

# The Forgotten Tribe in ODL Systems: Challenges Faced by Visually Impaired Students in Institutions of Higher Learning

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**Abstract:** *This study sought to evaluate the challenges faced by visually impaired students in Open and Distance Learning (ODL) Institutions of Higher Learning. This was a case study of the Zimbabwe Open University. Twenty purposefully selected lecturers in the Faculty of Applied Social Sciences and ten blind and visually impaired students participated in the research. Data was collected through student interviews and questionnaires for lecturers and thematically analysed. The results indicated that whilst ODL offers flexible learning opportunities to all, there remains a forgotten tribe in the form of blind and visually impaired students. Consequently, visually impaired students face numerous challenges in their effort to become successful college students. These include lack of qualified lectures to teach them, equipment and services to adequately serve their needs. Both lecturers and visually impaired students felt there was need to have qualified professionals designated to the various needs of these students, appropriate resources for their learning environment should be provided, encourage faculty, academic advisors, staff and other students to proactively respond to the needs of students with visual impairment. The greater awareness that exists regarding visual impairment, the more likely it is that ODL institutions will meet the students' needs. Further studies need to be done on facilitating the smooth inclusion of visually impaired students in ODL institutions of higher learning.*

**Key words:** visually impaired students, Braille, special needs students, academic advisors, IT systems, ODL institutions of higher learning

## INTRODUCTION

Zimbabwe witnessed a huge expansion in learning institutions that offer certificates, diplomas, degrees and other post-graduate qualifications to students, which also included students with disabilities (visual impairment). For instance, at independence, Zimbabwe had one university but now, there are seven state universities, four church related universities and a women's university that are fully internationally accredited (<http://www.zimembassy.se/health.html>). In many of these institutions research on students with disabilities in higher education has shown that these students often face additional challenges and threats in their educational milieu.

While this shift was greatly needed, it left many other social ills unattended to. Among these, the disability sector was greatly overlooked and it became almost nonexistent. Evidence of this can be found in the lack of information about disabilities in Zimbabwe, the outdated disability policies that are in place, the under-funded and largely invisible national body of

people with disabilities, the dysfunctional and fragmented disability sector, and the failure to address the growing needs of people with disabilities ([www.kubatana.net](http://www.kubatana.net)).

Paul (2000) notes that students with disabilities face both physical and attitudinal barriers within their college or university environments. Rao (2004) states that, 'attitudinal barriers' are recognized widely as an impediment to success of people with disabilities. Unfortunately, this topic happens to be one of the least researched variables in studies done with faculties and students with disabilities in higher education (Fonosch and Schwab, 1981).

Furthermore, there are a few other studies undertaken to study this factor in relation to success of students with visual impairments in higher education. (Benham, 1995; Lewis, 1998; McCarthy and Campbell, 1993, 2002; Schoen, Uysal and McDonald, 1987; William, 2000) also expressed the same contention. The study seeks to examine and expose the challenges, students with visual impairments face in institutions of higher learning in Zimbabwe. The study also seeks to establish how students with visual impairment can best be assisted in their studies in institutions of higher learning and steps taken by the Zimbabwe Open University to realize this goal.

This study will review related literature on students with visual impairment in higher education done by other researchers. Also the rights of people with visual impairment will be discussed. The literature will be reviewed under the following subheadings: What is visual impairment, institutions of higher learning, open and distance learning (ODL), challenges faced by visually impaired ODL students in institutions of higher learning and how the education system can make environments to accommodate people with visual impairments.

Weiner's (1979) model informs and guides the study. Students attribute their success to internal and external factors (Weiner, 1979) as well as social and academic integration factors (Tinto, 1987). All these factors lead to degree completion (Weiner, 1979; Tinto, 1987). Institutions of higher learning experience strongly influence students' learning.

Weiner (1979) postulated that in achievement-related contexts, the causes perceived as most responsible for success and failure are ability, effort, task difficulty, and luck. That is, in attempting to explain the prior success or failure at an achievement-related event, the individual assesses his or her level of ability, the amount of effort that was expended, the difficulty of the task, and the magnitude and direction of experienced luck. In listing the four causes reported above, Weiner did not intend to convey that they were the *only* perceived determinants of success or failure, or even that they were the most salient ones in all achievement situations.

