

# Curriculum Reform: A Key Driver to the Inclusion of Students with Disabilities in Higher Education

Barbara Z. Podzo\* Charles G. Chipika

Faculty of Education, Reformed Church University, PO box 80, Masvingo, Zimbabwe

## Abstract

People with disabilities (PwDs) have been prevented from accessing rights that are freely available to other members of the society in such areas as health, education, employment, community participation and other basic social and political rights. The concept of inclusive education has been promoted internationally for more than a decade however, multiple barriers remain to the full participation of students with disabilities (SwDs) in education. This is in spite of many countries being signatories to a number of United Nations (UN) conventions on the rights of persons with disabilities. Most literature has cited accessibility in its three forms that is curricular, structural and systematic as major hindrances to the inclusion of students with disabilities in higher education (HE). The right to education for students with disabilities is often only considered within the context of primary education and not in terms of education for all. Discrimination against persons with disabilities has been long-term and widespread with a number of effects. Most curricula at higher education level do not cater for the needs of learners with disabilities hence the need for curriculum reforms so that learners with disabilities are fully and effectively included. As such, this paper is going to focus on challenges being faced by students with disabilities in accessing higher education curriculum and strategies that can facilitate their inclusion. Models of disability and their influence towards the inclusion of SwDs in higher education are also going to be analysed.

**Keywords:** keywords, curriculum, curriculum modification, curriculum adaptation, accommodations, universal design learning, students with disabilities.

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## 1. Introduction

From time immemorial, disability has been a phenomenon that incurred stigmatization, discrimination, persecution, resentment, indignity and denial of human rights. Historical Outline (2007:1) has documented that (PwDs) were not only ridiculed and viewed as people who are paying for their past sins, but were also perceived as witches and wizards. In many cultures today, a similar thinking still exists and is also reinforced by myths, legend folklores and literature, even modern films, television programmes, children's comics and cartoons portray these negative stereotypes (Kenya Projects Organisation (KENPRO 2010:4). In fact, the most pervasive negative attitude is focusing on a person's disability rather than on an individual's abilities that give rise to attitudinal barriers such as feeling of inferiority, pity, ignorance against PwDs (Office of Disability Employment Policy 2013:1). Notwithstanding the negative associated with disability many talents have emerged from this vulnerable group. According to Aghilham (2009:4), great men and women have contributed to the human advancement and have shaped and continued to positively change the course of world history can be found also amongst PwDs. Their impact and positive contributions have been acknowledged in the field of science, art, music, sports, medicine, politics and others. To emphasise this assertion, Aghilham (2009:5) posits that Albert Einstein, a great physicist and mathematician, had a learning disability but won the Nobel Prize in 1921 for his immense contribution to Physics. Franklin Roosevelt who suffered limited physical activity as a result of polio disease excelled to become the 32<sup>nd</sup> president of the United States of America in 1932 (Aghilham 2009:5). This is an indictment that virtues and talents are not monopoly of only able-bodied persons alone.

Higher education institutions (HEIs) are not only regarded as agents for social change, but also serve as 'engines of economic development, and are at the vanguard of inquiry and generation of knowledge' (Strauss & Sales, 2010:80). However, there is still societal stigmatization and marginalization of disabled people which inhibits reasonable curriculum accommodation and participation (Karr, 2011). Universities and HEIs need to address this discrepancy as they have the capacity and influence to do so (Ohajunwa, 2012). As part of the roles adopted by various HEIs with a bid to increase curriculum access and participation by people with disabilities, HEIs have now started to increasingly create opportunities for education and learning for people with disabilities. There is an awareness of the need to ensure reasonable curriculum accommodation for disabled people in HEIs as an issue of human rights (Getzel, 2008). For inclusive education to be a reality, curriculum is the central focus where appropriate interventions should be made. Access to the general curriculum involves the placement of students with disabilities (SwDs) in general education classrooms, which requires the adaptation of the curriculum content so that it proves meaningful to every student as an equal participant in the learning process. UNESCO (2003:16); based on the results of research on different inclusive education practices has identified the following features of an inclusive curriculum:

- It has broad common goals defined for all including the knowledge, skills, and values to be acquired.

- It has a flexible structure to facilitate responding to the diversity and providing diverse opportunities for practice and performance in terms of content, methods and level of participation.
- It contains learning assessment based on students' individual progress.
- It acknowledges the cultural, religious and linguistic diversity of learners.
- It is based on content, knowledge and skills that are relevant to learners' context.

