

Open and Distance Learning (ODL) as a sustainable development tool for disability inclusion: Reflections from the Zimbabwe Open University

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Abstract: Open and distance learning (ODL) is considered one of the most significant tool for sustainable development in the information age of advanced learning. This research study gave a critical eye on the various ways ODL can be used to improve the inclusion of people with disabilities in ODL programmes. Thus the aim of the paper was to establish the coalition between ODL and sustainable development for the educational inclusion and strengthening of disabled communities. The study explored the implementation of ODL methodologies that are utilised to include people with disabilities at the Zimbabwe Open University (ZOU). The qualitative approach guided the study. In-depth face to face interviews were used to collect data from fifteen current and former disabled students of the Zimbabwe Open University. Data was also collected from the ten staff members from the department of student affairs and the faculty of applied social sciences at Zimbabwe Open University. The results showed that the Zimbabwe Open University is including learners with disabilities in its programmes and is currently in the process of designing an inclusive education policy. It was also observed that ZOU is using methods like flexible fees payment modes, provision of loans, printing modules in braille, e-library and training of sign language to attract learners with disabilities in its programmes. Various departments are also in the process of offering compulsory disability modules. The university, through its student affairs department is in the process of establishing centres of disability excellence in the ten regional centres. The results also showed that while ODL improve accessibility, the issue of education for sustainable development among people with disabilities remains an issue. Most subjects offered are academic oriented as such learners with disabilities lack practical skills essential for self employment in an economy where unemployment is around 80%. Other possible threats to inclusive education and education for sustainable development raised were high fees, lack of disability friendly software like jaws and guided access. The issue of transition into employment remains a thorny issue. Recommendations made include the need to introduce more practical subjects and to develop more disability friendly software. The need to have disability friendly website like the talking website with visual alerts was also suggested.

Keywords: Zimbabwe Open University, distance learning, disabilities

INTRODUCTION

Inclusive education is currently one of the most topical issues in many Africa. Zimbabwe embraced the philosophy in the mid nineties. The concept of inclusive education is drawn from inclusion. Inclusion can be seen as a process of addressing and responding to the diversity of needs of all children, youth and adults through increasing participation in learning, cultures and communities, and reducing and eliminating exclusion within and from education. It involves changes and modifications in content, approaches, structures and strategies, with a common vision that covers all children of the appropriate age range and a conviction that it is the responsibility of the regular system to educate all children[1]. Inclusive education on the other hand is a process of strengthening the capacity of the education system to

reach out to all learners. As an overall principle, it should guide all education policies and practices, starting from the fact that education is a basic human right and the foundation for a more just and equal society [1].

While a lot of effort has been put to include all learners experience and research has shown that a lot still need to be done when it comes to the inclusion of learners with disabilities. This study therefore focuses on inclusive education as it entail to disability. In Zimbabwe a lot of effort has been put to include learners with disabilities at primary and secondary school level. However experience has shown that the number of learners with disabilities decrease with distance up the educational ladders. A research by Hlatywayo [2] shows that less than one percent of

Zimbabwean disabled learners who complete secondary education will be enrolled in colleges and universities. This was mainly attributed to inaccessibility of education at conventional universities. Thus for most people with disabilities in Zimbabwe conventional university education is not sustainable. The coming in of the Zimbabwe Open University raised hope among people with disabilities to reach higher education. It is against this background that the research sought to establish the extent to which open and distance education can be a sustainable tool for disability inclusion.

LITERATURE REVIEW

Disability and Education

World Health Organisation (WHO) and the World Bank (WB) (2011) estimates that more than a billion people across the world or approximately 15% of the world's population live with some form of disability[3]. This report indicated that Africa has the highest proportion of people with 'severe disabilities' (WHO & WB: 30). Thus impact of disability is disproportionately felt by people living in poor economic circumstances[3]. The most notable outcome of this report indicated that people with disabilities face massive socio-economic challenges and the needs of learners with disabilities are most often marginalized and disregarded especially in the sphere of education. According to the World Bank [8] people with disabilities are more likely to be unemployed and are generally paid less when they are employed. The employment rates for men with disabilities (53%) and women with disabilities (20%) are lower than men (65%) and women (30%) without disabilities. Only 41.7% of women with disabilities have completed primary school, compared with 52.9% for other women [4].