In as much as the list of conceivable causes of success and failure is infinite, Weiner (1979) created a classification scheme, or taxonomy of causes. In so doing, similarities and differences are delineated and the underlying properties of the causes are identified. This is an indispensable requirement for the construction of an attributional theory of motivation.

The causes can be readily catalogued as internal or external to the individual. From the perspective of the student, the personal causes include ability, effort, mood, maturity, and health. Teacher, task, and family are among the external sources of causality. But the relative placement of a cause on this dimension is not invariant over time or between people. Inasmuch as attribution theory deals with phenomenal causality, such personal interpretations must be taken into account.

A second dimension of causality, which Weiner (1979) has come to perceive as increasingly important, is labeled *stability*. The stability dimension defines causes on a stable (invariant) versus unstable (variant) continuum. Again Heider (1958) served as Weiner's guide, for he contrasted dispositional and relatively fixed characteristics, such as ability, with fluctuating factors such as effort and luck. Examining ability, typical effort, and family would be considered relatively fixed, while immediate effort, attention, and mood are more unstable. Effort and attention may be augmented or decreased from one episode to the next, while mood is conceived as a temporary state. However, as indicated previously, the perceived properties of a cause can vary.

Still a third dimension of causality that was identified by Heider and later incorporated into the achievement domain by Rosenbaum (1972) was labeled *intentionality*. Causes such as effort or the bias of a teacher or supervisor were categorized as intentional, whereas ability, the difficulty of the task, mood, and so on were specified by Rosenbaum to be unintentional. Hence, Weiner (1979) proposes that a third dimension of causality categorizes causes as *controllable versus uncontrollable*.

Attribution theory is "the study of perceived causation; it examines an individual's motivation to understand and interpret the cause-effect relationships underlying events" (Chen and Tollefson, 1989: 169). Although there are many attributional approaches, they all share the idea that people search for the causes of behaviour.

Studies of students with blindness and visual impairments often involve an analysis of the students' style of attribution or their ideas concerning the causes of their academic successes and failures (Roy, 2000). Academically successful students tend to attribute their successes and failures to their own efforts or actions (reflecting an internal locus of control). They attribute success to their ability, effort, persistence, and discipline, and they point to external factors as contributors to their lack of academic success, such as difficulty accessing information and the negative attitudes of faculty and administrators (Roy, 2000).

College students with blindness and visual impairments are expected to be self-reliant in seeking out and participating in both academic and social activities (McBroom, 1997; Matson, 1990; Gil, 2007). Whereas in the secondary schools environment educators and administrators were responsible for facilitating their access to both academic and social activities (McBroom, 1997; Vaughan, 1998; Gil, 2007), at the college level students with blindness and visual impairments are expected to be proactive.

According to McBroom (1997), students with blindness and visual impairments entered college with inadequate study skills among other deficits. Furthermore, the college environment can be hostile and uninviting, in part because it excludes individuals with blindness or visual impairments (Matson, 1990; Vaughan, 1998). When these students are not proactive in their environment because of temperament and/or an unwelcoming hostile environment, they fail to succeed.

External factors have also been examined in prior research literature. There are a number of factors which are important to the academic success of the visually impaired students such as, social support and campus climate factors, family support, interaction with other students and faculty and university services can affect their academic performance.

The support of family is a social and campus climate factor that might influence the academic success of these students. Though the support of family does not directly influence

academic performance, according to Nelson, *et al.* (1993), other nontraditional college students have expressed its importance to their social integration. College students with visual disabilities also revealed that they received emotional support from their families (Murphy, 1992). Although peers may have been socially rejecting in secondary schools, during college, they can also be valuable sources of assistance (Murphy, 1992). All of the college students with visual disabilities relied upon the help of other students to succeed academically. In all situations, they sought the assistance of other students who appeared to be the most competent in their classes. These college students with visual disabilities attempted to get the help of their peers in obtaining class notes, reviewing for tests, and reading.

Murphy (1992) observes that although entitled to certain accommodations, students with learning disabilities learn quickly that the cooperation of the faculty enhances the academic and social value of the accommodation. Some faculties were reluctant to modify their classroom procedures, giving students only partial accommodations or urging them to postpone receiving any special considerations until they “showed that they really needed them” (Murphy, 1992: 64). Given the significance of faculty attitude to the success of blind and visually impaired college students, it is also important to understand the significance of attitude of not only the faculty but also of peers and other campus administrators to the success of these students.

