part of the curriculum. Hence, inclusive sport is slowly being considered in Zimbabwe schools.

Benefits of Disability Sport for Children Living with Disabilities

Engaging in sport provides students with disabilities with a positive movement experience in one on one or small group setting. Besides that, it can also stimulate their nervous system for optimal growth and development. Students with disabilities are given opportunities to acquire and enhance the motor, cognitive and affective domains of learning physical skills. They may also develop movement skills in the manipulation and striking skills and develop various skills that are contained in the curriculum. Again, sport for individuals with disabilities can promote their health and prevent unnecessary disease and reduction of health risks that may be a result of physical inactivity and lead to healthy lifestyle and wellness. These children need to be given an opportunity to promote the maintain lean body tissue, which will in turn reduce obesity and improve function of heart and circulatory system. Participating in sport may result in self-confidence for life challenges in disabled individuals, they may also develop social skills and learn social interaction skills. Participation may also result in forging friendships which cannot be possible without sport. Individuals may also learn to exercise responsibility and even take up leadership roles as they engage in sport. They must develop independence and make change happen (Fukuchi, 2007). Through participation in sport, individuals develop strength and gifts with appropriate expectations. Some benefits may also include improved fitness, flexibility, strength and social interaction (DePau & Gavron, 2005). These benefits can be explored so as to improve the healthy lifestyles of individuals with disabilities.

Lack of accessible knowledge or information (Jaarsma, Haslett, and Smith, 2019; Martin Ginnis et al., 2016), lack of opportunities, safety of the activity, fear of liability by teachers or those in charge

(Appenzeller, 2000), equipment might injure other players, lack of knowledge and training, lack of appropriate programs. Lack of awareness on people without disabilities and adequately involving them effectively. Lack of competition opportunities and programs for training and competitions, few accessible facilities due to physical barriers, limited information on access to resources (De Pauw & Gavron 2005). Participation can also be restricted by discrimination, limited specialist teachers and material barriers. Barriers to physical activity identified by Martin Ginis et al., 2016; Richardson, Smith & Papathomas, 2017; Wadey & Day 2018) include the following i) inaccessible physical environment, ii) transport to green or blue spaces, iii) unavailability and unsuitable changing rooms, iv) gym doorways that are narrow for wheelchair, v) negative societal attitudes vi) limited social support and vii) safety. Leadership opportunities, modifications, team experience. Having looked at the benefits it is then imperative to consider challenges that may be faced by individuals with disabilities.

Challenges Faced by Individuals with Disabilities in Sport

Sport and physical activity are vital to developing the bodies and minds of children as well as improving their memory problem but children with disability find themselves in a predicament of being faced with a myriad of challenges and failing to take part in sport. Characteristics of the disability itself and the nature of impairment can create an environment that may have both physical and social challenges for children with disabilities (Ikelberg, Lechner, Ziegler & Zollner, 2014). Thus, these children may find themselves in pain and discomfort especially on other people's misconceptions of their physical or other conditions (Martin & Choi, 2009). Again, some of the challenges are that these athletes find themselves trapped and failing to forge friendships whilst they also have limited social activities and this results in them suffering from loneliness (Solish, Perry & Minnes, 2010). Individuals with disabilities are vulnerable and are likely to face stigma and discrimination can affect children with disabilities. Nielson (2005) argued that attitudes have been shown to be one of the biggest barriers faced by people with disabilities. Thus, it is prudent to examine attitudes and values in order to assist individuals in disability sport. The coach can even go a step further and build a culture of barriers for meaningful participation and focus on how to assists rather than what resources are available.

Barriers to Participation

The nature of impairments can create barriers to participation since some athletes may require specialised equipment for them to engage in sport and these impairments can create excessive barriers Ballard (2002). Lack of information, physical and emotional support, appropriate facilities, problems of transportation, financial constraints, attitudes of others, lack of time, poor provision, negative experiences, low expectations from teachers, family and peers, lack of knowledge, lack of information and expertise, poor community and lack of access to facilities. Observations by McGillivery and friends (2018) are that improvements to access are often temporary with no long-term considerations being taken care of. These benefits may be short term and due to perhaps a major event that warrants access.

Society is stratified and the homogenous treatment results in social barriers such as unemployment, exacerbating transport costs, parental, low self-esteem, behaviour concerns, lack of friends to participate with, negative societal attitudes to disabilities. There are some perceptions that that disabled athletes possess the same cognitive behaviours and psychological factors just like the able-bodied athletes. However, general societal attitudes towards disability may result in them feeling pity for people with disabilities

and thereby derail their willingness to effectively participate in sport alongside their able-bodied athletes. Again, there could also be environmental barriers that can inhibit participation that may include inadequate facilities, inaccessible facilities, inconvenient facilities vis-a-vis the disability of different individuals.

Policy barriers may also be due to lack of appropriate activities, lack of staff capacity, negative self-attitude, deficiency in available program, lack of opportunities, lack of transition programs from rehabilitation to community, equipment e.g. Motorized wheelchairs that are not allowed in basketball. Lack of local sport provision may simply be due to some policy barriers that may make it difficult for athletes with disabilities to engage in sport.

External barriers Coaching disability sport is the most critical factor in disability sport, and this may be due to the following aspects: i) discrimination and prejudice ii (physical safety of athletes iii) conscious of not offending athletes, iv) use of appropriate language (Davey, 2014). These may include lack of basic information for disabled athletes, lack of physical and external support, lack of appropriate facilities, problems with transportation, financial constraints lack of time and attitudes of others. Sport specific skills of disabled athletes must be considered by coaches since there is need to have effective practice in disability coaching. However, there are dual challenges in disability coaching that is, understanding athlete sport and understanding the disability and even try to change the mindset of athletes so that they train beyond team practice (Tawse, Bloom, Sabiston & Reid, 2012). Thus, disabled coaches must be enhanced by knowledgeable coaches for athlete successes while also considering having an excellent coach -athlete relationship.

Poor training, overtraining and non-specific sport training are some of the factors that may affect disabled learners and observations have been made that many disability sports athletes train poorly due to lack of formal coaching (Martin & Whalen, 2014). Lack of participation in sport include the following; lack of motivation, confidence and self-esteem, negative school experiences, no support from family and friends, lack of information on opportunities, transport problems, lack of time and money, and poor physical access inaccessible facilities and equipment, Auxter, Pyfer, Zittel & Roth, 2010), personnel without sufficient training (Auxter et al, 2010), inadequate, noncompliant or otherwise inaccessible programs (Auxter et al., Block, 2007). Some disabled athletes may be affected by feeling different from majority of the population and inability to fit in at a sporting facility. Issues like self-consciousness and reluctance to look for assistance in a sporting environment. Again, fear of failure may be a serious internal barrier that can inhibit disabled athletes from engaging in sport. It is therefore important to consider strategies that can be considered when including individuals with disabilities.

STRATEGIES FOR INCLUDING CHILDREN WITH DISABILITY IN SPORT

Sport can generally be seen to improve inclusion as and well-being of individuals with disabilities. Sport changes a person with disabilities in an equally profound way resulting in gradual acquisition of skills. It can even go a step further to change the attitudes of communities as well as what persons with disabilities think and feel themselves. Community can therefore play a crucial role in trying to reduce stigma and discrimination associated with disabilities. Sport can also empower persons with disabilities and help them realize their potential and advocate for changes in society. Sport can also change community perceptions through focusing on disabled individuals' abilities (DePau & Gavron, 2005). Those without disabilities are also likely to encounter individuals with disabilities in a positive context as they

accomplish the impossible (Parnes & Hashem, 2002). This will make people see individuals and not disabilities.

Spectators of disabled sport should be encouraged to support athletes with disabilities (Garcia, Welford, de-Wolff & Smith, 2017). Again, it is crucial for the community to work towards removal of societal prejudice (Shakespeare, 2016). This may enhance participation through increasing awareness of disability, include positive changing attitudes, development of more accessible infrastructure, public shift towards disability (Brittain & Beacon 2016; Hodges, Ammah, Casebo et al., 2014). And this is changing in the UK and a leaf can be taken from them so that players with disabilities do not take part in sport in an empty ground. McGillivray and colleagues (2018) noted improvement to access were often temporary yet they should be long-term and suggested that more could be done towards averting these systematic barriers. Improve environment and societal legacy to improve access to the local environment. Counterproductive e to the lives of disable people beyond the world of sport (Howe & Silva, 2018). Social change and justice makes athletes adapt to promote changes within sport contexts (accessible and inclusive environments) demand inclusive policies and ensure they are implemented since feelings of exclusion can fuel advocacy engagement since it is possible to be included in the policy but remain excluded in practice in disability sports contexts. Bundon & Hurd Clarke (2015) insist on the rights of players with disabilities and inequalities within disability sport contexts should be linked to wider inequalities in society. When working with individuals with disabilities, you need knowledge that comes through relevant prior learning of which without one can feel less enabled and constrained to get to understand the disability itself (Townsend, Cushion & Smith, 2015). Again, there is need for one's capacity to understand the context and be able to diagnose issues and get solutions for them.

PERCEPTIONS OF TEACHERS AND PUPILS ON CHILDREN WITH DISABILITIES IN SPORT

Teachers and learners' perceptions on children with disability in sport vary due to the condition presented by these individuals with disabilities. Society can be blamed as it is society that disables people by creating barriers. Social model defines disability as a social creation which means that society disables people or creates barriers for them. The medical definition on the other hand, define disability in terms of individual deficit, problem viewed by disability and treatment of the condition (Connors & Stalker, 2007; Shakespear, 2003). Shakespear (2013) goes on to observe that disability under medical model can be prevented, cured or even rehabilitated these athletes need support in order for them to continue participation and coaches may assist focusing on equal rights, independent living and eve try to eliminate all barriers that may exist in the physical and non-physical environment. When education is offered in segregated schools, no equal opportunities are often availed and in normal schools' rejection of children with disabilities is almost the order of the day and scholars often advocate for an inclusive learning environment (McComack & O'Flaherty, 2010; Travers, Balfe, Butter et al., 2010). This is a general trend that can be found not only in Zimbabwe but into the global South as well.

Behaviour is consistent with attitudes and specific attitudes predict specific behaviour and this is because attitudes are a major determinant of our behaviour (Bohner & Wanke, 2002). Research consistently reports positive attitudes towards inclusion by teachers although teachers are not generally prepared to deal with a multitude of issues that may emerge from teaching students with disabilities. Teachers generally consider those individuals with emotional and behavioural challenges as the most difficult

to handle. Teachers' attitudes towards children with disabilities may result in a considerable impact on learner experiences Norwich (1994). These attitudes towards teaching persons with disabilities are similar in international literature with attitudes of secondary school Physical education teachers being observed to be favourable depending on the disability (Meegan & McPhail, 2006). Teachers are responsible for shaping the attitudes and perceptions of their earners in relation to inclusion beyond school setting and in the community. It is how teachers engage and facilitate learning when teaching disabled athletes that can shape them since attitude plays a significant role in how teachers engage with these students (Avramidis & Norwich, 2002; Hodge et al., 2009). Teachers may express neutral perceptions when dealing with disabled learners and these perceptions will depend on whether they possess prior teaching experiences or not (Kesher, 2005). These insights are likely to work in general or special education qualification (McCoach & Siegle, 2007) or whether these teachers have attended seminars and programs regarding the needs of children (Gaeke & Gross, 2008).

Lack of time, support, insufficient training, ineffective teaching strategies may negatively affect delivery of a coaching session (Doulkeridou et al., 2011). Attitudes are more favourable towards students with physical disabilities compared to those individuals with severe emotional and intellectual disorders (Meegan & McPhail, 2006). The reason is that those individuals with physical disabilities can listen to instructions as compared to those with emotional and intellectual disabilities. The other issue that has been observed is that generally opportunities to teach Physical Education are curtailed by ineffective or lack of specialized equipment and facilities (Fitzgerald, 2012). Since society views individuals with disabilities as powerless and deserving pity, removal of restrictions and full empowerment becomes necessary so that their self esteem is raised (Levitt, 2017). Results on teachers' perceptions have shown that; i) gender of the teacher plays an important part in their attitude towards children with disabilities, ii) vary according to condition itself, iii) quality of training teachers receive affects their perceptions, iv) several school and environmental factors influence attitudes of teachers and v) policies, resources, support and organizational frameworks also affect perceptions (Jenjekwa, Rutoro & Runyowa 2013; Avramidis, 2002, Athletes with disabilities must be accommodated so that even those with lack of previous experiences who lack knowledge are adequately catered for. Those in charge must have abilities and higher positive attitudes towards children despite the severity of the disability

Lived Experiences

Athletes who defined themselves as 'athletes first' were seen to live in a 'sporting bubble' until retirement were proud to be disabled (Smith et al., 2016). The same athletes were able to build identity during their prime time but not post-retirement and thus sought visibility to speak out and build awareness about disability issue. They were free to publicly speak against discrimination, campaign for disability right, highlight disability and inequality, exploit their status as athletes to challenge disability oppression. There is, however, a risk of not being selected if they adopted activism, athletes living with disabilities themselves can enact social change though activism, they faced unemployment barriers after leaving/ beyond sport (Bundon et al., 2018). Practice in society, expectations to all athletes with disabilities to compete in sport, challenge the discrimination faced outside sport post retirement (Braye, 2016; Smith et al., 2016) health and wellness problems not addressed (Bundon et al., 2018. Retired athletes with disabilities reported that they felt psychologically hit and this left then struggling to survive in society Smith and friends (2016) felt the effects of society treating them as second class citizens and generally felt it not all rosy for them. Exposure to disability sport results in individuals bonding around a common

identity and identifying with disability sport culture but that goes away as soon as one retires from active sport. Observations from those individuals living with disabilities have noted that their autobiographical accounts explicitly point out that their disadvantage is more of social than physiological. Voices from a study by Mpofu, Sefotho and Moree (2017) on autonomy of choice in life made the following observations; i) their abilities to make choices needed to be promoted and games like chess enabled them to make correct moves during play, ii) one's condition determined the individual's limitations, iii) one's needs were clearly explained but in most cases not fully addressed, iv) one had no control over choices in the community and the choice was affected by one's disability, v) the choice was largely determined by one's condition or health.

Generally, experience of the disability can only be fully expressed by the individual himself/herself and one's capability can also be explored through availing different opportunities in sport for them to enjoy the experience (Smith et al., 2016). Thus, it is important to minimise disparity between able bodied individuals with those that are differently able as they engage in sport. They will have an opportunity for team experiences and leadership opportunities as they engage in sport. Given these lived experiences one would learn that lived experiences would determine the program that can assist them fulfill their needs. In Zimbabwe disability sport has gained prominence and availed opportunities for athletes to choose a sport on a spectrum from separate activities to modified ones. This has also seen athletes competing in sport both locally and internationally.

Research has observed that what comprises quality participation for athletes with disabilities is not stagnant but rather changes over time and may involve varied elements such as, autonomy, belongingness, engagement, mastery etc (Allan, Smith, Cote, Martin Ginis & Latimer-Cheung, 2018). Their voices are also important as they are likely to make a huge improvement in the way they need to be understood so that even the sports programmes cater for their needs for their successful and continued participation. It is important when dealing with athletes with disabilities to provide short and clear instructions, frequent feedback to the individual, repeat instructions. Since individuals with disabilities are highly dependent on society, their real issues need to be examined so that all the limiters and constraints are removed and they cease to see themselves as being victims of circumstances (Retief, 2018). Again, have a selected individual demonstrate the task to show clear understanding and possibility of repeating of the task by children. The coach can also keep learning environment consistent, eliminate distractions, use peers as partners, ensure there is a supportive environment, slow down the performance speed of the activity. That way, athletes with disabilities will be able to develop their potential whilst being viewed as capable athletes and accept their condition despite all the barriers that may hinder their performance.

CONCLUSION

This chapter explored various themes such as, disability in sport, lived experiences in Zimbabwe and authors looked at definitions of sport and disability, the history of sport for the disabled and the constitutionality of disability sport in Zimbabwe. The concept of inclusive sport was also looked at and authors also discussed benefits, challenges, barriers for individuals with disabilities. perceptions of teachers and strategies for including individuals with disabilities was also discussed and the chapter concluded by lived experiences of individuals with disabilities.

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Chapter 10

Students With Disabilities' Learning in South African Higher Education:
Disabling Normatives and Disablement

Sibonokuhle Ndlovu
University of Johannesburg, South Africa

ABSTRACT

This chapter discusses how the normative practices and structures 'disables' students with disabilities in their learning in the context of the South African higher education. Empirically, examples from the students' lived experienced have been drawn from the previous study that has been conducted in one institution of higher education, which is a privileged space, by virtue of being formerly advantaged. Data combines available literature on normativity and disablement of students with disabilities and empirical data, which were collected through interviews with students with disabilities studying specific professional degrees. Decolonial theory informed deeper understanding of the cause of normative assumptions and consequently disablement of students with disabilities. Literature and lived experiences of students with disabilities reveal that despite efforts of disruption normativity and disablement have continued to be reproduced at different levels because systems of domination are so durable and inventive.

INTRODUCTION

Despite countries in the South making efforts to include all persons after the so-called end of colonisation, the dominant strata of society continue to construct a disabling normative; in the process, diversity is not fully addressed. This is happening despite South Africa ratifying the UN Convention on the Rights of Persons with Disabilities (UNCRPD, 2006), an international legal instrument that seeks to ensure the equal rights and participation of persons with disabilities in inclusive education. However, specific criteria for ability-disability and normal-abnormal dichotomies and sets of boundaries are used (Shildrick, 2009). As a result, the construction, deconstruction and reconstruction of disability have continued in

society, causing a reproduction of disabling normatives and consequent disablement of persons with disabilities in different shapes and sizes in many spaces, including such students in higher education contexts. Disabling normatives and disablement continue to have serious negative implications for students with disabilities' learning and success, specifically in higher education in South Africa largely, and at the specific institution under study.

In contemporary debates, many contestations border around disabling normatives and disablement creating disability (Oliver 1990; 1996a; 1996b). When engaging in such debates, it can be argued that if there is ability, there is also disability. Thus, if one perspective is for the 'normal', the other should be for the 'abnormal'. Two major questions should be answered: Firstly, who makes the constructions and categories? And secondly, how are students with disabilities experiencing disablement in their learning through the socially constructed disabling normative at the institution? Answering these questions might unveil why disabling normatives and disablement of students with disabilities continue to be reproduced despite all efforts towards inclusion in South African higher education specifically, and in Africa, broadly. It is against this background that the issue of normativity and disablement emerges in this chapter, to inform what might not be seen at surface levels in terms of students with disabilities' continued exclusion from South African contexts of higher education.

Significant research has been conducted on the continued exclusion of students with disabilities in higher education (Howell, 2006; Mutanga, 2017; Ndlovu, 2017). However, little has been written from the perspectives of normativity and disablement, being one of the underlying factors in exclusion. This chapter presents this angle as a different way of understanding the hidden underlying factors resulting in the students with disabilities' exclusion in learning in South African higher education. Examples of how limitations are encountered in disabling normativity, resulting in disablement, are drawn from students with disabilities' lived experiences. The findings are extracted from an empirical study that was conducted on their entry into specific programmes, their learning and throughput. Feedback from the disability unit staff are also cited because they form an important component in terms of understanding disabling normativity and disablement of students with disabilities at the specific institution of higher education under study.

The chapter starts by discussing the concepts of disabling normativity and disablement, and the context in which they are used in this chapter. Specific disabling normative practices of education, physical and social structures and how they 'disable' students with disabilities from accessing higher education, learning and completing their programmes, are presented. The chapter then discusses how Ubuntu, as an African philosophy, can be an alternative for normativity and how it can enable, rather than disable, students with disabilities' general functioning in higher education broadly, and in learning within the specific context of South African higher education.

DISABLING NORMATIVITY AND DISABLEMENT

Normativity is a broad term that can be defined or interpreted in different ways as informed by different perspectives and disciplines. In the context of this chapter, the idea of disabling normativity is understood in light of disability, drawn from the perspective of Paur (2012), who refers to it as compulsory able-bodiedness. This is the essentialist view that there is one body which is 'normal' and all bodies should be the same. It implies that all human beings are represented by only one body, which is able. This is a disabling normative in that bodies are not the same for all human beings. Compulsory able-bodiedness

echoes Quijano's (2000) assertion about the coloniality of being; accordingly, there are standard criteria against which normalcy in terms of the body is measured, and anyone not measuring up to that standard is categorised as disabled. From the outset, this is what makes able-bodiedness a concept of disabling normativity because it does not consider diversity and the difference of multiplicity of bodies found in society. It could be argued that disabling normativity is one of the ways in which disability is socially constructed.

Disablement may also be understood from different contexts as normativity. However, simply put, it has to do with putting a limitation on one's day to day functioning. Barnes and Mercer (2003) understand disablement as a specific form of oppression that subordinates persons with disabilities and manifests in exclusionary practices at various levels, including institutional, interpersonal, and within societal relations. Thomas (2010) sees it as something that emerges when those without disabilities wield relative authority and power, and impose restrictions on the life activities and psycho-emotional wellbeing of those with disabilities. From this view, it implies that disablement of those with disabilities transpires through societally imposed restrictions by those without disabilities. Furthermore, Swain, French, Barnes and Thomas (2014) claim disablement encompasses limitations that result from totalising tendencies that do not consider diversity and in the process limit particular students with disabilities. Moreover, Swain et al. (2014) argue that those with disabilities are confronted by disabling barriers as they interact with the world, which is designed for the functioning of those without disabilities. A common interest between normativity and disablement is that in both instances, there is totalisation and essentialism whereby diversity and difference are disregarded. This chapter thus discusses how disabling normativity at students with disabilities' entry or admission into programmes, in teaching, in physical structures, and in terms of throughput results disadvantage them against their able-bodied counterparts.

NORMATIVE PRACTICE IN ENTRY INTO HIGHER EDUCATION

It is a normative practice in the South African context of higher education that entry requirements for all students are the same. Certain programmes like medicine and law have high entry-level requirements in terms of points and subjects, and education programmes, among others, have lower entry-level requirements. Students with disabilities are expected to meet the same entry-level requirements as all other students to gain entry into programmes of their choices in institutions of higher education. Looking at it from the surface, this could be seen as a practice or norm that considers all students as equals. It does not consider those with disabilities as being intellectually limited. A disability unit staff member shared this sentiment related to the same entry-level requirements for all students at the specific institution:

The university has to work with high schools because we cannot change the entry requirements for students with disabilities. It's not fair for other students. We should work with teachers to strive to help their students get the necessary qualifications. (Interview with a disability unit staff member).

While the above statement reflects that the university sees all students as equals and might be guided by the policy of non-discrimination (Republic of South Africa, 2000), this normative practice is, nonetheless, disabling to students with disabilities. Even though students with disabilities are considered intellectually as capable as all other students, the playground is not even for them because they confront specific barriers which are not faced by those without disabilities; these barriers often stem from their

earlier schooling (Howell, 2006). They have limitations resulting from impairment-related disadvantages in terms of sensory and physical limitations. The social and physical environment in South Africa in general, and the education system (both basic and higher education) are not yet entirely transformed to the extent that it is fully inclusive of those with disabilities (Ndlovu, 2017). Thus, as Crow (1992) has problematised, it is necessary to separate disability and impairment. This means that those with impairments, namely sensory or physical limitations embedded in the body, are likely to be disabled. Tremain (2005) also argues that disability and impairment should not be viewed as separate when adequately explaining the experience of disability. Commenting on disablement by impairments, Shakespeare (2010) contends that the realities of impairments are not to be ignored because no amount of environmental transformation can fully overcome the challenges faced by persons with disabilities. Thus, though both the disabled and the non-disabled are intellectually capable, it should not be expected that they perform at the same competency level when engaging in academic tasks. The one with an impairment might be limited by different barriers imposed by impairments themselves, and barriers in the social environment. Normative entry requirements do not consider unique barriers, such as the previous schooling backgrounds of those with disabilities, which could be a disablement to them accessing higher education broadly, and gaining entry to specific programmes of their choices specifically. Students with disabilities who studied law and medicine, respectively, at the specific university being used as a reference point, reflected how the disabling normative entry requirements are a disablement to those with disabilities. One of the law students stated:

The obstacle is that law points are high here and for those who went to special schools; they are disadvantaged because they do not usual have those points (Interview with a student with disabilities studying law)

A medical student also said:

I went to mainstream schools. For medicine entry requirements are high, the requirements are real high at this university. Even for me, if it wasn't for the Cuban programme, I don't know, maybe I wouldn't have managed to enter (Interview with student with disabilities studying medicine).

Thus, while the same entry-level requirements do not undermine the intellectual capabilities of all students, in the case of those with disabilities they are a disablement to their access into higher education. When those with disabilities are considered on the same footing as those without disabilities in terms of entry-level requirements, as it happens in the South African context of higher education, it can be considered a normative practice that is a disablement for students with disabilities.

When illuminated by the Decolonial Theory, disabling normative entry requirements for all students can be understood in light of Quijano (2000) and Ndlovu-Gatsheni's (2001; 2013) view that in the categorisation of humanity by the dominant society, all humanity should comply to 'normalcy'. This classification does not consider diversity. There is a 'normal' human and all persons should be that 'normal' person. This is why, at the specific institution, the same entry-level requirements are expected from all students, whether they are with or without disabilities. Diversity, multiplicity, difference and pluralities (Ndlovu-Gatsheni, 2012; 2013) are not taken into consideration by those responsible for admission and the university system in its entirety. Barriers for those with disabilities are glossed over. It can therefore

be argued that students with disabilities are limited in accessing higher education by disabling normative entry-level requirements, specifically in programmes of their choice.

EDUCATIONAL NORMATIVE AND LEARNING AND DISABLEMENT

While every effort is being made for all diverse students in South African higher education to be included, the practice of teaching and learning is another disabling normative. The practice favours 'normal' students, hence it is viewed as a normative practice. Academic staff have no knowledge of disabilities in general (Matshedisho, 2007; Haywood, 2014) and consequently lack the knowledge and skills to teach such students (Matshedisho, 2010). Mutanga (2017) has argued that sufficient training is required for institutions of higher learning to ensure that all academic staff have the knowledge to best practice with regards to dealing with ableism. This implies that academic staff should not be expected to teach students with disabilities without training. In some institutions of higher education, disability unit staff members make efforts to conduct workshops meant to teach academic staff members about disabilities and how to include such students in their teaching (Matshedisho, 2007). However, a lack of interest has manifested by way of very few academics attending these workshops (Matshedisho, 2007). All the factors related to teaching in South African higher education result in teaching specifically becoming normative as it only suits 'normal' students and not students with disabilities. The disabling normative teaching practice excludes students with disabilities who have limitations, diversities and specialities that need to be taken into account; for example, using slides when there is a student with vision limitations in class.

They will tell you we have a lot of work to do. As lecturers we are expected to be studying, we are expected to mark; we are expected to do this and that. So what you are asking for might be a lot too much! (Interview with a student with a disability in the law programme)

According to this student, the academic staff are not willing to include students with disabilities in their teaching because they have other work that is expected from them. The academic staff members' unwillingness to include students with disabilities in their teaching in the South African context of higher education is similarly confirmed in literature by Mutanga (2017), and as a result, students are excluded (Crous, 2004; Mosia & Phasha, 2017). A link can be drawn between this finding and the Universal Design, a concept of planning from the outset for diverse people with and without disabilities (Centre for Universal Learning, 2002) as it relates to teaching in higher education in South Africa. It is revealed in the Fotim Report (2011) that in lecturing and learning, very little attention is paid to the principles of Universal Design in South Africa. Lecturers do not plan for all diverse students from the outset, but only for 'normal' students. They are hindered by their normative way of teaching and require training to plan for diversity. That this has a disabling effect on students with disabilities and negatively impacts on their learning is clear. From a Decolonial Theory perspective, the explanation for normative education and teaching can be understood in the same way as a lack of consideration for diversity, multiplicity and plurality (Ndlovu-Gatsheni, 2013).

Normativity in education and classroom teaching is not unique to South African higher education. Fuller, Healey, Bradley and Hall's (2004) and Madriaga's (2010) studies found that some academic staff members were unwillingness to include students with disabilities in the British context of higher education. This could be considered an issue related to the South-West debate: a normative way of

thinking has been imposed by coloniality in the South, yet some educational and social issues that affect the South are also experienced in the West. Therefore, it appears that the oppression imposed on the South by the West in terms of coloniality reproduces itself to affect the oppressors. As the academic staff members' unwillingness is reflected in the South African higher education context, the country, at the same time, uses the British form of inclusion as a benchmark (Fotim Report, 2011). It could thus be argued that when normative education and classroom teaching is experienced in the West, believed to be advanced in terms of including all diverse students (including those with disabilities), then the South's total transformation that embraces the diversity of all, may be slow. Normative principles in education and the classroom are thus not only an obstacle in South African higher education, but also in the United Kingdom. In formerly advantaged institutions in South Africa, the unwillingness referred to does not only affect students with disabilities but also students from other previously disadvantaged groups. The Council of Higher Education (2008) has reported limitation as one of the internal inefficiencies that are experienced, which impacts negatively on transformation in the South African higher education context. The unwillingness to include students with disabilities specifically could be seen as a form of disabling normative, which excludes them in learning.

While inclusion broadly, and inclusive education, in particular, is proposed and supported by strong policies in South African higher education, normative teaching still perpetuates segregating students with disabilities (Mutanga, 2017). These students only feel accommodated and included in the special education system, specifically designed for those with disabilities. Though the system of special education still exists for profound cases of disabilities in South Africa, the new democratic government made efforts to extensively transform towards inclusive education across the board. The expectation by those who propagate for inclusive education is that students with disabilities would also want to teach within an inclusive environments in mainstream schools. The students with disabilities' perceptions in the particular study were that special schools were inclusive to them and offered them opportunities for better field practice. From the specific institution of higher education, the students who studied education stated that they experienced exclusion in the mainstream school but inclusion in special schools when they went out for teaching practice. They said that the special schools included them in terms of material resources, physical accessibility, attitudes, and accessible teaching methods. This was not the case in the mainstream education sector. One participant stated:

I was accommodated, it was a special school. I was like other teachers. They treated me like one of them. So I asked the TE office that they place me at a Special School for third and fourth year (Interview with a student with disabilities studying education).

The statement reveals that students with disabilities experience better treatment in special schools and this provided them with better field practice. They therefore often preferred special schools for their teaching experience deployment. Chataika's (2007) study, conducted with students with disabilities in the Zimbabwean higher education context, also revealed that students with disabilities felt a sense of belonging in special schools. On the basis of this experience, she argued that with special schools still functioning there is a threat to inclusive education in the mainstream context (Chataika, 2007). A potential result of this is the perpetuation of special education in segregated institutions, because the needs of those with disabilities are (often) met within these contexts of special schools. They were built with specific disabilities in mind during the time of apartheid.

It was determined that students with disabilities prefer special schools not only for their teaching experience deployment but also for their careers as teachers after qualifying and graduating from universities. From participants' statements, it has been revealed that they are prepared to become 'specialist teachers' for learners with 'special needs' in special schools, as was the case in the past (Howell, 2006). Evidence of this inclination surfaced when a participant claimed:

I will eventually want to go to Special Needs Teaching myself. I am a Special Needs sort of a student (Interview with student with disabilities in education).

Another stated: "And I realised that ok, I can't teach in the mainstream". This statement shows that the mainstream school system has some disabling normatives, which are disabling to student teachers with disabilities. The physical structures, for example, are inaccessible to students with physical disabilities. Thus, one would argue that normativity is inadvertently perpetuated through the school system and higher education that does not cater to diversity. Normativity in the education system broadly, and teaching in the classroom in higher education specifically, therefore disables; in the process, it defeats the whole idea of inclusive education in mainstream settings as proposed in the inclusive education policy (DoE, 2001b) and the agenda of transformation (CHE, 2008). It can be concluded that if education and the practice of teaching are normative in the way that students with disabilities end up preferring special schools because they feel as accepted, accommodated and included as other teachers, it is oppositional to their inclusion in society, generally, and in higher education, particularly.

NORMATIVE DESIGNS OF PROGRAMMES AND DISABLEMENT

Programmes designed for 'normal' students is another disabling normative that has been found to 'disable' students with disabilities at the institution, and in higher education broadly. Odendaal-Magwaza and Farman (1997) argue that some programmes have courses that involve field practice off-campus, use particular types of equipment, or require extensive interaction with the public. In the specific contexts of higher education, students with disabilities are denied access into these programmes because they are believed to be unable to meet their course demands due to their impairments (Odendaal-Magwaza & Farman, 1997). A comment from a student with disabilities that relate to the design of the programme of education in particular revealed that normative programme designs exclude students with specific types of impairments. The student stated:

People who have language problems, who cannot communicate well cannot be selected into teaching. Teaching requires that you talk clearly to learners for them to understand what you are teaching. You write reports, you write letters to parents and you fill in forms. That will be difficult for someone who has problems in reading, writing or speaking (Interview with a student with disabilities studying education).

Upon reflecting on this stating, it is not that a student with dyslexia cannot be included in the education programme, but it is the normative design of the programme that is disabling to such a student. Another expression that revealed the disablement that results from normative programme design was:

If a person can't hear, the basics of medicine require that you get the information from the patient and you process that information so that you can be able to diagnose. So now if you can't hear, you can't do that (Interview with a medical student with disabilities)

The statements captured above reveal that because of their normative designs, some programmes are not inclusive to diverse students. They are particularly exclusive of students with specific impairments. For example, a student with hearing impairment is 'disabled' when it comes to entering and learning in the programme of medicine because of its design, in which the medical diagnosis is often made through verbal information provided by the patient. If the programme design was not disabling, it would include other ways of diagnosis that included those who cannot hear. Furthermore, drawing from literature, in the context of South African higher education specifically, Nicholson (2004) and Motala (1996) state that at schools of law, learning involves students going to class and taking lecture notes from volumes of content knowledge that consist of statutes, cases, legal rules and principles. They are then required to learn and reproduce this information in tests and examinations. It could be argued that this way of teaching is disabling to some students, and it a disabling normative to students with disabilities because it is accepted as a 'normal' way of teaching. It is also a disablement to them because, besides possible limitations experienced by other students, they also confront impairment-related barriers.

NORMATIVE PHYSICAL STRUCTURES AND DISABLEMENT

Physical structures in South Africa have typically been found to be normative and disabling to those with disabilities. The built environment was originally designed for a 'normal person'. It is the same thing in higher education spaces because the physical environment was also designed for a 'normal student' and not for all diverse students. Scholars who write about the physical structures in South African higher education talk of its inaccessibility, especially for students with physical and visual impairments and limitations (Engelbrecht & de Beer, 2014). Of course, there have been instances of retrofitting and building new structures as informed by the principles of Universal Design taking place in some institutions (Fitchett, 2015). Yet while this improvement is not glossed over, some institutions preserve specific buildings for their architectural designs and heritage (Chipkin, 1993). This means that the specific built environment cannot be altered or retrofitted, hence the persistent inaccessibility for those with disabilities. Commenting on the issue of inaccessibly built environments, Swartz and Schneider (2006) explain that accessibility for those with disabilities might not be achieved soon enough because of the costs involved. Participants shared their experiences of inaccessibility, and noted:

When I was offered space to come and study education, I thought it was because I had specified that I am on wheelchair and since they responded, the environment was conducive. To my biggest surprise, I found that the campus was almost inaccessible (Interview with a student with disabilities in education).