## 2. Defining Curriculum and Inclusion

### 2.1 Curriculum

There is no uniform conceptualisation of curriculum as is reflected by most literature. The concept curriculum is as dynamic as the changes that occur in society. The term 'curriculum' has its origins in Latin and it simply means 'race course' (Gebrehiwot, 2015). In its narrow sense, some authorities view it merely as a listing of subjects to be taught in schools (Gebrehiwot, 2015). In a broader sense, it refers to the total learning experiences of individuals not only in schools but in society as well. Gebrehiwot, 2015:40 defines curriculum as:

---the plans made for guiding learning in the schools, usually represented in retrievable documents of several levels of generality, and the actualisation of those plans in the classroom, as experienced by the learners and recorded by an observer; those experiences take place in a learning environment that also influences what is learned.

Mckernan (2008) goes on to classify curriculum into two "hidden curriculum" and "official curriculum". The same author refers the hidden curriculum to what students learn from their individual observations of how the school operates as well as from different materials, but something which is not overtly planned to be offered to learners as instructional content. Billet (2006) defines the hidden curriculum as the unintended outcomes of the learning experience, what the learners' pickup or emulate unconsciously. Glatthorn (2000) identified seven types of curricula as follows:

- Recommended curriculum- proposed by scholars and professional organisations.
- Written curriculum- appears in school, district, division or country documents
- Taught curriculum- what teachers implement or deliver in the classrooms and schools.
- Supported curriculum- resources like textbooks, audio/visual materials which support and help in the implementation of the curriculum.
- Assessed curriculum- that which is tested and evaluated.
- Learned curriculum- what the students actually learn and what is measured.
- Hidden curriculum-the unintended curriculum

### 2.2 Models of Disability

In the process of instituting curriculum reforms, it becomes relevant to examine what lens the HEIs view disability with as this influences the process (Anderson, 2009). The perspectives of disability are often transferred from the North to the South and influence the definitions given to disability in these developing countries (Grech, 2011). Since time immemorial, societies have been viewing the phenomenon of disability from different perspectives. As a result, several models emerged to explain it. Amongst them are the Religious, Charity and Medical models. These models have been coined based on societal beliefs and cultures, and applied as frameworks to tackle the phenomenon of disability (Tugli, 2013). In addition the same author explains that these models have had a powerful influence on setting the parameters on how people with impairments are treated by society. In other words models of disability are a useful framework that depicts the reality of disability and help gain an understanding of disability issues. The wholesome adoption of these perspectives have given rise to the creation of policies that are ineffective as they do not fit the context they exist in, and so have no positive influence on the lives of disabled people. Although the social model has gained acceptance as a policy base in countries all over the world, the legacy of the medical model seems to influence the practice in HEIs (Gebrehiwot, 2015).

#### 2.2.1 The Individual/medical model

This model is attributed to the work done by John Glied and William Roth in the field of disability and it may be the most common understanding of disability (Ohajunwa, 2012). The medical model focuses on the individual as a person who needs to be changed and emphasizes the individual's ability to function physically. People with disabilities are considered recipients while the medical personnel are regarded as the decision makers. This scenario emphasizes the top-down approach. Ohajunwa (2012) defines the medical model as when an individual's:

body structure or function is perceived to deviate from socially recognized norms and comes to the attention of healthcare professionals who assess, diagnose and legitimise the person's impairment. Any restriction of activity or social disadvantage that the individual confronts in his/her everyday life is deemed to be the inevitable and tragic consequence of this impairment.

The model has been criticized for being aligned to the medical problem only and totally relegates the sociological and psychological aspects of disability. It does not reflect wholesomely on an individual's life and also does not consider disabled people's views. In this regard curriculum reviewed under this lens entails that disabled people should adapt themselves and fit into curriculum.