Arditi and Rosenthal (1998), defines total blindness as the inability to tell light from dark, or the total inability to see. Visual impairment or low vision is a severe reduction in vision that cannot be corrected with standard glasses or contact lenses and reduces a person's ability to function at certain or all tasks. Legal blindness (which is actually a severe visual impairment) refers to a best-corrected central vision of 20/200 or worse in the better eye or a visual acuity of better than 20/200 but with a visual field no greater than 20° (e.g., side vision that is so reduced that it appears as if the person is looking through a tunnel), (Arditi and Rosenthal, 1998). The study looked at students in the Zimbabwe Open University (ZOU) who are blind or visually impaired.

Education for students with disabilities in Zimbabwe has undergone a tremendous revolution since 1980. The inclusion of students with disabilities has not been taken seriously in Zimbabwe. For instance, The 1987 Education Act, that was amended more than six times now, is silent about the education of students with disabilities. However despite this lack of seriousness in Zimbabwe’s legislative system, students with visual impairment have always struggled to access higher and tertiary education in Zimbabwe. Today some Teacher Training, Technical Colleges, and Agricultural Colleges such as Kushinga Phikelela, United College of Education and Bondolfi Teachers’ College, occasionally enroll students with disabilities. Additionally, some Zimbabwean Universities such as University of Zimbabwe (UZ), Africa University (AU) National University of Science and Technology (NUST), Zimbabwe Open University (ZOU) and the Midlands State University (MSU), are currently enrolling students with visual impairment (Chiparaushe, B. *et al.*, 2010). This study sought to gather information on challenges, faced by students with visual impairment at universities in Zimbabwe and specifically in the Zimbabwe Open University (ZOU).

Zimbabwe’s only distance-learning university dates back to 1993 when a Centre for Distance Learning was established within the Faculty of Education at the University of Zimbabwe in Harare. The impetus behind this development came from a national Education Department that realised there were increasing numbers of people across the country that were prevented from gaining tertiary qualifications by the barriers of geography as well as by the colonial

legacy of under-development. The centre therefore soon evolved into the University College of Distance Education, and then in 1999 into the Zimbabwe Open University according to the Status of open learning and distance education in Zimbabwe.

In order to increase its accessibility for students, the university rapidly established regional centres in each of Zimbabwe's ten provinces. Each regional centre serves as the hub for all the learning activities for students in that province: from registration to face-to-face tutoring and counselling and from assignment administration to a venue for invigilated examinations. These centres obviate the need for students to travel to the university's headquarters in Harare, thus substantially cutting travelling costs.

The Zimbabwe Open University copes with nearly half of all the country's 41, 000 university enrolments. Most are enrolled for undergraduate programmes across a wide range of study fields, including science, engineering and technology, business, management and law, humanities and social sciences, and health sciences. Amongst its students, ZOU also enrolls students with disabilities and blind and visually impaired students; over 1, 770 students did enroll for masters' degrees, and a further 472 for basic postgraduate honours degrees or diplomas.

[http://www.sarua.org/?q=uni\\_Zimbabwe%20Open%20University](http://www.sarua.org/?q=uni_Zimbabwe%20Open%20University) accessed 11/05/2011.

**1993-** The Centre for Distance education in Zimbabwe was first initiated by the Department of Education in the University of Zimbabwe.

**1996-** The Centre for Distance Education was renamed as the University College of Distance Education.

**1st March 1999-** The University College of Distance Education was finally renamed as the Zimbabwe Open University [www.mapsofworld.com/zimbabwe/culture /open-university.html](http://www.mapsofworld.com/zimbabwe/culture/open-university.html) accessed 11/05/2011

To cater for students with disabilities, ZOU has established a department to deal with student affairs and also specifically to look at issues pertaining to students with disabilities. This department known as Centre for Student Management (CSM) has Professor Chakuchichi as its Director. The University of Zimbabwe has such a department known as the Disability Resource Centre (DRC) which manages the learning of students with disabilities.