Another student stated:

When I came to submit my letter of acceptance, I found that counters were up there, administrators could not see me and I was alone in that space (Interview with a student with disabilities in education).

An exacerbating factor in terms of physical structures in higher education is the influence of apartheid. When institutions of higher education were constructed, it was not expected that students with disabilities could attend higher education. It could thus be argued that the history of segregation impacted the geography or physical landscape of institutions of higher education. Evidence of this finding is reflected in the following student's statement:

I understood because that campus, you know, with the field of Education in the country, it has never happened that a person on a wheelchair qualifies, so it was specifically for the able-bodied (Interview with a student with disabilities studying education)

The statement seems to suggest that the student is aware of how a negative approach to disability could impact on structures and result in physical inaccessibility at a particular school at the institution. Another said:

This campus was actually built during the apartheid era and no person with disabilities were allowed into this campus ever! (Interview with a student with disabilities studying education).

The students' statements reveal that they were aware of the impact of apartheid on the way the built environment was constructed at the particular institution of higher education. In cases where students with disabilities managed to enter the education programme, their access to learning were negatively influenced, as already highlighted above.

NORMATIVE SUCCESS AND THROUGHPUT

Though success and throughput differ from one university to the next, the common thread is that success and throughput are determined by the completion of work required within a specified period of time, allocated to each programme. In the South African higher education context, success and throughput are also the same for all students, including those with disabilities. When students do not complete their studies within the specified period for the programme, it is considered delayed throughput, even for those with disabilities. Examples drawn from the institution that was studied, reflects that nine of the 12 students with disabilities who participated in the study completed their programmes later than students without disabilities.

All nine students with disabilities studying law and education, who were expected to have completed their course, had not done so during the time of interviews. One of the two medical students completed his study in that year, and another's completion was unknown, as he did not respond to the follow-up inquiry. In terms of graduating, none of the fourth-year law and education students with disabilities who were interviewed had graduated at the time of data collection. One of the students in education made a proclamation that:

I should have finished my degree last year. I had health issues. I fell three times and broke my arm and I also lost my mother who had cancer for four years. I am graduating at the end of the month (Interview with a student with disabilities studying education).

The statement reflects that students with disabilities, like other students, confront other obstacles that are personal and social, and these compound to delay their completion of a specific course of study. In essence, though students with disabilities can complete the specific programmes, they often take longer than others. During the interviews, one student of law echoed the following sentiments about throughput and success:

It's extremely difficult for you to pass – it's exceptionally hard, you will have many courses left over again for the next year and then the next year and then the next year, so you end up being here for years and you drop out because struggling will discourage you (Interview with a law student with disabilities).

This statement reflects that students with disabilities studying law specifically carry over many subjects to their next year of study, resulting in them being burdened and under extreme pressure. According to the student, some do not complete their courses at all, but drop out of the programme. Using the Decolonial Theory as a lens, the reason for normative success and throughput that runs across the board for all students, still points to seeing all students as the same. Hence, they are expected to complete the programme under the same specified conditions despite the diversity, differences, multiplicities and pluralities that define humanity (Ndlovu-Gatsheni, 2001). Normative success and throughput is a disablement to those with disabilities because they confront a number of specific and unique barriers, which are not encountered by other students. For example, students with visual limitations have their work transcribed by administrative officers who are not specialists in law; as a result, they frequently cause distortions in the process. It cannot be expected that a student who has such a barrier in their learning perform at their best and on par with someone without this barrier. This hindrance to their academic achievements could be counteracted in a fair and just manner by extending programmes for students with disabilities.

The delay in completing the programmes within a stipulated timeframe in education and law could be further explained in terms of a lack of total transformation, where all students' unique learning needs are fully catered for. Ndlovu-Gatsheni (2013) argues that though there are efforts of transformation, total inclusion is presently not yet achieved. And while other contextual reasons could be presented for delayed throughput, normativity still plays a role for students with disabilities. Their delay in completing the programmes they are studying should not be considered delayed throughput. As long as they complete the programme it should be deemed a success, since they often have to overcome several obstacles before they can settle down to study.

The disablement of students with disabilities through disabling normative practices and structures has been overt and observable to the particular students. Significant effort has been made by students with disabilities themselves to disrupt this normativity. However, normative practices and structures have continued because systems of domination are so durable and inventive, perpetuated in different ways by the very same institutions meant to fashion hope and liberation. Institutions of higher education perpetuate the issue of the disabling normativity by hegemonising practices and structures, hence the perpetuation of inequality, which particularly affects students with disabilities.

UBUNTU AS A POSSIBILITY TO OVERCOME NORMATIVITY AND DISABLEMENT

In this section, Ubuntu is viewed as one solution which South African higher education institutions could apply to overcome the normatives and disablement that have been highlighted and discussed thus far. Ubuntu, a philosophical worldview in the African context in which all humanity and humanness are respected, is contradictory to normativity and disablement of certain social groups. Shanyanana and Waghid (2016) argue that in the context of Ubuntu, every human is equal and regarded as being able to engage in the processes of knowledge production. Therefore, Ubuntu is a philosophy in which diversity, multiplicity and plurality are considered and respected. Within this context, there is no human considered the 'normal' and this defeats the whole idea of normativity. By virtue of respecting all humanity, it implies that despite differences, all persons are valuable and consequently worthy of inclusion. Shanyanana and Waghid (2016) argue that Ubuntu should be viewed in terms of inclusion because of its inclusive nature, its interdependence and communal practice. This is manifested in African phrases as "Umuntu ngumuntu ngabantu", meaning 'I am because we are'.

From the meaning of Ubuntu and its implications, it would suggest that in contexts in which it is upheld in practice, there is no normativity that results in the disablement of other social groups; more specifically, students with disabilities as in South African higher education. Marginalising and excluding certain social groups contradict the issue of Ubuntu, because it means treating these individuals differently and inhumanely. Enslin and Hormsthenke (2004) argue that limited effort is being made to practice Ubuntu because institutions of higher learning in Africa do not afford equal space and opportunity for all persons to access, actively participate, and contribute in their different capacities. As the ultimate goal is the inclusion of all students, including those with disabilities, this chapter sees Ubuntu as a philosophy that needs to be properly understood and implemented in terms of the underlying system of higher education in South Africa specifically, and in Africa broadly.

UBUNTU AS AN ALTERNATIVE FOR NORMATIVITY AND DISABLEMENT

Ubuntu and normativity are different and contrary. While Ubuntu views all people as human and equal, with voices that need to be heard, in disabling normative set-ups people are constructed as the powerful and the powerless (Ndlovu, 2015). This is due to categorisation by the dominant society and labelling, using normalcy as the standard measure (Quijano, 2000). People who fall outside the margins of 'normalcy' become the other, the disabled, the powerless, and the dominated. In society in general, and the higher education context specifically, when binaries are constructed through normativity, disablement and exclusion become automatic. This is because categories of inferior and superior, irrational and rational, the primitive and civilised, traditional and modern, the Black and the White, the civilised and the uncivilised, the powerful and the powerless, the 'able' and the 'disabled', are socially constructed and upheld. By virtue of the construction of a binary identity, one group dominates the other. The powerful dominate the powerless, and the abled dominate the disabled, hence there is marginalisation and oppression. In normative set-ups, difference, plurality and multiplicity are denied (Ndlovu-Gatsheni, 2001). Conversely, Ubuntu is inclusive as all diversity is considered, and it is against this background that Ubuntu is seen as an alternative. When the approach is applied in the context of South African higher education, students with disabilities can be enabled to gain access into higher education broadly, and

access all programmes they choose to study. Moreover, though they may complete their programmes later than others, it should not be considered delayed throughput but success.

The Ubuntu philosophy could work in terms of understanding that people are diverse but also equal in their humanity and humanness. Consideration should be made at the point of entering the university that those with disabilities have certain barriers. Thus, with Ubuntu as an organising principle informing the structures and practices of higher education, there could be a basis for including all students, including those with disabilities.

CONCLUSION

Normative parameters at different levels, such as the same entry requirement for all students, exclusive teaching practice, exclusive programme designs, and the same programme completion time for all students, are considered dominant disabling normatives in South African higher education. These manifest at entry, teaching and learning practices and in throughput. They further disable students with disabilities who are already disadvantaged due to their schooling background.

On the example of ableism, it can be concluded that while the South struggles to gain freedom from the oppression imposed by the West, it finds itself also perpetuating oppression by the very normative parameters and disablement mechanisms it is struggling against. The contribution this chapter is making against normativity and the disablement of students with disabilities is that rather than adopting policies, practices, and systems from the West to address issues of inclusion broadly, and inclusive education that suits all diversity, higher education could use the African philosophy of Ubuntu as a foundation, in which all persons are viewed as equals. It is time that countries in Africa, specifically South Africa, and those social categories impacting on students with disabilities by disabling normatives, find ways of overcoming specific normatives and disablement by changing structures, systems and practices that indirectly perpetuate oppression.

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Chapter 11
Disability and Education in Cameroon:
A Living Theory Perspective and Its Implications

R. Ndille

ⓘD https://orcid.org/0000-0001-7105-8515
University of Witwatersrand, South Africa

ABSTRACT

This chapter draws on the author's own experiences as a student and educator to provide another perspective of inclusive education in Cameroon. It is a call to attention to the day to day challenges that students with disabilities face in acquiring education in inclusive settings in the country. It may suffice for policy to state that education for persons with disabilities is best provided in inclusive environments based on their perceived advantages. However, an on-the-spot appreciation of the experiences of those in the field may reveal alternative results. This may be due to the milieu, the ignorance or negligence of those put as caregivers, and the non/poor implementation of policy. The author argues that while a significant volume of research is available in the country, presenting these experiences through a living theory methodology brings the reader closer to the personal experiences of students with disabilities and persons working with them. It further highlights issues which are often taken for granted when mainstream methodologies are adopted.

INTRODUCTION

As of 1 July 2020, official estimates of Persons with disabilities in Cameroon stood at 3,500,000 in a population of 26,542,203 people (World Population Review 2020). Of this number more than half are youths of school going age (Nkendem, 2016) of which UNESCO estimates that one in two is not attending school (in Carew et al., 2020). Where they do, they have lower rates of staying and being promoted (WHO, 2011). This situation has persisted for a while despite the over seventy-five years of discussions

on the international scene highlighting the need for rational policies and adequate resources to be channelled towards the education for persons with disabilities.

Recent research indicates however that some improvements are being made on the global front (Hallahan, Kauffman & Pullen, 2009; Bines & Lei, 2011; Jolley, Lynch, Virendrakumar, Rowe & Schmidt, 2018; Carew, Delluca, Groce, Fwanga & Kett 2020). Bines & Lei (2011) for example compared policy and practice in 28 developing countries and arrived at the conclusion that the education of persons with disabilities is being given more attention. This is because of a combination of factors including the progress in general school enrolments, which have enabled more attention to be given to children who are harder to reach, many of whom are disabled. The study also attributes improvements to an increasing awareness that universal primary education can only be achieved if the participation in schooling of such children is secured; the increasing recognition of the rights of persons with disabilities; and the changes in attitudes towards persons with disabilities.

While these findings corroborate local research in Cameroon (Shey, 2018; Tukov, 2018; Lukong & Jaja, 2016; Opuku, Mprah, McKenzie, Sakah & Bada, 2016; MINAS 2014 & Nofuru, 2012), it is important to mention that enrolment is not an end in itself. Even where research has demonstrated positive steps, it acknowledges that many gaps still exist in policy and provision of services for persons with disabilities attending school and that disability remains a significant factor in exclusion from schooling (Bines & Lei, 2011). The approach adopted in this chapter is motivated by the believe that an experience sharing methodology best captures the daily challenges that students with disabilities go through in Cameroon in the quest for inclusive education and significantly evaluates the state of policy implementation which is supposed to be in the interest of such students.

By way of structure, I start by presenting living theory as a methodological framework before presenting the global position on the education of persons with disabilities. This is then followed by a summary of the policies on the protection of the rights of persons with disabilities in the country with focus on their education. I then present a living theory assessment of the state of implementation. The chapter ends with some recommendations for best practice and a conclusion. A major purpose for adopting the approach used in this chapter is to enable those working with students with disabilities such as teachers and local school administrators think critically about their own work in order to continue developing their craft and improving the practice of inclusive education. This will not only increase access for learners with disabilities to inclusive schooling but will guarantee a high retention rate of such learners. This is so critical in a country like Cameroon where stigmatization is significantly high and statistics on disability continue to show annual increases (Kamga, 2013).

Recounting Personal Experiences as an Educator

The major purpose of this chapter is to recount my experiences as an educator in studying with and teaching students with disabilities in Cameroon. Such experiences would not only reveal the day to day challenges that such students face in acquiring education in inclusive settings but would serve as an evaluation of the level of implementation of policy on the education of persons with disabilities in the country. This is with the understanding that policy cannot be said to be satisfactorily implemented if those for which it is intended continue to face the same hurdles that the policy was required to flatten. It is for these objectives that the following guiding questions are set.

- What are my experiences and those of my informants regarding disability education in Cameroon?

- How do these experiences built to form the general picture of the experiences of students with disabilities in the country?
- How can the recounted experiences inform policy and provide alternative thinking in the practice of inclusive education in Cameroon?

The Living theory Methodology and Its Rationale

According to Gumede (2011, p.60) "methods must not prescribe problems; rather problems must prescribe methods." Mills also holds that "every man [is] his own methodologist!" (in Gumede, 2011, p.60). These living theory advocates imply that researchers must always adopt methods that enable them to present the situation in the most appropriate way that the information could be comprehended and used. Depending therefore on the circumstance, living theorists believe that research methods can be very idiosyncratic (Gumede, 2011, p.60).

The living theory methodology is a disciplined process of inquiring into the self by the self, thinking about one's own life and work as a practitioner so that one can continue developing oneself and one's work (McNiff and Whitehead, 2009, p.104). It is part of the practitioner-researcher theory (Jarvis, 1998; Newman and Woodrow, 2015; Slater and Kothari, 2016) which holds that educators are expected to be both effective practitioners and reflective professionals who need to assess their own actions, compare and reflect on own and others experiences and incorporate such with other reliable research findings in order to change and improve the state of things in the field. That is why living theory is said to rest on two things; embodied values, and the standards of judgment. Embodied values here include values of originality of mind and critical judgement of experiences which enables a researcher to focus on an objective and trustworthy presentation of facts. On the other hand, standards of judgement refer to the basis for which conclusions are reached which for this case should be the level of transformation or what Noffke (1997) calls 'the level of system influence.

In adopting the living theory methodology, I tell the story of the education of persons with disabilities as I have lived and continue to live it. This story enables the reader to appreciate the state of policy in the education of persons with disabilities and how it affected and continues to affect their acquisition of education. As one improves one's practice a new epistemology for societal improvement is developed. This may not only be found in the personal reflections and images that readers may immediately make of their own practice as they engage with the story being told but also in the recommendations that the analysis makes. According to McNiff and Whitehead (2009) the logic of any inquiry presupposes that there must be a purpose for which research in undertaken. Applied to this context, the changes which may come from the personal reflections upon engagement with the story or the recommendations that the story makes are expected to enhance present and future practice in disability education at the personal and grassroots school-community levels; impacts which official top-down policies (as it is often the case) may not achieve (Buse, et al., 2005). The living theory perspective makes more meaning within a general appraisal of the state of literature in the area. It is based on this that I employ it alongside a critical document study and empirical research review. This form of triangulation exposes individual experiences captured as living theory within the general educational experiences, situations, continuities and changes which are presented in the documents and reviewed literature and which have impacted many a child with disabilities in Cameroon.

A GLOBALLY RECOGNIZED INCLUSIVE EDUCATION PERSPECTIVE

Societies have learnt to live with persons with disabilities from the beginning of time. They have either treated them as outcasts or included them in the mainstream social and economic life of the community. Prior to the 20th century pitiful stories of how persons with disabilities in Europe and America were quarantined or injected with substances, which further disabled them and how those in Africa were viewed as cursed and left to die in evil forests or confined to particular rooms in homes or sections of villages abound (Ndille, 2015; Kamga, 2013; Hallahan, et al., 2009). However, at the dawn of the 20th century, the perception of persons with disabilities began to change in favour of their being socially recognized as human rights for all became universally accepted and implemented. In the educational sector, such rights emphasized the need for all persons with disabilities to acquire some form of training as a way of fully integrating them into society. The hospitals and other care-giving institutions of the 19th and early 20th centuries were gradually converted into special education centres. Even then, recurrent practices of discrimination convinced the international community that there was need for the establishment of structures within which persons with disabilities would gain access to education on an equal basis as a human right (WHO, 2011).

While not intending to bother the reader with a list of international standards here, it suffices to mention that from the espousal of the United Nations Charter in 1945 to the adoption of the International Convention on the Rights of Persons with Disabilities (CRPD) in 2006, the global trend has been in favour of providing education for persons with disabilities in an inclusive environment. Article 24 of the CRPD enjoins the states parties to provide, at all levels, an inclusive education system that is aimed at achieving the 'full development of the human potential, a sense of dignity and self-worth (Article 24:1). It specifies that states must guarantee the non-exclusion of children with disabilities from free and compulsory primary and secondary education (Article 24:2a). They must also guarantee effective individualized support measures in environments that maximize academic and social development, consistent with the goal of full inclusion (Article 24:2e). The CRPD further states that states parties must take appropriate measures to facilitate the learning of braille, alternative script, augmentative and alternative modes of communication as well as facilitate peer support and mentoring (Article 24:3a). It also highlights the learning of sign language and the promotion of the linguistic identity of the deaf community (Article 24:3b). To enable these succeed states parties are required to employ teachers, including teachers with disabilities, who are qualified in sign language and/or Braille, who would work at all levels of education of people with disabilities (Article 24:4a). Indeed, the CRPD has been hailed as a great landmark in the struggle to reframe the needs and concerns of People with Disabilities in terms of human rights.

The relevance of education for persons with disabilities in inclusive environments is viewed as a human right and as an opportunity for educated persons with disabilities to acquire the same benefits that society offers to everyone. Many countries have put this in their affirmative action policies which strive to make the workplaces more representative, non-discriminatory and fair. As such policies go, qualified people from disadvantaged or under-represented groups that have previously suffered discrimination such as women, LGBTs and persons with disabilities have equal opportunities in the workplace. Most countries require that such affirmative action strategies should be established to increase the recruitment and hiring of individuals with disabilities. Without the education of persons with disabilities, the goals of such policies will be hardly achieved. Therefore education not only removes stereotypes and eliminates discrimination but enhances self-employability and increases the pool of qualified job applicants available for hiring. Nearly one half of the working age people with disabilities are unemployed. Anyone of

these individuals may be the best person for the job an employer is seeking to fill if he/she acquires the right type, quality and level of education (Republic of South Africa 1998).

INCLUSIVITY: THE LEGAL OPTION FOR THE EDUCATION OF PERSONS WITH DISABILITIES IN CAMEROON

In terms of Cameroon's response to the international standards, there is evidence of policies in place albeit challenges. A brief survey indicates that prior to independence and reunification in 1961, the British colonial administration treated persons with disabilities as sick and supported their confinement missionary rehabilitation centres. On the French administered Cameroons side, colonial legislations adopted a similar position-regarding children with disabilities as 'children in moral danger.' Through court decisions, they could be admitted into special reception and observation centres (Ndille, 2015).

With independence and reunification, the Federal Constitution of 1961 became the first national document to highlight the concept of human rights and inclusion. Although the term inclusion was not used, it was implied in the concept of non-discrimination. The preamble affirmed the peoples' firm attachment to the fundamental freedoms enshrined in the UN Charter and UDHR, the Charter of the United Nations, the African Charter on Human and People's Rights, and all duly ratified international conventions relating thereto (Federal Republic of Cameroon, 1961). These values are reiterated in the current constitution (Republic of Cameroon, 1996) and the Penal Code which in Article 242, punishes any discriminatory practice with various periods of imprisonment and fines. Article 282 specifically criminalizes the neglect of persons with disabilities (Republic of Cameroon, 2011).

As far as specific frameworks regarding persons with disabilities are concerned, the first one was only passed in 1983; Law No. 83/13 of 21 July 1983 relating to the Protection of Persons with Disabilities (United Republic of Cameroon 1983). Its decree of Application No. 90/1516 of 26 November 1990 came seven years later (Republic of Cameroon, 1990). The 1983 law required that all persons living with disability had to be officially identified. Their condition of disability had to be ascertained by competent medical personnel who had to issue an attestation of disability free of charge indicating the nature and degree of the disability [Chapter 1, Article 2]. This was to be followed by the issuance of a national invalidity identity card to the concerned [Chapter 1, Article 4]. This was to be used to access public benefits aimed at facilitating their integration into mainstream society rather than promoting exclusion.

As far as education is concerned, the 1983 law explicitly provided for equal access to education of persons with disabilities in inclusive environments [Chapter 1 Article 3]. To achieve this, the government had to provide at least one specialized staff and appropriate teaching aids to help facilitate the learning of such children [Chapter 1, Article 5:7]. Chapter 2, Article 2 provided for an age waiver to enable the child with disability to be admitted in an appropriate class in an inclusive school. The age waiver was to be issued by the minister of education concerned but had to be applied for through the Minister of Social Affairs. Children with disabilities could also repeat a class up to two times in cases where it was ascertained that their failure was as a result of their physical and mental condition [Chapter 2, Article 5:3]. It also required all schools to provide the necessary facilities for easy access for children with disabilities [Chapter 2, Articles 35].

Generally, the 1983 law and its 1990 text of application only considered the need for special or separate education with specialized instructors for persons whose disability conditions were to be evaluated as severe and could not provide for a life within inclusive educational environments. Even then such op-

portunities were only viewed as temporary with the final aim of integrating the concerned in an inclusive environment as soon as conditions improved [Chapter 5 Article 9] (United Republic of Cameroon, 1983). By all intents and purposes therefore, the 1983 law and its text of application seemed to be attuned to the international trend of providing for the education of children with disabilities in inclusive environments.

In 2010, a new law was passed; Law No. 2010/002 of 13 April 2010, on the Protection and Welfare of Persons with Disabilities (Republic of Cameroon, 2010). This is the most recent law in the country but its text of application is still awaited. Unlike the 1983 law, the current law is quite ambiguous in terms of a clear-cut policy on the education of persons with disabilities. For example, in Chapter 3 Section 16, where it outlined its perspective on the education of persons with disabilities, the law states that this would comprise psychological support; medical rehabilitation, functional therapy and special education. On the other hand, in Chapter 5 section 3, it talks of providing access to institutions and public structures for persons with disabilities as the best way of ensuring their integration and upkeep in a normal working and living environment. Besides, unlike the 1983 law, there is nowhere that the 2010 law used the term inclusive education or inclusion. In the absence of a text of application, the education of persons with disabilities continue to be determined by ministerial orders, which are sometimes not unanimous in their approach.

During the first decade of independence (1960-1970), persons with disabilities were regarded as sick and in need of medical attention. They were placed under the Ministry of Public Health which promoted the establishment of specialized centres for their confinement and treatment (Kamga, 2013). This approach was inherited by the Ministry of Social Affairs to whom such responsibilities were transferred upon its creation in 1975 (MINAS, 2012). Until date, the welfare of persons with disabilities and their education continues to be the responsibility of the Ministry of Social Affairs rather than the ministries of education. Chapter 3, Section 18 of the 2010 law states that the Ministry of Social Affairs shall be responsible for the coordination of all actions leading to support for persons with disabilities and Decree No. 2018/190 of 02 March 2018, stresses that the Ministry of Social Affairs is the official arm of government through which state policy on persons with disabilities is to be implemented (Republic of Cameroon, 2018). In terms of the education of persons with disabilities, the ministry continues to adopt the special school position as prescribed by Sections 16, 25 and 27 of the 2010 law. The ministry oversees 404 state and 1199 private social structures in Cameroon operating as special education institutions (MINAS, 2008). By this position, there is no basis for which the state can be held accountable for the non-implementation of an inclusive education agenda.

However, despite the position of the Ministry of Social Affairs, the various ministries of education pronounce favourably for persons with disabilities not to be discriminated against in the mainstream educational sphere. In 1998, Law No. 98/04 of 14 April 1998 on the Orientation of Education in Cameroon (Republic of Cameroon, 1998) talked of compulsory basic education for all. A decree of the head of state in 2000 followed with making primary education free of charge for all without distinction. In 2001, Law No. 005 of 16 April 2001 on the Orientation of Higher Education (Republic of Cameroon, 2001) talked of using higher education to eliminate all forms of discrimination and to strengthen equal opportunities for all. These efforts have since been recognized as essential for the education of persons with disabilities and have led the Ministry of Social Affairs to reconsider its approaches to the education of persons with disabilities. In 2006, the Ministry of Social Affairs and the Ministry of Secondary Education even signed two joint circulars committing to guarantee effective integration of persons with disabilities in the mainstream school system. This included a fee waiver for students with disabilities (Republic of Cameroon, 2006). At the level of higher education, Joint Circular No. 08/0006/L/MINE-

SUP/MINAS of 9 July 2008 made similar commitments, including the recruitment, training or retraining of specialist staff; taking the disability factor into account in academic assessments, the building and equipping of teaching areas, sports and leisure facilities and equipment; giving disabled students priority access to student organizations, and, for the most deserving, the benefit of support for academic excellence (Republic of Cameroon, 2008a).

In addition to the above efforts, the Prime Minister, Head of Government in 2008 also issued Circular No.003/CAB/PM of 18 April 2008 which recognized that the ability of disabled persons to enjoy their fundamental rights to inclusive education could be jeopardized, if they are unable to move around and access the locations where educational, occupational, cultural and social activities are taking place. It therefore called on contracting authorities and subcontractors to consider accessibility concerns raised by persons with disabilities in the award, implementation and supervision of public contracts such as school buildings, administrative offices, hospitals, roads and other public infrastructure (Republic of Cameroon, 2008b). Despite the official government policy, these measures indicate that for a long time there has been a positive attitude towards inclusion. However, the question remains; are students with disabilities achieving the intended goals of inclusion? A living theory analysis enables us have an impression of the situation on the ground in the country.

EDUCATION OF PERSONS WITH DISABILITIES IN CAMEROON: A LIVING THEORY PERSPECTIVE

This narrative is based on my experience as a student and teacher in an inclusive educational setting in Cameroon. Cameroon has always observed a certain degree of inclusive education. From my primary school days we have always been in class with children with one form of disability or the other. One of the earliest ones I remember is a classmate I would call Epie for the sake of this analysis. I attended the government Bilingual high school Kumba station. At least that is what it is now. Then it was a newly created secondary school meant to decongest the overcrowded Cameroon college of arts and science on the other side of town. Two things were wrong with this school which made learning difficult for Epie and other students with his type of disability. Epie was one of the new classmates admitted with us into this school. He was physically disabled on both legs and used a tricycle.

The first thing was that coming to school was a challenge as the school was located at Up-station. Up-station Kumba is located on a hill; a former colonial government settlement which became the administrative centre of the town. For Epie, living downtown meant that he had to paddle this tricycle uphill every morning for a distance of more than 15 km. He relied on the generosity of school mates who met him on the way to push his tricycle up the hill to station and then into the school compound. As late coming was severely punished with an uncountable number of whips very few students would want to venture to be delayed by pushing Epie's tricycle despite his sweet tongue. In most cases Epie would arrive late to school well into the second or third periods of the day. Hand paddling the tricycle was not an easy job for him nor was pushing easy for those he beckoned to help him push it up the hill.

The second problem was that the school was made up of storey buildings. Being under construction for the first few years, we were stuck on the upper floor of the building for four years. No consideration was made for Epie and others in his condition. He had to rely, once again, on our kindness to get him to the classroom upstairs. On days when he arrived late and there was no one to carry him, he had to crawl his way upstairs at the risk of sweeping the staircase with his school trousers as he scuttled along.

By the time he got to class, Epie's palms, shirt, trousers would all be either dusty or muddy. His plight was worsened by the fact that the toilet was located downstairs. Like the classroom, the toilets were not wheelchair or tricycle adapted. Once again, our mate had to rely on our kindness to answer nature's call. Considering the number of times, Epie had to be carried up and down the staircases, and the very strenuous trip to school, it could be said that acquiring an education as a wheeled chair student was more than exhaustive.

Epie's case reveals how school infrastructure can affect the learning of a person with disability. Most of the government secondary schools in urban centres in Cameroon are story-buildings with no opportunities for wheeled chair students to circulate conveniently between the school floors. Apart from the classrooms, ease of access to administrative offices, convenience rooms and canteens become a huge challenge to students like Epie. While laws, policies and legislations have been put in place to encourage children with disabilities in regular schools, in most cases in Cameroon, the laws are made without taking into consideration the suitable physical school environments in terms of infrastructures for accessibility (Tukov, 2008).

I also remember vividly a student I taught at secondary school and at the university. Unlike Epie, I had the chance to interact with this student being a student minoring in my African history classes at the university of Buea. In a conversation, Miriam (I will call her so) told me she 'had polio when she was three years old. She could not walk to the local mission primary school which was again located on a hill. She was carried to the school each morning by her mother and her friends even threw tantrums at her.' Even when she grew a bit older, the parents unlike Epie's could not afford a tricycle. She was withdrawn from the village primary school and sent off to a special school where she spent three years and learnt how to use crutches. Entering secondary school meant once again an inclusive school on another hill. The challenge was not only to get to school but go down the sloppy road back home. The hills and the stairs made access extremely difficult. Using the latrines meant squatting; a task that would be performed with extreme difficulty for a girl on double crutches. According the Miriam, she was in a better condition than a friend of hers on a wheelchair. Everyday she would come out of her wheelchair and crawl to class because there was no way to enter the class with her wheelchair. It was very disturbing as she had to wash her uniform every day.

Despite the odds, Miriam passed the GCE and registered in the University of Buea. This meant that she had to live in a student hostel where finding a ground floor room made things easy for her. But at the university of Buea, like Epie's secondary school, the infrastructure is still extensively insensitive to the plight of those with mobility impairments. Miriam and others in her state have to access classes through a flight of stairs; arriving late most of the time; sometimes staggering, falling, rolling backwards and further injuring herself. On this fateful day she recounts;

I had a test to write in Classroom Block II 50E (upstairs). We were more than a hundred in that class and that classroom has less than 30 spaces. I knew there would be a rush for space and made all efforts to arrive early. Unfortunately, on climbing the stairs, I was caught between the crowd of students rushing into the classroom and those exiting whose lecture had just come to an end. I lost my balance and found myself tumbling to the last staircase. It was embarrassing. However, a person in my condition had to get used to falling and getting up even in the stony streets of Molyko (the university neighbourhood) where the list pebble was likely to sweep you off your feet.

Those who are conversant with the University and the Buea municipality would agree with the Miriam experiences. Most of the Buildings on this campus, including those constructed recently like the classroom block she describes do not respond to the needs of those with mobility impairment. This including the administrative buildings and halls of residence. Lukong & Jaja (2016) present a similar situation in the rest of the primary and secondary schools in the province. They report that these schools did not have standard ramps; that the steps were too high of disabled to circulate on the campuses conveniently and that appropriate school to home transportation for disabled was non-existent in most towns.

A second group of students I have worked with are deaf students. As a secondary school teacher, I taught history in a Baptist college which practised inclusion; The Baptist Comprehensive High School (BCHS) Njinikijem-Belo. The school receives primary school graduating deaf pupils from a special primary school operated by the same mission in a neighbouring village. The challenges that these students faced in following up classes required that teachers working in this school be given some sort of elementary training in sign language, but this was not the case. There was one specialist teacher in the school who would sit in the classroom to explain in sign language what I was teaching/lecturing. A fine and energetic Mr. Charles who did his work with passion and spent all days on his feet from one class to another. Just the imagination of being in his shoes is frustrating.

The learning of the deaf students was affected by a few practices. First because there was only one specialist teacher to many deaf students distributed in most of the classes, the teacher had to decide which classes and subjects he had to attend. This meant that when he didn't show up in a particular lesson, the deaf students in the class had to contend themselves with copying notes from the notebooks of other students if the teacher didn't write them on the chalkboard. The second thing was that, it became particularly difficult for them in subjects that required lots of explanations like mathematics. In such classes, even the passionate Mr. Charles would lose out. We made do with writing a lot on the board, but we couldn't do this in the more senior classes which were preparing for public examinations like the General Certificate of Education. In such classes, most teachers predominantly used the lecture method and dictated the lesson contents to students. The effect was that by the third year of schooling, the number of deaf students in the more senior classes began to dwindle as they could not meet up the challenges of inclusion at that level.

As a secondary school teacher, I didn't teach in a school which accommodated visually impaired students, but the Cameroon Baptist Convention schools' system had designated another of its secondary schools to receive visually impaired students; The Joseph Merrick Baptist College (JMBC) Ndu. However, as lecturer of history at the University of Buea, I had the experience of teaching visually impaired students. Like Miriam, a majority of them registered in the faculty of education where a Special Needs Education Programme (SPE) had been set up but took history as a minor subject. They attended some of the compulsory history modules I taught such as the history of political thought and African history. An exciting thing with this group of students is that within a few days of arrival on Campus, you could see them walking around the paved alleys of the university with the white cane unaided. I still remember a particular gentle man (Armstrong) whose skills amazed me. However, the dark side, as I presumed it was, was in the lecture halls. Giving a lecture in a mixed class of visually impaired students using braille and non-visually impaired students was a huge task, which in the major of cases disadvantaged the visually impaired.

I must mention that most of the time considering the lecture durations and the volumes of course contents to be covered, following up lectures at the teacher's pace and making notes on brail was quite a huge task for them. In most cases Armstrong would stop and ask me to repeat a portion of the lec-

ture. Besides, our lectures were accompanied by reading references. As teacher of history to visually impaired students, I have never seen a History book in braille, but I required that all my students study from recommended texts and handouts in preparation for subsequent lectures, in doing assignments, or revising for tests and exams. Although a significant number of them did well in my history courses, there is no doubt that the nature of instruction evidently put the non-visually impaired students at and advantaged position.

This account may be an individual's experience, but studies have shown how students complain that the nature of instruction in inclusive settings in the country does not take their disabilities into account. One student was quoted in Shey (2018) to have said that many university teachers do not have knowledge or skills with regard to teaching students with special needs. Some are perhaps directly negative, others only confused and afraid, still others overlook or overprotect us. Lukong & Jaja (2016) also found that teaching methods which remain predominantly teacher-centred and systems of evaluation did not permit the full expression of the potential of students with disabilities. A hearing-impaired informant quoted in Opuku et al., (2016) asserted that "I was in a public school, but my class teacher told me to stay home since going to school won't help me in life…. I knew it was difficult for them to teach me since they had no formal training in sign language…. They (teachers) learn the sign language from us (students)…. Very few can read braille. Every year, most of the students fail because we don't have the right teachers in the schools (in Opuku, et al., 2016).

What the above narration reveals is that there are unsurmountable challenges that continue to gawp students with disabilities in the face in Cameroon in their attempts to acquire education as a human right in inclusive settings. As the title of Kamga's 2013 article implies, children with disabilities in Cameroon are forgotten under the Cameroonian and international dispositions relating to non-discrimination in education. Like Kamga, Shey (2018) has attributed this problem to the absence of an inclusive education policy, which they hope will bring the most needed solutions in the field of inclusive education. While the enactment of such a policy is still awaited, the existing national legislations regarding the protection of persons with disabilities including their education (some of which have been in place since 1983) have shown, as seen above, that the national policy is in favour of inclusive education. When this is therefore reasoned along the lines of implementation, one would go beyond a lack of policy to find an answer to the problem.