### **2.2.2 The Social Model**

This model was developed in the last quarter of the twentieth century by disabled scholars and advocates in the United Kingdom (UK) and the United States of America (USA) (Courser, 2011). The Social Model was initially introduced in the mid seventies by a "disabled" lecturer, Mike Oliver, who adapted it from a booklet published by the Union of Physically Impaired Against Segregation (UPIAS) titled *Fundamental Principles of Disability* (BRIANHE 2006:2). A British organization formed in 1974, UPIAS expresses the fact that disability is shaped by factors over which individuals have minimal control such as social, environmental, or organizational. According to Barton (1993), the social model, views disability as a form of social oppression and those with disabilities as an oppressed social group which calls for its liberation through the removal and dismantling of barriers and their empowerment through self-participation and involvement. The model has become the cornerstone of the Human Rights approach to disability leading to progressive policies and legislations. In this regard curriculum reviewed under this lens entails the modification and adaptation of the curriculum to accommodate the needs of learners with disabilities. The social model draws more attention to the physical and environmental rights to access and participation for disabled people. This model is more beneficial to those with physical impairments than all others with varying health conditions. Brunton & Gibson (2009:7) in their study argue that the problems associated with disability cannot be entirely eliminated by any imaginable form of social arrangements only. This is an indication that the social model is not the panacea to all conceivable barriers that PwDs face but, in the absence of a better model the social model of disability stands supreme for now.

However, both models (medical and social) are said to have shortcomings. One of the criticisms is that they both take a narrow perspective of disability (Oliver, 1996). The World Health Organisation (WHO) Report (2011) affirms this viewpoint and suggests that disability should be viewed neither as purely social nor medical. Thus, an approach that balances the medical and social models is preferable (Healey, 2014). In response to these criticisms, the World Health Organisation, which was responsible for the development of the medical model, has developed the new modified model known as the bio-psychosocial model (Gebrehiwot, 2015). According to the WHO Report (2011), the bio-psychosocial model understands functioning and disability as a dynamic interaction between health conditions and contextual factors, both personal and environmental. The model was first used by Engel in the 1970s (Healey, 2014). This model sees the problems of disabled people from biological, individual and social perspectives. According to this model, disability is created as a result of the interaction of individual and contextual factors, and is not created solely either by impairments or by the social environment (Schneider, 2006; Waddell & Aylward, 2010; Kuno, 2008; WHO, 2001). The bio-psychosocial model received support from certain disability organizations (Gebrehiwot, 2015). However, this new blended model has also received criticism, the major one being its alignment to the medical model (Barnes, 2012; Kuno, 2008).

### **2.3 Inclusion**

Inclusion has remained a very complex concept with different dimensions that have proved to be difficult to define (Podzo & Dzviti, 2017). Thus, there is no single agreed-upon definition of inclusion (Giangreco, Carter, Doyle & Suter, 2010: 248). UNESCO (2005) defines inclusion as a "process of addressing and responding to the diversity of needs of all learners through increasing participation in learning, cultures and communities, and reducing exclusion within and from education". It involves changes and modifications in content, approaches, structures and strategies, with a common vision which covers all children of the appropriate age range and a conviction that it is the responsibility of the regular system to educate all children (UNESCO, 2003). Inclusive education focuses on transforming education systems in a way that they can address the needs of diverse learners as well as emphasising giving of equal opportunities for students with disabilities to participate in education (Podzo & Dzviti, 2017). Inclusive education promotes a shift from looking at an individual learner as one with a problem that needs to be fixed. However, inclusive education promotes the adoption of a social model where the learner's challenges are not only looked within the student, but also on how wider community where they are situated can be involved in overcoming the challenges (Makanya, 2015). This approach is therefore concerned with challenging the ways in which educational systems reproduce, perpetuate and maintain social inequalities regarding marginalised and excluded groups of students across a range of abilities, characteristics, developmental trajectories, and socio-economic circumstances (Liasidou, 2012).

### **3. Models of inclusive curriculum**

There are two models that have been in use in relation to the implementation of an inclusive curriculum. These are the accommodation model and Universal Design for Learning (UDL) model (Gebrehiwot, 2015).

### 3.1 Universal Design for Learning(UDL)

According to the Higher Education Opportunity Act (2008) UDL is

A scientific valid framework for guiding educational practice that (a) provides flexibility in the ways information is presented, in the ways students respond or demonstrate knowledge and skills, and in the ways students are engaged, and (b) reduces barriers in instruction, provides appropriate accommodations, supports and challenges, and maintains high achievement expectations for all students including SwDs and students who are limited English proficient.

Its aim is to promote inclusivity of the curriculum by increasing participation and progress for all learners irrespective of their differences and is a relatively new concept (Gebrehiwot, 2015).

The UDL is an approach to designing course instruction, materials, and content to benefit people of all learning styles without adaptation. Mace (2008) expresses that the concept was initially developed in the field of architecture in which products and environments are designed to be usable by all without any modifications or adaptations. UDL promotes:

- Flexible ways of presenting lesson content;
- Flexible options for student engagement; and
- Flexible methods of expression and assessment

As usual every innovative has its advantages and disadvantages and thus the UDL has its own criticisms as well. McGuire, Scott & Shaw, 2006 maintain that it is premature to promote the use of UDL in HE as they express that UDL is not yet sufficiently developed. Time limitations and financial implications were also cited as other constraints to the implementation of UDL.