Open learning and distance education refers to approaches to learning that focus on freeing learners from constraints of time and place, while offering flexible learning opportunities. For many students, open and distance learning (ODL) is a way of combining work and family responsibilities with educational opportunities.

Distance education (sometimes referred to as 'distributed learning' or 'distance learning') is any educational process in which all or most of the teaching is conducted by someone geographically removed from the learner, with all or most of the communication between teachers and learners being conducted through electronic or print media.

The 'open' nature of distance learning might be formally institutionalized in such policies as open admissions, and freedom of selection of what, when and where to learn. The openness of distance learning is also seen in relatively flexible organizational structures, delivery and communication patterns as well as the use of various technologies to support learning.

The Zimbabwe Open University is the major provider of open and distance learning in Zimbabwe though other conventional Universities are indirectly doing so through parallel and block-release programmes.

The University has had students from all walks of life including disabled and visually impaired students. The challenges that the University has are also severely felt by the students with visual impairment conditions especially and this research sought to establish these challenges, explore possible ways best to assist the visually impaired students and to expose the threats being experienced by these students with special needs in institutions of higher learning in Zimbabwe.

Despite the accommodations made for distance learners with disabilities, some drawbacks still exist especially for blind and visually impaired students. As alluded to by McBroom (1997), blind and visually impaired students enter the higher and tertiary learning institutions with inadequate study skills and learning materials. They have problems of navigation, accessing resources and information centres as well as being in an environment that can be hostile and uninviting. It is the University's responsibility therefore to make sure these students are assisted in anyway and every way possible.

The visually impaired continue to struggle to gain education in contemporary areas relevant to the market place and their disability. Technological progress has much to contribute to this state of affairs, with highly inaccessible computerization of many online educational courses. Educational institutions have been slow to ensure accessibility of learning materials and environments for those with a variety of disabilities, and the visually impaired are particularly disadvantaged by the vision-driven online education approach (Harper, Goble, and Stevens, 2001).

Equal opportunity legislation in many nations state that people with disabilities have access to the same opportunities as others. Unfortunately there still exists a digital divide that separates people with disabilities from achieving the equal opportunity and equal access they seek. Higher education institutions are increasingly using web pages and Internet resources for essential learning materials, and with the growing number of visually impaired students studying at these institutions accessibility issues are of paramount importance (Thompson, Burgstahler, and Comden, 2003). It is important to understand the obstacles faced by students with a severe vision disability studying in a variety of areas. The first learning obstacle is the concentration of visual presentation of core learning content. Recent progress in technology has enabled teaching methods to move from predominantly textual forms to visual content and web-based modes of delivery. ZOU is establishing e-learning centres in all its regions popularly known as the 'ZOU on line'. However, the major challenge is accessing computers that are suitable for use by blind and visually impaired students.

Institutions of higher learning traditionally rely heavily on tables and graphics to present essential concepts, methods, and so on. Blind students cannot see diagrams and low vision students have great difficulty comprehending what is being taught. The challenges of developing learning materials for the vision impaired and interfaces not reliant upon graphics are complex (Sánchez, 2007). Visually impaired students are increasingly being disadvantaged as teaching environments move to integrate more vision-centric methods of presentation within e-learning materials. ZOU as a university is frantically trying to source education materials that are user friendly to students who are blind and visually impaired.

Blind and visually impaired students are special students and as such they need specialised qualified personnel to take care of their educational and social needs. In ZOU, there is a Disability and Special Needs department in the Faculty of Applied Social Sciences. Academic personnel in this department have qualifications to teach this special group, however, it is probably the ancillary staff that needs some specialised training.

When blind and visually impaired students enter universities they have peers who help them in their daily educational and social activities. Peers read scripts and take notes for them, as well as guide their physical movements. This close association removes the chances of discrimination by fellow students and other members of staff and as such, they won't be taken as second class citizens.

No known research in Zimbabwe has managed to determine clearly the challenges faced by students with visual impairment in the institutions of higher learning in Zimbabwe. The study provides valuable insights into ways of improving the learning environment and opportunities for students with visual impairments in institutions of higher learning in Zimbabwe and the Zimbabwe Open University in particular.