As Frankin Essame asserts, the Ministry of Social Affairs in Yaoundé (the Capital) which is the government department in charge of persons with disabilities has not lifts or ramps. It is a pity to see disabled persons being carried on the backs of others to access administrative offices. The same applies to its regional delegation buildings. The same applies to other government offices in the region including the delegations of education. The problems are not only confined to the schools but extend to all administrative offices, public places and even churches. Esseme argues that, for more than ten year now, over three government policy documents have highlighted the need for public infrastructure to accommodate persons with disabilities (in Norufu, 2012). The 2010 law on disability pronounced on the requirement that all construction and renovation of inaccessible infrastructure and buildings that are open to the public should consider the accessibility for disabled citizens. A degree of the minister of social affairs had made a similar pronouncement three years earlier (in 2007). The decree required contractors and subcontractors to consider persons with disabilities when constructing government buildings. A similar instruction was echoed in the 2010 prime ministerial decree.

The fact that these measures are not being implemented even as pacesetter efforts by ministers who enacted them completely reveals that the solution to the problems of persons with disabilities is not that

of policy but that of attitude and a lack of will to better the conditions of this group of persons. According to Samuel Nyingcho the president of the coordinating unit for disabled in the North West region of Cameroon, disability in itself is not a problem. The problem is the attitude. It is because of attitude that 'we have infrastructure developed without taking into consideration the pride of persons with disabilities in the 21ˢᵗ century.' According to him, it is very disturbing if you have something to do in an office, but you cannot go inside because of the way buildings are structured (in Nofuru, 2012). This attitude is not limited to infrastructural access. It is reflected in people's opinions about the disabled and teachers approach to the teaching and evaluation of persons with disabilities (Opuku, Mprah, McKenzie, Sakah and Badu, 2016). As one of Shey's informants lamented "it is attitude and not policy that would make a person schedule our classes on the second floor where we cannot reach with our wheelchairs" (Shey, 2018).

THE FUTURE OF INCLUSIVE EDUCATION: FROM TOP-DOWN TO BOTTOM TOP TRANSFORMATION

The evidence above suggest the existence of policies on the education of persons with disability in Cameroon. These policies point to the need for inclusivity. For more than two decades there have also been implementation directives emanating from decrees of application to ministerial *aretes* that explain how the right to inclusive education should be achieved. However, the success of this policy depends on those in the field charged with implementation and there are some positive steps in this direction. The University of Bamenda; being the most recent creation of public universities has adopted an inclusive infrastructural policy with visible ramps in all its buildings for persons with disabilities to access all structures on Campus. But this is still to go beyond access to ground floors of storey buildings. At the University of Buea, the faculty of education offers training in special needs at the Bachelor, Masters and Ph.D levels through its Special Needs Education Programme. The University also hosts the UNESCO Chair in Special Education. The chair promotes research in special needs education, makes available special equipment for disability education and facilitates the transcription of tests and exam papers from brail for teachers to be able to evaluate such students effectively.

The above notwithstanding, local actors like school administrators and teachers especially in the secondary and primary school levels need to do more to make the education of persons with disabilities hassle free. This can be achieved at the pedagogic and administrative levels. For instance, as far as the former is concerned, in classrooms where there are learners with disabilities, the adoption of inclusive teaching strategies and attitudes that accommodate all learners is very important. Specific reference is made to cooperative learning; a set of teaching strategies in which students with different abilities, skills and achievement levels learn together and take responsibility for both individual and group achievement. Such strategies reject competitive individualistic tendencies, and foster cooperation 'working together.' (Medcalf, 1995). The implementation of these strategies amongst other things requires teacher change of attitude in setting objectives for lessons and assigning students to supportive peer groups. It also requires setting and enforcing ground rules for respectful interaction in the classroom such as guidelines for contributing ideas and questions and for responding respectfully to the ideas and questions of others. In this case if a student's conduct is found to be silencing or denigrating others (intentionally or not); something that often make learners with disabilities uncomfortable and feel excluded, the teacher must remind the entire class of the ground rules and then talk with the student individually outside of class about the potential effects of their conduct.

School authorities must get to know their students with disabilities personally to understand their challenges, their perspectives, their individual skills, experiences, and the potentials that they may bring to the learning environment in particular and school success as a whole. These may be in co-curricular activities such as sports, arts, and music. While these may be enhanced in cooperative learning environments that enable students with disabilities to participate actively in-group activities, communicating high standards and expectations from students with disabilities and expressing confidence that every student can achieve them significantly enhances the potentials of learners with disabilities. This is what Dweck (2006) calls fostering a 'growth mindset' by conveying the idea that intelligence is not a reflection of fixed, natural abilities and potentials but can change and grow over time. As he cautions, teachers must stop talking about performance in class activities, assignments and exams as a sign of natural ability (or lack of ability) because doing so may activate threat, a phenomenon in which students' awareness of negative stereotypes that link identity and ability can lead to what Steele (2010) refers to as depressed academic performance. Such stereotypes are deeply engrained in students with disabilities in Cameroon. Some revealed to Opuku and colleagues that:

[They] are suffering because most people in Cameroon think disability is a curse…. They don't want to come close to me. Even if I need help, no one wants to come and help me because they think my grandfather cursed my mother…. Anytime I offend someone that's what they tell me and it makes me cry a lot when I'm alone… I'm always alone because nobody wants to be with someone like me…. It is very sad that our own people don't believe in us. It hurts my soul to hear people say 'what can he do?' They doubt what I can do and always don't see me as a valuable person (2016, p.6).

Inclusive pedagogic practices have been found to help eliminate such stereotypes in the school and enhance the potential of those with disabilities with predominantly positive results in terms of fostering essential skills, social acceptance, communication abilities; visibly reduced rates of stigmatization and overall cognitive performance of such students (Medcalf, 1995; O'Connor & Jenkins, 1995; Ellala & Alslaq, 2017; McMaster & Fuchs, 2002). As one of them mentioned 'we are also humans, and there is a lot that we can do if given the chance or opportunity…. Such revelations transcend the school environment to the homes and communities and constitute what I have referred to as grassroots attitudes which hold the key to the enhancement of inclusive education policies in the country.

Apart from teaching and learning strategies local efforts at the administrative level would also include investing local funds in improving the academic potentials of students with disabilities. Most school administrators would complain of limited funds from hierarchy and attribute their inabilities to acquire pedagogic materials and carry out infrastructural maintenance on this. However, there is evidence that most schools have alternative sources of financial support such as Parents Teachers Associations (PTA). Such finds have been known to improve the quality of learning and infrastructure in most institutions (Mutinda, 2013; Gutuza, 2015) and if there is a will, could be channelled to making access to classrooms, office buildings, playgrounds etc easy for students with disabilities in Cameroon such as in the building of ramps. It is also the responsibility of local school authorities to identify classes which have students with disabilities and place such classes on ground floors of buildings or on sections of the campus where such students would enter and exit buildings with the most convenience like every other student. Although such measures may have been mentioned in national policy documents, it is incumbent on the local authorities to implement them. This includes making efforts to ensure that learners with disabilities benefit from the privileges prescribed by policy such as the non-payment of tuition fees.

Teachers and school authorities must remember that their silence in the face of the most basic challenge that students with disabilities face is often read as endorsement. Therefore, it is important to take action to try to improve the learning environment for all. This is what I mean by the future of inclusive education lying in the grassroots mind-set which would start with a change of attitudes of those directly working with persons with disabilities. This would require a teacher to make an effort to accommodate both disabled and non-disabled in their methods of teaching and evaluation; would require a local administrator to understand that he/she may be visited by a wheelchair user and thus prompt him to adapt his building entrance to the mobility demands of crutch, tricycle and wheelchair users. It would also require students who are not disabled to understand that a little helping hand to a disabled is commendable; in assisting with reading notes, accommodating them in study groups or leading them to the right directions and giving a little push on a disabled wheelchair or tricycle.

Without shifting government responsibility for the effective implementation of education policies or making them complacent, it is important to observe that a critical look at the way government handles educational policy implementation in the country tells that, like in the attitude of creating schools and leaving the responsibility for its construction and sometimes equipping to the local community, very little would come from recommendations that dependent on central services for implementation. This may not be the case elsewhere and is not intended to minimise the efforts that some government departments have already begun but argues that such efforts in terms of their perceived impacts have so far not significantly driven transformation towards effective inclusive education and this may continue for some time.

This position is based on four considerations. First, Government is still to ratify the International Convention on the Rights of Persons with Disabilities which they signed in 2008. It has not also passed the degree of application of its 2010 law on the protection of persons with disabilities. These two steps have been extremely belated. If they had been addressed, many believe that by now, they would have helped to legally contextualize the implementation of inclusive education and cause rapid implementation by state authorities. Such reference documents would have at least provided an avenue for civil society to hold defaulters and nonconformists accountable.

Secondly, even though inclusion resonates in the educational milieu, based on the 2010 law the position of government is not yet clear regarding inclusivity. The ministerial department officially responsible for the education of persons with disability remains the Ministry of Social Affairs. In terms of the education of persons with disabilities, the ministry continues to adopt the special school position. As Sections 16, 25 and 27 of the 2010 law, continue to articulate that government policy remains in favour of special rather than inclusive education environments, the ministry continues to oversee more than 404 state and 1199 private social structures in Cameroon operating as special education institutions (MINAS, 2008). Officially, thus, government's policy and its implementation approach through Ministry of Social Affairs can therefore be said to be antithetic to international standards, which favour inclusive education and provide no basis for which the state can be held accountable for the non-implementation of an inclusive education agenda.

The third reason is closely linked to the above. Attributing the responsibility for the education of persons with disabilities to the ministry of social affairs implies that budget allocations for the education of persons with disabilities may not be attributed to the ministries of education. This not only breeds reluctance on the part of the respective ministries of education to fund and provide logistical and infrastructural amenities to enhance inclusion despite their various pronouncements but also make them see the education of persons with disabilities as another department's responsibility. There is therefore

need for such a responsibility to be officially handed to the various ministerial departments responsible for different levels of education for inclusion to be effective. This must be made clear in a revised law on persons with disabilities in the country and inclusion should be officially imprinted as state policy.

The fourth and final reason is a general consideration of the nature of top-down approaches to policy development and implementation. While this approach may have its strong points it has been found to be less effective than bottom-top approaches. According Buse and colleagues (2005) in most top-down approaches to policy development stakeholders especially at the subaltern level where implementation is required find it hard to identify with the policies because such legal texts often emanate from government central services and often adopt the perspectives of higher-central authorities and neglecting the opinions of frontline actors (Buse, et al., 2005; Tambo, 2000). Because the front-liners do not identify with policy, it becomes very unlikely that implementation would be effectively guaranteed. On the other hand, the bottom-top approach to policy development highlights the need for field experiences of teachers to be shared through perspectives as living theory and subaltern studies. A primary importance of such reflections is that it improves one's craft. According to Buse, et al., (2005), the living theory recognizes that individuals at subordinate levels are likely to play an active part in implementing and may have some discretion to reshape objectives and change the way it is implemented positively using the most minimal means without seeing them as implementing instructions from hierarchy (as top-down approaches seem).

The living theory perspective also requires that practitioners should adopt grassroots level strategies as mitigating solutions to problems while waiting for the long-term development of legal instruments at the top. This requires that instead of research to shift the responsibility for improvements to central authority, those on ground, local municipal authorities, school administrators, and teachers should adopt positive attitudes towards inclusion and seek to remove obstacles to inclusion at their levels. In this way, while living theory serves an individually conscientising role, it propels people to personal action and individual improvements. Such individual initiatives would snow-balling and off-set the status-quo.

CONCLUSION

The chapter has described the fate of persons with disabilities in their quest for education in Cameroon through a living theory perspective. It presented governments efforts and assessed implementation through recounted experiences. The paper concludes that persons with disabilities in Cameroon still face a lot of challenges in the acquisition of education as a right despite a significant volume of policies in place guaranteeing the implementation of this right in inclusive settings. While a good number of disabilities requiring significant investments in technologies remain unaccommodated in mainstream education in Cameroon, efforts in conveniently settling those with mobility challenges, visual and hearing impairments, are surprisingly still a major issue in the country. In places where there is a will to implement policy, challenges such as visual, hearing and mobility impairments have long been settled and students with such difficulties are more than satisfactorily integrated in local inclusive education settings. In Cameroon, with the non-ratification of CRPD and the still awaited text of application for its 2010 disability law coupled with the overarching role of the ministry of social affairs and its sitting on the fence position, there is much to meet the eye in terms of disability rights in education in inclusive settings. These notwithstanding, the key to transformation rests not with government central services but with grassroots individual and collective initiatives; of teachers, students and local administrators each

making a determined effort to play a part in making the school settings, lessons and social environment all accommodating for students with disabilities.

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Chapter 12
Technology Use Among Academics With Disabilities Within a Transforming University

Phefumula Nyoni
University of Johannesburg, South Africa

Tafara Marazi
University of Zimbabwe, Zimbabwe

ABSTRACT

This chapter focuses on the experiences of academics with disability within a Zimbabwean university context. Transforming universities under the Education 5.0 policy in Zimbabwe despite its good intentions has revealed some of the unresolved challenges. This chapter reveals how transformation practices especially with increase in technology use have presented opportunities and challenges for disabled sections of academic society within university spaces. The chapter also highlights how academics with disabilities face and how they ultimately negotiate their way within diverse structures that act as enablers on the one hand whilst being equally a source of barriers on the other. In-depth interviews, observations, and literature are used. The chapter concludes by highlighting how the importance of being conscious to contextual factors and embracing day to day experiences could represent opportunities for broadening access to technology and subsequent inclusion of academics with disability whilst also aiding transformation of universities and the broader Zimbabwean society.

INTRODUCTION

The process of transformation in Africa as is the case worldwide has taken different dimensions. Despite some notable achievements with transformative action in various African countries, a combination of the colonial legacy and inadequate policy interventions has seen the challenge of social injustices remaining an issue of concern. Injustices have become increasingly concerning at present in particular when it comes to access to technology by academics with disabilities. In this regard, the chapter seeks to deal with the following questions; what forms of technologies do academics with disability have access to within transforming universities?; How do the academics with disability explain their experiences with various technologies they use in teaching and learning in particular in relation to inclusivity; What types of assistance is provided by transforming universities to academics with disability; In what ways do academics with disability deal with various challenges they face regarding various technologies accessed in transforming universities.

Foley and Ferri (2012) have emphasised the potential of technology, in particular, to enhance connectivity to people whilst also broadening access to education, commerce, employment, and entertainment is increasingly become an important element for transformation in a rapidly changing world. It follows that when it comes to universities or countries that seek to anchor the transformation of their economies through knowledge and innovation derived from universities, technologies could become key in breaking down barriers and intensifying access ad inclusion for persons with disability. In reality, however, a cautious approach is required as technology can also create unforeseen subtle forms of social exclusion for disabled persons.

As argued by Unser (2017), the implication has been that access to assistive technologies ought to be viewed beyond the 'haves' and 'have-nots' divide. Such a divide is said to be equally important to explore when particularly looking at settings that involve the disabled and non-disabled. Technology consequently tends to be biased towards promotion of certain ways of being, largely linked to normative, social, cultural, and economic practices. The bias is further manifested in the design, manufacture, marketing, and distribution of technology (Foley and Ferri, 2012). This implies that technology ought to be viewed as designed in ways that reflect taken for-granted ideas related to understanding diverse interpretations of what constitutes normality, inclusion and by extension accessibility. It thus, follows that lack of access to requisite technologies and other forms of support results in subtle forms of exclusion that have been promoted in transforming contexts as part of initiatives aimed at expanding opportunities for connecting previously marginalised individuals and groups to mainstream society.

Mapuranga and Nyenya (2014) have provided crucial statistics that explains that some of the prevalence of disability at global and local levels. They have thus revealed that studies on people with disabilities have shown that 10% of the world population consists of persons with disabilities (PWDs) (Mapuranga & Nyenya, 2014). Another important statistical picture is presented by Cappa and Loeb (2012) who depict Zimbabwe as having 1.9% of its population being persons with disability. Lang and Charowa (2007) have made an alarming revelation which has highlighted that most of Zimbabwe's persons with disability are poor, excluded, and socially marginalised. What is important for this chapter is not the statistical aspects related to persons with disability but rather to understand how academics with disability have negotiated circumstances especially in contexts where transformation is being pursued. There is need to answer questions related to the experiences of academics with disabilities regarding technology use, interaction with other academics and fulfilling their academic responsibilities. It is crucial to understand how inclusiveness or exclusiveness of the emergent relations in particular following

the view by Unser (2017) where persons with disability have been said to suffer from diverse forms of poverty, marginalisation, and exclusion. Assuming that academics just like students with disability and other persons located in various spaces in society could be experiencing poverty, marginalisation, and exclusion, it therefore, becomes crucial to understand how academics with disabilities have negotiated the transformative practices associated with universities in Zimbabwe. Previous research has noted a number of challenges that teachers and academics in particular have faced in relation to access to assistive technologies (Unser, 2017; Jacobsen, 2012; Kajee, 2010).

Transformative efforts in Zimbabwe's higher education institutions have taken multiple dimensions. Policies and practices targeting technology have become key in transforming and enhancing teaching and learning within the university environment (Chiwandire & Vincent, 2017). The rapid growth in the importance of technology has thus been central in transformative practices as innovativeness has taken central stage. What is crucial in the focus of this chapter is however, the question of how certain groups who have historically been on the margins have negotiated inequalities and exclusion that have been associated with the transformative efforts (Rembis, (2019; Retief and Letšosa, 2018; Prince, 2016). Whilst the redressive measures have been characterised by transformation with evolutionary and radical features being adopted, the resultant exclusion and inequalities that became entrenched in various socio-economic spheres of academics with disability and how these are negotiated requires a deeper understanding. Zimbabwe as is the case with other African countries has had to go through transformation to deal with various ills of the colonial period which have been severe on institutions and society in general. It therefore follows that the education system was amongst the severely affected institutions hence the continuous need for transformation. Besides having to deal with transforming institutions to redress the colonial legacy current efforts within Zimbabwe's university system has aimed transforming institutions with the aim of embracing innovation and industrialisation to secure the country's ambition to attain a middle income status by 2030. It is within this context that this chapter seeks to understand how academics with disabilities have negotiated through emergent relations. The issue of how this has influenced inequalities and forms of inclusion and exclusion among academics with disabilities is also explored.

This chapter is based on a combination of empirical data from previous studies and data from a qualitative study that was conducted between August 2018 and December 2019. Focus was on key informants who constituted five academics living with disability. Due to the contextualised nature of experiencing and interpreting disability, as well as accessibility of respondents, the researchers focused on academics that are visually impaired. In this regard, three males and two females were interviewed. Whilst for some this might be a relatively small sample it is important to note that there is still a very low number of academics with disabilities across Zimbabwean universities. To ensure that data captured experiences without disrupting the contextual significance of interpretations, the study was conducted in one of the universities in Zimbabwe. In-depth interviews and observations were used. In order to protect the identities of the participants pseudonyms were used to identify them. All names used in this research are thus not real names of the participants. The chapter's first sections are based on conceptual aspects whilst the later sections present some empirical data, which is infused with literature.

BACKGROUND

Countries the world over are beginning to embrace development that is knowledge-driven. With universities being central to knowledge production, they have no doubt equally become focal areas for innovation and general development. It is within this context that Tarivangana (2019), whilst putting emphasis on what he calls 'a real education system' has argued that no nation can develop faster than its education system. In addition, whilst suggesting that it was time to pose the question of whether 'African universities' were playing the expected developmental role, Murwira (2019) argues that real education by nature ought to lead to industrialisation and modernisation through the production of goods and services which he emphasises as implying that 'university education by intent must have 'a purpose and a benefit' (Murwira, 2019).

Education 5.0 has come to be a foundation for transformation in Zimbabwe's society particularly targeting the knowledge sector that is dominated by state universities. Education 5.0 has therefore, represented an important transformation of the traditional tripartite mission of Zimbabwe's state universities represented by teaching, research, and community service. In the country's ambition to attain a middle income status by 2030, the traditional tripartite focus has been revised to add innovation and industrialisation onto the list (Government of Zimbabwe, 2019). In this regard, Zimbabwe's state universities have been instructed to embrace outcomes-focused national development practices to ensure a competitive, modern, and industrialised society, a dimension that is premised on the principle of problem solving (Tarivangana, 2019).

In a format that can be equated to the 4th Industrial revolution trend that has been embraced in other economies in Africa and elsewhere in the world, Zimbabwe's approach has been anchored on the universities which have been noted to be better positioned to grasp and decipher the threatening disruptive technologies such as the internet of things (IoT), advanced robotics and the automation of knowledge work that continue to dramatically reshape the global business and social landscape (Government of Zimbabwe, 2019). The universities are also favoured because central to their entrepreneurial urge, they are spaces where a combination of critical thinking and innovativeness can set the right tone at both curriculum and practical levels (Enock, 2019).

It is important to note that whilst the Education 5.0 has been billed an important policy instrument aimed at transforming the Zimbabwean society, albeit through universities, not much attention is being paid to some of the deficiencies that still feature within the university system itself. In this regard, the chapter presents the experiences of an important constituency, academics with disability. With the transformation craze hitting universities across Zimbabwe and causing waves of uncertainty and fear for academics and students who have harboured genuine fears regarding the fate of the degrees in their departments, a small but important constituency of academics with disability have remained on the margins. It is therefore important to explore how the experiences of academics with disabilities have exposed long standing injustices that they have suffered. This has cast further aspersions on the commitment of universities to inclusivity which by extension has left many doubts that the required transformation that the Zimbabwean society needs could be engineered from these spaces.

It is important to note that the issue of the role of universities in Africa being central to initiating and enhancing the developmental needs of African economies which has remained subject to debate is not surprising if one looks into the prevalence of social injustices within the university spaces. With development being closely linked to social justice it becomes inconceivable to think that these institutions can carry the necessary ethos and identity to be anchors of the development African economies

require. Whilst colonial legacies are to blame for some of the institutional deficits towards contributing to the development of the societies that are located in, post-colonial states have equally been guilty of politicising the universities and reducing them to battlefields for ideological differences. Not only has this compromised the capacity of the universities to pursue their core mandate of knowledge production and development but it has also seen the academic community being fragmented. Whilst acknowledging some of the efforts to embrace inclusivity, within the university spaces especially within the context of ensuring that the ethos needed for ensuring that the universities deliver on their core mandate of knowledge production for development, disturbing features pointing to inadequate practices for inclusivity have emerged. The gaps in the policies and practices meant to ensure inclusivity within academics at universities have been felt more when it comes to academics with disabilities (Tarivangana, 2019).

Understanding Transformation, Inequalities, Power, and Inclusivity in Universities

Transformation has historically been a part of both the traditional and modern spheres of society. What becomes important however, is the nature of transformative actions in different societies and how it has been drawn upon in dealing with entrenched inequalities. The aim has thus been to broaden social justice and enhance inclusivity in particular. What has become noticeable about the resultant outcomes of transformative practices especially by post-colonial governments has been the failure to address the injustices associated with the colonial legacies. At the centre of these failures has been the reproduction of injustices and inequalities albeit in subtle forms. It can thus be argued that despite well intended policies and practices being implemented in various higher education institutions, inclusivity in particular in relation to access to requisite teaching and learning technologies has remained at lip service level (Jacobsen, 2012). This is mainly because interventions have not been entrenched onto the day-to-day experiences and knowledge of the affected academic groups.

In addition, the interventions have failed to appreciate the power and ideological dynamics at pay in post colonial higher education institutions. The power dynamics imply that universities are not just spaces of knowledge contestation as the nuances of power cannot be ignored. It can thus be argued that any understanding of the challenges faced by any group ought to understand the disruptive nature of power imbalances towards any interventions. In some instances, universities have sought to deal with the challenge of representation through appointing representatives of groups such as academics with disabilities at various structures of decision making. Having representation in various decision making structures for academics with disabilities has however not resolved the crisis of representation as the power dynamics remain deeply embedded onto the ethos of the institutions. Such a situation still speaks to issues of social justice and inclusivity from a lens that draws from the western philosophy where some form of normativism, which draws from positivism prevails. This angle tends to stifle the acknowledgement that meanings are rather subjective. It is within this view that the chapter seeks to draw from constructivism to understand the subjective meanings academics with disability attach to access to technology within a transforming Zimbabwean university.

Theoretically, the concept of transformation has been presented and discussed under the ambit of socio-economic change. The issue of socio-economic change becomes crucial in this study because it defines the influence of diverse forces such as affordability and access to requisite technologies in particular for men academics with disability. The idea of the influence of multiple forces within society as presented by Van der Merwe (2000) thus becomes a crucial lens through which notions of transformation

in societal institutions such as universities can be explored. In that regard, it is argued that a combined interaction of the social forces on the one hand and institutions such as schools and universities, the state and church on the other hand constitutes the functioning of society. It is such an interactive process that transformation in universities and its relationship to technology access and by extension social justice can be understood. Equally, it is within such a context that the post-colonial education in Zimbabwe has albeit policy contestations undergone transformation oriented attempts aimed at establishing a more equitable dispensation through transformation. Key focus of the discourses of transformation has targeted redressing socio-economic injustices. It follows that transformation in Zimbabwe's universities as has been the case within broader society has generally been viewed from a wide range of facets that tend to commonly deconstruct the exclusionist colonial policies and the associated legacy.

Johnstone (2001) has highlighted the close relationship between social transformation, disability, and social justice. It is from this angle that this chapter deals with how technology may influence inclusivity within academic spaces. It ought to be understood that technology use especially within the education context is interactive. This therefore, implies that the subject of the kind of technology combined with accessibility become important in defining how users who are in this case men academics with disability. Bourdieu's vantage can be applied to the Zimbabwean context and other African countries during the post colonial period as they seek to transform their education systems to ensure social justice through addressing access issues related to technology.

Biln and Munro (2008) have indicated that whilst the advent of technologies in university teaching was envisaged to produce disruptions as the culture of transformation engulfs university ethos, the significant changes have remained a mirage. Biln and Munro (2008) have provided explanations on transformative expectations that accompanied virtual learning and other technologies used in universities. They argue that understanding technology from a disruption point of view in particular as far as university teaching and learning practices are concerned implies positioning technology as capable of introducing serious transformation or alteration of the structure of teaching and learning activities taking place within the university. This is essential when specific focus is made on those transformations arising from an institution-wide deployment of e-learning technologies.

Whilst it is agreeable, that technology is common place in most higher education institutions it has been noted that there is little evidence of its significant influences on the teaching practices of academics (Li, Garza, Keicher,& Popov, 2019). What has been observed has been that despite university management putting emphasis on academics to intensify their usage of technologies, huge discrepancies on usage remain. This chapter however seeks to go beyond these general discrepancies in technology use to explore the question of inclusivity and social justice associated with various strategies that universities, in particular, those facing resource constraints such as the University of Zimbabwe have adopted. In this regard, the chapter focuses on the experiences of academics with disabilities with various technologies used within the academic spaces. Focus is also on how academics with disabilities have dealt with some of the challenges encountered in relation to access to requisite technologies and support received from the universities they are in. In addition to the challenge of lack of financial resources, academics as has been the case with students with disability have found themselves further isolated in particular by the failure of their institutions to provide the requisite support under the ambit of transformative efforts modelled under the Education 5.0 policy.

Social Transformation and Social Constructivist Views on Disability

Theorists whose ideas on social transformation can be applied in education include Margret Mead and Pierre Bourdieu. Calhoun (2006) presents an important angle of Bourdieu's analogy on transformation in which he uses the Algerian context to show how ideas of symbolic violence and cultural capital can be understood. Importantly is how much such ideas can represent his assessment of the social and economic transformations that featured in Algeria's colonisation by France and the country's incorporation into capitalist economic relations. The ideas of Bourdieu bear some importance in as far as they are grounded on understanding of how socio-economic structures and related inequalities are reproduced with profound consequences on access to requisite technologies, in particular with respect to university academics with disability.

Bourdieu's concern with educational institutions just like other modern institutions including the capitalist market and state have however remained areas of concern during efforts to broaden access to technology and ensure social justice. Thus the state and market institutions have been blamed for harbouring a common tendency of promising well below what they can deliver in which their portrayal of working for a common good has turned out to reproduce the very social inequalities they purport to address (Prince, 2016). In many instances, they are accused of presenting themselves as agents of freedoms yet they are in reality organisations of power. A careful approach towards dealing with limits of modernity is proposed by Bourdieu in which he suggests stripping legitimacy from the practices by which power mystifies itself and challenging the general myths and deceptions of modernity without throwing away the whole system.

The social constructivist perspective, from which humanistic approaches which can be related to the Kaupapa Maori approach endeavours to assess beliefs, practices and innovations that either advance or hinder the performance of individuals and their capacity to believe in themselves (Smith, 2003). Considering this, the chapter draws from social constructivism focuses on how academics with disabilities within university spaces understand and relate to diverse forms of technologies and other forms of assistance such as the provision of assistants. It can be further argued that the principles of constructivism must also be understood as closely related to socio-cultural interpretations which tend to be linked to context specificity and holism. The constructivist focus enables an interpretation that is based on understanding how social meanings related to the way that academics with disabilities in universities experience various forms of technology and other forms of assistance provided by the institutions they are in. Social constructivism further presents an important dimension as it presents valuable insights on the symbolism of interpretations and meanings attached to understanding circumstances surrounding adoption and appropriation of various technologies particularly within the academic context. Social constructivism also assists in explaining that during the development of technology, it is driven by problem posturing whilst at the same time it is socially shaped. This implies that technology just like any human made relic ought to be understood as a social construct (Njenga, 2018). Above all, social constructivism as an approach implies that at any given time, technology reflects the needs and interests of the creators and the meanings contained in their socio-cultural contexts (Van Zyl & Sabiescu, 2016; Njenga, 2018).

In highlighting the social embeddedness of technology, understanding Information Communication Technologies (ICTs) ought to transcend viewing them exclusively as mere tools especially considering that they can enhance or constrain users. In addition, besides diverse forms of technology being inclusive of artefacts they also include practices that are enabled through the ICTs as well as the social arrangements that facilitate their production, distribution and usage (Njenga, 2018). It is therefore through a

social constructivist lens that the diverse meanings attached to technology can be explored. Li, Garza, Keicher and Popov (2019) have also revealed that a considerable amount of research showing that perceived competency beliefs of technology or self efficacy in using technology among academic staff with disabilities has been noted to have a linkage to its frequent use. Notably to pursue is the question of how the meanings attached to technology relate to the question of inclusivity and social justice especially for poorly resourced universities that are undergoing transformation. Social constructivism is further suitable for exploring the strategies adopted by educators in dealing with the day to day challenges encountered with regard to various devices available for their use within the university setting.

Historical Overview of the Marginalisation and Struggles Experienced by Persons with Disability

Clapton and Fitzgerald (1997) have indicated that in understanding the history of the marginalisation of disabled persons and the related struggles for their rights, it is crucial to understand that historically, people's bodies in their diverse forms have framed people's futures whilst also explaining their past. In this regard, although bodies are said to be capable of telling stories, in reality, it is the interpretations and associated beliefs held by individuals and society that subsequently bears the responsibility of shaping people's histories and future.

Clapton and Fitzgerald (1997) have further argued that the categorization of some bodies as the 'norm' whilst defining those falling outside the 'norm' can be traced back to centuries in which bodily differences have shaped social structures (Murugami, 2009). Subsequently, in reality even as acknowledging the challenge in discerning the boundaries between social constructions and real life practices since the former shape the later, the degree of 'otherness' has remained modelled against the established norm. It is crucial to note that such a form of categorization has implications on inclusivity as it tends to marginalize the persons with disability who find it difficult to fit into the set norm. It therefore, follows that in many instances, the disabled persons find themselves excluded not necessarily by persons who might be in a better off position but the isolation is usually deeply felt in settings where they are involved with individuals and groups who are in no better position but equally experiencing some level social exclusion and injustices (Rembis, 2019).

The history of redefining disability and creating a space of inclusivity where difference is tolerated and celebrated cannot be complete without understanding the contribution of the progressive western and non-western ideas. The western constructions of disability where boundaries defining individual and societal reactions to disability have been set have included the religious model of disability, the medical or genetic model of disability, and the rights-based model of disability (Retief and Letšosa, 2018). It is vital to note that the western models have been accused of failure to completely dismantle the concept of disability with their main thrust being consistently founded on the concept of 'otherness' something that critics have found to be too narrow.

Alternative interpretations of Common non western models of inclusion where disability has been normalized include the Maori in Aotearoa. This 'normalisation' approach to disability among the Maori, which is grounded on their rich indigenous knowledge system, has not only been viewed as inclusive and holistic but it has also been seen as having the capacity to enhance social justice. The essential aspect of the Maori philosophy which is commonly referred to as the Kaupapa Maori approach (Smith, 2003) is that disability, like other key practices that define the relations of the Maori in Aotearoa, is humanistic and deeply embed onto the socio-cultural principles. Overall, disability from the Maori philosophy

is viewed as normal which subsequently offers a more inclusive and socially just space. It is within a similar context that the impairment/disability divide has been challenged with Rembis (2019) arguing that everyone has some form of impairment.

Overview of some of the Technologies Accessible to Academics with Disability

Whilst the study revealed that a number of assistive technologies and support systems are available to academics with disability two key devices have been identified to assist in exploring the question of inclusivity within a transforming university. The two types of the assistive technologies that will form focus will thus be the Index Braille embosser which is useful for the embossing of Braille and the JAWS (Job Access with Speech) which is a computer screen reading program for Microsoft windows that assists in reading documents.

With respect to access to the Index Braille embosser machine, academics with disability interviewed had access to this type of assistive technology, there are over ten types of these. According to one of the respondents, a female senior academic with visual impairment, Dr Makamba, the Index Braille embosser machine is one of the important types of assistive technologies for both academics and students with visual impairment in particular. The machine constitutes one of the important devices which has transformed the embossing of Braille. With a higher performance ratio compared to other embossing machines, output from the machine is durable with a higher speed and print out that are of better quality Braille. The facilitation of access and thus broadening of inclusivity was also confirmed by another visually impaired academic, Professor Chivasa who argued that with such technology academics and students are able to print a Braille copy of their work at high quality even in instances of back to back printing.

Dr Makamba expressed gratitude for being fortunate to be one of the persons who has the Index Braille embosser machine as many colleagues could not afford to have one. She indicated that during her training she received sponsorship for assistive devices which presented her with an opportunity to acquire the device. She revealed this when she responded to a question on how she came to acquire the technology by indicating that:

You see what I can assure you is that it is not easy to just acquire some of these technologies. Even the old models of the technologies are not easy to come by due to the prohibitive costs. I was therefore fortunate to have some sponsor which enabled me to purchase the Index Braille embosser machine and other technologies (25 August 2019).

The JAWS as another important technology was said to be of significance and preferable especially for those with a total loss of sight. This device permits the visually impaired especially those with complete loss of sight to read the screen through either a text-to-speech output or refreshable Braille display. In this manner, this device constitutes one of the key features in the transformation of the workspaces for visually impaired academics. Participants also highlighted that since it is not possible or in some instances convenient to Braille all materials, the JAWS brings with it the listening option. This was emphasised by one of the male respondents, Dr Kazembe (all names are pseudonyms) who upon being asked to explain the importance of the JAWS machine found in his office echoed the following sentiments:

Whilst this collection might not be the latest but it has come a long way in assisting me with my teaching. It is not possible to put everything into transcript form so sometimes this machine comes in handy with its option of reading out my material (30 August 2019).