The report went further to show that even where, at a policy level at least, the right of children with disabilities to access quality education is recognised, they remain those children most excluded from accessing education and its benefits. Children with disabilities are less likely to start and finish school than their non-disabled peers. Limited access and poor quality educational opportunities, especially at the primary school level, contribute to high levels of unemployment among people with disabilities, leading to very poor levels of economic participation in their societies and high levels of poverty and deprivation, both for the person with a disability and their family. The challenges which children with disabilities, especially in developing contexts face in accessing education, has a profound effect on the rest of their lives. It restricts their ability to participate equitably within and contribute meaningfully to their societies, and renders them most vulnerable to on-going economic and social exclusion [5].

Salamanca Declaration, [6] posits that if the right to education is to be realised for all learners, education systems need to be designed so that they are able to respond to the diverse learning needs that exist among all children. This has become recognised as a call for the building of inclusive education and training systems – education systems designed to create learning environments that enable every learner to develop and learn to their full potential.

According to the South African National Plan for Higher Education, (February 2001) it is unacceptable for graduates in general and those from previously disadvantaged communities in particular, to be denied the provision of high quality programmes, as it would not only impact on their ability to improve their own life chances, but would also adversely impact on the broader agenda for social and economic development[7].

Argument for Disability Inclusion in Development Issues

There are a lot of arguments that can be put forward to substantiate the need to consider ODL as a tool for sustainable development in the education of learners with disabilities. The first argument is the biographic argument. According to the World Disability Report [4] people with disabilities represent a significant proportion of the world population (15%) and therefore cannot be ignored or excluded from development efforts. In Zimbabwe there is a population of about 13million. This means that about 2 million people have different forms of disabilities. As such it is imperative to consider sustainable education programmes for this population. In addition the link between disability and poverty is significant. According to WHO and WB [8] there is a strong link between disability and poverty, disability being both a cause and a consequence of poverty: poor people are more likely to become disabled, and persons with disabilities are among the poorest.

The second argument is the economic argument. Research has shown that excluding people with disabilities from society has a significant cost. For example, research highlights the fact that disability affects the economic well-being of 20% to 25% of households in Asia[9]. In addition, it is estimated that using universal design principles to make a community centre and a school accessible only add 0.47% and 0.78%, respectively, to the overall cost [10]. Lastly, it is estimated that the rehabilitation needs of 80% of people with disabilities could be satisfied at community level. The remaining 20% are likely to require referral to some kind of specialist facility[11]. These empirical findings therefore call for a sustainable inclusive education for learners with disabilities. Education contributes to human capital formation and is thus a key determinant of personal well-being and welfare.

The last argument is the legal or human right perspective. People with disabilities have the same rights as any other person, as stated by the United Nations Convention on the Rights of Persons with Disabilities[12], and as such should benefit from development activities on an equal basis with others. Zimbabwe ratified CRPD in September 2013. Article 32 of the CRPD is a specific provision that reminds international cooperation stakeholders of their obligations in this area, i.e. the obligation to ensure that all development programmes are inclusive of, and accessible to, people with disabilities. In Article 24 the CRPD stresses the need for governments to ensure equal access to an “inclusive education system at all levels” and provide reasonable accommodation and individual support services to persons with disabilities to facilitate their education

Distance Education and Inclusive Education

The Rio+20 summit outcome document, *The future we want*, inter alia developed sustainable development goals which were adopted by the United Nations General Assembly at its 68th session. Goal number 4 seeks to ensure inclusive and equitable quality education and promote life-long learning opportunities for all by year 2030. One of the benchmarks was to 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. One of the ways adopted to achieve this is through building and upgrading education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all. It is at this point that ODL comes in.

