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The Role of an Instructor in Managing Orientation and Mobility of Students with Visual Impairments at the University of Limpopo, South Africa

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ABSTRACT In South Africa, access to higher education is extremely difficult for students with disabilities, particularly those with visual impairments. The University of Limpopo, a historically disadvantaged University has established a Disability Students' Unit (DSU) in order to alleviate the problems of students with visual impairments on campus and recently appointed an Orientation and Mobility (O&M) instuctor to provide assistance and skills to these students. Various modern disability facilities were installed into infrastructure to enable disabled students access to them. These strategic initiatives and interventions are now yielding remarkable results and having significant impacts on teaching and learning. To this end, over the years, the number of students with disabilities registered by the University has increased tremendously and majority of disabled students are now completing their degrees in record time. A major contributory factor for this success has been the appointment of a skilled instructor to oversee the students with visual impairments. Ii is against this backdrop that this paper examines the significant role being played by the instructor in facilitating teaching and learning and the continuous mentoring of visually impaired students prior to admission and throughout their years of studies. The paper highlights various teething problems being faced daily by both students and the instructor and details various strategies that have been implemented to solve the problems. Numerous innovations introduced by the instructor to enhance teaching and learning at the University and the assistance received from the University management are also enumerated. Despite some occasional problems, significant successes have been recorded over the years. The paper concludes by recommending areas for improvement.

INTRODUCTION AND BACKGROUND

According to the United Nations Educational, Scientific and Cultural Organisation (UNESCO 2006), "it is estimated that there are 150 million children with disabilities worldwide and that fewer than 2 per cent are enrolled in school." Puri (2012) indicates that this is increasing on a daily basis due mainly to social problems like chronic poverty, poor nutrition and health, armed conflict, child labour, violence, and HIV/AIDS. These problems are exerbated by denying these children the necessary care and education that will bring them out of poverty. UNESCO report also confirmed that 90 per cent of children with disabilities do not attend school in developing

countries because of discriminatory tendencies they face on a daily basis at schools just because of their disability. With regard to persons with visual impairments, only ten percent are literate (Groce and Bakshi 2009).

Studies have shown that very few of the small percentage of children with disability that attend school will eventually apply to the University for further studies. But the concern is that those who would apply and gain admission are likely to become helpless because of lack of infrastructure and support that will aid and support their mobility within the University environment with regard to teaching and learning activities (Linton 1998). This was the situation at the University of Limpopo before a professional O&M instructor was appointed for the purposes of assisting, supporting and facilitating the mobility of the students with visual impairments.

O&M is concerned with teaching students with visual impairments how to move around the environment safely and confidently (Jacobson 1993). At the University of Limpopo, the approach of orientation and understanding of

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the environment is being used throughout and it focuses very much on direct attention to elements of the environment, which can provide meaningful information to students with severe disabilities (Brown et al. 1998). It is pertinent to mention that at the University of Limpopo, prior to the appointment of O&M instructor in 2009, there was no skilled or professional person providing teaching of O&M to the students with visual impairments.

Historically, in the early eighties, the then University of the North (before it was renamed the University of Limpopo) was admitting students with various disabilities with little or no assistance in any form being provided to the numerous disabled students who were thus left to fend for themselves. However, in 1987, students with disabilities started to make their presence felt by staging 'sit-ins' and 'non-violence protests' to register their dissatisfaction for the blatant neglect by the University and the Department of Education.

Since 1994, a lot of reforms have been implemented in Higher Educational System and in particular in the education of persons with disabilities (Fölscher and Cole 2006). However, the ashes of previous inequalities continue to linger replicating a cycle of disadvantage in almost all Historically Black Universities including University of Limpopo (Lesley 2009). Disabled students at the Historically Black Universities are are majorly drawn from the rural remote areas where poverty and inequalities are still prevalent. Most of the students attended special schools where there were no modern infrastructure and skilled person to provide learning and teaching assistance to them. It is against this backdrop that Kagee et al. (1997) observed that due to the gross inequality in resource provision at primary and secondary school levels, students (including students with disabilities) from the disadvantaged communities are underprepared for the demands of tertiary education because of lack of assistance at the primary and secondary levels.

The problem of non-assistance and support to the students with disabilities was exacerbated to the extent that in 1990, fifteen students with visual impairments were registered in different faculties but there was no O&M instructor to assist them to orientate to the University environment. Aginst the backdrop of all these problems and challenges, in 1992, a coordina-

tion committee on students with visual impairments was established to look into the various problems and other related issues affecting and depriving students with vitual imparments from receiving assistance in orientation in teaching and lerning services. Regrettably, only little progress was made because the committee was dissatisfied with the models of assistance that was presented. Consequent upon this, the students approached the then Deputy Librarian of the University with the list of their complaints. The Deputy Librarian intervened and requested various stakeholders and role players to come up with workable document and policy that will be implemented in order to alleviate the plight of the students with disabilities at the University. The Deputy Librarian received vibrant and robust submissions from the stake holders as well as the students and used them to come up with a viable proposal and recommendations which were presented to the University and the Council. The Deputy Librarian's proposal on how to alleviate the problems of the students with disabilities and in particular students with visual impairments was accepted and this led to the establishment of the DSU in 1996 and was formally launched in March 1999.