The research findings brought out clearly the challenges faced by the visually impaired students in institutions of higher learning in Zimbabwe. The information gathered is vital to policy makers, stake holders, donors, service providers and administrators, civil society organizations and the general public in the provision of intervention strategies to address the plight of students with visual impairment conditions. The study adds new information and also opens new avenues for further research in the education of students with visual impairments.

Because of the general changes in the education system in Zimbabwe after independence, the student community has changed considerably in institutions of higher learning and now includes a significant number of students with a variety of disabilities including blind and visual impairments seeking to complete their studies as colleges and universities increases across the country. It is important to understand from their perspective their beliefs and experiences that support their higher and tertiary education success and failures since the attrition rate of this population are also extremely high despite the changes. The students with visual impairments conditions face a number of challenges, which this study seeks to unveil. It is important that research be conducted in this area to assist university educators and administrators in facilitating the success of this student population.

This study aimed at highlighting the major challenges which students with visual impairment conditions are encountering in pursuance of their higher education qualifications in institutions of higher learning in Zimbabwe and specifically to:

- Establish major challenges faced by students with visual impairment conditions in the Zimbabwe Open University (ZOU);
- Explore the best ways possible of assisting students with visual impairment conditions in institutions of higher learning in Zimbabwe;
- Identify steps taken by ZOU and other institutions of higher learning on students with visual impairment conditions in their quest to undertake studies with institutions of higher learning in Zimbabwe.

## **METHODOLOGY**

This research was a case study of the Zimbabwe Open University (ZOU) that surveyed the challenges faced by visually impaired students in institutions of higher learning in Zimbabwe. This qualitative case study (Stake, 1995) was conducted with college students with blindness and visual impairments located within the ten ZOU regional Campuses. Qualitative research allows for a naturalistic approach to this study. The researcher dialogues with blind and visually impaired college students about their collegiate experiences, the natural setting, and the interactions of college students with blindness and visual impairments (Bogdan and Biklen, 1998).

Ten purposefully selected full-time lecturers in the faculty of Applied Social Sciences and ten students with special needs (blind and visually impaired) participated in the research. These participants were recruited from ZOU's ten Regional Campuses.

The researchers first sought permission from the Zimbabwe Open University authorities to conduct the research and then asked for informed consent from the respondents who were free to participate in the study or withdraw from it at any particular time. Their anonymity and confidentiality was upheld.

Data collected from the interviews and closed questionnaires was presented in themes and analysed accordingly. The process of data analysis was implemented during the phases of data collection and interviewing and writing the findings of the study. In qualitative research, it is difficult to separate the procedures of data analysis and data collection. Data analysis occurs continuously through several points of the research design. According to Miles and Huberman (1994), data analysis occurs in the field as data are collected.

## **RESULTS**

### **Responses to the Questionnaire and Interviews**

This study sought to highlight the major challenges which students with visual impairment conditions are encountering in pursuance of their higher education qualifications in institutions of higher learning and in the Zimbabwe Open University (ZOU) in particular. The results are presented in two sections; from the students' interviews and questionnaire responses from the lecturers. In this study, ten student participants and ten lecturers shared their understandings of their experiences in undergraduate studies and the impact of institutions, faculty, and staff on the challenges faced by students with blindness or visual impairment in pursuance of their higher education qualifications.

### **RESPONSES FROM STUDENT INTERVIEWS**

#### **Inclusive Education**

Regarding whether there should be inclusive education, the ten students with visual impairment agreed that inclusive education is the best practice as it offers the following:

- Reduce discrimination;
- Able bodied will have a better understanding of students with disabilities;
- They are able to share information which they have limited access to;
- Helpers are needed for smooth integration;

However two of the students noted exclusivity can bring over dependence of the visually impaired impacting negatively in the live of student with visual impairment.

Members of staff also supported the idea of inclusive education. Some students however felt greatly challenged being in University. Mark confessed:

At high school I had very close relationship with my teacher and boarding master. However when I came to the university, the closeness with my tutors did not happen because of the distance and time we see each other in distance learning. But later I developed some close relationship with the Student Advisor whom I consulted every time I visited the Regional Campus.

### **Attitudes of Institutions' Office Bearers**

Asked if they felt welcomed at their institutions all the participants agreed that "yes" to a certain extent they were welcome. However some negative attitudes displayed by lecturers, administrators were a course of concern.