The JAWS machine was thus praised for its capacity to read soft copies of teaching material thus saving the academic time. It was also added that this machine brings in diversity in preparation of teaching material as reliance on Braille can be monotonous and energy-consuming. The respondents therefore, indicated that having material accessible in the different formants significantly enhances concentration and as such more work can be done without much difficulties. The broadened access to a variety of technologies subsequently promotes inclusivity and accessibility.

Whilst the academics with visual impairment who participated in the study in some instances had access to technologies with similar advanced settings it was clear that they possessed diverse levels of competences in using the technologies. It is this diversity and other forms of access that will later be explored in detail in relation to transformation and inclusivity.

Discourses and Types of Assistive Technologies Accessible to Academics with Disability

Discourses related to assistive technology cannot be complete without understanding the types of assistive technologies accessible to various groups whether it is persons considered included or excluded (Rembis, 2019). Understanding types of technologies accessible to persons with disability is crucial as it can shape relations of inclusivity and exclusivity. As revealed by the ways in which academics accessed technologies it is clear that factors such as access to funding are central to one acquiring the requisite technology. This can be further linked to claims by some scholars that whatever differences exist among individuals in relation to access to technologies, mainly depends on circumstances that are subject to change (Foley and Ferri, 2012). This view by Foley and Ferri (2012) can be further extended to indicate that technology constitutes and extension of the body such that it is not separate but part of the body. What can be understood from this view point is that inclusivity in technology is not only circumstantial but rather deeply embedded into academics' day- to-day experiences, beliefs, values and knowledge. This view also implies that technology is in itself a form of cultural practice (Li, Garza, Keicher, and Popov, 2019). In this way, a closer analysis of technology as a cultural practice can reveal diverse ways in which particular ways of being are promoted at the exclusion of others. It can thus be argued that in many instances questions that relate to technology are opinionated. The opinionation is mainly because the technologies are grounded in normative, social, cultural and economic practices whilst being further reified in the design, manufacture, marketing and implementation of the particular technology (Foley and Ferri, 2012).

In some way, technology has been embraced as liberating and having the capacity to create a socially just society (Foley and Ferri 2012). This view on technology is seen through various technologies having capacity of gap- filling for social, educational, and physical barriers to ensure full participation in society. This view which is idealist, can therefore be interpreted to mean that technology remains a source of hope for freeing persons with disability from some of the exclusionary day-to-day experiences they have to deal with. Often viewed in very idealist ways, technology consequently promises to liberate individuals from the limits of embodiment which can subsequently assist in providing solutions to the exclusion experienced by individuals in this case, academics with disabilities.

Of particular significance is to pursue the potential of assistive technologies towards enhancing one's interactive and problem solving capacities within the context where they are located. The issue of technology ought to be understood from both the status of the person concerned on the one hand and available individual and institutional support they have access to (Prince, 2016).. It can thus be argued that access to technology and associated forms of assistance that targets persons with disability can be used to understand the state of inclusion prevalent within a particular context. The types of technology aimed at improving the conditions of persons with disability can also define the state of inclusivity in the transformative efforts being propounded by universities and other stakeholders such as government and designers of technologies.

Forms of Assistance Provided by Transforming Universities to Academics with Disability

The capacity to provide requisite assistance to academics with disability by universities depends on a combination of factors that include the financial resources, political will from government and the institution itself as well as other internal capabilities that relate to human capital. It follows that the institutional capacity for enhancing transformation through technologies as envisaged under Education 5.0 and the national vision 2030 together with addressing the challenges associated with access to technologies can also be explained in terms of disparities that exist between the developed and developing countries (Government of Zimbabwe, 2019). It is consequently crucial to be conscious of the contextual circumstances at both country and university level so as to avoid the pit fall of importing technologies that may be too sophisticated to the extent that it could be difficult to have properly trained individuals to manage or service the technologies.

Participants indicated that it is mainly due to failure of being conscious of the contextual dynamics that the disability centre for the university involved in this study approached the issue of technology acquisition, something that has become counterproductive as the technology has frequently remained underutilised. They also emphasised that there has been a shortage of local experts to either use or service the technology, something that has further negatively impacted operations of the centres amidst the inadequate resources already experienced. It can therefore be argued that interventions meant to deal with transformation and ensure inclusion of persons with disabilities, coupled with patterns of inclusion and exclusion are circumstantial. Approaching interventions as circumstantial also means that it is crucial to understand that countries and universities ought to ensure that interventions targeting transformations at macro and micro contexts need to carefully plan and implement such initiatives in order to avoid perpetuating the very forms of exclusion the interventions are meant to deal with.

Disability Resource Centres and Related Forms of Assistance

Disability resource centres are commonly found in most universities in Zimbabwe as initiatives aimed at assisting students and academics with disabilities with access to requisite technologies. The responses across the gender divide of the participants in this study affirmed the important role associated with the disability resource centre available in their institution. Asked about how they are benefiting from the resource centres in particular within the ambit of a transforming institution and economy, most of the respondents poured scorn onto the capacity of the centres in their current state. They indicated that the centres have turned into areas of last resort for them and students, as one could barely find requisite

technologies or competencies among the staff. There seemed to be consensus among respondents that even in instances whereby new technologies would have been acquired by the centre, they have not served their purpose due to a variety of reasons. Respondents highlighted that newly acquired machines such as the Braille note taker and Imboser tended to break down because of abuse by the poorly trained staff. In addition to machine breakdowns due to improperly trained staff, it was also reported that there has been a lapse in proper servicing of the technologies coupled with a lack of competent experts to do the servicing since the equipment is imported. These aforementioned factors consequently need to be explored closely when assessing the question of inclusivity in particular within a transforming university as it has a potential to broaden barriers to technology access by targeted groups whilst entrenching exclusion.

Just as argued by Unser (2017), despite some academics and disability resource centres in particular, having access to technologies through sponsorship this may not be equated as a complete solution to the challenge of access and inclusion. In this regard, inclusion ought to be understood to transcend material or economic resources to embrace one's state of integration and acceptability within a group as well as to have control over life circumstances. Responses from some academics with disability thus revealed other forms of exclusion such as the state of having a disability, age, and sexual preference. These aforementioned forms of exclusion were reportedly problematic especially when it comes to male academics. The responses from the participants therefore, revealed that although access to computers and other assistive technologies has led to improvements in the quality and frequency of social interaction whilst also reducing barriers in physical and social settings for academics with disabilities a significant digital divide among these academics remains a challenge.

The provision of assistants for persons with disability is common in many spaces in particular with respect to universities. Whilst most participants highlighted that institutions have tried their best in availing assistants to support them, there were reports by some academics with disability that the assistants could not be provided as additional forms of assistance beyond what they receive from disability centres. Instead of being provided by assistants some academics reported that they were informed that their allowances already catered for the assistant packs. Such interpretation of conditions of service have been found to be insensitive to the realities faced by academics with disabilities as it is based on the assumption of affordability measured through allowances or salary scales. It is an approach participants criticised for not being conscious of the fact that academics with disability are in most instances left to pull together resources for purchasing requisite technologies with little or no assistance from their institutions. In reality, this situation is further compounded by the challenges of poor resourcing faced by resource centres that tend to promote subtle forms of exclusion through the shortcomings they have in relation to assistance provided to students and academics with disabilities.

Technology Related Challenges Faced by Academics with Disability within the University Context

The different types of assistive devices used by different academics with disability points to a differentiated level of access which is dependent on diverse factors (Prince, 2016). This statement can be further explained by the fact that technologies not only evolve but accessibility is also controlled. In terms of access to technologies, it needs to be highlighted that despite the many advantages that are associated with technologies that were presented by academics who participated in the study, the situation in Zimbabwean universities in particular within the transforming universities faces many constraints. It thus

remains clear that the attainment of Education 5.0 and the highly anticipated economic policy for vision 2030 are likely to remain unattainable.

The challenging economic circumstances that the country has found itself have equally affected transformation related projects and programmes at national level and within universities. The effects of the volatile economic environment on university academic and infrastructure programmes have been so severe to the extent that budget cuts have made it almost impossible to establish and let alone sustain new initiatives aimed at transforming the institutions into better academic spaces. Technology linked transformative initiatives have also been affected by the challenges. This has meant that groups such as students and staff with disabilities who were already suffering from some degree of neglect became further subject to deepening marginalisation. This marginalisation can be explained by lack of funding to centres providing assistance to the academics with disability. The lack of financial and other forms of assistance to academics with disability have also been seen as one of the key issues that have resulted in their isolation and exclusion. Narratives were presented on how some academics with disability especially the visually impaired that are of central focus in the study have ended up having to draw from their own resources to fill the void left by institutions.

Some respondents confirmed the issue of myths and interdependence of individuals that scholars such as Foley and Ferri (2012) have associated with assistive technology. The respondents have consequently reported having to endure stigmatisation, labelling and in some instances ridicule from colleagues who have seen their calls for assistance as some form of uncalled for nagging. In this regard, Foley and Ferri reveal that disability rights activists and scholars, have argued that viewing disabled persons as dependent obscures the myriad ways that all people are interdependent on one another and on technology (Prince, 2016). It is an unfair practice to expect persons with disability to limit seeking of assistance to technologies, yet this is something that such persons cannot in reality sustain as they have to periodically ask for assistance from colleagues when necessary.

All respondents highlighted the issue of costs as one of the prohibitive aspects when it comes to access to assistive technologies. They indicated that with Zimbabwe experiencing financial challenges, the funding that they used to access when the economy was stable was no longer possible something that has made it difficult to purchase the new more effective and user-friendly technologies. Respondents also highlighted that assistive technologies are always changing and there is need to keep abreast with the innovations. However, without the requisite funding they indicated that it was impossible to access the technologies. It was also indicated that what makes the technologies more expensive is that they are imported from countries in the global North or other African countries such as South Africa. The issue of the technologies being imported was also reported to be a challenge as it created challenges in the usage of the technologies. Intensive training was thus required yet in many instances institutions did not have the capacity to provide for the training whilst individuals also fell short of the capacity to adequately understanding the technical requirements that come with the technologies. Some respondents also complained that technologies that are imported from the United States of America such as the JAWS are problematic for them due to the ascent which is American and poses hearing challenges for some persons.

One of the respondents, Dr Mavi, thus had this to say with respect to the costly nature of technology despite its importance especially in transforming practices within the academic context:

My brother I can confidently tell you that technology is truly taking us somewhere but it is just too costly. The costs of technology are felt even in developed countries and it is worse with us in the developing

countries. It requires someone who is bold and willing to pump out resources. This suppresses the benefits of the technology (September 15, 2019)

In addition to the aforementioned challenges related to costs, respondents also revealed that even if in many circumstances academics had to bring in their own devices to use in the universities, it was difficult to maintain these as the technologies require adequate maintenance and care. A related challenge to the issue of academics having to acquire their own devices that respondents raised is the poor coordination of policies related to dealing with issues affecting persons with disability. Respondents highlighted that in the Zimbabwean context, at government level, issues to deal with persons with disability in particular within education spaces are rather poorly coordinated. They indicated that sustained efforts are still limited to education institutions owned or managed by religious institutions something that draws from the historical legacy where missionary run schools fared better in dealing with such matters. Some respondents indicated that institutions such as the National Braille Press that had been initiated with the intention of assisting persons with disability have remained ineffective.

In dealing with the challenges of access to technologies especially considering the volatile economic situation and limited resources availed by institutions, most participants indicated that they have drawn from the individual networks they have with private organisations. In this regard, they highlighted how they have received grants from organisations during projects they have undertaken. Participants thus noted that for one to be able to buy the assistive technologies such as the JAWS they needed to have a sponsor as it was expensive. Most of the participants whilst acknowledging the high costs of acquiring assistive technologies also indicated that they have managed to acquire the technologies they have through sponsorship during their studies. It can therefore be argued that most participants have drawn from external support as opposed to institutional support which many found to be inadequate.

CONCLUDING REMARKS

The chapter has highlighted the importance of various technologies not only in broadening access and inclusion for persons with disability but also for the broader success of transformation initiatives. Academics with disability thus indicated the different ways in which they have accessed diverse types of assistive technologies. They mostly indicated that sponsorship has been one of the key mechanisms in which they have purchased assistive technologies in particular due to the costs involved. Access to technologies has not been uniform among academics with disability, something that has revealed a digital divide. In instances where technologies are accessible to academics with disability privately or through disability resource centres there are other challenges related to competency to operate the technologies and costs to maintain them that have becomes barriers. This situation of availability of technological devices in resource centres which is coupled with limited access implies that understanding access to technology and inclusivity transcends issues of availability and affordability. It therefore means that access issues and inclusivity have to be explored within the broader experiences and level of integration to broader society.

The chapter thus presented some of the discourses and related challenges associated with implementing initiatives aimed at broadening access and ensuring inclusivity for academics with disability. It has been noted that disparities that exist between the developed and developing countries on the one hand and private education institutions such as universities owned or managed by religious organisations are

important in understanding some of the constraints and the associated historical legacy that has exposed gaps in the implementation of initiatives aimed at enhancing inclusion and access of academics with disabilities to requisite technologies. In ensuring success, individuals and institutions accordingly ought to ensure that they understand the contextual circumstances surrounding the production, sourcing and use of technologies for transformation. The capacity to provide requisite assistance to academics with disability by universities, therefore depends on a combination of factors that include the financial resources, political will from government, and the institution involved together with other internal capabilities and support that mediate the successful use of technologies. It can also be argued that the success of transformation in Zimbabwe's universities and the larger economy through technologies as envisaged under Education 5.0 and the national vision 2030 can be achieved when realities and associated barriers have been engaged with conscious of the dictates of the context and put at the fore of implementing essential initiatives.

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KEY TERMS AND DEFINITIONS

Academic Spaces: These are platforms and spaces within universities where students, lectures and other actors interact to peruse their academic business.

Academics With Disability: This is a term used to refer to academics with diverse form of impairment.

Assistive Technology: This is a piece of technological device that are used by persons with disability.

Disability Resource Centres: Are resource centres commonly found in most universities in Zimbabwe as spaces aimed at assisting students and academics with disabilities with access to requisite technologies and support.

Education 5.0: This is a policy directive that has been billed an important policy instrument aimed at transforming the Zimbabwean society, in particular through universities.

Exclusion: This is a state in which certain populations are pushed to the margins of mainstream activities, especially in instances where they ought to be active participants in the processes.

Inclusivity: Inclusivity is particularly explored within a context of access to requisite teaching and learning technologies that has remained elusive in Zimbabwean universities.

Transformation: This involves processes f redress targeted at addressing socio-economic injustices.

Chapter 13
Technology and Innovation in the Global South:
Effective Literacy Programme for the Poor

Obadiah Moyo
National Council of the Disabled Persons in Zimbabwe, Zimbabwe

Sibonokuhle Ndlovu
University of Johannesburg, South Africa

ABSTRACT

This chapter addresses the problem of literacy and technology for rural impoverished and deprived children in Zimbabwe. While technological innovation is understood as the Western concept, too far-fetched for poor countries in the Global South, this chapter argues that poor disadvantaged countries have their own innovation and technology that befits its context and needs. Decolonial theory is used to analyse a unique programme that has been able to improve literacy and technology levels of rural and impoverished children of Zimbabwe. The finding is that despite remoteness and poverty, a unique kind of innovation and technology is possible to enhance literacy in disadvantaged contexts in the Global South when the locally available resources are mobilised in a scientific way. The chapter hopes to help the understanding that advanced technological innovation is not only a Western concept, but also the South.

INTRODUCTION

The chapter presents an example of the technology and innovation contributing to literacy development within a context of educational disadvantage in Zimbabwe. Africa is one of the continents in the Global South with the highest population of children who are deprived of education in terms of literacy. Zimbabwe is one such country with the highest number of deprived children due to the economic and political crisis that has plagued the country for over two decades. This has left three-quarters of the population living in dire poverty, with most rural families living below the poverty line. While the economic and political situation was expected to improve when the new president was inaugurated in 2017, it has instead

become worse. Consequently, most children have dropped out of school because their parents cannot afford school fees. In addition, hunger and poverty have reached levels never seen before.

The most severe problem encountered by children from extremely impoverished families is literacy deprivation. Such children spend most of their time engaged in activities that would provide a source of living for their families, such as selling wares around the villages and farming instead of attending school. Even then, those who can attend school are not exposed to early literacy experiences before they start schooling. The Zimbabwean situation is extreme because schools, specifically the rural ones, are severely disadvantaged; hence, they lack the capacity to solve literacy deprivation among impoverished children. There are not enough learning resources, such as books for children to be exposed to reading and writing skills. Besides literacy deprivation, extremely impoverished rural Zimbabwean children also lack exposure to technology, both from home and at schools. Children complete primary schooling without having been exposed to a computer, let alone using it.

The argument in this chapter is that while the Global South could be seen as still living within coloniality, in the zone of non-being and oppressed by the West, there have been some awareness and consciousness, which have resulted in liberation and emancipation, whereby Africans have demonstrated the ability to solve their own problems without interference from the West. This can also be seen in terms of knowledge production and the development of local resources to improve literacy in impoverished schools of rural communities in Zimbabwe. It is critical to explore the knowledge produced from the Rural Libraries and Resource Development Programme in this chapter because it might not be known to many. This programme is the epitome of technology and innovation by African people within a context of limited resources. It is a technological innovation suitable to rural contexts of disadvantage, produced in the South by Africans, for Africans.

DECOLONIAL THEORY AS FRAMEWORK

The chapter uses Decolonial Theory to analyse a special programme that has been designed, developed and is being implemented to address literacy deprivation in the context of extremely impoverished areas, affecting rural Zimbabwean children. This is very important to demonstrate that Africa in general, and Africans, have intellectual resources which could help them tap into the locally available resources. They could effectively and uniquely utilise these resources to meet the needs of their people. This could be seen as a way of dismantling repressive ideologies of the West, which coloniality imposed on Africa and Africans.

Selected tools, which are specific theoretical concepts of Decolonial Theory, have been used to illuminate and give meaning to the Rural Libraries and Resources Development Programme. The authors want to provide a deeper understanding of the programme than what might be seen at the surface level. The concepts of coloniality of being, coloniality of knowledge, coloniality of power, and decoloniality are examined since they helped the authors to explore and explain the specific programme under study.

Coloniality of Being

The coloniality of being exposes how equality and inequality emerge in society. As Ndlovu-Gatsheni (2001) has argued, the dominant powers use 'normalcy' as a yardstick to categorise people and place them into hierarchies. This implies that anyone falling within the margins of 'normalcy' occupies a su-

perior position to those outside it. Since those labelled as inferior become unequal to those considered superior, inequalities emerge. Similar to this assumption, those constructed as 'primitive' are deemed inferior to the 'civilised', just like the 'disabled' are considered inferior to the 'abled'. By virtue of the persistence of such hierarchies, people have become unequal. This is the way oppression is orchestrated because those in superior positions tend to oppress the' other', who occupy lower positions. People with disabilities are automatically oppressed by virtue of this positioning. This understanding is important in this chapter because the founder of the particular programme is an individual who has a disability. The concept of coloniality of being illustrates how this particular 'being' beat the odds of oppression by the dominant society, namely the West.

Coloniality of Knowledge

Coloniality of knowledge is critical because the Rural Libraries and Resources Development Programme focuses on the production of knowledge in the South. It is therefore imperative to illustrate that scholars in the South can also use scientific knowledge to innovate and produce technology that is relevant for use by people in what can be understood as disadvantaged contexts of learning. The concept of the coloniality of knowledge seeks to reveal the hegemony in knowledge production, in which knowledge from the West is universalised. Sithole (2014, p. 53) maintains that "The knowledge systems are formulated and totalised by the Euro-North America, and the African subject's is silenced and excluded". This justifies the ideology that Western forms of knowledge are universal and legitimate, while African indigenous knowledge is considered inferior. Institutions such as the state apparatus, schools, universities and churches are used to naturalise and perpetuate this view. According to Dastile and Ndlovu-Gatsheni (2013, p. 111):

Schools, churches and universities contribute towards the invention of the 'other' as they operate as epistemic sites as well as technologies of subjectivation that make it natural for dominant powers to be universal.

In retaliation, decolonial scholars are against the censoring of knowledge to undermine some and privilege others. The argument is that all knowledge forms have equal value and status as they are all useful and should be considered as such (Dastile & Ndlovu-Gatsheni, 2013).While decolonial scholars value all knowledge forms and epistemologies, there is an argument that there are divisions of forms of knowledge such as 'formal school knowledge', which is considered more powerful knowledge than the 'informal everyday knowledge'. This distinction is premised on the understanding that formal knowledge is constituted by theoretical, abstract and scientific concepts that are generalisable. In addition, this knowledge system is formally taught and acquired in institutions of learning. Conversely, informal everyday knowledge consists of concrete, spontaneous, contextual and everyday concepts that are locally based and developed informally in society (Vygotsky, 1987). This implies that knowledge that is generalisable (powerful knowledge) is universal and legitimate, while informal knowledge – because of its non-generalisability – is not.

Maton and Moore (2010) and Young (2007) also assert that some forms of knowledge are more powerful than others. Within these discourses, informal everyday knowledge is considered as context-bound, un-generalisable, limited and fallible. While these authors try to justify their position, this is not to critique knowledges, nor an endorsement of some forms of knowledge as being inferior. Instead, it is an acknowledgement that there is powerful knowledge that possesses more explanatory power.

In explaining the notion of 'powerful knowledge', Young and Muller (2013) maintain that all knowledges are valuable. However, they assert that the difference between specialised and non-specialised knowledge is in its structure, and not in its value. Furthermore, coloniality of knowledge supports the understanding that scientific knowledge can be applied to solve the problems of disadvantaged contexts, and in that respect, it confirms that all knowledges are useful and valuable. Censoring other knowledges limits innovation and creativity. It is against this background that coloniality of knowledge becomes an important part of the chapter, because it helps illustrates that knowledge produced in the South is relevant and useful to its context and should be acknowledged as such. There should be a shift from universalising Western epistemologies and ways of knowing, to embrace all diversities of knowledge production. Moreover, all scholars producing knowledge should be acknowledged, regardless of their social and geographical location.

Coloniality of Power

Coloniality of power is another core concept of Decolonial Theory that exposes the invisible ways in which power operates, and how it is used to oppress the 'other' in specific contexts by the dominant powers. It involves hierarchies of domination, the oppression of the 'other', and the persistence of a colonial mentality. Castro-Gomez (2002) states that coloniality of power extends from Foucault's (1995) concept of disciplinary power, which refers to providing individuals with skills and knowledge, to shape their characters so that they are controllable. In this chapter, the argument is that the oppressor (which is the West) uses disciplinary power to leave the South vulnerable in conforming to its demands. Whatever oppressors in the West do, it is meant to mould conformists on the part of the people in the South.

Castro-Gomez (2002, p. 276) argues that "the present global structure is informed by the colonial relations at the centre and periphery of European expansion". This implies that domination by Eurocentric powers operates invisibly, and its effects are felt by the oppressed as in the operation of disciplinary power. It gives rise to networks of exploitation, which dominate and control knowledge and authority, and affect all dimensions of social life (Quijano, 2007). This form of domination co-opts the capitalist model within global coloniality and is "organised and articulated to suit the imperatives of global imperial designs" (Ndlovu-Gatsheni, 2013, p. 50). The coloniality of power is intrinsically linked and intertwined with capitalism, and is organised to suit dominant powers. Although decolonial scholars (Castro-Gomez, 2002; Quijano, 2007; Ndlovu-Gatsheni, 2013) understand the concept of coloniality of power in different ways, they share the belief that it results in differential access to power by the dominant powers and the oppressed. The concept of coloniality of power emphasises the oppression of the mind, meant to suppress innovations and creativity, as presented in this chapter.

DECOLONIALITY

Decoloniality is a very important theoretical concept in this chapter because Obadiah's Rural Libraries and Resources Development Programme is the epitome of decoloniality in the South. Decoloniality is a 'method of fighting' which is used to dismantle oppression. As described by Maldonaldo-Torres (2007), it is not a single theoretical school of thought, but a family of diverse positions that share the view that coloniality is a problem of modernity. It therefore departs from merely problematising coloniality and its effects to positing ways of overcoming it. Ndlovu-Gatsheni (2015) has argued that people not only

need to be liberated from long-standing epistemological stances but also from ways of thinking, knowing and doing, which require dismantling. Decoloniality seeks liberation from the hegemony as informed by coloniality. This means dismantling the relations of power and the hierarchies that came into being in order to find powerful forms of expression in the practices and structures of the modern world. In relation to a particular way of thinking about knowledge production in the South, Dastile and Ndlovu-Gatsheni (2013) view the decolonial epistemic perspective as a way of thinking and doing that could be applied to oppression in order to yield a different way of being and thinking. Decoloniality scholars challenge universality by arguing against the claim that there is one epistemic site from which all truth and universality derive (Grosfoguel, 2011).This implies that Eurocentric ways of thinking can be dismantled by thinking of alternative ways of knowledge production and innovations that are not Eurocentric. The authors in this chapter seek to emphasise that the Rural Libraries and Resources Development Programme is as the epitome of decoloniality by way of thinking and innovation, whereby scientific knowledge is used to suit the specific context, illustrating that knowledge is contextual and situated. It should not be universalised, as with Western thinking.

Another critical aspect of decoloniality is its ability to embrace diversity. Within the space of decoloniality, all persons in all their diversities need to have space in the world in which their knowledges, cultures, language and being are embraced. No one should dominate another because no one has a legitimate claim to superiority over another. Mignolo (2007 in Ndlovu-Gatsheni, 2013) argues that in decoloniality, there has to be a "pluri-versal, a redemptive and liberatory epistemology that seeks to delink from the tyranny of abstract universals" (p. 13). Simply put, the inclusion of all diversity should be embraced, not only knowledge from one side of the globe.

Decoloniality also involves awareness, consciousness, and liberation. When the oppressed are not aware and conscious of their own oppression, they are not equipped to dismantle it. Ndlovu (2015) maintains that consciousness is developed and liberation is attained when the oppressed understand their actual location in society as they are constructed as the 'other'. Furthermore, they need to understand why they are treated differently from other people, and then epistemically locate themselves where they belong. They are not required to understand this in abstract terms, as in 'zones' (Santos, 2007), but understanding who they are could yield powerful awareness and consciousness of oppression. Being 'colonised' by a Western education system is the reason why some 'others' are not even aware they are oppressed. Ndlovu (2015) adds that when the 'other' in the zone of non-being embraces colonial ways of knowing, they begin to speak the language of the oppressor, and think and speak like one of them. As a result of the epistemic colonisation described, some 'others' do not view themselves as oppressed. In such a scenario, it might be impossible to "outmanoeuvre the constraints placed upon the oppressed by coloniality and [dismantle] the snares of the colonial matrices of power" (Ndlovu, 2015, p. 14). It can be argued that it might be difficult for people who have chosen to be part of their own oppression to overcome it.

This led Ndlovu (2015, p. 10) to ask a fundamental question, "How then does change occur in a system such as that of coloniality?". In answering this question, Ndlovu argues that first, it is important to understand whether social agents, such as the 'other', are aware of how they are influenced by coloniality within their contexts. It can then be argued that if they think from the position and talk like the oppressor, they might work against themselves in any attempt to achieve freedom from oppression. What Ndlovu (2015) implies is that without awareness and consciousness, the oppressed might not overcome oppression but could accept and perpetuate it. Thus, awareness and consciousness are the first steps towards emancipation and consequent liberation. Mignolo (2011) has distinguished between emancipation and liberation claiming that "the emancipation represents a process inside the colonial mechanism of west-

ern rational episteme while liberation is the same as decolonisation" (p, 7). It involves the struggle of unblocking thoughts that have been blocked, to see those things that are invisible at the surface. Thus, emancipation could be viewed as a process towards liberation, and it is the liberated mind that might dismantle oppression because the process involves decolonisation of thought.

Looking at the programme being presented, one would be able to gauge the levels of awareness, consciousness and liberation of the founder and conclude that such thinking would not have come without being aware of oppression from the West, and without being emancipated and liberated from oppression. It is thus important that the programme is evaluated against the ethos and thinking of an alternative to coloniality, which is decoloniality.

RURAL LIBRARIES AND RESOURCES DEVELOPMENT PROGRAMME: A LIGHT TO A GLOOMY EDUCATIONAL CONTEXT

It is at this height of economic, political and social crisis in Zimbabwe, resulting in the deprivation of school children, poverty and hardship, that this chapter presents a glimpse of light in which the problem of literacy and technology for impoverished rural children is being addressed through a unique programme. Within a situation that could be seen as hopeless, a programme has been designed, developed and is being implemented in rural Zimbabwe to improve literacy and technology levels of rural children.

The Rural Libraries and Resource Development Programme (RLRDP) was founded by a Zimbabwean scholar, Obadiah, who has a physical disability. Disability has not deterred him from utilising his intellectual capacity to be creative and innovative. This innovation and creativity have significantly benefited schools and communities within the project catchment area. It was first launched in 1995 in disadvantaged rural schools in Zimbabwe, and it also covers the Tsholotsho district, one of the most disadvantaged areas in the country. In this project, library books and computers are brought to rural impoverished schools by donkey-drawn mobile library carts for children to read. The project is unique in that it utilises familiar and locally available resources in these poorly resourced communities, in the form of donkeys and carts.

Poorly resourced Zimbabwean communities rely on donkeys and carts for most of their domestic chores and livelihoods, including farming. Donkey-drawn carts are also used to fetch water and firewood for homes. Children are familiar with donkeys because they look after them. Some even ride on donkeys when going to schools. Obadiah's idea with the RLRDP is to use the very resources available within the poorly resourced communities to improve the literacy of all disadvantaged children in their localities. The programme has proved very practical and effective in improving literacy in rural Zimbabwean communities. Some children who had no previous exposure to a computer, have seen and accessed it for the first time in the solar-powered donkey-drawn mobile library cart. Fifteen of these carts have also been fitted with shelves for library books. Obadiah's intention with the carts is to develop children's literacy competency in poor rural schools. The mobile library carts have the capacity to carry approximately 1,200 books. Rural community members and school children – both primary and secondary learners – benefit immensely from the RLRDP in terms of reading, writing, and accessing computers that use solar energy. One would argue that as the world moves to advanced technology in the West, rural communities in the remote district of Tsholotsho in Zimbabwe, are not being left behind; they are accessing such innovation in their own way as well.

ADVANCED TECHNOLOGY IN THE WEST VERSUS TECHNOLOGICAL INNOVATION IN ZIMBABWE

Advanced countries in the West are in the age of the Fourth Industrial Revolution (4IR), which has already been embraced in some developing countries in Africa. The 4IR's distinguishing features are sustainable (Ab Rahman, Abdul Hamid & Ai Chin, 2017) and disruptive (Christensen, Raynor & McDonald, 2015) innovations. The sustainable innovation improves on the existing production, technology, market, network, societal values and products. Disruptive innovation involves new initiations and the formation of new economic and business production and markets. Mariaye and Samuel (2008) postulate that the 4IR influences various sectors and spheres of human endeavours. In simple terms, the 4IR involves integrating technology into people's lives, resulting in them doing things differently from the way they did things previously. It could then be reiterated that the 4IR broadly continues to change the way human activities, relations and everyday lives have existed and functioned.

The 4IR combines technologies and biological spheres. According to Schwab (2017), the 4IR has also entailed the infusion of technologies into people's lives, consequently blurring the lines between the biological, digital and physical spheres. This implies that the 4IR has become part of people's everyday lives, both in urban and rural settings. This has, in the process, changed the way people live in terms of what they do, how they interact, how they relate, how they acquire knowledge, and how they apply that knowledge in their everyday lives. It is an age characterised by cyber-physical systems, intelligent robotics, mobile super-computing, self-driving cars, genetic editing and neuro-technological brain enhancements, among others (Schwab2017).

Ab Rahman et al. (2017) agree with Schwab (2017) that the 4IR is the present environment of disruptive technologies and trends such as the Internet of Things (IoT), robotics, virtual reality (VR) and artificial intelligence (AI). Robots and artificial intelligence such as self-driving cars can thus perform the tasks previously done by human hands and minds. Ab Rahman et al. (2017) also reiterate that the trends of the 4IR have eased many tasks that relate to human activity, as human activity is replaced by high technologies. It could be considered that the 4IR is conflated with the third by virtue of technological orientation. It must be understood, however, that other things such as robots and AI stand out within the 4IR discourses, to make it distinct.

Akoojee and Nkomo (2008) argue that most African countries are still struggling with the technologies of the Third Industrial Revolution (3IR), which was characterised by increased computing technologies. In Africa, some countries such as South Africa and Nigeria are said to be the first countries to have started to embrace the 4IR. And, while Zimbabwe has also introduced technology in its higher education institutions, this cannot be said to be at the level of the 4IR, but rather still at the level of the 3IR. Even then, Zimbabwe is still struggling to fully implement the 3IR as it lacks the necessary technological tools and knowledge associated with it.

The RLRDP could be viewed from the level of the 3IR, but it has, at least, taken technology to deprived contexts of poverty and low literacy levels, such as in rural Zimbabwe. Three of the mobile carts utilised for the RLRDP are fitted with renewable solar panels to charge the computers. The solar energy is also used to charge phones, power televisions or radios. While it could be said that this may not be anything near the 4IR in its purest sense, within the context of Zimbabwe – the deprived social and physical context in which this technology is being applied – though not comparable to absolute 4IR technology, this innovation serves a great purpose of improving literacy. At the same time the programme is exposing rural communities to technological gadgets including computers, phones and radios by utilising solar

as energy. The utilisation of solar energy in rural areas could be seen as sustainable development. Thus, though this technology may be far from the 4IR, it serves a great purpose. Moreover, all technologies' developments within the industrial revolutions have often tended to interrupt and intrude on subsequent revolutions, hence blurring the dividing lines.

It is worth acknowledging that in Africa and among Africans, though limited by social, political and economic circumstances, there are also isolated and unique incidences on innovation, especially in deprived countries such as Zimbabwe. This is noteworthy given the Zimbabwean situation where in the people's prime concern is meeting their basic needs such as food and shelter, which are not only unavailable but also prohibitive when available. Accordingly, the rare cases of creative and innovative thinking, such as in the case of this particular project that can benefit the excluded generations, need to be brought into the limelight and supported. Through Obadiah's innovations, children not only gain reading experience, but are also able to use computers for learning, studying and attaining global information. Those with phones can also charge them using the installed solar panels on the three carts and thereby gain access to information, something unimaginable within the deprived rural schooling context of the country.

THE LITERACY PROGRAMME AND DECOLONIALITY

From the decolonial perspective, Obadiah's innovation can be seen as knowledge production from the South in Africa, by scholars from the South in Africa, for Africans. Western supremacists might not recognise this kind of innovation. Santos's (2007) explanation of the concept of zoning of the South and the West, and the invisible abyssal line dividing the two globes into the zone of being and non-being, best illustrates how this kind of innovation might not be recognised because its knowledge is produced in the South, the zone of non-being. In agreement with Santos' (2007) concept of zoning, Grosfoguel (2011) claims that knowledge produced by scholars in the South is usually viewed with contempt. Likewise, theories developed by scholars from the South are censored as not being authentic. This kind of thinking and conceptualisation being perpetuated by the West reveals how the concept of knowledge production has been hegemonised, so that only scientific knowledge produced in the West by the scholars in the zone of being is regarded as valid and objective. Grosfoguel's (2011) assertion of censoring knowledge production from the South due to epistemic and social location within the zones, is also echoed by Sithole (2014). Sithole argued, "The knowledge systems are formulated and totalised by the Euro-North America and the African subject is silenced and excluded" (Sithole, 2014, p. 53). This reaffirms the ideological assumptions that Western forms of knowledge are universal and legitimate, whereas knowledge generated in the South is inferior, un-objective and illegitimate.