### 3.2 The Accommodation Model

There are ongoing debates on the use of the terms ‘accommodation’, ‘adaptation’ and ‘modification’. Gebrehiwot (2015) defines accommodation as the adjustments and alternative arrangements made in the learning environment so as to reduce barriers to participation and promote accessibility. The same author goes on to say that accommodations should facilitate removal of physical and social barriers, promote availability of the necessary provisions so as to assist students access the curriculum and extracurricular services. In many of the institutional documents the adjective “reasonable” is added before the concept to indicate that any of the modifications and adjustments made for individuals with disabilities are not intended to unfairly treat those individuals vis-à-vis their non-disabled peers. This can be clearly noticed in the definition given to reasonable accommodation by the CRPD (2006: Article 2). In the context of education, the goal of reasonable accommodation is to provide SwDs with a learning environment equal to their non-disabled peers rather than giving unfair advantage to SwDs over their peers. However, the accommodation model is criticized as having limitations in its effectiveness (Gebrehiwot, 2015).

### 4. Challenges encountered by students with disabilities in accessing Higher Education Curriculum

According to South African Human Rights Commission (SAHRC 2002:5) and WHO (2011: xxi), persons with disabilities experience unfair treatment and denial when it comes to equal access to education; health care; employment, or political participation. Nkoane (2006:45) explains that in any education system the curriculum is either a major obstacle or one of the tools to facilitate the development of a more inclusive education system. The author further expresses that in many contexts the curriculum is extensive and demanding, or centrally designed and rigid, leaving little flexibility for adaptations for learners with disabilities. At times the curriculum is so inflexible and lecturers’ preferences, techniques and methodologies may not meet the needs of SwDs (Maruzani, Mandipa, Matope, Mugodzwa and Chinyoka, 2014). For these learners, besides having to cope with the trauma of a disability which might be mild, moderate, severe or profound, they also do face challenges in terms of gaining wider access to issues pertaining to the curriculum, teaching, learning, assessment and progression in the higher education institutions (HEIs), (Tugli 2013:56). As long as barriers exist in the curriculum more and more learners from disability categories will be excluded because of their specific disability needs that are not catered for. Barriers to learning and inclusion arise from the physical and psycho-social environment within which learning occurs. Howell (2006) states that: “learners with disabilities who have managed to attend higher education complain that the energy, emotional, resources and levels of stress involved in dealing with the overwhelming range of barriers that confront them are extremely undermining and place them at an ongoing disadvantage to other learners.” Tugli (2013:57) asserts that “barriers to learning arise from within the various interlocking parts of the curriculum such as:

- The content of learning programmes
- The language and medium of instruction
- How the classroom or lecture is organized and managed
- The methods and processes used in teaching



- The pace of teaching and the time available to complete the curriculum
- The learning materials and equipment that is used
- Assessment methods and techniques”

Thus, tertiary institutions should ensure the provision of universal services which include positive attitudes and inclusive educational systems to students with disabilities (Majinge and Stilwell, 2013). Literature on studies of experiences of students with disabilities in higher education reveals that there are more negative than positive experiences. In Kochung 2011’s study on Role of Higher Education in Promoting Inclusive Education carried out in Kenya SwDs expressed the following challenges:

- Negative attitudes by teachers and stakeholders;
- Lack of sign language interpreters and Braille transcribers;
- Lack of policy on inclusion which negatively affected operations on assessment, admission and provisions; and
- Lack of community involvement.

Similar findings were recorded in studies by (Chataika, 2007; Haihambo, 2010; Gebrehiwot, 2015; Mutswanga, 2016). Most hearing impaired students in HE expressed lack of effective communication as the major hindrance to accessing the curriculum (Suubi, 2011). Deaf learners are vision-oriented unlike hearing and seeing learners, who are both auditory and visual (Moores, 2010). Thus, sign language as a visual language (Damian, 2011) is suited to the learning needs of deaf/hard of hearing people. Provision of sign language interpreters also becomes vital as a means of enabling deaf students’ access to verbal information. Access to assistive technology (AT) for learners with disabilities is critical for many to access and benefit from education (UNICEF-WHO, 2015). Assistive technology supports persons with disabilities to access and enjoy their rights and participate in things they value and it bridges the disparities between people with disabilities and those without. In education, technology could play an important and significant role, in many cases, in helping students with disabilities overcome the academic difficulties that they face and helping them to develop their academic skills as well. However, in most studies done in HEIs on the inclusion of SwDs, most of them have expressed lack of adequate assistive technology, lack of appropriate software like JAWS, lack of trained staff to assist them and lack of adequate skills of using computers on their part as challenges they were facing. One respondent in Gebrehiwot, 2015’s study had this to say:

.....our computers are not loaded with JAWS software. ----- There are 12 computers with only three of them loaded with JAWS. You can imagine how three computers will serve over 80 students.

Assessment is one of the key components of the curriculum. It is a process of collecting and interpreting evidence in order to determine the learner’s progress in learning and to make a judgment about a learner’s performance (Mbilini, 2012). Therefore, there is need for fairness to all students. However, most students with disabilities in HEIs have maintained that they face a number of challenges that hinder them from demonstrating their academic achievement and potential (Blundell & Vickerman, 2010), yet higher education in particular is a predictor of gainful employment in meaningful occupations. The two authors in their study found out that 11.1% of SwDs felt that their assessment did not meet their needs. Gebrehiwot, 2015 also established similar findings and these are as follows:

- Lack of provision of alternative assessment mechanisms
- Total dependence on other students in doing assignments and examinations writing
- No provision of extra time to do exams and assignments

SWDs in higher education institutions express accessibility challenges in its three forms- physically in terms of the buildings and grounds, educationally in terms of curricula, support systems and methods of communication (Suubi, 2011). SwDs in Chataika’s 2007 doctoral study expressed challenges in accessing the physical environment. Similar findings were recorded in the following studies Gebrehiwot, 2015; Suubi, 2011; Haihambo, 2010.

Most African countries, Zimbabwe included have made political declarations, commitments particularly through the adoption and ratification of the Convention on the Rights of Persons with Disabilities (CRPD) but have not domesticated it to support inclusive practices (Mutswanga and Mapuranga, 2014). In the absence of any obligatory legislation specifying what services are to be provided, by whom, how, when and where, there would be no meaningful inclusion of persons with disabilities (Chataika, 2007). Lack of policies on the education of students with disabilities may be as a result of poor attitude, ignorance, and protectionism towards segregation education and antagonism towards inclusive education (Mutswanga, 2016). The same author argues that while South African education policies are inclusive in intent and purpose, significant gaps between policy and practice are evident. Developed countries like the United Kingdom, United States of America, Australia, Ireland, Netherlands and New Zealand have made recognizable progress towards the educational provisions of students with disabilities in HE (Redpath, Kearney, Nichole and Mulvenna, 2013; Heelan, 2013). These countries have legislation and policies in place to support inclusion of students with disabilities in HE, although there are gaps

between policy and practice in some circumstances. It is sad to note that SVI in Gebrehiwot's doctoral study experienced a number of challenges to their inclusion despite the existence of the Higher Education Proclamation of Ethiopia 2009 that includes an article on students with disabilities with four general provisions.

### 5. Strategies to facilitate access to the curriculum for SwDs

Different surveys indicate that the number of students with impairments who are enrolled in higher education is on the rise (Gebrehiwot, 2015). If students with impairments in higher education institutions are to enjoy equal opportunities and participate fully in the teaching and learning process as their non-disabled counterparts, issues of access and equity need to be addressed. Makanya (2015) argue that alternative curricular materials and pedagogical practices are necessary to meet the needs of SwDs. Important among many other considerations, certain adaptations and modifications have to be made to the regular curriculum and the learning environment. Lerner & Johns (2012) indicate that the inclusion of SwDs requires educators to adapt their teaching curriculum. This must however be done without sacrificing the integrity of the content. Makanya (2015) suggests the following strategies for enhancing access and participation of SwDs in the regular curriculum: curriculum adaptation; differentiated instruction; learner-centred classrooms; continued educator development; collaboration with other professionals; learner peer support; collaboration with parents and teacher support. Rodrigues, 2007; Shepherd, 2006 have suggested the following strategies that can be used by instructors for making the instructional process be accessible to students with visual impairment (SVI):

- Making sure that what is visually displayed is verbally explained;
- Providing students in advance with a printed outline of what is going to be presented;
- Allowing students to take notes on their Braille not taker, computer, or using a tape recorder;
- Making students touch tactile items being presented either during or before presentations;
- Providing Braille text for all materials that students with visual impairment will need; and
- Making sure that all directions are clearly communicated to students with visual impairment.