Conventional education has been labeled restrictive when it comes to the education of learners with disabilities. In this regard open and distance education is seen as more flexible as there are less boundaries and barriers to education. For example the use of technology in open and distance learning could go a long way in widening accessibility to education for the majority of learners with disabilities. According to Walkendistance education should widen and create access to learning and training opportunities that are tailored to meet the needs of the individual who are learners with disabilities in this aspect[13]. Walken went further and said that open and distance education should have local provision that is available within a local area through dropping learning centers, community-based learning centers, workplace learning centers or at home. This kind of platform would allow learning for the learning of learners with disabilities to take place as the technical element of learning is localized thus, making attendance for tutorial or technical guidance during a programme less of a

barrier. With course materials on the internet, the role of the learner changes from one of primarily being a recipient to one of being a participant, just as the teacher will have to learn new tools, the learners will also have to use new tools if they are to fully capitalize on using course materials and related sources of information on the internet [14].

Many learners with disabilities are currently excluded from university education because of cultural, familial, and economic circumstances and the concept of open and distance learning does not resonate with them or their communities[15]. Thus open and distance education materials should address the need for pedagogy of recognition[16] where diverse learners can recognize their own experiences and identities in the curriculum. Sheehy, Rix, Nind & Simmons support this position when they said we want students with minority cultures, languages and sexuality to find themselves visible in the materials[17].

Strategies for Disability Inclusion in ODL

The strategies given here are discussed courtesy of Burgstahler (online)[18] of the University of Washington. Assuring that individuals with disabilities can participate in distance learning courses can be argued on ethical grounds. Some simply consider it to be the right thing to do. Others are more responsive to legal mandates. The following paragraphs discuss access issues and present design guidelines for assuring that a distance learning course is accessible to potential instructors and students with a wide range of abilities and disabilities.

Visual Impairments

Students who are blind may use a computer equipped with text-to-speech software and a speech synthesizer. Basically, this system reads with a synthesized voice whatever text appears on the screen. He may use a text-only browser to navigate the World Wide Web or simply turn off the graphics-loading feature of a multi-media Web browser. He cannot interpret graphics unless text alternatives are provided. For example, his speech system will simply say "image map" at the place where an image map would be displayed to someone using a multimedia Web browser. Printed materials, videotapes, and other visual materials also create access challenges for him. A student who has limited vision can use special software to enlarge screen images. He may view only a small portion of a web page at a time. Consequently, he is confused when web pages are cluttered and when page layout changes from page to page. Standard printed materials may also be inaccessible to him.

Mobility Impairments

Students with a wide range of mobility impairments may enroll in a distance learning course. Some have no functional hand use at all. They use

alternative keyboards, speech input, and other input devices that provide access to all of the Internet-based course materials and navigational tools. Some options use keyboard commands to replace mouse functions and thus cannot fully operate software that requires the use of the mouse. Some students with mobility impairments do not have the fine motor skills required to select small buttons on the screen. Those whose input method is slow cannot effectively participate in real-time "chat" communications.

Hearing Impairments

Most Internet resources are accessible to people with hearing impairments because they do not require the ability to hear. However, when web sites include audio output without providing text captioning or transcription, this group of students is denied access to the information. Course videotapes that are not captioned are also inaccessible to individuals who are deaf. Deaf students also cannot participate in teleconferencing sessions that might be part of a distance learning course.

PROBLEM STATEMENT

Education for sustainable development has been a topical issue in the last decade. While significant gains have been realized through educational reforms the take up of tertiary education by learners with disabilities needs a lot to be desired. Open and distance education has been widely viewed as the best tool towards disability inclusion and provision of sustainable education. This research study explored the extent to which Open and distance learning can be used a tool for sustainable disability inclusion in tertiary education.

RESEARCH QUESTION

To what extent is open and distance learning a tool for sustainable disability inclusion?

Sub-questions

- What does ZOU inclusive education policy entail?
- What methodologies are being implemented by Zimbabwe Open University to make ODL sustainable for learners with disabilities?
- To what extent does the ZOU delivery mode make education sustainable for learners with disabilities?
- What need to be done to improve ODL as a sustainable tool for disability inclusion?