In this chapter, the authors argue that knowledge produced from the South by Southerners is also scientific and authentic. This is confirmed by a scholar in the zone of non-being in the South producing scientific knowledge, which has improved the literacy competence of rural children in Zimbabwe. Any wishful thinkers cannot silence this knowledge production because it speaks for itself as it addresses the contextual needs of the local community. Like other scholars have argued, knowledge is contextual and cannot be universalised and totalised (Ndlovu-Gatsheni, 2013). In this chapter, the argument is therefore that the programme is the epitome of Western and African knowledges being brought into the conversation, with none being censored and inferiorised, emphasising that the knowledge produced is able to meet the needs of the local context. This is what decolonial scholars have always claimed.

Coloniality of being has helped the authors of this chapter understand why the issue of Obadiah's innovation, who has a physical disability, might not have been expected. It is uncommon for people who have a disability to have developed and produced such knowledge, which is not only locally relevant to a rural community but could also steer development in urban and semi-urban areas globally. The dominant society categorises people using the standard of 'normalcy' (Quijano, 2000), and this results in one social group being seen as inferior or superior to the other. Within the context of coloniality, for example, the abled are superior to the disabled, the rich are superior to the poor, and Whites are superior to Blacks (Ndlovu-Gatsheni, 2001, 2012). With that mentality of coloniality, it might not be expected that a scholar with a disability could create such innovation because of the power stratification status afforded to people based on their abilities and disabilities. Obadiah's literacy programme, however, has proved that all people are equal, irrespective of their social, biological and genetic make-up. Persons with disabilities can create innovations that abled persons cannot match.

Coloniality of power has also helped the authors understand the dynamics of power in the context of coloniality. At present, the West has rendered the South powerless because the power of knowledge is in their zone of being. Power has always remained in the zone of being, because they have monopolised it by universalising knowledge and legitimising their knowledge, while ardently censoring other knowledge forms. From this stance, it could be understood that through his programme, the innovator has liberated himself from the oppression of the West by being able to manifest the power of his individual mind. He has not perpetuated the oppression that Western knowledge is better than that from the South. He has mobilised local knowledge and resources to innovate relevant to his context and his people. Thus, though power is in the hands of the Western oppressors, he reclaimed it and made the best out of his situation.

Furthermore, coloniality of power illustrates that power is fluid and not permanent as it can be transferred from one globe to another. Scholars in the South, such as the innovator of the programme, have proven that they can transfer the knowledge of power from the West to their own context by being innovative, which can empower their communities. When learners in schools are consequently empowered through such programmes, they will also have the epistemic power of those in the West, in this way decentralising it from the West.

The Programme and its Benefit to the Local Community

The donkeys that are used in transporting the books to the schools are donated by members of the communities. People are excited to offer such a service, knowing that the programme benefits their children. The programme does not only benefit poor children's literacy and technology skills but also helps parents value the importance of literacy, and some of them also borrow books from the mobile carts. The programme therefore benefits all community members. The carts spend a day in one school, then moves to another school on the following day, until all the schools in a cluster have been covered. This way, all underprivileged children have the opportunity to read and borrow books, as well as access computers and device-charging services. Each mobile cart visits three primary schools and one secondary school per week, reaching 2,000 children. These books are normally lent out for a one-week duration.

IMPROVEMENT IN EDUCATION AND LITERACY

Through the implementation of RLRDP, literacy levels in Zimbabwe have improved. Obadiah reports that there have been improvements in the pass rates in schools that have been fortunate to be part of the programme. Statistics from the participating schools indicate an average pass rate of up to 65% was recorded in national examinations after the implementation of the RLRDP. This improved pass rate is also an indication that literacy competencies have improved in these schools and learners have access to a wider range of reading materials, which is improving their performance in turn.

What could be Incorporated to Improve on the Programme?

Factually, the programme has challenged coloniality in a little space in the South. It might not be considered significant, but if there could be more of these innovations, the voice of the South may become loud enough to be heard. However, there are still gaps within this programme which can be overcome to further improve it. These challenges relate to teaching and the learning of literacy itself. One major limitation noted about the programme is the assumption that learners have a background of literacy and library skills, which is often not the case. This gap needs to be addressed because learners might not have been exposed to literacy and library skills from their deprived homes. Teachers might also lack the training to teach literacy to deprived learners. The Cognitive Approach to Literacy Instruction (CATLI) is thus one important literacy programme which could be incorporated into the RLRDP to improve literacy.

The CATLI is a literacy programme developed by Harcombe (2005; 2008), which is targeted at South African learners in disadvantaged schools with limited literacy experiences. Harcombe believes that literacy should start by training teachers themselves in order for them to be able to implement an effective literacy programme to disadvantaged learners, who lack literacy experience because of their disadvantaged background. The CATLI was therefore created to develop learners' literacy skills. Harcombe (2003; 2005) argues that most teachers lack literacy skills because traditional methods of teaching were used for their own learning, and they did not actively engage in reading, writing and language manipulation.

The CATLI actively engages learners in the literacy process and makes it easier for them to acquire language and literacy skills than the traditional approaches. It is in this regard that literacy instruction in schools should move from isolated traditional methods to whole language approaches, as proposed by Harcombe (2008). The CATLI is a new approach that is holistic in nature and addresses all literacy difficulties simultaneously (Harcombe, 2008). The approach to teaching literacy could be equated to the processes of riding a bicycle, where all skills involved in bicycle riding are applied simultaneously to get the bicycle in motion. The CATLI is known as a whole language approach because it involves teaching and learning of all literacy skills, such as writing, reading, spelling, and all language experiences that promote literacy competence .It involves active engagement in the literacy activities by learners, while teachers mediate the process and act as facilitators and guides. By virtue of the CATLI actively involving learners, it makes literacy instruction effective in meeting the needs of learners without any prior literacy skills because they build concepts while simultaneously developing language (Harcombe, 2008).The CATLI also helps learners to increase their experience in English as a second language.

The CALTI makes good use of Mediated Learning Experiences (MLE) in literacy instruction (Harcombe, 2008). Many theorists, such as Feuerstein (1962 in Harcombe, 2008), Piaget (1989 in Donald, Lazarus & Lolwana, 2010) and Vygotsky (1978 in Donald et al. 2010) argue that MLE facilitate language development and general experiences. Thus, if the CATLI offers an opportunity for MLE, and for learn-

ers in disadvantaged schools to acquire literacy skills, the authors of this chapter argue that it is worth including as part of training teachers for competent literacy teaching and learning.

South Africa is one of the countries whose literacy levels are said to be very low (Spaul, 2012), especially in disadvantaged locations and rural areas. The CATLI has been used by Harcombe to educate trainee teachers at the honours level in one university in South Africa to support teachers who teach learners with literacy difficulties in disadvantaged schools in Johannesburg (McMahon-Panther, 2008). As both pre-service and in-service teachers need training in literacy skills, the CATLI could be incorporated into pre-service training in institutions of higher learning and also as a support strategy for in-service teachers. When teachers' own literacy levels are developed, they would be able to teach literacy skills to learners even in disadvantaged schooling contexts.

In the practical training of the CATLI, the trainers first establish the needs from the in-service teachers themselves, then they design a reading programme where teachers actively do specific reading, writing, spelling tasks and they learn through involvement. The active way of doing and learning those literacy tasks is the same way they will teach their learners. A study by McMahon (2008), which evaluated the effectiveness of the CATLI in the South African context, revealed that it is effective for teacher trainees in terms of facilitating an effective literacy programme that can improve literacy among learners in schools. Contexts might be different, but when the CATLI has proved effective in the South African disadvantaged school contexts, the chances are that it might work the same way in Zimbabwe. The disadvantages and experiences of literacy by learners in the two educational contexts might be different, but the authors of this chapter feel that it is worth trying this programme alongside the RLRDP in Zimbabwe. It is thus suggested that the CATLI can be included in the curriculum for teacher education in higher learning as a training tool to improve literacy skills among Zimbabwean teachers. When teachers are trained in the CATLI, they will be able to impart literacy skills to the learners in their schools. When the programme is extended to library literacy, it will be easier for learners to develop their literacy skills because they already have the required background. The authors suggest the incorporation of the CATLI into teacher education programmes at the pre-service level.

CONCLUSION

The RLRDP is the epitome that locally available resources could overcome deprivation and serve numerous learners in disadvantaged rural schools and communities. Broadly, the programme also illustrates that the problems of Africa, as a continent in the South, could be overcome using solutions developed by Africans in Africa, rather than the West. Thus, the West's interventions to solve African problems with Eurocentric strategies and forms of knowledge that are European may be fruitless. The programme has been able to demonstrate that though coloniality still has a strong influence on the South, there are small spaces in which oppression is being dismantled by those who have become aware and conscious of the oppression of the West. The specific programme has created an understanding that all knowledge is valuable and useful, especially if it is context specific and able to meet the needs of the local community and the future generation of that society. The current innovation might not be a match to the 4IR technologies other African countries such as Nigeria and South Africa are embracing, but it should be acknowledged that the combination of tradition and new technology is unique and has improved the lives of the local communities and learners in a unique way. The authors conclude that the gaps observed

in this programme could be refined through the incorporation of other literacy programmes that have proven useful in other countries, such as the CATLI in South Africa.

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Chapter 14

Dynamics of Disability for South African University Students in the Fourth Industrial Revolution

Phefumula Nyoni
University of Johannesburg, South Africa

ABSTRACT

This chapter focuses on the relational nature of disability especially with respect to experiences of disabled students with access to assistive technologies particularly within the context of the fourth IR. The chapter presents a background on various interpretations relating to disability and implications to identities within an academic context. The chapter also highlights the various experiences by students in diverse university spaces. Using informal interviews and observations, the chapter explores the nature of the identities of disability, how individuals negotiate the experiences in the diverse spaces of interaction with other beings or technology. Focus is also on relations created as disabled students interact with non-disabled students and lecturers in diverse situations. Conceptually, the chapter draws from the social model on disability in which disability is viewed as a socially constructed phenomenon. In addition, Foucauldian analysis of disability is used to explore notions of how disabled students experience power as thy deal with day to day academic obligations.

INTRODUCTION

The importance of universities as centres of knowledge, especially within the current era of the 4th industrial revolution (4th IR) gripping the world at large, and South African institutions in particular, has deepened. Technology has therefore become central in the different spheres of the universities especially in teaching and learning. With access to the universities being broadened within the post 1994 democratic era, the increase in the student numbers have seen populations of previously marginalised groups such as the disabled students also increasing. With improvements in access being a result of a combination of progressive legislative directives and institutional policy interventions it is however crucial to go deeper in exploring the issue of access.

Whilst it is clear that growth in technologies accessible to different groups in universities has accelerated with the advent of the 4IR, not much has been done to explore the question of accessibility for such technologies and other university infrastructure by disabled students. In this regard, the question of access to various technologies needs to be explored from how the disabled students have come understand their day to day experiences not just with technologies but broadly encompassing interactions with the physical spaces, available technologies, lecturers, and other students. The identities created around the interaction are further explored in the chapter.

In understanding the day to day experiences of disabled students with technologies albeit within the context of the 4th IR, the chapter uses the social model approach and Foucault's argument related to the impossibility of power being absolute as it is rather fluid and involves cooperation, negotiation and contestation. The chapter also highlights the issue that power is manifested and practiced differently in the diverse spaces. Whilst it has been widely expected that extending access to technology for disabled students could enhance the democratisation of academic spaces, a closer exploration of the day-to-day day to day experiences of disabled students has revealed that despite the positives of technology being undeniable, it has equally come with its own challenges that are explored in depth in the chapter.

In terms of methodology, the chapter is a result of a combination of face- to-face interviews with students and staff both disabled, non-disabled, and the researcher's day-to-day experiences within the university spaces concerned. Pseudonyms are used throughout to identify the participants.

Background

Whilst there has been a growth in the interest in relation to support given to students with disability across the globe with legislation being used to support the process, not enough effort has been made to systematically explore the experiences of students with disability from a day-to-day experiential point of view (Healey, Fuller, Bradley and Hal, 2006; Owens 2015 and Sarsak 2018). Healey et al. (2006) have further emphasised that capturing experiences of disabled students presents the advantage of understanding challenges encountered how they negotiate through the academic spaces. Chiwandire and Vincent (2017) have highlighted that in South Africa, with regards to access to education by students with disabilities during the pre- 1994 era, little attention was given to this group. This situation however changed with the post 1994 democratic government enactment of legislation such as Section 29 which has given legislative authority to addressing the position of disabled persons. In addition, efforts within the higher education context in South African institutions have had success in enhancing students' access and success across the higher education institutions.

In many contexts, inclusivity entails an integration of disabled and non-disabled students. The integrative approach has been seen as crucial in democratising and enhancing social justice within the teaching and learning setting. Important, is the view of Kajee (2010) that the use of information and communication technologies (ICTs) as teaching tools, particularly when sighted and non-sighted students are combined, tends to worsen the challenges. Whilst the progressive legislation particularly within the South African context has been widely celebrated, Chiwandire and Vincent (2017) have argued that the legislation has had minimal impact on improving challenges such as campus access as well as the day-to-day barriers they have to negotiate within universities. Whilst the situation might be better in historically advantaged universities, exclusionary practices might be on the increase for poorly resourced universities. Chiwandire and Vincent (2017) have further presented reports whereby there have been instances where students

have been denied access into some universities due to claims of the institutions not having appropriate facilities to accommodate such students.

Although the integrative approach to learning has been common among universities not just in South Africa but the world over, it has been realised that educational modifications for blind students that include use of Braille writers and note takers usually act as social barriers. This barrier is mainly because these activities take place whilst students with disabilities are separate from those with no disabilities. On the contrary to the isolative nature of technology, it has been noted that, blind students are said to fare better when they spend time with their fellow blind peers as opposed to the time spent using technology. In addition to some technologies that may play an isolating role, the issue of visual impairment as a barrier to social communication, with the combination of limited use of body language and perceptions being identified as hurdles, has also constantly been emphasised (Kajee, 2010).

Kajee (2010) has argued that despite the emerging use of technologies as new modes of delivery, resistance and feelings of inadequacy and under-preparedness for such technologies are common among both students and lecturers. ICTs can present both opportunities and challenges to higher education (Kajee, 2010). Opportunities include the positives that can be drawn from being familiar with new technologies and applying computer literacy skills in particular. Challenges relate to the widening of the digital divide if initiatives aimed at addressing it are not implemented.

Identities Surrounding Disability

Sarsak (2018) has argued that although disability can happen to anyone at any time, non- disabled sections of society usually find it difficult to appreciate such a reality. It is equally difficult for the non-disabled persons in societies to appreciate the causes, effects, representations, and ramifications of disability. Sarsak (2018) in reviewing Linton's work on disability has revealed how she has consistently demonstrated how society and academia has taken a narrow devaluing construction of disability.

It is important to explore the dynamics surrounding the way disability is interpreted at both theoretical and practical levels. In this regard, Shakespeare (1996) has made crucial contributions by presenting two key dimensions of disability that include; the physical or medical on the one hand and the socio-cultural dimension on the other. The narrow limited view of disability usually adopted by society and the academia can be said to have negative effects on language and the conceptual underpinnings on disability which further perpetuates the marginalisation and discrimination of persons with disability (Sarsak, 2018).

The physical or medical approach explains disability within the context of impairment in which biological determinism by its focus on physical differentiation is emphasised. In essence, disabled persons are described as a group whose bodies cannot perform certain functions, have different appearances, act differently, and broadly face constraints in terms of productivity. This viewpoint is therefore heavily vested on some set standard that identifies normativity, to the extent that disabled persons are put on a scale of performance and conformity with some measure of deviation being used to define 'normalcy'. Shakespeare (1996) goes on to indicate that whilst the medical approach does not identify 'the disabled' precisely but focuses on particular groups with impairment such as the visually impaired or epileptic, such an approach tends to exhibit denialism of the common social experiences shared by disabled persons. The confusion displayed by non-disabled persons in relation to disability occurrences becomes crucial particularly when considering the view by Shakespeare (1996) where impairment is something that affects everyone despite the fact that non-disabled persons tend to ignore their experiences of impairment and physical limitation.

The socio-cultural approach views disability as linked to social processes implying that it is socially constructed. With links to the social movement of disability of disabled people and further developed. The background and key principles of the social model approach are presented in the section that follows.

The Social Model Approach

There is wide consensus among scholars that the social model despite its pit falls and criticism levelled against it has shown success for disabled persons in society particularly through challenging their discrimination and marginalisation (Owens, 2015; Oliver, 2004; Retief and Letšosa, 2018 and Rembis, 2019). As Owens (2015) further argues, processes surrounding the social model have taken the form of a social movement that has brought together disabled people, civil rights and political activism which has ultimately led to the challenging of disabled peoples experiences of oppression through political and academic activism. This has broadly enhanced disabled people's reclamation of their position in society.

In what makes the foundation of the social model strong at addressing both theoretical and practical obligations linked to attaining a socially just society for all persons especially marginalised groups such as the disabled, Owens (2015) adds that in the 1990s the disability rights movement adopted the slogan 'nothing for us without us' whose Latin translation is '*nihil de nobis sine nobis*'. With links to the Polish foreign policy, dating back to the 1930s to communicate the idea that no policy could be decided without the full and direct participation of those affected by the policy. Despite the aspect of 'full and direct' participation lacking clarity and being subject to interpretation, such efforts remain crucial in the creation of socially just processes and settings. Owens (2015) and Oliver (2004) have also reported that the usage of the social model whilst initially being more pronounced within the social work context has found itself attracting common usage in diverse political and policy contexts. Oliver (2004) gives a political context in which in the speech of the then British Prime Minister Tony Blair he indicated that the Labour Government's aim was to take down the barriers preventing persons from fulfilling their full potential. Importantly however is the fact that this growth in the usage of the social model equally saw intensity in the contestation surrounding what the social model means in theory and in practice. In this regard, Owens (2015) has argued that the social model of disability's shift from impairment and disability towards the role of the social setting that is responsible for discriminating against disabled persons, the model aims at politicising disabled people's struggles whilst also raising awareness and challenging established norms in society.

In explaining the emergency of the social model, albeit within the British context, Oliver (2004) argues that it can be traced to the publication of the basic principles of disability by the Union of the Physically Impaired Against Segregation (UPIAS) in 1976, who argued that:

In our view, it is society which disables physically impaired people. Disability is something imposed on top of our impairments by the way we are unnecessarily isolated and excluded from full participation in society (UPIAS 1976, p.14).

The above quote as suggested by Oliver (2004) also resonates to the views by Owens, (2015) and Rembis (2019), particularly in highlighting a key principle of the social model, that is, it is not impairment responsible for the social exclusion of the disabled persons but rather the way in which society respond to persons with impairment. It therefore means that whatever circumstances and related experiences are faced by persons with impairment ought to be understood within the practical realities manifest within

the settings where they are located. This view is critical in the arguments of this chapter where the stigma attached to disability which is prevailing within the rural setting is equally prevalent in universities, and is mainly responsible for shaping the experiences of person with impairment especially the students. It is therefore pertinent to understand that the usage of the social model in the arguments of this chapter relate to its focus on the how the interaction of the persons with impairment with other societal actors shapes their experiences.

Just as Rembis (2019) has highlighted regarding the significance of the social model, especially as far as its contributions in transforming the way people view disability, it can be equally argued that in contrast to the individual model principles which poses explanations surrounding personal tragedies, the social model becomes crucial in understanding the issue of disability at both theoretical and practical levels. This is the case in as far as understanding disability in practice is concerned in particular considering that label construction is a two way process. This implies that the persons with impairment, also to a certain extent contribute towards the shaping of identities created around their condition. Instead of them being spectators and at the mercy of society they are involved in this process and are capable of drawing from various forms of agency to navigate through the interactive processes. This is despite the importance of the view that at inception in many instances, the structural elements within society always tilt the power scale against the persons with impairment.

Three key principles of the social model

1. Focus is shifted to the challenges posed by disabling environments, obstacles and cultures located within societal spaces as opposed to the incapabilities of the persons with disability. As argued by Rembis (2019) disability is separate from impairment as it is socially created hence there is a possibility of reducing or eliminating it by creating a built environment that is more accessible for persons living with impairment and promulgating legislation that could assist in the protection of the rights of persons living with disability.
2. A holistic approach needs to be pursued in order to ensure that the disabling settings and the challenges they create for persons with impairment are understood in their totality and not in isolation.
3. The role of the persons with impairment in the construction of identities cannot be underestimated together with interventions and interpretations that tend to target individuals.

Limitations of the Social Model

Rembis (2019) argues that for the past 30 years, disability studies scholars writing from diverse theoretical perspectives and contexts have criticised the social model of disability. The main issue raised against the theory has been that it is in some instances disconnected from the histories, cultures, and societies being studied. In addition, the basic premise of the social model which advocates for the impairment/disability dichotomy has been challenged as false. This false dichotomy on impairment/ disability is also shared by Owens (2015). Furthermore, Rembis (2019) has indicated that the social model's principle that social justice or equity can be achieved through eliminating barriers has been viewed as utopia due to the economic impossibility of creating such an environment due to the social and relational nature of disability and the differentiated identities. In essence, people cannot be reduced to their disabilities and no two people can have the same experiences in relation to their disability.

Foucauldian Analysis of Disability and the Social Model Approach

There is a close association between the social model and Foucault's ideas in which power cannot be conceived in wholly coercive terms as persons are provided with the ability to act. The implication is therefore that power ought to be viewed in terms of actions as people need to have some degree of autonomy to exercise power.

Owens (2015) thus argues that for Foucault, people's private worlds are governed by a public and political world of knowledge and power with the private realm replicating the political. It becomes crucial to therefore bring to the fore the ideas of Foucault where disability can be explored in relation to the diverse aspects of knowledge, power and activism. As argued by Prince (2016), the view of power being absolute is a challenge in reality as power involves a negotiated process in which actors derive it from different sources. Equally, power is exercised differently in the diverse spaces. It therefore implies that in as much as power may entail some degree of assertion, it equally involves contestation. It can further be noted that instances of subjugation are met with some measure of opposition whilst oppressive experiences are confronted with some form of resistance. In essence, the aforementioned dimensions on power are crucial in understanding the relational nature of power and assists in illuminating the different relations formed and how people tend to experience those relationships.

Student Experiences in Disability Centres

Disability Centres as Resource Centres

Post 1994 university spaces have moved to promote access to teaching and learning for disabled students through the creation of specific units normally referred to as disability centres. These spaces are equipped with technologies for supporting students with disability. What was striking during visits to the centres are the processes surrounding the equipping of the centres. Mostly it seems that there is little or no effort done to consider the disabled students' personal experiences and requirements when sourcing the technologies to be used. Instead, what the centre administrators do is to use the broad categorisations such as visually and physically impaired. This approach compromises the efforts of ensuring that a socially just environment is created and calls into question the meaning of access considering the exclusionist tendency associated with the processes governing the equipping of disability centres. It is the same forms of exclusion that according to Foley and Ferri (2012) could be due to the prescriptive tendencies which have seen the provision of certain technologies bringing to the fore subtle exclusionary features due to reliance on narrowly construed and overly generalistic mechanisms in efforts to assist marginalised groups such as the disabled students.

It follows that the generalistic approach contradicts the principles of the social model approach where a holistic approach which seeks to promote the views of the disabled ought to be upheld to primacy if their issues are to be adequately addressed. This implies that processes related to addressing the technology and broader learning needs of disabled students ought to draw from the meanings that the group attach to both access and typologies of technologies. Above all, it is crucial to equally appreciate the power imbalances that commonly prevail within the processes involving redressing of access to technology by disability centres. Drawing from approaches that seek to place the affected persons at the centre of their emancipation becomes even crucial with the advent of the 4th industrial revolution where possibilities for

enhancing teaching and learning through affordable smart technologies can go a long way in ensuring the inclusion and capacitation of formerly marginalised groups such as disabled students.

Challenges faced by Disabled Students in Disability Centres

Whilst the question of declining funding has been felt across universities in South Africa, the funding gap has been felt more by historically disadvantaged institutions. Equally, the historically disadvantaged institutions have consequently experienced a backlog in infrastructure and requisite technologies. It follows that units catering for previously marginalised groups such as disability centres particularly within the historically disadvantaged have suffered from the financial inadequacies faced by the institutions. It is however crucial to note that the challenges faced by historically disadvantaged institutions especially in terms of ensuring that disability centres are well equipped go deeper than the challenges related to funding deficits that are commonly projected as key reasons. In this regard, historically disadvantaged institutions have equally proven to struggle with internal processes that may include though not being limited to equipping disability centres as well as ensuring that adequately trained staff and requisite technologies are acquired by students with disabilities. The personnel at the targeted historically disadvantaged institutions displayed a lack of competency in different spheres of ensuring that the disability centres suit the needs of disability students in their diversity. What was however observed with these centres was some tendency to procure technologies that students have found either obsolete or not user friendly. Whilst some of the staff interviewed tried to shift the blame to lack of budgetary support by their institutions, it was clear that issues related to the suitability of the technologies could go a long way in enhancing the learning of disabled students had the disability centre staff possessed requisite competencies.

During one of the fieldwork encounters through interviews and observations, targeting staff at a disability centre in one of the historically disadvantaged universities revealed a gap in competencies of the staff for handling students with disabilities. This followed the researcher's observation in which one of the visually impaired students who also doubled as a student activist was seen struggling with accomplishing his tasks. The researcher was met by a defensive head of the unit who seemed interested in knowing the identity of the student seemingly for cover up purposes more than providing a solution to the concerned student.

The head of the unit was quick to say:

But who is this young man who lodged the complaint of the machine not working, we are doing all that we can to fix it but at the moment they know where they can get assistance with their work. Some of these students are just lazy and we know they will come up with excuses. (Head of a disability centre, March 2019)

The quote represents some common reactions by support staff at disability centres which has shaped the experiences of disabled students across the historically disadvantaged universities. Such attitudes have exposed the capacity gaps faced by these centres in ensuring that the disabled students get the assistance required for their learning.

In many instances, statements by students in terms of root causes to some of the challenges faced by students with disabilities tended to contradict responses of heads of disability centres. In one of these centres, a visit which combined observation and interviews, saw a disability centre head confirming the

allegations raised by students that there seemed to be a slow reaction towards addressing technology acquisition and repairs especially the critical equipment such as the Braille machine. This issue was raised by one of the visually impaired male students who indicated that:

I have been going there to remind the head of the centre about the need for urgency in repairing the machine and he keeps on promising that they are working on it, now I am a bad person because unlike some of my colleagues I always challenge the centre head. I am now labelled a trouble maker because of my intolerance to ill-treatment. I think we need to take our issues to the university management. (Interview with Duma, a visually impaired male activist, 20 September 2019)

The situation revealed by Duma formed a common thread across the historically disadvantaged institutions with narratives of confrontations and frustrations between students and centre staff coming out frequently. The simmering tensions combined with the reluctance by staff within the centres to urgently deal with disabled students concerns which are likely to directly impact on their academic performance points to the poor understanding that they have on what access might mean in reality. In addition, it also indicates the stubborn societal stereotypes where disabled persons in some spaces are still languishing under the socially created identities pitting them as second class citizens. It is thus saddening that not much seems to be done to deal with this neglect despite the progressive national legislation and policies that are in place in South Africa.

Relational Nature of Disability- Lecture Room Encounters

In understanding the influence of the relational nature of disability on the issue of disabled student's access to technology with the academic context there is need to explore the lecturer-student interactions. In this regard, the question of lecturers teaching classes that combine disabled with non-disabled students has revealed that in many instances lecturers barely take the initiative to familiarise themselves with the experiences of disabled students outside the mainstream teaching spaces hence in many instances they miss the opportunities of getting first-hand information on the special needs of this group. Whilst in some instances there is some form of awareness on such needs, the capacity to make necessary interventions has also been observed in low resource university settings. In one of the cases that the researcher observed, disabled students could not access the separate printed test questions on time and had to go all the way from the disability centre to the test venue where non-disabled students were already in session. It was only after the students with disabilities had made an effort to access the test paper, and following assistance by the course lecturer that the disabled students preceded with their test. Such experiences which tend to be common within many universities in particular the poorly resourced institutions, further expose shortcomings inherent in current systems meant to cater for students with disabilities in academic institutions.

Some crucial explanations related to exploring the diverse and relational nature of disability was revealed by a lecture room encounter that the researcher had with a visually impaired female student, Fezile[1] who during one of the lecture session raised her hand to indicate that she was being disturbed by what she felt as a high volume from the speakers. Whilst she was not the only visually impaired student, the differences in which the students experience disability played out clearly. For some visually impaired students, both male and female the higher sound was preferred something which seemed to be commonly acceptable to have the speaker volume tuned to the level that Fezile found disruptive. The

difficulty in balancing the sound became important as it highlighted the practical realities faced when trying to create an inclusive and socially just environment within the teaching and learning. This experience also fits into the one of the key principles of the social model approach in which Oliver (2004) highlights the primacy of the role of the persons with impairment in the construction of identities. Not only is it crucial to consider the views of persons with impairment but it is also equally crucial to explore how these relate to the various interventions and interpretations targeting the individuals concerned. Interventions especially from lecturers and other persons meant to assist disabled students usually fall short in addressing their access to services especially if they fail to embrace the social meanings that the disabled students hold.

The aspect of viewing how disabled students access learning materials through technologies such as the e-learning platforms coupled with a lack of awareness by academic staff on the different needs of the disabled student can also constitute a common complex issue that disabled students have to grapple with. In a way, the provision of learning material through e-learning platforms tends to be benchmarked along non-disabled students with disabled students being expected to seek assistance from the disability centres. Whether this is done out of lecturers lacking awareness with disabled students needs or failure to make adjustments through bringing specific interventions has also been raised by Kendall (2016). In one of the lecture rooms because of a combination of using power point slides and verbal explanations a visually impaired students who relied on recording the lectures found it difficult to reconcile the two and he indicated this when he thus exclaimed:

Whilst the lecturers and other students try to be supportive by for instance ensuring that I occupy a front seat and operate my recorder but its only the voice that I can capture otherwise it becomes a challenge when I have to later go through the slides and the notes as I have to rely on my assistant to try to reconcile my recorded lecture with the slides. It is really a challenge when demonstrations or projection is combined with the lecturers' verbal explanation (Interview with, Sabo, a physically and visually impaired male student- February, 2019).

Taking the experiences of Sabo further it can be argued that just as indicated by Foucault, and the social model, and as the latter highlights, the primacy of the action of the actors in identity creation albeit from a holistic approach is crucial. In addition, identities are created within a social environment. This implies that to understand the experiences of the disabled students requires that the spaces they find themselves in and the interactions be examined from both a social and holistic point of view. Such an approach ought to be used as part of processes that could lead to our understanding of how disabled students negotiate their way within the academic spaces. The issue of how fluid power might be is equally important to explore as what universities might view as empowering might actually be sources of subtle exclusion to the disabled students. It is therefore crucial to note that whether focus is on access to assistive technologies or experiences within the academic spaces by the disabled students, it remains important to uphold the primacy of incorporating the socio-cultural underpinnings in any effort aimed at assisting this group.

Dynamism in Access to Technology within the 4th IR and Disability Contexts

The 4th IR can be linked to the prospects of technology being key in enhancing people's connectivity whilst also acting as a means for broadening access to education, business, entertainment as well as

employment opportunities. The changes taking place within the context of the 4th IR have been rapid with the accompanying communication technologies and new media showing potential for breaking down barriers and transforming people's lives. In some way, technology has been embraced as liberating (Foley and Ferri 2012) and having the capacity to create a socially just society. This view is seen through various technologies having capacity of making up for social, educational, and physical barriers to full participation in society. The advent of the 4th IR has meant that use of technological multimedia modes of delivery in the various subjects has reportedly increased within universities in the developing world, including South Africa (Kajee 2010). According to Kajee (2010 technology constitutes the new reality whilst higher education remains pivotal in preparing youth for the knowledge and information society. It is also reported that there is possibility that success within the next century will be linked to one's capacity of drawing from literacy in and familiarity with computer technologies.

Technology use within university spaces has therefore reportedly expanded with students who enter universities facing the requirement to learn and make use of online learning resources or activities to support their formal and informal learning (Seale, Wald and Draffan 2008). The e-learning initiatives with which the students are involved include; virtual learning environments, discussion lists, blogs, emails, podcasts and library information databases. It follows that the higher education and e-learning subjects have seen an increase in scholarly interests especially with the growth in reliance on artificial intelligence fuelled by the rise of the 4th IR.

Technology Related Challenges faced by Disabled Students within the University Context

Within the context of disability, there has been hope that technology might present opportunities for freeing persons from the confines of embodiment and make provision for a futuristic solution for transcending impairment related constraints. This is also highlighted by Foley and Ferri (2012) who have argued that the optimism surrounding the potential for technology driven solutions especially within the context of the 4th IR rests on the assumption of assistive technologies having capacity of levelling the playing field. The 4th IR has had implications on technologies as they have become smaller, faster and relatively cheaper.

The issue of access to technologies has however emerged despite the acknowledgement of the complexity surrounding the relationship between technology and access to it. It follows that the technology divide has increasingly transcended nuances of access as it has come to include the deeper underlying meanings of access. As argued by Foley and Ferri (2012), the implication has been that access ought to be viewed beyond the 'haves' and 'have-nots' divide. Such a divide is said to be equally important to explore when particularly looking at settings that involve the disabled and non-disabled. In essence, it has been argued that an understanding of the influences of technology on students requires a framework that transcends a mere engagement with statistics in terms of those with and without access to technologies.

Whilst there has been a wide acknowledgement regarding the positive influences of technology on access, integration and to a certain extent enhanced academic productivity within the university context, this has not over shadowed some criticism that technology has potential to also isolate people and create unique forms of social exclusion. Such exclusions, according to Foley and Ferri (2012) could be due to the prescriptive tendencies where certain technologies are provided in a blanket manner without considering some distinguishing features of impairment among the targeted persons. Such challenges become even more pronounced when efforts are made to introduce technology to under resourced contexts. This

further means that enhancing access to technologies without scrutinising the meaning attached to the access issue does not guarantee any social transformation and creation of a socially just environment especially for marginalised persons such as the disabled.

It can also be noted that technology in some instances can lead to exclusion albeit in subtle ways and subsequently favour certain ways of being founded upon normative, social, cultural, and economic practices associated with the design, production, marketing, and implementation of the technologies (Foley and Ferri 2012). In such instances, technology gets linked to ways that reflect commonly taken for granted ideas that define the 'normal'. In essence, ideas on how we ought to operate which reflect a somewhat *ableist* worldview tend to be dictated by available technologies.