### **Access to Information**

Some totally blind students expressed their limited access to information and the partially sighted expressed concerns which are Non-availability of large print copies of notices, books in Braille and large print and lack of knowledge on using the computer and Internet. Grace, a visually impaired student said this about accessing information:

In ZOU your main teacher is the module, but every time I try to read the module I have tears running down my cheeks. The print letters are too small for me to see. If only ZOU can have modules that have large prints we would appreciate. However that is not possible because they think it's expensive to produce such modules for just a few students.

Such situations make this group a really forgotten tribe.

### **Mobility in the institution's environment**

The totally blind students faced problem of construction work (trenches dug up everywhere, parked cars, water puddles etc). However the partially sighted said at least they could navigate their environments, however face difficulties in new paths. Another student however appreciated the idea of having peer friends:

*"Dai isi shamwari yangu inowona inofamba yakandibata, ndingadai ndakatsikwa nemota kana kuwira mumakomba akacherwa dhorobha rese ndichienda kuchikoro"*

I am greatly lucky that my sighted friend directs me to the Campus most of the time. Otherwise I would have been hit by the passing cars or fallen into trenches dug in the city.

### **Notices**

All the students agreed that they felt left out by the way institutions' communication system. Notices were written and pasted on notice boards of departments, faculties' administration offices in print. No effort is made to inform students with visual impairment what is on the notices. This at times affected the students to miss on changed times of programmes and courses.

### **Technology**

Of the visual impaired students who were interviewed, only five were computer literate. Four others could use a Pac-Mate Machine. Also four other of the students used a slate aid the rest use Perkins Braille Machine. The participants attributed low intake of Information and Communication Technology (ICT) to: Difficulties accessing screen reader software; lack of appropriate software; and lack of trained staff to teach the students. All these are challenges faced by the University.

Negative attitude towards technology by some students with disabilities is also a contributing factor.

### **Responses From Lecturers' Questionnaires**

Suggestions to improve the welfare and academic support of students with disabilities on technology

- (i) Set up a revolving fund. The institutions buy a full set of equipment needed such as laptops / computers loaded with screen reader such as Jaws software Programme
- (ii) Have trained manpower in ICT's
- (iii) Adhere to set ICT standards of institution such as that 'one has to have a qualification in ICTs'
  
- (iv) Government / Institutions fund projects for students with disabilities. Train more personnel specializing in the teaching and learning of the blind and visually impaired students in institutions of higher learning.

### **DISCUSSION AND CONCLUSION**

This study unearthed a number of challenges, threats and opportunities that are being faced by students who are blind and with visual impairment in the various tertiary institutions and universities in Zimbabwe. Data analysis indicated that most lecturers lacked special training in handling students with disabilities even though they had first degrees and even masters in Special Education. However, participation of students with visual impairments in class was rated highly by lecturers who took part in this study. The analysis of the study showed that students with visual impairments received no special treatment as far as marking of their assignments and examinations were concerned. One of the major challenges, unearthed by this study is that universities could be or might not be granting other privileges such as waiver of fees and provision of accommodation to students with visual impairments besides Government sponsorship. Of the universities and colleges in Zimbabwe, only the UZ offers free accommodation, food and exemption of tuition fees to students with disabilities. Additionally, the majority of the administrators admitted that, currently there is no policy which mandates them to grant students with disabilities such privileges. With the ZOU, the challenges are greater since it involves learning away from the institution. However families/parents and peers play a vital role in assisting this tribe.

Most of the institutions under study provide education to students with disabilities, yet, there are no qualified personnel for them to fully help in developing their educational quest. While all the lecturers who took part in this study indicated that the buildings at their institutions were accessible to students with visual impairments, the interview results from the students who took part in this study as well as the observations made, showed that the infrastructures used by ZOU, particularly the lecture rooms, were not user-friendly as they are scattered all over the city. Results of the findings reflected that the students with visual impairment enjoys extra examination time of up to 60%, while, those who had other forms of disabilities were not given any extra time. Additionally, interview responses revealed that there is no stipulated policy on the official time that should be given to students with visual impairments during examination time. The quality of educational equipment used by students with visual impairments was found to be absolute while learning materials were found to be inadequate.

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