RESEARCH DESIGN AND METHODOLOGY

The research assumed the qualitative approach with the phenomenological design guiding the plan. It was imperative to employ the qualitative approach as it aim at developing rich descriptions of particular phenomena. In this current study the phenomena was ODL as a tool for sustainable disability inclusion. The

qualitative approach was also deemed necessary because of its strengths, the acknowledgement the researchers make of their potential biases influencing the way in which data are acquired and analyzed or reflexivity. The respondents were purposively chosen from the current and former students with disabilities enrolled by the Zimbabwe Open University. A total of fifteen were selected. The six programme chairpersons in the faculty of applied social sciences were also purposively selected to be participants. Lastly the dean of student affairs, the manager of student affairs and two student coordinators were also selected as participants. In total the representative sample had fifteen students with disabilities and ten staff members. Semi-structured face to face interviews were used to collect data. The phenomenological design calls for the use of relatively unstructured data collection approaches that may use an evolving set of questions, such that later participants respond to queries quite different from those to which earlier participants responded[19]. Such an approach is in keeping with the sentiments of Kvale, who asserted that the design of qualitative interview research is open ended in that it is more concerned with being attuned to the participant than with necessarily following the same path for all respondents[20].

During data collection the two researchers conducted the interviews. One of the researchers collected the data from students with disabilities while the other collected from the staff members. The collection of data took about one month. Data was recorded using voice recorders and was later transcribed after the interviews. Ethics were considered in a lot of ways. Informed consent was sought before the interview sessions and participants were made to sign the consent forms. Participants' particulars were also kept in confidence.

FINDINGS AND DISCUSSION

Disability Policy

The results from the students with disabilities were not aware of a written disability policy at ZOU. Most respondents agreed that while effort was put by staff members towards helping them they had no basis from which to demand their services. One of the students with disability had this to say

While I am happy as a first year ZOU student I am skeptical about completing my four year studies in the absence of a disability policy. It is only the policy that will show commitment and seriousness toward disability service provision. In order for me to acquire education for my sustainable development I strongly think more still need to be done towards documenting disability services by way of policy

The other student with a disability added

We were informed during orientation that the university provides a variety of services for learners with disabilities. I expected to find some of the disability services in the student handbook but these are very minimal. Zimbabwe has ratified the Convention on the Rights of Persons with Disabilities and I feel institutions of higher learning like ZOU need to take this seriously if they are to include a number of learners with disabilities

Results from the ZOU staff members indicated that the ZOU is in the process of crafting a disability policy through the student affairs department. In the meanwhile it was revealed from the interviews that disability services are mainly provided through the student services section. Thus the results concurred with those from the students above on the absence of a specific organizational disability policy.

Methods being implemented by Zimbabwe Open University to make ODL sustainable for learners with disabilities

The following are the major methods used at ZOU in trying to make ODL sustainable for learners with disabilities. These methods were cited by both the students and the students with disabilities.

- Brailed modules, assignments and exams for learners who are blind
- Enlarged print on modules, assignments and examinations for learners with low vision
- Extra or extended time on examinations for all students with disabilities as per their request
- Provision of transport to learners with disabilities to the tutorial and exam venues as per request
- Conducting tutorials in sign language
- Provision of online audio visual aids
- Flexible fees payment plans
- Training and sensitizing staff on disability issues
- Running of sign language and Braille short courses.

One of the senior members in the student affairs department indicated that the ZOU planning to acquire state of the art brailing and other assistive equipment that will be housed at the disability centres of excellence to established across ZOU regional centres.

These results show that there is some diversity in the disability services being offered at ZOU. According to Walken [21] distance education should widen and create access to learning and training opportunities that are tailored to meet the needs of the individual who are learners with disabilities in this aspect. Walken went further and said that open and distance education should

have local provision that is available within a local area through dropping learning centers, community-based learning centers, workplace learning centers or at home. This kind of platform would allow learning for the learning of learners with disabilities to take place as the technical element of learning is localized thus, making attendance for tutorial or technical guidance during a programme less of a barrier.