Whilst there has been optimism that the technological explosion being currently experienced provides many possibilities for students with disabilities to experience opportunities which had previously been inaccessible or limited to them it is crucial to also explore that in reality particularly for South African universities located in rural areas the situation has been dire. Seale, Wald and Draffan (2008) have argued that despite the fact that fewer studies have focused on the general learning experiences of students with disabilities in higher education, their results indicate that disabled students may have different e-learning experiences. Crucial findings in previous studies presented by Seale, Wald and Draffan (2008) and Kendall (2016) have also added on the issues that can act as barriers in particular those that are used by students with disabilities in general and specialised technologies to support their learning. They also concur about the barriers linked to using publicly available general information technology facilities such as location and lack of specialised software on computers and bureaucratic hurdles. The aforementioned barriers are also linked to decision making that relates to provision and maintenance of equipment as well lack of adequate training for staff who deal directly with students with disabilities. These challenges were also observed in the current research focusing on historically disadvantaged universities. In some instances, interviews with disabled students confirmed their inability of accessing learning material posted on platforms such as blackboard and resort to requesting peers to download the materials on their behalf.

The challenge with how in some instances introduction of technologies become prescriptive thereby excluding some disabled persons is confirmed in one of the conversations I had with one of the disabled male students who upon being asked whether they had accessed material posted on one of the e-learning platforms thus responded:

Our computers cannot even do basics either because of the outdated software or just being too slow to download the material posted. I have asked my assistant to assist with downloading the material because it has been over a month since we were promised that the computers would be upgraded (interview with Ntonga a visually impaired male student- March 2019)

Reports by Jacobsen (2012) that in some contexts such as in the United States of America teachers share the assistive technological devices they have with students in a way of broadening access is an underestimation of the conservative culture within some South African universities especially those commonly known to be historically disadvantaged. Whilst one would have expected academics with disability to be more proactive in promoting the sharing of assistive devices with students, it was observed that they are the ones more sensitive and reluctant to share. An interaction with some of the disabled academics revealed that in addition to the issue of costs related to purchasing and maintaining the devises, they

further believe that it is the responsibility of the university not only to ensure the devises are provided but to also ensure that they are adequate and always maintained and functioning properly.

It is crucial to note that lived experiences of disabled students show the challenges presented by the differences of impairment which consequently calls for varied technologies. The variations in experiencing disability have posed challenges for ensuring that university spaces provide adequate technologies and infrastructure for the disabled. This challenge is intense particularly when it comes to the historically disadvantaged institutions with limited resources. In this case, I use the experiences within a mass lecture where various technologies are employed to enhance the teaching process.

Chiwandire Vincent (2017) and Kendall (2016) have also added to the issues that can act as barriers which include the physical environment as exemplified by challenges in accessing campuses, accommodation, lecture rooms and computer laboratories, support services as well as attitudinal linked barriers. Isolation of students with disability from others during assessments and exams has been seen as some form of discrimination. This issue of isolation also speaks of the differing needs that disabled and non-disabled students have. Certain learning disabilities may require specific assessments or exams, something that is barely considered particularly in historically disadvantaged universities which are frequently faced by resource challenges.

Another challenge facing students with disability relates to accomplishment of tasks especially in instances whereby they are expected to work in groups. Although the challenge of participation in group activities was expressed by students across the impairment divide, it was the visually impaired who felt that their experiences were more dire compared to the rest as they felt constrained in giving input during group tasks. Faced with difficulties in accessing spaces where discussions take place, the visually impaired students further find it difficult to influence the discussions. This was expressed by one of the visually impaired male students who upon being asked about his contribution towards the group task revealed that he had given input but it was not incorporated:

Even if I make an effort to attend the discussions and contribute, it is difficult for me to ensure that my input is respected as I remember very well that I had contributed in line with the explanations we are now being provided for. I am so devastated by this bad performance and if possible, I would rather be given an individual task (Interview with, Sodo, a visually impaired male student- April, 2019).

CONCLUDING REMARKS

Scholarly interest on the experiences of disabled students within universities has expanded with increasing calls for more action to be taken in terms of improving the circumstances of this group. However, despite national legislation and policies aimed at enhancing access within the South African university context, especially in relation to assistive technology and physical infrastructure upgrades, reports of marginalisation of students with disabilities in university spaces are increasing. The question has therefore been asked whether the growth of cases of marginalisation could be related to the conceptual dilemma or else persistent societal marginalising practices that have reduced disabled persons into second class citizens.

The chapter reveals the relational nature of disability and highlights experiences and contradictions surrounding student-staff interpretations on the meaning of access in reality. It is therefore through embracing narratives on disabled student's day to day experiences that the question of access and subsequently inclusion can be best understood. Above all, the highlighted incidences show that despite claims that a

lot is being done to improve the issue of access to assistive technologies by disabled students, their day to day experiences especially at disability centres points to laxity which threatens the group's access and academic productivity. This is despite the fact that disability centres are spaces where the disabled students are expected to receive support including moral support to strengthen their individual resilience throughout their long-life learning journey.

It is crucial to note that incidences pointing to the diverse and complex nuances of disability can also be understood within the broader interactions between disabled students and their non-disabled counterparts. In this case, although different interpretations of the student's experiences can be said to transcend the state of disability, power differences appear to be manifest in relations that involve the interaction between students with disabilities and those without disabilities. Consequently, disabled students complained about how their non-disabled counterparts seemed to belittle their contributions, a sign that there is still a lot needing to be done to make academic spaces more accessible, inclusive and above all just particularly for marginalised groups such as the disabled students. One can thus recommend that awareness-raising campaigns be instituted targeting students and lecturers whilst at the same time implementing professional development programs on Universal Design Teaching for academic staff.

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KEY TERMS AND DEFINITIONS

Academic Spaces: These are platforms and spaces within universities where students, lectures and other actors interact to peruse their academic business.

Access: This is used to define inclusivity at various levels that include the technological, physical, social, and intellectual levels.

Disability: This is loosely used to point to a state of infirmity to the effect that all persons one way or the other have some form of disability despite denials.

Historically Disadvantaged Universities: These are universities commonly found in former homeland with most being located in rural settings.

Inclusivity: This involves embracing the understanding and needs of students with disability.

Integrative Approach to Learning: This involves a commonly used approach where disabled and non-disabled students are taught in a combined manner.

Chapter 15

The Disabling Influence of Work–Life Imbalance and the Fourth Industrial Revolution (4IR) on Postgraduate Research Engagement and Progress

Dennis Zami Atibuni
University of Johannesburg, South Africa

ABSTRACT

The onslaught of the fourth industrial revolution (4IR) requires employees to have a more complex combination of skills—the 21st century skills—than in the past. The corporate world expects employees to amass these skills from the education system, especially through acquisition of postgraduate qualifications. However, acquiring these skills presents challenges to the students as institutions rarely offer these skills at that level. Low competence in these skills, coupled with work-life imbalance, hampers research engagement and hence progress and completion among postgraduate students. In essence, a lack of the 4IR skills is a disabling reality for postgraduate research students. This chapter presents a desk-based conceptual review of the disabling effects of work-life imbalance and inadequate 4IR skills on postgraduate students' research engagement and general academic progress. Implications for policy and practice include routine provision of hands-on experiences on the 21st century research skills and work-life balance in order to step up their research progress.

INTRODUCTION

The UN, in the 2000 Millennium Development Goals (MDGs) and 2030 Sustainable Development Goals (SDGs), has set the development agenda for the first half of the 21st century. These strongly emphasise the role of postgraduate education in socioeconomic transformation. Postgraduate education constitutes a particular investment, whether personal or national, in human capital (Kearney, 2008). The overall

objective of postgraduate education is to prepare highly skilled citizens and professionals able to address specific issues in national and globalised society. The wealth drawn from individuals and their talents can provide a basis for finding viable solutions to the issues of sustainable human development – particularly in poverty reduction, wide access to health care, education for all, population, good governance, equitable arrangements for globalised economic trends, and trade patterns.

However, in many African countries, postgraduate students encounter a series of internal inefficiencies as reflected by high dropout rates, high repetition or retake rates, longer completion times, low graduation rates, and to a lesser extent transfer between programmes (Farrar, 2013; Pillay, 2010). These inefficiencies are coupled with poor quality of outputs including low scores in course work, examinations, and research work. Such progress deficiencies are attributable to various programme, environmental, and student quality factors, although many disciplinary and other complex factors too contribute to these outcomes. One serious student quality factor is the disability status of the student, that is, whether the student has any physical or mental health issue that grossly impairs their academic functionality.

Among the salient issues that affect student performance at postgraduate level is work-life balance (Allen, Herst, Bruck, & Sutton, 2004). Work-life balance refers to the extent to which a postgraduate student can effectively manage multiple responsibilities at work, at home, and in other aspects of life (Ahmad, 2008). It should be noted that work-life balance is a function of one's internal psychological state as well as external factors. The internal component depends on whether the person has an underlying disability or not; those who are physically and/or mentally ill are more likely than the "normal" peers to exhibit low work-life balance or conversely high work-life imbalance. The work-life balance concept has three main constructs: (a) work place support, (b) work interference with personal life, and (c) personal life interference with work (Banu & Duraipandian, 2014). A proper balance in handling the simultaneous demands on the student would determine how he or she engages in academic demands such as research.

In the event where the students' simultaneous involvement in family, work, study, social, and personal life is stressful, their work-life balance is low. The resultant work-life imbalance, coupled with low proficiency in the 4IR skills, is most likely a notable disabling cause of student research engagement at higher degrees. The integration theory of work-life balance (Clark, 2000) provides a good grounding for explaining these dynamics. According to the theory, students will establish and transfer emotions, attitudes, skills, and behaviours between their work life, family life, study life, and personal life. This implies that students require a healthy system of flexible and permeable boundaries between family-, work-, and community-life domains to pursue their programmes with utmost efficiency. When students experience satisfaction and achievement in one domain, their satisfaction and achievement in the other domains is enhanced.

Conversely, when students experience difficulties and depression in one domain; they are likely to transfer the same emotions in other domains (Xu, 2009). This implies that postgraduate students who have a high work-life balance will have high research engagement. The reverse is expected to be true for students with low work-life balance. Whereas a student may have a high work-life balance, research skills proficiency is critically important to enhance the student's progress during research. Research skills proficiency is a student's skilfulness in the command of fundamentals of computer applications, academic writing, data collection and handling, and communication skills deriving from practice and familiarity (Word Web, 2007).

Kearsley and Schneiderman's (1999) student engagement theory provides an explanatory framework for the research engagement of the students. According to the theory, students must be engaged in their academic work in order for effective learning to occur. Research engagement is the feeling of positive

emotions toward research work; investing personal resources, energy, and time in doing research as a meaningful activity; considering the research workload to be manageable, whilst taking advantage of collaborative, faculty, and institutional support; and having hope that the research work will attract better opportunities in future (Ram & Prabhakar, 2011). Measured on a high-low continuum, research engagement entails active use of emotions and behaviours in addition to cognitions in undertaking research. High research engagement is characterised by energy, involvement, and efficacy as opposed to low research engagement characterised by burnout and intentions to quit; evidenced by exhaustion, cynicism, and inefficacy.

Rashid and Rashid (2012) observe that in today's competitive economy, the presence of dedicated and brilliant employees in an organisation requires more attention than in the past, owing to the increasingly complex nature of duties. This implies that education must be tailored to generate greater intellectual attainments and innovative approaches, possible through higher and further education. Hence, no wonder that such a demand impresses on more people to enrol for postgraduate programmes. However, in the pursuit of higher qualifications, care needs to be taken to ensure that the academic motivation levels of the students are kept high through appropriate work-life balancing.

The Disabling Reality of Work-Life Imbalance on Postgraduate Research Engagement

Rantanen, Kinnunen, Mauno, and Tillemann (2011) assert that participation in work role may interfere with or enhance performance in family role, and likewise, participation in family role may interfere or enhance performance in work role. Astin (1984) refers to this as the "zerosum" game, in which the time and energy that a student invests in family, friends, job, and other outside activities represents a reduction in the time and energy the student has to devote to educational development.

According to Marks and MacDermid (1996) cited in Rantanen et al. (2011), there are two ways to engage multiple roles; as either positive or negative role balance. *Positive role balance*, in Marks and McDermid's theory (*cf.* Barnett and Baruch, 1985 cited in Rantanen et al., 2011), refers to the tendency to engage in every role with equally high effort, devotion, attention and care, whereas *negative role balance* refers to the tendency to engage in roles with apathy, cynicism, low effort and low attentiveness. Due to these behavioural and cognitive-affective tendencies, it is theorised that positive role balance will lead to role ease while negative role balance will lead to role strain (Marks & MacDermid, 1996) – role ease and strain corresponding with role enhancement and conflict, respectively.

In the case of positive role balance, role conflict is either prevented or solved before acute problems of role management become chronic. This is achieved by addressing the demands of each role on time, with effort and attention (Marks & MacDermid, 1996, cited in Rantanen et al., 2011). Strategies to use for this include avoiding unnecessary breaks, calls and e-mails while working, prioritising job responsibilities, and updating one's professional skills to substantially facilitate managing job and study responsibilities more efficiently so that the student's work time does not cut into his or her allocated work, family, social, and personal time. In contrast, for postgraduate students of whom a negative role balance is typical, occasional incidents of role conflict are likely to accumulate due to their indifference towards role-related tasks and duties, creating an ongoing state of unfulfilled demands. For example, ignoring one's spouse's emotional concerns and avoiding private life responsibilities, such as taking care of one's children or household chores may, over time, escalate into constant and daily disagreements,

which can also negatively affect job and research performance due to the consequential worsening of mood and concentration.

According to Seligman, Abramson, Semmel, and von Baeyer (1979) cited in Morganson, Litano, and O'Neill (2014), adopting an optimistic explanatory style (how people explain the cause of events that happen to them) allows setbacks to be viewed as external and temporary and successes as internal and long lasting. Likewise, a positive optimistic style increases resilience to adverse events (Seligman & Schulman, 1986) and correlates with performance in challenging occupations (Corr & Gray, 1996). In contrast, a postgraduate student with a pessimistic explanatory style may be socially isolated, which reduces the opportunity for them to provide or receive social support (Peterson & Steen, 2009). The explanatory framework for the effect of work-life balance on the predictor—research engagement links may be enhancing or inhibiting. For instance, lower levels of work-life balance will hamper the predictive impact of core self-evaluations on students' research engagement (Harris et al., 2009).

A study by Sushil (2013) established that there is a significant positive relationship between the quality of work-life balance and increasing the motivation of individuals. Conversely, research by Nwagbara and Akayi (2012) reveals that work-life imbalance negatively affects motivation and commitment for work and for any other aspect of life. This is noted to finally impinge on the research engagement and hence productivity of postgraduates as well as the organisations they belong to given that many of them are employees. Hence this chapter argues that work-life imbalance negatively affects research engagement.

Low 4IR Research Skills Proficiency and Impaired Research Engagement among Postgraduate Students

There is growing evidence of the need amongst employees for a more complex combination of skills than in the past (Remali, Ghazali, Kamaruddin, & Kee, 2013). These include mathematical, information and communication, and workplace-specific skills. The specific work-place skills include multimodal communication, collaborative writing, online networking, and one to one mobile computing – the so-called fourth industrial revolution (4IR) skills. Improved 4IR skills are envisaged to result in improved earnings and savings. The corporate world expects their employees to amass these skills from the education system, especially through acquisition of postgraduate qualifications. Most postgraduate students double as employees, and so acquiring these skills presents challenges as universities often assume that these should have been attained at undergraduate level. Unfortunately, without a threshold level of competency in these skills, research engagement is hampered among the students.

Trilling and Fadel (2009) argue that today's students fall short in communicating clearly, collaborating with others, thinking critically and solving problems, and creating and innovating. According to Trill and Fadel, clear communication means articulating thoughts and ideas effectively using oral, written, and nonverbal communication skills in a variety of forms and contexts. It also means listening effectively to decipher meaning, including knowledge, values, attitudes and intentions. Effective communication is needed for a variety of purposes [e.g., to inform, instruct, motivate and persuade] in diverse environments [including multi-lingual]. It requires utilizing multiple media and technologies, and know how to judge their effectiveness a priori as well as assess their impact. In the case of students with physical and mental disabilities, attaining the required level of 21st century skills is highly impaired, which implies a deficiency in 4IR skills that causes a disabling effect on research engagement. It can therefore be argued that lack of communication skills as a critical aspect of the 21st century skills stifles research engagement and progress, especially among persons with disabilities.

Active and collaborative learning as a key component of 4IR involves demonstrating the ability to work effectively and respectfully with diverse teams, exercising flexibility and willingness to be helpful in making necessary compromises to accomplish a common goal, assuming shared responsibility for collaborative work, and value individual contributions made by each team member (Trilling & Fadel, 2009). These active and collaboration skills can be learned through a variety of methods (e.g., project-based learning, problem-based learning, and design-based learning). Research on teaching communication and collaboration skills encourages direct and mediated communication, working with others on team projects, and performance-based learning and assessment (Partnership for 21st Century Learning, 2009). Students with disabilities are generally more disadvantaged and so may not easily acquire these skills. In the wake of massification of knowledge in the information age a postgraduate student with disabilities, lacking in active and collaborative learning skills, would be an exceptional learner requiring special attention.

Trilling and Fadel (2009) define critical thinking as the ability to analyse, interpret, evaluate, summarize, and synthesize information. Critical thinking and problem solving skills therefore include the ability of individuals to (a) reason effectively, (b) ask pointed questions and solve problems, (c) analyse and evaluate alternative points of view, and (d) reflect critically on decisions and processes. What gives these, perhaps traditional, critical thinking skills a twist in the 21st Century is the availability of advanced technologies for accessing, manipulating, creating, analysing, managing, storing, and communicating information. This implies that postgraduate students lacking in the knowledge of these technologies due to any disabilities is highly likely to get compromised in their research engagement and progress.

Creativity and innovation are required to constantly adapt education to the rapid shifts in this 21st Century. This calls for a culture of innovation informed by data, research, and critical and creative thinking. This skill set promotes creative thinking and the ability to work creatively with others. Creativity is often described as an essential skill that can and should be fostered (Wegerif & Dawes, 2004). In a review of the interconnection between technology, learning, and creativity, Loveless (2002) shows how technology allows individuals to produce high quality work in a range of media that provide opportunities for creativity. A postgraduate student with mental and some severe physical disabilities cannot readily employ their power of creativity and innovation owing to the condition they are suffering. In addition, there are generally few avenues of supporting students with disabilities to enhance their creativity and innovation skills.

Lack of attention to developing creativity and innovation skills is often based on a common misperception that creativity is only for artistic-types and geniuses – that creativity is something one is born with or without (Trilling & Fadel, 2009). Trilling and Fadel argue that creativity can be nurtured by teachers and learning environments that encourage questioning, openness to new ideas, and learning from mistakes and failures. Creativity and innovation skills can be developed, like other skills, with practice and over time (Wegerif & Dawes, 2004). Though it is difficult to assess creativity, there are multiple instruments and assessments that have been designed to measure creativity in specific fields such as problem solving and design. A postgraduate student whose creativity are not well developed due to disability is generally disabled in the pursuit of research and risks taking longer time than expected on the research journey.

In addition to the technological skills, skills such as oral communication, working with others, and continuous learning are considered very important in social capital frameworks. The Organization for Economic Co-operation and Development's (OECD, 2008) key competencies include social/soft skills such as the ability to relate well to others, the ability to cooperate and the ability to manage and resolve conflicts, for which communication skills are an essential requirement. Lack of these skills due to mental

and severe physical disabilities grossly disables postgraduate research students to coordinate well with fellow students, supervisors, and other resource persons who could be of help to them in the research process.

Zepke and Leach (2005), and Astin (1999; cited in Halm, 2015) postulate that colleges and universities are faced with increasing pressure to improve student outcomes which ultimately impact retention, perseverance, and completion. Literature suggests that student engagement may have an impact on these outcomes (Astin, 1999; Kuh, 2009; Pascarella & Terenzini, 2005). Studies show students who are actively engaged in learning learn more, learn better, and actually enjoy the classroom experience (Park, 2003 cited in Halm, 2015). On the other hand, Ewing, Mathieson, Alexander, and Leafman (2012) attribute attrition in higher degree programmes to failure to complete a dissertation or other required research project. This failure is itself attributable to the daunting nature of the research process, requiring many professional and personal obligations, lack of which impair the research progress of the students. Students with disabilities face a double tragedy in overcoming the pressures and challenges of the demands during the research process.

Alt (2015) posits that the current generation of students known as the "Millennials" or "Net Geners" are characterised by an information technology mind-set and a highly developed skill in multitasking. Their main focus is on social interaction and connectedness with friends, family, and colleagues by using SMS, mobile phones, chat-rooms and email while they simultaneously play computer games, listen to music and watch TV. Gemmill and Peterson (2006) cited in Alt (2015) posit that on the up side, these technologies might play a significant role in keeping the students connected to family and friends to obtain social support, as a buffer to ''excessive'' levels of stress they experience as they grapple with a host of academic, personal, and social pressures. On the down side, technology may also disrupt and occupy the time of a college student, and that could enhance higher levels of perceived stress. In other words, research engagement is inhibited when the student gets addicted to using technology for mainly non-productive social networking which eventually results in physical and mental illness.

Oblinger and Oblinger (2005) argue that though Net Geners (part of the millenials) are frequent users of electronic tools, they typically lack information literacy skills, and their critical thinking skills are often weak. Although they are digital natives, they do not necessarily understand how their use of technology affects their literacy or habits of learning. In other words, they are disabled by the 4IR skills they consciously and unconsciously acquire. For educators, engaging the Net Geners requires fostering their information literacy and critical thinking skills rather than computer skills (Barnes, Marateo, & Ferris, 2007). They require quality instruction delivered in socially, emotionally, and intellectually engaging ways so as to get them better engaged cognitively, more so while doing research.

The current postgraduate students are likely to include those of Generations X and Y, whose information and communication technology skills are typically low. These are the category of employees of whom employers frequently cite the need for improved technological reading, writing, and maths skills in the workplace (Remali, Ghazali, Kamaruddin, & Kee, 2013). Their one advantage is the ability of critical thinking. These students are expected to mobilise their dispositional powers and exert energy in acquiring the necessary study skills of using numbers, language, and information and communication technology effectively (Vorhaus, Litster, Frearson, & Johnson, 2011) when they enrol to pursue a higher degree programme. The utility of these functional skills is related to a positive approach to participation, new ideas and constructive criticism, and to personal skills such as self-management, thinking skills and working together. However, their low information and communication skills betray them in the pursuit of research, a situation which gets exacerbated by physical and mental disabilities.

As noted by Taylor and Parsons (2011), the human-technology interface in the 4IR increases factors of student engagement – including cognitive, affective, behavioural, academic, and social engagement. This implies that if postgraduate students' access to technology as well as their skills of manipulating the technology is increased, their research engagement and ultimately academic progress will be heightened. Therefore, strategies need to be devised to enable postgraduate students to take initiative and responsibility for learning, using resources wisely, time on task, and having interest and desire to pursue information necessary for their research engagement. However, these strategies are likely to work effectively only for regular students. Those with disabilities are at a higher risk being further disabled in the wake of the fourth industrial revolution as acquiring the requisite 4IR skills will not be easy for them.

This suggests that postgraduate students in general and those with disabilities in particular will need continuing skills development throughout their academic journeys if they are to develop and maintain current information and communication literacy skills levels. Warschauer and Liaw (2010) identify these new skills in the following terms: multimodal communication, collaborative writing, language analysis and structure, online networking, and one-to-one mobile computing. As noted by the authors, the students will increasingly require additional skills such as these in order to engage with online learning platforms for improving traditional literacy and numeracy skills as well as other forms of learning, and for accessing public and private digital information. Potentially, this additional skills requirement may present a barrier to adult learners already struggling with more traditional literacy and numeracy skills to the detriment of suffocating research engagement.

Enhancing Work-Life Balance and 4IR Skills to Foster Postgraduate Research Engagement

Middle States Commission on Higher Education (2003) proposed a restructuring of the learning process to enhance the critical thinking skills of students and to empower them for lifelong learning and the effective performance of professional and civic responsibility. This "restructuring" for postgraduate students should accordingly take into account the realities of an expansive information age. It should further extend far beyond developing technology skills to offering a deeper and more meaningful definition of learning that includes the ongoing pursuit of knowledge outside the classroom. Consequently, information literacy challenges educators to provide students with a more complex set of skills that they can use when they enter the "real world." According to the Middle States Commission on Higher Education, this restructuring of the learning process should actively involve the students in a process of knowing, identifying, finding, evaluating, organizing, and using information effectively to address the problem or issue at hand.

As argued by Trilling and Fadel (2009), successful professional development programs for postgraduate students need to be experimental, engaging the students in the concrete tasks of designing, implementing, managing, and assessing learning activities and projects, and observing other colleagues' methods and skills. Such programmes should be grounded in the students' own questions, problems, and issues as well as what evidence-based research has to offer. This argument presents 4IR skills development as well as work-life balancing as a baseline for engagement.

In addition, Trilling and Fadel further argue that skills development requires collaborative learning, implying that postgraduate students need to build upon the collective experiences and expertise of each other and the wider community of educators in order to concretise their own skills. In this case, institutions need to provide sustained and intensive facilitation, with ongoing support by modelling, coaching,

mentoring, and collaborative problem solving with other colleagues. These cannot be achieved when the students have low work-life balance and 21st Century skills. Bouteldja (n.d.) argues that the development of study and self-study skills will enable the students to assume full responsibility for their studies inside and outside of the classroom. Bouteldja further asserts that study and self-study skills are meant to empower students to work efficiently in classroom but also invest time productively outside the precincts of the university. This implies that there is a reciprocal effect between the students' 4IR research skills proficiency and work-life balance: High skills are expected to enhance work-life balancing while high work-life balance should enable greater acquisition and application of research skills, and vice versa.

Bybee and Starkweather (2006) argue that technology education professional development needs to be provided to educationists and should focus on how to use technology to improve student achievement and how to teach a standards-based lesson infused with technology. To achieve this, the authors encourage educational administrators and other education stakeholders to recognize technology-related professional development to be ongoing. The authors advocate for education systems to move away from short-term learning experiences towards on-going support systems. This indicates the need for incorporating research skills development which includes the necessary technological component as part of postgraduate study programme. As argued by Bouteldja (n.d.), an appropriate mastery of a skill gives shaky foundations on which to build. So it is necessary to impart the skills as ongoing.

Moore and Benseman (2003) cited in Carpentieri and Vorhaus (2010) note that changing work practices and more fluid organisational structures and flattened hierarchies place greater demands on employees and require higher skills levels overall. Carpentieri and Vorhaus further report that employees tend to lack literacy and numeracy skills, and that there are more problems with oral communication and written communication. Frank and Hamilton (1993) cited in Carpentieri and Vorhaus highlighted a similar need for basic skills in manual jobs, while Atkinson and Spilsbury (1993) also cited in Carpentieri and Vorhaus found that nearly half of employers in their sample reported the increasing importance of oral communication skills and also basic skills related to working with ICT. Hoyles et al. (2010) found that employees working at intermediate skill levels across a range of industry sectors require a more complex combination of skills (mathematical, ICT, and workplace-specific) than they did in the past, and more complex skills than those taught as part of employee training. Research by Bynner at al. (2008) looking at ICT, literacy, and numeracy skills in employment found that individuals in the UK and the US struggling in any one of these areas are likely to suffer losses in the other two areas (Carpentieri and Vorhaus 2010). Therefore, there is need for deliberate effort to train postgraduate students to acquire these critical skills.

CONCLUSION

Without a minimum threshold of competences in the 4IR skills, coupled with work-life imbalance, research engagement and hence progress and completion is hampered among postgraduate students. In essence, a lack of 4IR skills is a disabling reality for postgraduate research students. Postgraduate students with high levels of 4IR research skills proficiency and high work-life balance have higher research engagement and hence faster research progress than their counterparts with low levels of 4IR skills. This implies that postgraduate research progress is compromised by low proficiency in 4IR skills and work-life imbalance. It is therefore suggested that the students should be routinely provided courses, seminars, workshops, and other hands-on experiences on the 21st century research skills and work-life

balance in order to step up their research skills proficiency, and consequently their research progress and hence completion.

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KEY TERMS AND DEFINITIONS

21st Century Research Skills: Refers to 12 abilities that are necessary for students' academic and career success during the current Information Age. These include critical thinking, creativity, collaboration, communication, information literacy, media literacy, technology literacy, flexibility, leadership, initiative, productivity, and social skills.

Fourth Industrial Revolution (4IR): Is a way of describing the blurring of boundaries between the physical, digital, and biological worlds. It is a fusion of advances in artificial intelligence (AI), robotics, the Internet of Things (IoT), 3D printing, genetic engineering, quantum computing, and other technologies.

Postgraduate Student: A postgraduate student is a student who is studying a postgraduate course, including a master's course, an MPhil and a PhD that requires an undergraduate degree as part of the entry requirements.

Research Engagement: Is the feeling of positive emotions toward research work; investing personal resources, energy, and time in doing research as a meaningful activity; considering the research workload to be manageable, whilst taking advantage of collaborative, faculty, and institutional support; and having hope that the research work will attract better opportunities in future.

Research Skills Proficiency: Refers to a student's skillfulness in the command of fundamentals of computer applications, academic writing, data collection and handling, and communication skills deriving from practice and familiarity.

Work-Life Balance: Is defined as the extent to which an individual Master of Education student can effectively manage multiple responsibilities at work, at home, and in other aspects of life.

Chapter 16

Re-Thinking Inclusive Higher Education for Students With Disabilities:
A Proactive Approach Towards Epistemic Access in Ethiopia

Emnet Tadesse Woldegiorgis

https://orcid.org/0000-0001-6371-7832

University of Johannesburg, South Africa

ABSTRACT

Several studies address the notion of inclusive higher education from the perspective of access questioning who participates, where, and how in the sense of equity, raising issues of enrolment of disadvantaged groups. This chapter approaches the concept of inclusion in the Ethiopian higher education system from an epistemic access perspective. The argument is that discussions on access to higher education for disadvantaged groups should go beyond mere physical access and should be conceptualized in a manner that reflects educational outcomes and post-enrollment experiences. This chapter aims at exploring the notion of inclusive higher education and epistemic access to students with disabilities in Ethiopian public universities. The study is based on in-depth interviews of 25 students with disabilities from five Ethiopian public universities. The chapter argues that the higher education system in Ethiopia should re-approach the notion of access and take a proactive measure to ensure epistemic access to students with disabilities.

INTRODUCTION

Higher education has been a progressive international ideal and democratic value in many educational policies and practices. It is a seemingly simple concept about widening opportunities for all and ensuring equality in terms of access to higher education regardless of students' background (Norwich & Koutsouris, 2017; Stepaniuk, 2019). One of the aims of inclusive higher education is to reduce educational inequalities by ensuring access; this contributes to democracy by abolishing discriminatory organisational and educational practices. Such practices are based on bell curve distributions that result in disproportionality (Florian, 2015). Several studies have been conducted on the notion of inclusive higher education from the access perspective questioning who participates, where, and how in the sense of equity, raising issues of enrolment of disadvantaged groups in higher education and their contributions to socio-economic developments (Zeleza & Olukoshi, 2004; Yusuf et al., 2009).

One of the reasons for the abundance of research on access from the enrolment perspective has been the fact that for many decades, higher education systems in many countries have significantly excluded disadvantaged groups from the educational sector. In this regard, students with disabilities have been among the victims of exclusions in many higher education systems. This is particularly the case in the global south, where university enrolment and completion rates for students with disabilities are dismal. In many African countries, being disabled halves the chance of attending school, and those who do start school are at increased risk of dropping out before completing primary education (UNESCO, 2016). Exclusion from primary education means that there is only a small pool of disabled students qualified to enter higher education. Thus, it is imperative to conceptualise and advocate the notion of inclusive education so as to both address the challenges of exclusion, and to widen the participation of students with disabilities in higher education.

This chapter argues that the concept of inclusion should go beyond ensuring numerical access to marginalised groups and instead seeks to resolve the causes of epistemic exclusion, marginalisation, and structural imbalances. Enrolling more disabled students in higher education does not automatically lead to epistemic access and full participation in university life (Richardson & Wydell, 2003; Jacklin & Robinson, 2007; Matshedisho, 2007). Discussions on access to higher education for disadvantaged groups should go beyond mere physical access and accessibility and should be conceptualised to reflect educational outcomes or post-enrolment experiences. Inclusive education should, therefore, be analysed within the process of identifying and removing barriers and structures of inequality to provide epistemic access for disabled students after being enrolled in higher education institutions.

According to the World Bank Report (2017), there are an estimated 15 million persons with disabilities in Ethiopia, representing 17.6 percent of the population. Even though there is an evident lack of organised and up-to-date data on the exact number of students with disabilities in the Ethiopian higher education system, several pieces of research indicate that the rate of participation by disabled students in public universities in the country has remained extremely low (Baart, Schippers & Meta, 2019; Seid, 2019; Abera et al., 2020). Moreover, many studies confirm that students with disabilities in Ethiopia have been stigmatised and deprived of their fundamental service rights stipulated on many international and national policies and legal documents (Abera et al., 2020). Therefore, despite the increase in the number of students with disabilities in Ethiopian public universities, the completion rate remains low.

The aim of this chapter is therefore to exploring the notion of inclusive higher education and epistemic access to students with disabilities in Ethiopian public universities; it further re-examines the causes of exclusion, marginalisation, and imbalance. It is based on in-depth interviews of 25 students with physical

disabilities from five Ethiopian public universities–Addis Ababa University, Goneder University, Jimma University, Hawasa University, and Mekelle University. Five students from each university were selected using a purposeful sampling technique recruiting participants who could provide in-depth and detailed information about the phenomenon under investigation. The United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) recognises that 'disability is an evolving concept' (UNCRPD, 2006, p. 1). 'Persons with disabilities include those who have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others' (UNCRPD, 2006, p. 4). Even though students with disabilities include many aspects of those with a sensory, motor, physical, cognitive, behavioural, and communication impairments, this study focuses only on students with hearing, visual and physical impairments. Accordingly, eight visually impaired students, two students with hearing impairments and 17 students with physical impairments participated in the study. This study tries to locate the experiences of students with disabilities concerning their epistemic access and causes of exclusion based on a Social Model of Disability (Finkelstein, 1980; Oliver, 1990). The notion of a 'Social Model Disability' argues that disability is an outcome of a society which does not adequately consider the needs of disabled people by imposing '...*restriction ranging from individual prejudice to institutional discrimination, from inaccessible public buildings to unusable transports system, from segregated education to excluding work arrangements...*' (Oliver, 1996, p.3). The first section of the chapter discusses the conceptual framework of inclusive education and epistemic access; some light is then shed on the current state of policy and provisions for students with disabilities in the Ethiopian higher education system.

CONCEPTUALISING INCLUSIVE EDUCATION AND EPISTEMIC ACCESS

For over 20 years, education policies in many countries in the global south and north have focused on inclusive education. Following the UNESCO (1994), statement which argued that 'mainstream schools with an inclusive orientation are the most effective means for the achievement of education for all' (p. 8), inclusive education has become one of the priorities for many national educational policies. The notion of inclusive education mainly focuses on designing an educational system that is responsive to the diverse needs of students from all backgrounds. It is aimed at addressing and responding to the diversity of needs of all learners so that they can have access to the knowledge base (Booth et al., 2000). The idea of inclusive education is also a human rights issue in the sense of embracing diversity, the appeal for social justice, and equal opportunity in the service of education for all.