In the same vein, Wolanin and Steel (2004) have provided the following guidelines for adapting teaching strategies and the teaching environment for SVI:

- Agree adaptations with the student
- Provide material of a lecture or tutorial in advance in the student's preferred format, in print, disk or Braille
- Encourage students with visual impairment to use 'paper/pen' substitutes such as tape recorders or laptops during lectures
- Give thought to verbal and non-verbal communication trying to eliminate background noise, speaking clearly, and avoiding inaccessible gestures such as a nod of the head and expressions such as 'it's over there'.
- Allow students with visual impairment additional time, if required for assignments and examinations/assessments.
- Substitute courses that do not pose disability-related barriers.
- Lengthen the time of degree completion

To sum up, Gebrehiwot (2015) gave the following as accommodations required by SVI to fully participate in the teaching and learning process:

- Flexible teaching
- Appropriate sitting arrangements
- Adaptations to institutional policies and procedures
- Access in all areas of the curriculum through specialist aids and assistive technologies;
- Access to alternative or augmented forms of communication;
- Provision of tactile or kinesthetic materials;
- Time allowances; and
- Alternative assessments

These strategies play a very important role in facilitating access and participation of students with visual impairment in higher education curriculum.

- Technology has great potential in providing access for all learners and the ability to access the general curriculum. Assistive technology (AT) should not be viewed by educators within a 'rehabilitative' or 'remediative' context, but as a tool for accessing the curriculum and exploring out means to help students with disabilities achieve positive outcomes. Assistive technology has the potential to augment abilities and bypass or compensate for barriers that disabilities create. As educational reforms include the application of technology to support and expand classroom curricula, assistive technologies can provide both routine and customized access to the general curricula for SWDs (Ximba, 2016). This is further supported by Alnahdi (2014) who argues that we are living in a society that is being

technologically transformed in trying to address the needs of SwDs. Thus, he commends the use of AT as the youth find technology to be both attractive and effective. Consideration of AT is therefore required for SwDs so that they have the necessary tools to fully access and participate in the curriculum with the greatest possible level of independence. Tugli (2013) suggests the following new technologies and software options that HEIs can acquire for enhancing access to learning by SwDs:

- Text –to-speech devices
- Digital white board
- Speech synthesizers
- Print enlargers and document converters
- Scribe pen
- Visual/ graphic outliners
- Visual tracking
- Phonetic spell checkers
- Voice input

Curriculum reforms should also focus on the inclusion of extra-curricular needs of SwDs. These are activities beyond the classroom and are meant to complement the university's academic programmes and to enrich the learners' quality of social and educational experiences hence, institutions need to make provisions for the appropriate accommodations of SwDs like other learners. Extra-curricular activities include: involvement in university clubs; sports and games; music; art; culture, Religious engagements and many others (Net Industries 2013:2). Students need support in all aspects of education including the academic, emotional and social demands of higher education. This ensures higher quality of education for both students and those that engage with them as they progress towards graduation. In light of that Mutanga (2015) recommends the establishment of a Disability Resource Unit and subsequent engagement of the Disability Officer/Technician. The Disability Technician is the recognized practitioner and main driver of the disability service, working exclusively to ensure that students with disabilities are supported and included on campus. He/she:

- Acts as a broker of services, planner, manager, source of information and advocate for SwDs's services
- Ensures reasonable accommodations which are intended to facilitate equality of participation in education through Universal Design Learning which refers to the design of curricula, teaching practices, assessment methods, support services and physical environments that can accommodate the ever-increasing diversity of students in higher education.
- Ensures implementation of policies and to craft them if they are not available.
- Carry out needs assessment
- To collaborate with staff across the campus
- Administers service provision of assistive technology
- Organises funding
- Carries out staff training

## 6. Conclusion

In conclusion, curriculum reforms should be given high priority if students with disabilities are to be effectively included and benefit from education. Curriculum reforms should focus on the three pillars of accessibility and participation which are epistemological, structural and systematic. These reforms should be wholesome and address all the basic needs of learners with disabilities so that they are fully empowered for future participation in the larger society. Provision of adequate and appropriate assistive technology with relevant software cannot be overemphasized if students with disabilities are to effectively access the curriculum and fully benefit. There is great need to embrace contemporary practices in the inclusion of students with disabilities in higher education guided by models and frameworks which promote access and participation.

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