The extent to which the ZOU delivery mode make education sustainable for learners with disabilities

Learners with disabilities were asked to evaluate the extent to which the ZOU delivery mode meets the expectations of education for sustainable development. The majority of the learners believe that a lot still need to be done to make ZOU efficiently include learners with disabilities and make education sustainable to them. The major concern raised by all the learners was their failure to get all their services online. They attributed this to the failure by the university to comprehensively train them on the use of E-resources as this would reduce their movement to regional centres where they get face to face services. Some argue they are not allowed to submit their assignments online. The other concern that is militating against disability inclusion and the provision of education for sustainable development as cited by the disabled learners is what the called exorbitant tuition fees charged by the university. They felt they are supposed to learn free. Lastly the majority of former learners with disabilities indicated that the selection of subjects to be widened to increase their employments prospects. They feel they lack practical aspects that make they employable. Open and distance education should have local provision that is available within a local area through dropping learning centers, community-based learning centers, workplace learning centers or at home. This kind of platform would allow learning for the learning of learners with disabilities to take place as the technical element of learning is localized thus, making attendance for tutorial or technical guidance during a programme less of a barrier [22]. The following are some of the comments given by students with specific disabilities.

Visual impairments

Students with visual impairments generally agreed that the experience problems moving around carrying very big brailed modules. They called this a great burden. They argued for the need to have talking modules in their various mini electronic gadgets. They also feel very excluded when it comes to the use of the internet. They raised issues such as the absence of computers with brailed keyboards and voice feedbacks that they can use. They complained that failure to access the E-resources means that they produce sub-standard assignments in most cases. While able bodied learners get their information directly they rely on friends who sometime are not willing to share notes and discuss. Lastly the learners raised a concern that the

university orientation lacks training on mobility and orientation. These findings concur with Burgstahler (online)[18] who said that students who are blind may use a computer equipped with text-to-speech software and a speech synthesizer. Basically, this system reads with a synthesized voice whatever text appears on the screen. They may use a text-only browser to navigate the World Wide Web or simply turn off the graphics-loading feature of a multi-media Web browser. they cannot interpret graphics unless text alternatives are provided. For example, his speech system will simply say "image map" at the place where an image map would be displayed to someone using a multimedia Web browser. Printed materials, videotapes, and other visual materials also create access challenges for him

Physical Impairments

The major issue raised by this group was the physical inaccessibility of buildings. One of the students had this to say

The ZOU Harare Region office is in the third floor. I am expected to climb up there to get services that I may not get online. With my condition (loss of one lower limb) it takes me a lot of time to get there. Secondly the print library is a kilometer and a half from the regional centre? How can I migrate to such a location from time to time? I really feel something has to be done if the university is to attract more other learners with my condition.

Hearing Impairments

One of the students currently enrolled had a post-lingual deafness. The major concern he raised was high fees and the failure by most tutors to use sign language during tutorials.

The United Nations Educational, Scientific and Cultural Organization (UNESCO) [23] posits that education for sustainable development must address current and future needs through education by harmonizing environmental, societal, cultural and economic considerations in the pursuit of an enhanced quality of life. According to UNESCO education for sustainable development entails accommodating the evolving nature of the concept of sustainability; addressing content, taking into account context, global issues and local priorities; building civil capacity for community-based decision-making, social tolerance, environmental stewardship, an adaptable workforce, and a good quality of life and the use of a variety of pedagogical techniques that promote participatory learning and higher-order thinking skills. There is need for ZOU to consider all these tenets in the process of coming up with a disability policy.

What need to be done to improve disability services trough ODL?/ Recommendations

- There is need for the university to revise entry qualifications for students with disabilities such as learning disabilities
- Introducing hands on programmes may help increase the enrolment of students with disabilities
- The university need to use ICT highly with disabled students to minimize their visits to seek for services
- Assignment and exam markers need to mark the work of students with disabilities with special considerations
- The regional offices must have working lifts or else moved to a place accessible by students with disabilities
- There is need to design a disability policy that mandates service provision to the disabled
- There must be a well resourced disability resource centre at the region
- The personnel in the student support unit need to be beefed up to reduce pressure on one officer
- Teaching and learning materials must be produced in the format understood by students with disabilities such as Braille and large print
- The university need to make use of more disability friendly software like jaws and talking modules

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