The idea of inclusiveness in higher education is intertwined with the concept of access, which has different interpretations. The concept of access to higher education in its literal meaning implies the opportunity to be enrolled in higher education institutions. It is commonly considered to be a synonym of entry or a combination of entry and participation. The Council of Europe, for instance, defined access policy as 'a policy that aims both at the widening of participation in higher education to all sections of society, and at ensuring that this participation is effective' (1998, p. NA). Access is a multi-dimensional concept and should be interpreted from a comprehensive view. Morrow (2009) unpacked the different dimensions of 'access' to higher education offering a clear distinction between physical, institutional, or formal access and access to the knowledge base that institution distributes—or what he calls 'epistemological access'. The notion of epistemic access was first conceptualised by Morrow (2009) while explaining the complexity of the notion of access in the South African higher education system.

The argument here is that the conceptualisation of access to higher education for students with disadvantaged backgrounds must be approached from two perspectives—institutional access and access to the knowledge base (epistemic access). Morrow (2009) argues that the conceptualisation of access to higher education institutions should go beyond the mere numerical increase in enrolment rates; rather this should include access to academic processes According to Morrow (2009) epistemological access is '*learning how to become a participant in an academic practice*' (p.77) as academic processes are '*developed around the search for knowledge*' (p. 70).

Mere formal access to a higher education institution that dispenses knowledge is different from, and insufficient condition for, epistemological access. As described by Wheelahan (2014), epistemic access means entering 'the system of meaning so they [students] can understand the debates and controversies in it' (p. 134). To enrol as a student at an institution is not yet to have gained access to the knowledge that the institution distributes. Samoff (2001) called the same concept' expanded access' (p. 25), arguing that access to higher education should also be reflected in educational outcomes and post-enrolment experiences.

Students with disabilities face a multitude of challenges related to both physical access—including accessible routes, curb ramps, parking and passenger loading zones, elevators, signage, entrances, and restroom accommodations; and epistemological access. The latter includes delivery and learning methodologies not conducive to enabling students to learn, and which should include such collaboration as teaching aids and digital facilities, test and evaluation formats. The absence of this support stems from a socially constructed process of discrimination and exclusion. Exclusion from access based on different backgrounds of students is a consequence of society's lack of awareness and concern about persons who require specific modifications in their environment to live full lives, be productive, and to access various services. In this regard, the social model of disability provides a framework for understanding how people with impairments experience disability. As noted by Oliver (2013), the Social Model of Disability started to emerge as an alternative approach to disability in the 1960s and 1970s, but later developed through the work of Finkelstein (1980) and Oliver (1990) as an alternative articulation of the notion of disability and location of social experiences of the marginalised (see Macdonald & Deacon 2019). According to this model, impairment is seen as a normal part of life, and disability being the result of discrimination and exclusion. The social model has inculcated the idea that students with disabilities are actors in their own lives, rather than passive recipients of care, and their activities within social structures constitute their agency (their ability to operate within the social structure). Even though structures have a constraining effect on students with disabilities as agents, students with disabilities also can construct and reconstruct the nature of the structure through resilience. The capacity of students with disabilities to negotiate and navigate their pathways towards the resources that sustain their epistemic access can be termed as resilience.

The next section discusses the legal and policy frameworks in place in Ethiopia to protect the rights of people with disabilities. Based on the discussion immediately below on the legal and policy provision, the subsequent section analyses the challenges of students with disabilities in Ethiopian public universities in terms of epistemic access.

LEGAL AND POLICY FRAMEWORKS FOR DISABILITIES IN ETHIOPIA

The challenges of Ethiopian university students with disabilities are, among other things, a result of the overall institutional dysfunction within the national legal framework of the country; this fails to enforce the rights stipulated in international and national regulations for people with disabilities.

Disability is a complex state, resulting from the interplay between conditions of a person's body and features of the society in which the person with disability lives. According to the United Nations (UN) Flagship Report on Disability and Development (2018) disability is defined as"

'...limitation in a functional domain that arises from the interaction between a person's intrinsic capacity, and environmental and personal factors...functioning occurs at three levels: body function and structures, activities and participation (point 5 in the Preamble)

Many international organisations such as the World Bank (2011) estimated the percentage of disabled people to be 15 percent of the world's population. This is the world's largest minority, and 80 percent of disabled people are estimated to live in the global south (UN, 2010). There are an estimated 15 million people with disabilities, representing 17.6 percent of the total population in Ethiopia, according to the World Report on Disability, published jointly by the World Bank and WHO in 2011.

Nevertheless, there is no organised national data on the number of students with disabilities in the Ethiopian higher education system. Several publications have indicated, however, that despite a slight increase in number in the past decade, the participation rate of disabled students in public universities in the country has still been dismal (Tamerat, 2018; Baart, Schippers & Meta, 2019; Seid, 2019; Abera et al., 2020. For instance, Tamerat (2018) reported that even though the number of disabled students attending Ethiopian public higher education institutions had increased from 398 in 2009–2010 to more than 1,000 in 2015, the percentage ratio as compare to the general increase in access to higher education is continuously declining. Currently, there are 50 public and 236 private universities in Ethiopia and access to higher education has risen in the past 20 years, from 3.5 to 12 percent (Ministry of Education, 2020).

Access of persons with disabilities to higher education in the global south is slowly gaining momentum; nevertheless, completion rate and full epistemic access have remained unattainable in most countries of the world, including Ethiopia. Even though some students with disabilities manage to access higher education services, acquiring the intended training, knowledge, and success has always been a challenge in Africa because of infrastructural challenges, discrimination and social stigma (Abera et al., 2020). As many studies indicate, the higher education system in Ethiopia has not been accommodating towards students with disabilities, and many of them have also been stigmatised and deprived off their fundamental service rights; this is despite these rights being stipulated in many international and national policies and legal documents (Abera, Mohajer, Negassa & Mulatie, 2020).

Disability has been incorrectly perceived in many cases as a defect, a curse; a consequence of sin or wrongdoing or evil deeds by parents, ancestors, and persons with disabilities themselves. Viewing disability as a deficit within a person which needs fixing positions the individual as 'other' in the sense of being 'wrong' in comparison to the majority. Such thinking in some cases is ascribed to the traditional moral model which associates disability with sin, shame, and feeling of guilt (Tirusew, 2006). As a result, most people with disabilities in Ethiopia are exposed to violence and abuse. Sometimes this abuse is justified by culture or religious beliefs; this omission is barely even acknowledged.

Even though Ethiopia has ratified many international instruments and declarations designed to protect the right of individuals with disabilities, these amount to rhetoric rather than realistic instruments that provide for, and protecting the rights of, disabled people. For instance, Ethiopia in June 1966 ratified the 1958 International Labour Organization (ILO) Convention concerning Discrimination in Respect of Employment and Occupation. In 1991, the government then also endorsed the ILO Convention concerning Vocational Rehabilitation and Employment. The government has been working closely with the ILO to implement these conventions, in terms of institutionalising them and building the capacity of local agencies, such as the Ethiopian Ministry of Labour and Social Affairs. With the July 2010 ratification of the 2004 United Nations Convention on the Rights of Persons with Disabilities, Ethiopia concluded its commitment to international conventions to protect the rights of disabled people, but without being fully committed to their realisation on the ground.

Apart from ratifying international instruments on the rights and protections for people with disabilities, Ethiopia has also included the fundamental rights of disabled people into national legislation. Article 41(5) of the 1995 Constitution, for instance, stated the government's responsibility for the provision of all necessary rehabilitation and support services to 'the physically and mentally disabled'. However, the Constitution only provides protection for disability in its narrow or biological sense. Even though the WHO provided a comprehensive interpretation of disability as an impairment or abnormality of a psychological, physiological, or anatomical structure or function in 2011, the provision has not yet been amended in the Ethiopian Constitution. As with the Constitution, most national legislation in Ethiopia has also interpreted disability in its narrow sense, focusing only on the physical form of disability. Nevertheless, under Article 9(4) and Article 13(2) of the Constitution, all international agreements ratified by the Ethiopian government automatically become part of the law of the land. The state is therefore required to ensure the rights of persons with disabilities in a comprehensive sense as prescribed in the UNCRPD.

The Ethiopian legal framework in general tries to provide fundamental rights and ensure the preservation of full protection of people with disabilities. Apart from the general rights stated in the Constitution regarding people with disabilities, Proclamation No. 568/2008 on 'Rights of Disabled Persons to Employment' further stipulates the regulation on equal opportunities for people with disabilities. This proclamation aims to protect and promote the rights of persons with disabilities to appropriate training, employment opportunities, and salaries. It also aims at preventing workplace discrimination and providing affirmative actives to people with disabilities. This proclamation has been the primary legal framework providing socio-economic protection against discrimination at the workplace; it further provides rights of employment for people with disabilities in Ethiopia.

There are also other legal frameworks that make the existence of infrastructural and other physical facilities mandatory for people with disabilities in public institutions. The Developmental Social Welfare Policy of Ethiopia (1997), for instance, makes creating accessible physical spaces, promoting and advocating for positive attitudes towards disability, and assisting non-governmental organisations (NGOs) working on the issue mandatory for all educational institutions. Moreover, the Ethiopian Building Proclamation of 2009 makes it obligatory for public buildings to be physically accessible for persons with disabilities (see the full list of national legal instruments for people with disabilities in Table 1).

Even though all government ministries are expected to be observant of all legal provisions regarding disability, the Ministry of Labour and Social Affairs is the primary governmental organ responsible for the provision and implementation of social and vocational rehabilitation of people with disabilities. Within the framework of the Ministry, the Social Welfare Development Promotion Directorate coordinates disability issues at the national level as part of its broader mandate to deal with employment and social

Table 1. Ethiopian legislative frameworks on disability

National Provisions	Objectives
Constitution of the Federal Democratic Republic of Ethiopia (1995)	Article 41(5) sets out the stat's responsibility for the provision of necessary rehabilitation and support services for people with disabilities.
Proclamation concerning the Rights to Employment for Persons with Disabilities, No. 568/2008	Makes null and void any law, practice, custom, attitude and other discriminatory situations that limit equal opportunities for persons with disabilities.
The Federal Civil Servant Proclamation No. 515/2007	It provides for particular preference in the recruitment, promotion, and deployment, among others, of qualified candidates with disabilities.
Labour Proclamation No. 494/2006	It makes it unlawful for an employer to discriminate against workers based on nationality, sex, religion, political outlook or any other conditions.
Building Proclamation, No. 624/2009,	Provides for accessibility in the design and construction of any building to ensure suitability for physically impaired persons.
Framework Document 2009,	Provides for Special Needs Education (SNE) in Technical and Vocational Education and Training (TVET).
National Plan of Action of Persons with Disabilities (2012-2021)	Aims at making Ethiopia an inclusive society. It addresses comprehensive rehabilitation services, equal opportunities for education, skills training, and work.
The Higher Education Proclamation No.650/2009	Article 40 states all the provision of necessary facilities for disabled individuals in the higher education setting.

issues. Other ministries are required to take responsibility for mainstreaming and promoting disability into their particular areas of work as described under Proclamation No. 691/2010 on 'Definitions of Power of the Executive Organs of the Federal Democratic Republic of Ethiopia.'

Moreover, there are several associations for people with disabilities working on various advocacy projects (see Table 2). Most of these advocacy organisations are non-governmental associations based mainly in the capital city, Addis Ababa; as a result, their impact at the national level is quite limited.

Table 2. National associations for people with disability in Ethiopia

Federation of Ethiopian National Associations of People with Disabilities (FENAPD)
Ethiopian National Association of the Blind
Ethiopian National Association of the Physically Handicapped
Ethiopian National Association of the Deaf
Ethiopian National Association of the Blind-Deaf
Ethiopian National Association of Persons Affected by Leprosy
Ethiopian National Association on Intellectual Disability
Ethiopian National Disability Action Network (ENDAN)
Ethiopian Women with Disabilities National Association
Tigray Disabled Veterans Association
The Ethiopian Centre for Disability and Development (ECDD)

Stemming from both international and national legal frameworks, the higher education system in Ethiopia also has a legal obligation to protect the rights of students with disabilities. The Higher Education Proclamation No.650/2009 Article 40, has declared that higher education institutions shall make their facilities and programmes amenable for easy use by physically challenged students. Moreover, the proclamation demands institutions, if necessary, to rearrange classes, develop alternative evaluation procedures and facilitate different educational auxiliary aids for students with physical challenges.

Designing an institutional structure that ensures epistemic access for students with disabilities is essential to having an inclusive higher education system. In this regard, the Ethiopian Higher Education Proclamation has provided a legal framework to ensure access to the knowledge bases for students with disabilities. Article 40 of the proclamation states that higher education institutions shall provide '…necessary and feasible academic assistance, including tutorial sessions, exam time extensions, and deadline extensions' so that students with a disability can cope up with the barriers existing within academic institutions. As indicated in sectoral plans (2015/16–2019/20), universities are also expected to implement the national policy on facilities and infrastructure to make it more accommodative to people with disabilities by adapting their campuses to ensure accessibility to students with disability.

Universities in Ethiopia have included non-discriminatory provisions in a very general way on grounds such as 'membership of a social and political group, political opinion, race, ethnicity, religion, gender, disability, HIV/AIDS or another status' (Addis Ababa University, 2015). Thus, university legislation generally acknowledges the need for protection of constitutional rights and freedoms, safety and security students with disabilities on campus. Even though it is not explicitly stipulated on university legislations, by implication, students with disabilities are entitled to fair treatment in all respects of campus. However, almost none of the legislation pertaining to public universities in Ethiopia has explicitly integrated the provisions stated on the Ethiopian Higher Education Proclamation about disability. These institutions have also not developed specific regulations to overcome barriers facing students with disabilities. Consequently, lack of specific provisions about disability on most Ethiopian university campuses facilitates the conditions for ill-treatment and violation of basics rights of students with disabilities. Moreover, without such provisions, it is virtually impossible to embark on organising effective institutional disability service centres.

Thus, even though Ethiopia has ratified most international conventions and introduced various legal provisions to protect the rights of people with disabilities, there are still barriers to implementation of these legal frameworks. It is virtually impossible to address the challenges facing university students with disabilities in Ethiopia without a comprehensive transformation of the enforcement mechanisms of the legal system, and open commitment from the state. The higher education system must also revisit its regulations to best appropriate the conditions through which it can address the challenges encountered by students with disabilities. The next section discusses the physical and epistemic challenges of students with disabilities in Ethiopian public universities.

THE CHALLENGES OF EPISTEMIC ACCESS FOR STUDENTS WITH DISPARITY IN ETHIOPIA

Even though the legal frameworks and policies of Ethiopia on disabilities are intended to ensure access and equal opportunities for students with disabilities in higher education, they do not have instruments to ensure either physical or epistemic access to students. In order to consolidate the inclusive higher

education system, it is important to articulate how students with special needs could access the knowledge base within higher education institutions. There are many dimensions of epistemological deprivation that Ethiopian students with disabilities have suffered from; they have been deprived of fair opportunity and access to the kind of knowledge that is supposed to be distributed equally for all.

Students with disabilities in Ethiopian public universities continue to face various challenges after been enrolled in higher education, including physical barriers to educational services; barriers to accessibility include insufficient ramps and/or elevators in multi-level campus buildings, heavy doors, and inaccessible washrooms. Facilities such as classrooms, dormitories, halls, dining rooms, recreational areas, libraries, service delivery units, exit passageways used emergencies, are also inadequately designed and equipped. Thus, spaces in many public universities in Ethiopia are relatively inaccessible and not conducive for learning by students with disabilities. Inability to gain equitable access and navigate through the various campus facilities significantly hampers students with disabilities from being able to properly utilise learning facilities within university settings. As a result, these students expend more time, effort, and resources accessing the same facilities as their peers. These barriers have a direct implication on their ability to harness the knowledge base, in turn limiting their potential to perform well. A student of economics from Mekelle University in an interview stated that:

Look at the classrooms on the second and third floor; they do not have slopes or lifts, so I cannot access them with my wheelchair. Now I am forced to crawl everyday…we are only two students with wheelchairs, and no one takes us seriously if we ask for services (Interview 25.07.2019).

One of the main difficulties for Ethiopian universities is that they still do not have an institutional mechanism providing relevant support services for individuals with disabilities. The campus settings in most institutions pose serious challenges, forcing disabled students to seek support from others, especially for wheelchair users and those with visual impairment. Most students with disabilities mobilise their own family and friend support systems and non-governmental advocacy groups. A second-year visually impaired student of literature at Addis Ababa University said:

In the first three weeks of my stay at the university, my elderly sister stayed with me, moving around explaining the campus setting and the whole environment. But after she left, I had a hard time navigating my way through the university administration, library catalogues, lecture halls, and all the documentation. Dormitory life, finding my place and trying to fit in to campus life was difficult. The university gave a group-orientation session for all blind students one afternoon, but after that, there were no follow up consultations or support. Later, the Ethiopian Blind Association mobilised volunteers for senior students and now they give us various types of support throughout our campus life (Interview 28.07.2019).

The obstacles confronting students with disabilities start from the placement and enrolment processes. Universities in Ethiopia vary in term of facilities and infrastructure available for students with disabilities. These students need to make an informed decision on the university and programme they should be enrolled in after secondary school completion. Unfortunately, apart from sporadic orientation from some Ethiopian disability associations, the universities do not offer pre-enrolment orientation. Moreover, students who pass the national examination are placed by the Ministry of Education into broad fields of study (e.g. natural sciences, social studies, etc.) in government-owned higher education institutions. According to the Ministry of Education placement policy for public universities, students who qualify to

join governmental higher education institutions need to list their preferred fields of study and universities from most to least preferred. The Ministry allocates students to various public universities based on their academic performance, choices of programmes, and the capacity of universities to accommodate students.

Even though students indicate their preferred university of study, they have no say on their final place of enrolment; this has a profound effect on students with disabilities. As noted by one of the disabled students:

I was planning to study Law at Addis Ababa University because I knew the institution is one of the oldest universities in Ethiopia with profound experience training blind students in Law. I also gathered information about the school from senior students and made the university my number one choice on the university enrolment form. The Ministry of Education, however, placed me at Hawassa University, and I was extremely disappointed, since the facilities for blind students at this university are unsatisfactory (Interview 26.08.2019).

Lack of autonomy in deciding which university and particular programme they enrol in profoundly affects the smooth transition of students with disabilities from high school to university. This transition can be especially challenging and stressful for students with disabilities as it coincides with other significant transitions, such as moving from living with family members to living independently. Added to this is the need to cope with the intellectual demands of a different style of educational delivery and studying at a higher level. Palmer et al. (2009) in their studies found that positive first-year experiences for all students are crucial in enabling students to complete their study and minimise attrition. Students with disabilities in the Ethiopian higher education systems also face obstacles concerning admission procedures, institutional and programme accessibility, receiving appropriate support, developing friendship networks and overcoming the negative disability stereotypes held by others in the new environment.

Epistemic access is also embedded in the extent to which students manage to participate in the various activities on the campus, including accessing the necessary resources, learning all aspects of academic institutional life, both inside and outside the classroom. Such extended participation encourages students to have a multi-dimensional experience and help them exercise the knowledge gained within higher education institutions. Despite excellent legislative frameworks and development of programmes for students with disabilities in Ethiopia, however, there are still few infrastructural facilities among public universities for students with disabilities.

Students with disabilities involved in Ethiopian higher education still have challenges accessing necessities including multimedia facilities, braille books, ICT infrastructure, and computers, mobility aids, hearing aids, cognitive assistance, specialised classroom settings, disabled student services, laboratories, and study facilities. As a result, they are cannot fully function and explore the full potential of knowledge offered by institutions. During interviews for this study, the majority of students with disabilities indicated that most faculty members understood their needs, but only few lecturers were willing to adapt their approach to accommodate them, including adapting presentation and examination of material covered to suit these students' learning needs. Rigid assessment techniques and examination procedures are some of the underlying barriers that hinder the epistemic access and success of disabled students in the country. The institutional support services mechanisms and counselling for individuals with disabilities in most public universities in the country are insufficient. Even where such facilities are said to exist, they appear to be meagre, fragmented, and still at a nascent stage. A third-year visually impaired Law student from Addis Ababa University in an interview, for instance, stated that:

There are only few braille books which are available for us and the university does not provide us with audiobooks or any multimedia services and yet we are expected to compete with those who do not have any disabilities to access knowledge and succeed... we have requested the university administration to provide us at least with the basics but they replied saying we do not have the budget for these allocated from the government (Interview 23.07.2019).

The numbers of students with hearing impairments in Ethiopian universities has been minimal since there are only a few schools for deaf learners in the country. Addis Ababa University has launched the first and the only undergraduate programme to train students in Sign Language in 2009. The programme is located in the Department of Linguistics and they train students in Ethiopian Sign Language and Deaf Culture. The challenge, however, is how to ensure epistemic access to students with hearing impairments enrolled in other fields like Sociology, Economics, Law or Biology. In a higher education system where infrastructure for students with hearing impairment is exceptionally low, accessing learning facilities is extremely challenging. As stated by one of the respondents from Addis Ababa University

I was in Mekanisa School for the Deaf [Addis Ababa] for my primary school training and then transferred **to** *Menelik II Secondary School [Addis Ababa] for grades 8 and 9. Until grade 9, all my teachers taught and communicated with us in sign language which was easy and convenient. But after grade 10 and also here at the university classes are not taught with sign language; I am always dependent on books and I have to transcribe lecture notes for my studies. It is neither easy to get all information for courses nor have a discussion with my professors or peers as they do not know sign language (Interview 11. 07.2019)*

There is an underlying misconception about meeting the demands of students with disabilities among university leadership. It is believed that providing facilities for people with disabilities is a luxury for poor countries like Ethiopia, as these demands are expensive to fulfil. As students with disabilities are still a tiny minority of the general student population, addressing their demands is generally perceived as the lowest priority compared to other issues. Ensuring epistemic access for students with disabilities, however, 'depends on the existence of an inclusive ethos at the level of the institution which makes openness to diversity one of its goals and pedagogical, social, psychological and physical accessibility a component of the institution's culture' (Organisation for Economic Co-operation and Development (OECD) 2011a, p. 10).

Knowledge is the epicentre of a higher education system around which activities are organised. Epistemological access for students with disability implies the ability to fully participate in academic practice, and thereby to benefit from its knowledge base. As discussed above, even though the Ethiopian higher education system has shown improvements in terms of increasing the enrolment rate of students with disabilities, the teaching and learning processes within universities have not accommodated inclusive pedagogy that meets the special needs students. Inclusive pedagogy is a method of teaching and learning that aims to create a supportive environment that gives each student equal access to learning and the knowledge base (Florian & Black-Hawkins, 2011). Ethiopian university students with disabilities still encounter barriers to epistemological access, including: rigid lecture formats and assessment methods which are not fair or effective for students with disabilities (especially with visual and hearing impairment). Furthermore, interactive methodology is inadequately practised as access to digital/audio teaching and learning aids are extremely limited. Disability-friendly library and other university facilities are also not sufficiently accessible. Thus, it is important to revisit the teaching–learning processes

and academic environments of Ethiopian higher education systems to fully ensure the epistemological access of students with disabilities. It is imperative that alternative and innovative pedagogy is found to enable students with disabilities to gain such epistemological access.

TOWARDS A PROACTIVE APPROACH ADDRESSING THE CHALLENGES OF STUDENTS WITH DISABILITY IN ETHIOPIA

The challenges of students with disabilities in higher education are multifaceted and cannot be approached or addressed with readymade policy prescriptions; rather these should be carefully mitigated, taking account of the socio-economic contexts in which, the system is functioning. Disability is a structured inequality that has not received significant policy or research attention concerning higher education in Ethiopia. In order to ensure that students with disabilities are not excluded from higher education, and their potential is realised, various elements must be in place. These include ensuring that: suitable disability-inclusive policies, governance and finance systems are put in place; curricula are appropriately adapted; staff are appropriately trained; buildings are accessibly designed or retrofitted; and supportive communities are available. Listed below are some of the main proactive measures recommended by this research.

Giving voice to disability in higher education: Students with disabilities in most Ethiopian public universities do not have a formal forum within the university administration where they can express their concerns and advocate for their special needs to be accommodated as members of the university community. It is paramount that disability representation is instituted on appropriate campus committees as an essential element of disability services. Giving voice to students with disability on university administration will provide them with an opportunity to organise, increase visibility, and express themselves.

Re-organising disability service centres: During this research, it was noticed that some public universities have disability service centres but most of them are dysfunctional in providing up-to-date services and information for students and academics. One of the main reasons accounting for the weak disability service centres is that there is insufficient funding and expertise in the area to support the process. These service centres could, however, be essential for providing consultation, awareness, and information for all concerned role players. The centres should develop a strategy to mobilise resources and design a policy to work with relevant departments to ensure that students with disabilities can have equal access to the knowledge base within the university.

Creating awareness among higher education communities: Students with disabilities continue to encounter negative attitudes and stereotypes in the higher education system. Poor awareness, ignorance, and insensitivity to disability issues on the part of some instructors, staff, and students prevent students with disabilities from having equitable epistemic and educational access. Attitude to disability is a major barrier to disabled people's full participation in higher education. This can range from pity to awkwardness, and even fear. The academic community can also have low expectations about what disabled people can contribute; such stereotypical and negative attitudes hold progress back. Thus, involving the university community in the process of meeting the needs of students with disabilities is one of the most effective and efficient ways to mobilise social support for the realisation of inclusive education. This includes providing consultation and training for faculty, administrators, and staff to facilitate conditions so that they can make necessary accommodations for students with disabilities. A more recent approach has been to enhance the ability of faculty to utilise alternative modes of teaching, test formats, and evaluation for students with disabilities. Generally, creation of awareness includes providing consultation with

faculty members regarding academic accommodations, compliance with legal responsibilities, as well as modifications to the curriculum and instructional programmes, as well as physical modifications including retrofitting of buildings to ensure accessibility. Awareness-raising also caters for individualised disability awareness training for campus constituencies (e.g., faculty, staff and administrators).

Institutional policies and procedures: The vague disability provisions in the legislation of most of the higher education institutions in Ethiopia need to be developed into written policies and guidelines following international and national legal frameworks for disability. This needs to deal with procedures not only for determining and accessing services for students with disabilities, but also institutionalising disability service centres. Guidelines for institutional rights and responsibilities concerning service provision (e.g. documentation of a disability, course substitution/waiver) are particularly needed. Institutional policies need to be contextualised to integrate the needs of students with disabilities.

Inclusive pedagogy: Course structure, teaching and learning methods, and evaluation instruments in Ethiopian public universities are not accessible for most students with disabilities, especially for those with visual and hearing impairment. Thus, even if they manage to access higher education institutions, it is hardly possible for them to have epistemic access and gain the knowledge these institutions provide. It is important to have inclusive pedagogy that pays attention to the varied background, learning styles, and abilities of all the learners. University instructors and students with disabilities should work together to create a supportive and open environment that fosters social justice; the environment should also allow everyone to be fully present and feel equally valued in creating an overarching learning space in which students feel both invited and included. Ethiopian universities should thus take deliberate steps to ensure that all students, across physical and cognitive abilities, could feel welcomed, valued and supported in their academic work.

An integrated advocacy approach: Even though there are several disability associations and advocacy groups in Ethiopia working on different issues, they do not have a joint forum impacting national policies that could change the lives of students with disabilities. Having an integrated advocacy approach could mobilise strong voices and negotiate the way forward for education policies to accommodate the needs of students with disabilities. Access to higher education in Ethiopia is still a distant dream for many students with disabilities, mainly, owing to faulty admission policy and procedures, ignorance about disability issues by the general higher education community and unsupportive and untargeted preparation in the primary and secondary levels. In order to tackle these challenges, a collective endeavour for the various advocacy groups in the country is essential.

A comprehensive disability database: One of the main hindrances to disability studies in Africa is inadequate availability of data; this also applies to Ethiopia where there is no comprehensive national survey or sectoral database on students with disabilities in Ethiopia. A national assessment centre and registry of organised data and information on disability services are imperative to have an informed policy intervention. This can also enable students and families to better anticipate the support and services they will need and whether they are available in higher education settings.

CONCLUSION

Ensuring an inclusive higher education system for students with disabilities has had international attention for several decades, focused on addressing barriers including physical access to students with special needs. This chapter has provided an overview of Ethiopian higher education students with dis-

abilities, taking cases from five public universities. Although the data on the number of disabled students in Ethiopian higher education is incomplete, studies indicate that very few students with disabilities receive higher education in Ethiopia. In a higher education system where access is still limited to the privileged minority, the absence of students with disabilities has received little attention. It is imperative to revisit the way researchers examine the topic so that comprehensive understanding of conduciveness or challenges related to physical, curricular, service deliveries and social circumstances of students. The discussion of access to higher education should interrogate the state of enrolments, retentions, and fulfilment of needs during students' stay in universities until graduation and beyond. In this regard, the absence of viable support structures for students with disabilities is one of the main difficulties for the Ethiopian higher education system. In order to address the barriers to university access for students with disability in Ethiopia, it is imperative to capitalise on inclusive pedagogy using a comprehensive and holistic approach. This includes adopting innovative teaching and learning methodology, making instruments and platforms available that give voice to disability in higher education, creating disability service centres, creating awareness among higher education communities, and enacting appropriate institutional policies and procedures.

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Chapter 17
Support for the Underprivileged in the South:
Lessons From the West and South

Collin Nyabadza
Collin Nyabadza Children's Voice, Canada

Sibonokuhle Ndlovu
University of Johannesburg, South Africa

ABSTRACT

This chapter presents the support provided by the countries in the West to the underprivileged schools in Zimbabwe, through a non-profit organisation. Theoretical concepts drawn from decolonial theory, Ubuntu philosophy, and social model of disability were used to analyse the kind of support provided by the West to the South, and the activities of the organisation in disadvantaged schools and communities in rural Zimbabwe. Data were collected by scanning the organisation's website, newsletters, published material, and resources on the organisation, including journal articles and books on literature on the specific theoretical concepts. The argument for this chapter is that though it has been conceived that the West through coloniality oppresses the South, there are humanitarian lessons, both the South and West can learn from each other, which can improve both worlds educationally, socially, and culturally.

INTRODUCTION

This chapter presents and analyses the work undertaken by an organisation facilitating aid from the West to support the disadvantaged in a country in the South. At present, the economy of Zimbabwe is at an extremely low point, with a number of unemployed people. This continues to put pressure on civil society and, as is always the case, children and women are the most affected. Most poor rural schools are struggling to provide resources such as books, furniture and classrooms for their learners; thousands of children sit on the floor due to a critical shortage of classroom furniture in rural, impoverished schools. Some children attend classes under trees due to the unavailability of classrooms. The authors of this

chapter, therefore, wanted to shed light on individuals from countries in the West stepping in to assist through a non-profit organisation that has led to significant changes in the educational situation and conditions of learning in Zimbabwe. The cultural, educational and social understanding of support for those of poor backgrounds in the West and South are reflected on in this chapter as the authors attempt to analyse the provision of aid and the specific organisation's activities in Zimbabwean schools.

The study used the qualitative design, in which data were collected by scanning literature available on Google Scholar and ProQuest. A combination of the search terms 'organisation', 'rural', 'disadvantaged', 'Zimbabwe', 'aid', 'children's voice', 'Canada', 'support', 'decolonial theory', and 'ubuntu' were used. The search yielded over a hundred journal articles, books, policies, online and media resources published between 1960 and 2020. The latest and most relevant texts to what the authors intended to explore were selected, and data were gathered from the literature.

THE ORGANISATION AND ITS ESTABLISHMENT

The name of the organisation is Collin Nyabadza Children's Voice Charity Trust (CNCVCT). Established in December 2012, the organisation is registered in Canada as a non-profit organisation. The founder and director is a Canadian, originally from Zimbabwe. He is a Black male teacher and has spent many years teaching in disadvantaged rural schools in the southern part of Zimbabwe before relocating to Canada, where he continues to teach. He also has experience teaching children with disabilities, having trained in special needs education in Zimbabwe. He has thus accumulated social, educational, and cultural experience in both the South and the West.

The organisation's slogan is that, 'No child shall be put down by poverty'. It means that despite the children's impoverished environment, they can attain their best when they are materially supported. Members of the organisation strongly believe 'every child matters'; no matter the family from which they come, children can excel in sports or in education, depending on their personal capabilities, potential and talents.

CONCEPTUAL FRAMEWORK

The conceptual framework employed for this chapter is built on specific theoretical concepts drawn from the Decolonial Theory, Ubuntu philosophy, and the Social Model of Disability. The conceptual framework was created in order to understand and explain the aid provided by the West to the South, and the works of the particular organisation in light of South-West debates on culture, education, social experiences and perspectives. It is hoped that the conceptual framework can help unveil the invisible, which might not be easily seen from the surface level.

DECOLONIAL THEORY

The Concept of Zoning

The Global South and the West can be better understood when explained in terms of zones, which Santos (2007) view as spaces where humanity is categorised and placed through Western "abyssal thinking" (p. 45). This 'abyssal line' is imagined and invisible, and it divides the world into two social realities (Euro-America, and Africa and other non-Western countries). In the two zones, power is distributed differentially, according to which side of the line one falls on (Dastile & Ndlovu-Gatsheni, 2013). On one side of the line is the zone of being, which is the metropolitan zone occupied by the West. The other side of the line is referred to as the zone of non-being, occupied by the 'other' (Santos, 2007).

Zoning also has central concepts like the zone of being and non-being. Grosfoguel (2011) argues that in the first zone, there are superior beings who are the 'I' (the being). The author (Grosfoguel, 2011) continues that people who occupy the second zone are inferior beings constructed as the 'other'. The authors of this chapter foreground, from the outset, that the countries providing aid are in the zone of being, and the one receiving is in the zone of non-being. However, in this chapter, the authors do not want to understand the concepts as they are understood by decolonial scholars, namely that the zone of being is oppressive to the zone of non-being. They come from a different perspective that the zone of being is merely economically stable and ahead of the zone of non-being in terms of development and educational standard. Though the present condition of the zone of non-being is understood to be caused by oppression from the zone of being, the authors believe that the people in the privileged zone are now philanthropic enough to make material and educational provisions to the disadvantaged zone. The authors are aware that decolonial scholars might not take to this understanding of zoning kindly, but a positive understanding of issues is also necessary. Concepts of zoning are thus crucial in understanding the hidden, underlying reason why the West is providing aid to the South; specifically, why it is the countries in the West, such as Canada, that are providing aid to Zimbabwe.

Social Location

The social location is another important concept for this chapter because it further illuminates the notion of zones. Social location is the occupation of space by an individual in a specific zone within the context of coloniality. It is the actual position in which the individual is placed by social ordering determined by the dominant powers (Quijano, 2000). For example, people from Africa, and Zimbabwe specifically, are socially located as oppressed persons in the zone of non-being; the South. At the same time, Canada and other developed countries are socially located in the zone of being, the West. The concept of social location is important in this chapter, not only in terms of geographical location but also to understand the purpose of aid from the West to the South, and how it is received by the members of the organisation, the schools, and the community at large.

Locus of Enunciation

There are heated debates in decolonial scholarly circles that the West is oppressing the South, and it is essential that the concept of locus of enunciation is brought to the fore and how it applies to this chapter. Locus of enunciation involves a declaration of being transparent about the position from which one is

speaking or helping. Dastile and Ndlovu-Gatsheni (2013, p. 114) define it as "A reference to a particular location from which a human being speaks within a power structure". This implies that in a situation where someone is a saviour, their intentions should be clear. In a specific case, such as this chapter, where the West is providing aid to the South, the locus of enunciation should be declared so that it is established and understood that the aid given, and the activities of the organisation, are genuine and no sinister motives are influencing them. Ndlovu-Gatsheni (2013) underlines the need for transparency in terms of locus of enunciation because there have been instances of hypocrisy, whereby an oppressor pretended to speak against oppression. In this case, it is important to understand whether those who are providing aid and their organisation are not hypocrites with selfish motives. Ndlovu-Gatsheni (2013) contends that it is thus critical that the position from which one is speaking or helping is declared. The persons with the most favourable locus of enunciation are the ones with a lived experience of disadvantage or oppression. The organisation's team members have the best locus of enunciation in terms of distributing aid to the disadvantaged because they too have a lived experience of the social context of disadvantage in the Zimbabwean environment.

The Philosophy of Ubuntu

Ubuntu, a Zulu word in South Africa, is a philosophical worldview in the African context, in which all humanity and humanness are respected. In its context, every human being is regarded as being able to engage in processes of knowledge production (Shanyanana & Waghid, 2016). By virtue of respecting all humanity, it implies that despite differences, all persons are valuable and consequently worthy of inclusion. Shanyanana and Waghid (2016) argue that Ubuntu should be viewed as being inclusive because of its inclusive nature, its interdependence and communal practice. This is manifested in African phrases such as "*Umuntu ngumuntu ngabantu*", meaning 'I am because we are'. The meaning of Ubuntu and its implications suggest that in contexts in which it is upheld in practice, no one is excluded and all voices are heard, as all persons are viewed as capable of engaging in knowledge processes. Marginalising and excluding specific social groups contradict the issue of Ubuntu because it entails treating them differently and inhumanely. Ubuntu, as inclusion, is questioned when other social groups are excluded. Enslin and Hormsthenke (2004) view such exclusion as a limited understanding of the meaning of Ubuntu. It is conceivable that the spirit of Ubuntu could be informing those involved in the organisation to assist rural schools in the Zimbabwean context.

Ubuntu and Coloniality

Worldviews about Ubuntu and coloniality are different and contrary. Ubuntu views all people as humane and equal, and capable of knowledge production; hence, it acknowledges the value of all knowledge and equal treatment and respect for all human beings. Conversely, coloniality constructs some people as powerful and others as powerless (Ndlovu, 2015). People are categorised by the dominant society and labelled using normalcy as the standard measure. People who fall outside the margins of 'normalcy' become the other; hence we have people differentiated into categories of bipolar binaries of inferior and superior, irrational and rational, the primitive and civilised, traditional and modern, the Black and the White, the powerful and the powerless, the 'able' and the 'disabled' (Quijano 2000). People are also socially placed in separate zones and labelled as beings and non-beings by the dominant society (Santos, 2007). Under the construction of bipolar identities, one group dominates the other. The powerful domi-

nate the powerless, and the abled dominates the disabled, resulting in marginalisation and oppression. Difference, plurality and multiplicity are denied (Ndlovu-Gatsheni, 2001). This contradiction between Ubuntu and coloniality is important for this chapter to facilitate an understanding of how the West and the South meet at the centre, through the organisation, and assist each other. The fundamental question that can be asked in a context in which the 'oppressor' is assisting the 'oppressed', is whether the assistance is genuine or there are deeper unforeseen motives and motivation that need unveiling.

The Social Model of Disability

The Social Model of Disability is another significant concept related to the issues and activities of the organisation in this chapter. The model is specifically crucial as it relates to children with disabilities, whom the organisation is supporting. The children have a double limitation of disability and disadvantage by virtue of being socially located in the space of impoverished backgrounds. Making specific reference to the strong social model, Shakespeare and Watson (2001) reveal that it was initiated by persons with physical disabilities in the 1970s. Persons with physical disabilities of the day argued that their disadvantage was imposed on them by society, and not by their impairments (UPIAS, 1976). It could be argued that the social model has been used to inform disability movements and its strength originates from activists with disabilities, who seek social change for themselves.

Discussing disability as a social construct, Oliver (1990) asserts sociocultural contexts result in oppression, and the emphasis should be on the removal of barriers in social environments. It is further argued that this social model promotes persons with disabilities' sense of self-worth and collective identity (Crow, 1996), and counteracts exclusion and discrimination (Gallagher, Connor & Ferri, 2014). It emphasises that when barriers have been removed in the environment, persons with disabilities become included because they can access the social and physical environment from which they were traditionally excluded. Consequently, Gallagher et al. (2014) argue that the social model does not emphasise biological determinism; it reinforces that disability does not result from impairments but from a social construct, ensuring that certain quadrants of society remain out of reach for some.

The social model has also been critiqued for separating disability from impairment. Scholars like Crow (1996), Corker and Shakespeare (2002) reflect how the effects of impairment are overlooked within this model, and persons with disabilities are deprived of recognition of their experiences resulting from impairments. Shakespeare's (2010) argument is that not all limitations are in the environment. Furthermore, Anastasiou and Kauffman (2011), who are vocal proponents of special education, argue that the social model seeks inclusion at the expense of effective instruction. Shakespeare and Watson (2001) have even proposed that the model should be entirely abandoned. However, in defence, Finkelstein (2004) and Oliver (1996) support that an emphasis on impairments being limiting presents a danger for stakeholders not being afforded an opportunity to make the environment socially and educationally conducive for children with disabilities.

Despite the criticisms of the social model, in this chapter the model is used to guide the understanding that those with disabilities experience barriers in social contexts, not merely as resulting from their impairments. More importantly, the model is being used as a tool and not a theory (Oliver, 1990). Thus, the authors of this chapter stand on the shoulders of Oliver (2013) as the disability giant, and view the strong social model as useful in enhancing an understanding that disability stems from the environment. With adequate support in the environment, children with disabilities can also access education, like all other able-bodied children.

Provision of Aid and Activities of the Organisation

In the section below, the authors present the activities undertaken by the organisation and the aid provided to Zimbabwean schools, applying the specific theoretical concepts presented earlier for analysis and discussion.

The organisation comprises a team of 15 members. Some are heads of schools; others are professionals in different areas as sports, engineering, accountancy and disability fields. Thus, the organisation consists of a team of dedicated and devoted professional Black men and women who are driven by their desire to serve and lead; leadership is all about serving. All of these individuals are Zimbabwean nationals and have their profiles, interests, how they are involved in the organisation, and their individual pictures displayed on the organisation's webpage. The organisation has thus established a highly experienced and dedicated team that is willing to leave a legacy in improving the lives of children in Zimbabwe.

Locus of enunciation improves our understanding of the composition of the organisation's team members, their transparency and declaration of their positionality; who they are and from which zone they are speaking and helping. Ndlovu-Gatsheni (2013) contends that it is important that the position from which one is speaking or helping is declared. In this case, it has been declared and known that the director and founder of the organisation is a Zimbabwean national based in Canada. He speaks for disadvantaged children since he has a lived experience of their disadvantage, having taught such disadvantaged children for many years in rural schools in Zimbabwe. The other team members have the same lived experience of disadvantage, having been exposed to such children in rural schools, in which they were teachers and heads of schools. Above all, all members of the organisation also come from a background of disadvantage but have defied the odds to be where they are today. They have similarly been assisted by well-wishers and government funding. It could be argued that such a team might not have sinister motives as they apply themselves in distributing materials that have been received from their donors in the West. Moreover, the declaration of positionality has been made clear on the organisation's website, and this is one way of pledging transparency in organisations like this one, of which other people, specifically decolonial scholars, may question its motives.

The organisation is making giant strides in helping improve the educational facilities in some of Zimbabwe's poorest rural schools. Currently, it works in six districts: Binga, Bubi, Matobo, Mutasa, Tsholotsho and Umguza. These districts have the most disadvantaged schools, some with no classrooms aside from grass-thatched huts built by parents. The objective of this particular organisation is to take heed of the government's call to collaborate in helping improve rural schools by providing teaching and learning resources. The lack of proper teaching and learning resources in these schools has a ripple effect, as it tends to affect countless aspects of the school system. Qualified teachers often shun such schools, opting for better-equipped ones, which has an adverse effect on impoverished schools' academic performances. Thus, the organisation's intervention seeks to redress this background.

The Activities of the Organisation

The organisation described in this chapter is a charitable organisation with all board members working as volunteers. Its aim is to ensure that every penny raised goes to assist the schools in need. All members live and work in the communities they serve. As the majority are school principals or teachers in struggling communities, they are more conversant with the challenges of running schools without proper teaching and learning facilities. The organisation does not have vehicles to ferry donated materials yet, but the

members sacrifice the use of their own vehicles or use public transport to get the resources to schools in different districts. It is an entirely volunteer-based organisation, with the team members' primary aim being to ensure that they meet the organisation's goals and objectives. Thus, despite the team's lack of vehicles, the organisation has managed to initiate and complete quite a number of meaningful projects. These include constructing a basketball field in one of the schools, building classroom blocks and laboratories, and providing sanitary pads to girls. The projects have benefitted both the community and the learners in disadvantaged schools.

The volunteer aspect characterising all team members can be seen as aligning with the principles of Ubuntu. In an African context informed by the philosophy of Ubuntu, all humanity and humanness in general are respected, and helping those in need is a mantra held globally. Every human being is regarded as valuable, deserving, and able to engage in processes of knowledge production (Shanyanana & Waghid, 2016). The team members, who are applying themselves fully without any remuneration, could be said to be influenced and motivated by the Ubuntu spirit, in which they understand that even those who are disadvantaged are capable of knowledge production when they are supported. The evidence is the team doing voluntary work within the context of the dire economic situation in Zimbabwe, as citizens of the country, hard hit by the economic meltdown. They could use their time to secure their own economic survival, but instead apply themselves to serve in the organisation and assist in the distribution of donated materials. This could not be described as anything but a spirit of Ubuntu.

Distribution of Classroom Furniture

The main agenda and goal for the particular organisation is to provide appropriate furniture and infrastructure for classrooms and science laboratories. Several concerns have been raised as to why a number of children from the majority of poor, rural, secondary schools, especially those from Matabeleland, cannot get placement at the National University for Science and Technology (NUST) in Bulawayo. However, the present state of affairs is quite clear – the majority of these rural secondary schools do not have appropriate science laboratories, which means their students do not pursue science-related subjects at the advanced level in their schools. It is therefore unlikely that these children will pursue an engineering degree at NUST without the foundation of science subjects. It is thus imperative for the organisation to provide science laboratories for these schools. As for classrooms, it cannot be expected that children concentrate fully while attending classes under a tree. The same goes for the lack of classroom furniture, such as tables and chairs; the chances of these children writing effectively while kneeling down on hard and dirty surfaces in class are very slim. The organisation therefore continues to fight for the children's right to an education by striving to improve educational facilities.

Support in Terms of Sports

Apart from infrastructural support, rural disadvantaged children are supported in sports. The team has considered that besides being a multi-million-dollar career prospect, sport plays an integral role in the development of a child. As an organisation that works with children, one of the organisation's primary aims is to give every child the opportunity to play and enjoy sport in school. One of the activities undertaken by the organisation is to distribute sporting equipment, such as soccer balls, to schools within the districts in which it operates. However, the organisation noted that donating these soccer balls without any basic soccer skills being taught to the teachers who coach these children is tantamount to a waste of

resources. Against this background, a sportsperson was appointed to the team and assigned the role of a sports officer. His role involves going into schools to conduct coaching clinics with schoolteachers so that they gain the right coaching skills. This sportsperson has invaluable soccer expertise from playing soccer himself and coaching national teams; he played in the country's premier league for the Highlanders and Olympics Football Clubs (Zimbabwe national teams). He then went on to manage and coach the Highlanders and Amazulu Football Club. Currently, he is the technical advisor at Highlanders Football Club. His expertise in sports is greatly benefitting rural children in terms of developing their skills and them gaining sports knowledge.

Under the Ubuntu scope, supporting disadvantaged children in rural districts of Zimbabwe in terms of sports could be explained as the organisation showing respect for all humanity despite differences (Shanyanana & Waghid, 2016). The members of the organisation see all persons as valuable and capable, which is why they distribute sporting equipment, such as soccer balls and sports uniforms to rural children. Through sport, they seek to respond not only to the physical needs of the disadvantaged children, but they also believe that the development of these underprivileged children's sporting potential and talents can give them an edge to succeed in life; following the example of many stars who, through sport, conquered poverty and succeeded in life.

Support for Disability

The organisation has not overlooked issues of disability, particularly in terms of learners with learning disabilities who are integrated into mainstream schools. Learners with disabilities are one social group that is often forgotten in schools, in communities, and society. The Zimbabwean society is no exception, and segregation of those with disabilities occurs. In cases where their needs are considered, they are bunched together with other disadvantaged social groups, such as women. While this could be viewed as non-discriminatory behaviour, the fact is that those with disabilities have needs which persons without disabilities do not have. Therefore, they need their own representation at micro and macro levels.

The organisation has considered the welfare and education of children with disabilities since it strongly believes they too deserve equal opportunities, just like any other children. The organisation appointed a scholar who is suitable for this portfolio as she has the expertise, passion, knowledge, experience and professional qualifications in both special needs education and inclusive education. The individual, who is also part of the organisation's volunteer team, represents the needs of learners with disabilities as the disability coordinator in the organisation.

The organisation's consideration of learners with disabilities can be explained by the Social Model of Disability. The organisation is concerning itself with creating a conducive schooling environment, in which learners with disabilities are afforded equal opportunities to learn, just like their able-bodied counterparts. It could be argued that the organisation's support for those with disabilities is influenced by scholars like Oliver (1990), who argue that it is the social environment that should be transformed so that it is inclusive of those with disabilities. The disability coordinator understands that she has to work in collaboration with the administrators responsible for disability aid in various districts, the heads of schools, and teachers so that they understand the special learning needs of children with disabilities. When people who work with children with disabilities on a day-to-day basis are aware and conscious of their needs, an inclusive environment is created in which even those with disabilities are able to access learning. It could be argued that the organisation is assisting the Ministry of Education to provide

an inclusive environment where all learners with and without disabilities are afforded opportunities to learn in the most disadvantaged districts in the country.

Accountability and Transparency of the Organisation

All the resources and materials, books, sporting equipment and classroom furniture that the organisation has been distributing to the disadvantaged schools, have been sourced from people and countries in the West. The organisation has managed to link up with funding bodies spread across the Global West. It has received support from Canada, the United States of America, the United Kingdom and Australia. Most of its support is from Canada; the Canadians are regarded among the most generous people in the world. A clear testimony of the West touching the lives of disadvantaged rural Zimbabwean children and communities has been illustrated over consecutive years when the CNCVCT distributed classroom furniture to a number of schools in the districts within which the organisation works. Cited in the organisation's newsletter is the following:

In a colourful function held at the school, the young but fast-growing non- profit organisation donated classroom furniture worth USD4 293. The money was kindly donated to the trust by Global Education Fund (GEF) of Edmonton, Canada where the Nyabadza Trust's Executive Director is based. The Canadian organisation kindly donated an amount of CAD 6000 for this project. The equipment handed over to the school consisted of 17 Group Tables, 170 Chairs, 2 Teachers Tables and 2 Teachers Chairs. This support therefore means that from this day onwards 170 children at the school will never have to sit on dirty floors again in class.

Using the concept of zoning, the issue of the people and countries in the West providing aid to schools in a country in the South, specifically Zimbabwe, could be explained in light of those with economic power assisting those without such power. The people in the countries located in the zone of being, who are advantaged, have been kind enough to support disadvantaged persons in a country in the zone of non-being. This serves as evidence of positive acts – supported by the authors of this chapter – which stand in stark contrast to the views of the proponents of decoloniality. The decolonial scholars would argue that, in the first place, the economic disadvantage of countries in the South results from the settler and the continuity of a hidden but still oppressive coloniality of the South. Without denying this fact, the authors of this chapter are of the view that in this case, the aid provided by the West is helpful because it is benefitting and sustaining the education of children who are the future leaders of their country.

Moreover, the cornerstone of success for this particular organisation is its values of ethics, accountability, transparency, fairness, and integrity in the manner of conducting its work. An example of the organisation's high-level accountability was emphasised when it was reported that on the 23rd of July 2015, the CNCVCT handed over some school supplies and girls' under-garments to children at Majiji Primary School in Bubi District of Zimbabwe. The organisation's accountability and transparency are illustrated in the CNCVCT's report specifying that:

The school supplies were kindly donated by an amazing Rotarian, Kim Cooper from British Columbia and her Rotary Club of Kamloops. She travelled to Harare, Zimbabwe a few weeks ago and took with her lots of school supplies purchased by her Rotary Club, which she handed over to the CNCVCT's Public Relations Officer, who resides and works in Harare, who then sent the items to her team in Bulawayo.

The items that were distributed were accounted for in all their quantities. They consisted of 34 packets of HB pencils (10 in each packet), 35 boxes of 24 Crayola colour pencils that each come with a sharpener, 12 glue sticks, 8 packets of pens, approximately 20-25 erasers and 49 pairs of girls' underwear.

Such strict accountability of every single item could be understood in the light of honesty and integrity. The organisation's accountability is a key determinant of the successful achievement of its objectives through donations from people in the West, and the continued support from the same donors.

The honesty and integrity shown by the organisation can also be explained in light of the spirit of Ubuntu motivating members. In African societies, mostly in rural contexts, Ubuntu is still the organising principle in terms of how people behave. For such accountability to manifest in the distribution of materials, the members of the team are thus motivated by the Ubuntu spirit; they do not deprive the already disadvantaged rural children and are accountable to their donors. Embedded in the Zimbabwean culture, the expression of Ubuntu through integrity and honesty has turned out to be a source for attracting more kind behaviour and support from other people wanting to show goodwill.

Lessons to Learn From Each Other by the South and the West

In a bid to blur the boundaries between the West and the South, the authors propose that both the West and the South learn from each other. The decolonial scholars have emphasised the West's agenda of oppressing the South, reflected in accepted knowledge that is Eurocentric and universalised (Dastile & Ndlovu-Gatsheni, 2013). And while the authors of this chapter agree, problems in the South have also become problems in the West. The authors feel that it is time to fight the economic wars together, for the betterment of everyone globally. In the process, several lessons can be learnt when the West is not seen as an oppressor in its totality.

The authors in this chapter argue that this particular organisation has strong material support from the West, and the children and the community who extensively experience this support can learn the act of giving and supporting those in need at different times, such as during times of economic recession and civil wars. The culture of giving to the poor by the rich has always been practised in the South, especially in the African context. When Zimbabwe experienced floods that swept away a school in the Eastern part of the country, South Africa provided the aid of helicopters that rescued people and offered food relief. Providing aid to the needy is thus not a new phenomenon in the South but is only reinforced by the people from countries in the West through the particular organisation; perhaps this is why people in rural Zimbabwe are receptive to the aid being offered from people in the West.

However, in African societies in the South, the assumption has always been that the rich gives to the poor. In one of his speeches of encouragement, the director of the organisation was quoted as saying:

I am a bit disappointed in that all the support we have received ever since we started operating has been coming mostly from outside the country. As Zimbabweans, I strongly feel the time has come for us to change our modus operandi. We need to make the paradigm shift from the notion that the humanitarian field is a preserve of people from the Western World.

The director therefore seeks for people in poor countries like Zimbabwe to shift from this mentality and understand that everyone has the capacity to provide aid. Thus, though Zimbabweans are disadvantaged, they can learn that everyone, including themselves, have something to give. It is only in the

mind-set that the West should be the giver and the South the receiver. It could be argued that this is what perpetuates the notion of the West's domination of the South, to which decolonial scholars are opposed (Ndlovu-Gatsheni, 2013). The South has a lot to give because it is not only material resources that can be donated. This view can change the charity mentality of many African societies that they should always receive from the West, which is viewed as economically advanced.

Throughout the organisation's operation, broadly and in its activities working with schools, learners and communities, the spirit of Ubuntu has been demonstrated. The community itself has demonstrated this philosophy by cooperating with those who are assisting them in different ways so they can also give back. For instance, when cement and building materials were donated, parents came together, moulded bricks, and built classrooms for their children. Moreover, the Ubuntu philosophy, demonstrated by Zimbabwe in the way it shows appreciation and reciprocal action, can also be shared with people in the West. The authors argue that it is time that both the Global South and West come together to solve common problems, and share values, cultures, knowledge, skills and support, as is happening through the organisation described in this chapter.

CONCLUSION

This chapter considered the finer details of how people from the West are assisting schools to improve the lives and education of disadvantaged communities in rural Zimbabwe through the particular organisation. It would be easy for the authors to conclude that there are unforeseen motives and motivations for people living in countries in the West, to offer support to those living in the South. Decolonial scholars, in particular, might think that their provision of aid is not genuine. However, having used theoretical concepts as the locus of enunciation, whereby the positionality of all those involved in the organisation has been declared and transparency prevails in all activities, the authors of this chapter conclude that the help provided by those in the West in this instance is genuine. This is important in shifting the debate from the West oppressing the South, to understand it from other perspectives of coming together, learning from each other, sharing those cultural, educational and social values that benefit all across the globes. It is vital to understand that it is time for the West-South debates to focus on positive developments as the world moves towards globalisation.

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Conclusion

TOWARDS PROMOTION OF AFRICAN EPISTEMOLOGIES ON DISABILITY THROUGH VOICES FROM THE SOUTH

This book is intended to continue the Global South-North debate concerning the social, cultural, and educational perspective of disability, in which the motive is to come together and share experiences because all knowledge is valuable. The Global South, more particularly Africa, is used, as an epistemic site that experienced not only colonial exclusion in general but also discrimination, isolation and stigmatising of those with disabilities in society in general and in education in particular This development has resulted in disability issues being written from perspective that has allegedly been criticized for having a Global North bias. Again, in the Global South, the social, cultural and educational narrative of disability has continued to be narrated by those without disabilities. Subsequently, this conceptualisation has stifled voices from the Global South whilst at the sometime the voices of those with lived experiences of disability has been overlooked notwithstanding the different contexts in which the issues are located. It is against this background that the book opens with the first chapter on the social and cultural experiences of disability in the light of Ubuntu, which is an African philosophy of accepting and respecting all people, including those with disabilities, as manifested in the use of idioms relating to disability. This chapter sets a stage in which Ubuntu philosophy should be an underlying factor in consideration of all people as equals at both local and global levels. From this dimension, the book not only calls for the embrace of local solutions but to also ensure that tangible transformation which meets the lived experiences and expectations of persons with disability are established.

The location of the book is in the Global South is meant to centre the voices as a legitimate historical unit of analysis and the epistemic site from which to interpret issues related to disability, whilst at the same time seeking to globalise knowledge on disability. This process of globalizing the knowledge is thus meant to be anchored on African experiences and epistemologies. This is expected to enable the laying of a firm foundation of epistemic freedom, which is an essential pre-requisite for political, cultural, economic and other freedoms., This can assist in Africa's transformation agenda aimed at directly addressing the problems of mental dislocation, alienation, and problematic consciousness imposed on African people in general and those with disabilities in particular. The diverse chapters thus set the tone for redressing some of the deep-seated challenges created under colonialism, which still persist within the realm of coloniality. This is a fundamental decolonial demand of which political decolonisation of the twentieth first century is grappling with to make strike a balance between the West and the South in terms of social, cultural and educational perspectives of disability.

However, while critiquing the Western hegemony has taken a toll in the Global South, the argument in this book is that whatever had been previously perceived as problems of the South have also spilled to West, triggering what could be arguably described as 'a global knowledge crisis' within the field of disability. The book is therefore not claiming finality on the subject of the social, cultural and educational issues in the context of disability, but is only foundational. There is a need therefore, to find common ground between the ideas of the Global South and the West, starting from re-articulating the discursive space of the Global South. Moving into the future then, new ways, new solutions new ideas, innovations and interventions, that seek to address the social, cultural and educational challenges within the disability context, should be forged together, not only through ideas from the Global South but with the global developments being embraced. Further, ahead, scholarship should bring a different perspective in which the focus is to transcend the commonly held and persistent criticism, which is not helping both worlds.

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About the Contributors

Sibonokuhle Ndlovu is a post-doctoral fellow at Ali Mazrui Centre for higher Education Studies, University of Johannesburg. Her research interests are in disability in higher learning, Inclusive Education and inclusion in higher learning. She also has interest in transformation in higher learning, teaching and learning of disadvantaged learners in disadvantaged rural contexts. She completed her PhD at Wits School of Education in 2017. She has been a research intern at the University of Kwazulu Natal, researching for the national project, Education and Emancipation. Her current research interests are in social, cultural and educational perspectives about disability in the Global South.

Phefumula Nyoni is an anthropologist and sociologist lecturer and researcher. He has been actively involved in curriculum design, implementation and programme quality assurance. He completed his PhD on Economic Anthropology at the University of the Witwatersrand. His research interests are multidisciplinary and include education transformation, quality assurance and curriculum design in tertiary institutions, particularly from a culture-centric perspective, reconfiguration of urban spaces, access to socio-economic amenities for marginalised communities, poverty alleviation and human rights, community development, urban artisanal mining, gender and entrepreneurship. Phefumula Nyoni is currently a postdoctoral fellow at the Ali Mazrui Centre for Higher Education Studies, University of Johannesburg. Prior to joining the Centre, he has been a lecturer at various South African universities as well as a research and policy consultant with several organisations. His recent Chapter publications include; "Pedagogy and Agency in Postgraduate Student Supervision in a Rural South African University".

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Nausheen Ameen is a Chief Educational Specialist employed at the Provincial Department of Education. She is an Educational Psychologist with a keen interest in Autism Spectrum Disorder. She is instrumental in the establishment, support and admission processes of children with autism at schools in the Gauteng Province. She is in the process of creating a booklet on strategies for teachers teaching autism as well as parental support programmes. She has currently submitted her PhD titled "Strategies for teachers teaching children with autism" at the University of Johannesburg. She is currently working on a journal article titled "Teachers experiences of a differentiated curriculum for children with autism spectrum disorder".

Augustine Arimoro is a Lecturer in Law at the Nottingham Law School, Nottingham Trent University, Nottingham, United Kingdom. He contributes to the teaching of the Criminal Law, Public Law and EU

Law modules and is also a Personal Tutor to two groups of LLB Year 1 students. Augustine previously taught at St Mary's University Twickenham London and at Kingston University London. He is Barrister and Solicitor of the Supreme Court of Nigeria.

Dennis Zami Atibuni holds a Doctor of Philosophy (PhD) degree in Educational Psychology from Mbarara University of Science and Technology (MUST) – Uganda, awarded on January 28, 2017. He obtained his BSc. (Educ) and M.Ed (Educational Psychology) degrees from the same university in 2004 and 2012 respectively. He is a postdoctoral research fellowship (PDRF) at the Ali Mazrui Centre for Higher Education Studies at the University of Johannesburg – South Africa under the supervision of Professor Michael Cross. He is a Senior Lecturer and Head of Education Department and Quality Assurance focal point at the Faculty of Science and Education, Busitema University – Nagongera Campus, having served before as Assistant Examinations Coordinator and School Practice coordinator. His interests/areas of specialty include student (research) engagement at higher learning; educational assessment; pre-service and in-service teacher education; science and mathematics education pedagogy; research methodology and engagement; social and personality psychology; developmental psychology; guidance and counselling; special needs education; and psychological determinants of effective academic leadership at higher educational institutions. He is currently supervising research works of doctoral and master's degree students, and has served both as internal and external examiner for master's dissertations and viva voce examinations. He has participated in, and presented papers and/or served as invited guest speaker and chair, at different local and international conferences, seminars, and workshops. He is an author and co-author of several articles and book chapters in addition to editing a book volume. He is a reviewer of articles for different international journals, including serving as a board member of Research Journal of Education. He has won a couple of prizes and trainings, including from Japan International Cooperation Agency (JICA) and Secondary Science and Mathematics Teachers (SESEMAT) Programme, Council for the Development of Social Science Research in Africa (CODESRIA), African Doctoral Academy (ADA), MAK-SIDA, and the PDRF at the University of Johannesburg. He has served a number of assessment bodies and universities in Uganda as an achievement examiner, item writer, item moderator, and quality assessment workshop facilitator. Outside academia, he serves as a guest/consultant presenter at an education talk show on EAST FM radio, motivational speaker and continuous professional development facilitator for teachers in primary and secondary schools, catechist of the Catholic Church, in addition to offering guidance and counselling to students, staff, parents, and the general public.

Michail Peter Barasa holds a Master's degree in Education Leadership and Management of Busitema University. He is an Education Officer with a diverse experience in primary education and special needs education. He has served as a teacher in inclusive primary schools in Uganda for 22 years. His research interests include inclusive education, special needs education, mental health of learners with disabilities, and primary teacher education. He has a strong desire to advocate for the rights of minority groups including women, children, persons with disabilities, and marginalised ethnic minorities. Outside academia, he serves as a counsellor to learners, teachers, and members of the immediate community.

Naume Z. Choguya currently works in the Department of Sociology, University of Zimbabwe. Naume does research in rural studies, livelihoods, social identities, medical anthropology, as well as women and gender studies. Her current research projects are social epidemiology; women's health rights; alternative healthcare and public policy in Zimbabwe.

Thembelihle Gondo is a senior lecturer and program coordinator at the Zimbabwe Open University. She holds a certificate in Education, Bachelor of Education PE (UZ), Masters in Educational Management (ZOU). She has taught in secondary schools and at different levels of tertiary education. She has written many articles in academic journals and four modules and four book chapters. Currently she is waiting for PhD results.

Ephraim Taurai Gwaravanda holds a PhD in Philosophy from the University of South Africa (UNISA). He also holds a Master of Arts Degree in Philosophy (University of Zimbabwe) and a Bachelor of Arts Honours Degree in Philosophy (University of Zimbabwe). He is a Senior Lecturer in Philosophy in the Department of Philosophy and Religious Studies at Great Zimbabwe University where he teaches Logic, Metaphysics and Philosophy of Law. His research interests are in the areas of Philosophy of Education, Indigenous Knowledge Systems, Globalisation, Epistemic Justice, Governance and Philosophy of Law. He has published several articles with international peer reviewed journals.

Caroline Long was awarded her PhD from UCT in 2011. Prior to this she taught, and conducted research projects at Wits, and the University of Pretoria. She was appointed professor in the Department of Childhood Education, University of Johannesburg, on Soweto Campus in 2016. Her publications include mathematics education, assessment and measurement theory, and professional teacher agency. She is currently a Senior Research Associate at UJ. As well as her academic work, she has been consulting, editing and reviewing for institutions both within South Africa, and internationally. A renewed interest in rural communities, and the education challenges has emerged.

Tafara Marazi holds a PhD. in Sociology from Rhodes University South Africa, Master's of science degree in rural and urban planning and a BSc. Honors degree in Sociology both from the University of Zimbabwe; as well as a graduate diploma in education from the University Of Zimbabwe. His research interests include special needs education, family and rural livelihoods, ageing and society, policy and gender. He is currently a senior lecturer of Sociology at the University of Zimbabwe.

Macdelyn Mosalagae acquired her Ph.D. in Inclusive Education from the university of Wits in Johannesburg, South Africa. Her area of research is on Inclusivity, disabilities and Technical Vocational Education. She holds a Diploma in Education with a major in Social Studies from University of Zimbabwe, BEd in Special Education and Social Studies from University of Botswana and MEd in Inclusive education from University of Glasgow, Scotland. She attended and presented in academic international and regional conferences in the following countries; University of South Bohemia -Chezc Republic (2019); Tübingen – Germany(2018 &2019), Oldenburg Germany (2018),Buenos Aires, Argentina (2018); Oxford, UK (2017) Cape Town, South Africa, (2016 and 2017). She taught in both primary and secondary education. She is currently a lecturer at Gaborone Technical College, Botswana. She has been the pioneer of the establishment of a Special education Department in the same institution. She has published a scholarly article in a reputable academic journal. Besides, she is an advocator of the marginalized communities and works in prison rehabilitation centres to offer restorative justice.

Obadiah Moyo holds a PhD from the National University of Science and Technology, in Zimbabwe. He is the president of the National Council of the Disabled Persons of Zimbabwe and is the Founder of the Rural Libraries and Resource Development Programmes, which is supporting literacy development

in disadvantaged schools in Zimbabwe. His research interests are in issues of disability and Inclusive Education and has published extensively on the issues at schooling and higher education level.

Precious Muzite is a Research Associate and a Ph.D. candidate at the Wits Centre for Diversity studies. He has a Masters degree in Diversity studies with a special focus on Critical Realist Disability studies and Assistive Technology (AT), Inclusion in Technical Vocational colleges and the intersections of disability and sexuality. In his extra time he enjoys coming up with new innovations of technology and he, alongside colleagues received the Wits Enterprise first time Inventor award on the 15th of September 2016.

R. Ndille holds a BA (hons) in history and Politics, a PGDE in History Education, an M.Ed in Curriculum Studies and Teaching all from the University of Buea. He also holds an MA in African Studies from Dalarna University in Sweden and a D.Litt et Phil from the University of South Africa. He has served as Head of Department of History and Head of Service for Teaching and Research at the Faculty of Arts at the University of Buea-Cameroon. Dr. Ndille has completed a Postdoc position at the Centre for Education Rights and Transformation of the University of Johannesburg and holds a History Educator lectureship at the School of Education of the University of Witwatersrand- South Africa. He specializes in History and Policy of Education research and his recent works have appeared in renowned journals like Third World Quarterly, Yesterday and Today, African Renaissance, Historicka Sociologie and Social and Education History.

Collin Nyabadza is the director of Collin Nyabadza Children's Voice Charitable Trust (CNCVCT), registered as a charity organisation in Canada, but operating in rural disadvantaged context of Zimbabwe. He is a teacher for learners with disabilities by training and profession. His organisation's main thrust is to help enhance the quality of education in some of the country's marginalised rural schools. His organisation distributes and supplies proper resources such as classroom furniture, sports equipment and infrastructure, books, and even reusable sanitary pads for the girl children. The organisation builds schools and science laboratory in remote schools in Zimbabwe Besides helping with physical resources, Collin also strongly believes in grooming, coaching and mentoring young people into tomorrow's next generation of leaders. In Canada, Collin works at Ecole Centennial School as an Educational Assistant. He voluntarily does Leadership Consultancy on young Zimbabwean professionals based in Zimbabwe, the U.K. South Africa and other parts of the world, as he is of the belief that the country's resurrection of the inert capabilities lies upon proper and modern approaches of coaching and mentoring.

Emnet Tadesse Woldegiorgis (PhD) is an Associate Professor of Higher Education Studies at the University of Johannesburg. He has been researching higher education issues in Africa since 2006. He did his PhD at the University of Bayreuth, Germany, where he has also been working as a post-doctoral researcher between 2015 and 2018. His research focuses on various issues of higher education processes in Africa. He did his joint Master's Degree in Higher Education Studies at Oslo University in Norway, Tampere University in Finland and Aveiro University in Portugal. He is certified in two advanced-level research training in higher education in the Netherlands at the Centre for Institutional Cooperation (ICIS) Vrije Universiteit, Amsterdam; and training on Leadership and Management of Higher Education Institutions in Maastricht School of Management. Before his Ph.D., he has been working as Head of Quality Assurance Office, Department Head and team leader at Mekelle University, Ethiopia. He

has published several articles and book chapters on higher education issues particularly, theories of regionalization and internationalization, student mobility, cost-sharing, and harmonization of higher education systems in Africa.

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