The DSU promotes the notion that all students have the right to education and therefore students with disabilities should have access to all facilities on campus like their able-bodied counterparts. In order for the DSU to attain its objective of providing for the academic needs of students with disabilities, it has to provide services that will meet these needs. It was also decided that an O&M instructor should form part of the DSU team in order to provide assistance to students with visual impairments. Pursuant to this, an O&M instructor was appointed in 2009.

The overarching role of the instructor at a university is to be "a vital part of the student's educational plan, offering the opportunity for both accesses to the world at large and safe acquisition of travel skills" (Joffee and Rikhye 1991: 211). It is against this backdrop that this paper highlights the intrinsic role of O&M instructor in facilitating the teaching and learning goals of the students with visual impairment at the University community as a whole.

Objective

The objective of this paper is to, through descriptive research approach, show how the

appointment of an O&M instructor has added value to students who are with visual impairments' teaching and learning activities to be independent and function without being assisted to move around the University and the environment just like their able counterparts. This has resulted to drastic transformation and improvements in their academics and social activities leading to attainement and achievements of academic excellence and fulfilment of dreams.

METHODOLOGY

Although the literature in the field of O&M for students who are visually impaired is extensive, research on how an instructor provided O&M to students with visual impairment at a Historically Disadvantaged University in South Africa is more limited. Pursuant to this, the methodology for this paper is descriptive based on the information gathered and experienced gained from the day to day activities of the instructor during the course of discharging her O&M responsibilities. The job description at the time of the appointment also clearly spelt out the role and functions of the instructor. To this end, these also form the materials and method for this work.

Problem Statement

Providing assistance to students with visual impairments at the University environment is a huge challenge for the O&M instructor and also an opportunity to ensure that they attain their O&M goals. The task requires enormous time and effort to plan teaching strategy progrmme. During the course of planning the programme, it is very important to consider that the University is not only a study environment but one that includes various social activities. This is quite different from a special school where disabled students are dictated to and restricted. At the University, the disabled students need to be trained in order to understand the environment and the social life as this will facilitate and foster proper integration and a perfect fit into the system (Ranson 1998). These are part of numerous tasks and responsibilities to be provided and discharged by the instructor.

O&M instruction is considered as a fundamental training to enable students with visual impairments function effectively and efficiently (Bardin and Lewis 2008) at the University. Prior the appointment of the O&M instuctor at the University of Limpopo, students with visual impairments used to depend on their friends to move around the University environment such as assisting them to go to the lecture halls, cafeterias, toilets and so on. On assumption of duty, the O&M instructor indicated that the students would be trained and go around independently without assistance from able students as it used to be. To the University community, including the management, this sounded novel hence they have problems in comprehending and understanding the services to be provided by the O&M instructor. In addition, there were worries and aggitations on how it would be possible to provode skills to students with visual impairments to walk in and outside the University environment without human assistance which they were used to. At this precarious stage, students with visual impairments themselves were uncooperative and made the job of the instructor difficult because they were not responding positively to the training being offered by the O&M just because they wanted to continue with 'business as usual' by asking for assistance from fellow able students to take them around the University for their teaching and learning and other activities. This is understandable and it is due to the attitude they have cultivated over the years and the mind-set of depending on others in order to perform their various tasks. It is pertinent to reiterate that in South African special schools for persons with disabilities, there are no O&M instructors to provide training and skills on how the students will have to live and be independet inorder to prepare them for future challenges wherever they find themselves including the University. Against the backdrop of the lack of training, the students with disabilities especially students with visual impairments, on a daily basis, face a lot of challenges on how to independently adapt and intergrate to the University community and system. The implications of these are that; they struggle to catch up with teaching and learining because they are usually at the mercy of who will provide mobility assistance; sometimes, they become disillussioned and withdrawn from teaching and learning by not attending classes which may eventually lead to being deregistered as students by the University due to lack of progress. The problem is exacerbated by failure of academics and support staff's lack of understanding and knowledge of the intrinsic challenges and problems being faced by students with visual impairments. For this reason and other related reasons, students with visual impairments are often subjected to ill-treatment and sometimes this is done with impunity. Another problem is that, often, access to vital academic and social information is difficult. Take for an example, during graduation, they are discriminated by segregating them and seated in special areas instead of allowing them to sit with and interract freely with other able students. Another notable concern is that infrastructure, safety devices and equipment installed on campus were done to suit and benefit able persons but not students with disabilities, especially students with visual impairments. Other problems are constant altering and reconstruction of new and old buildings year in year out. These have proven impact on and caused disorientation to already trained students who might have mastered the mobility and the environment and be able to move freely without assistance.

Literature Review

Existing literature on persons with vision impairments revealed that "mobility is an important part of everyday life, and that impairment to mobility greatly affects the quality of life" (Lahav and Mioduser 2002). Against this background, Disabled World (2012) defines disability as "a condition or function judged to be significantly impaired relative to the usual standard of an individual or group." The term is used to refer to "individual functioning, including physical impairment, sensory impairment, cognitive impairment, intellectual impairment, mental illness, and various types of chronic disease. These impairments can be termed as the disability of the person to undertake his day to day activities" (Boring 1945: 243).

In one of their reports, the Department of Public Information at the United Nations (UND-PI 2009) findings reveal that "throughout history, persons with disabilities have been viewed as individuals who require societal protection and evoke sympathy rather than respect." Bringing on board the instructor at the University of Limpopo demonstrates a major step towards changing the perception of disability and make the people and society recognize that all people must be provided with the opportunities to live life to its full potential, whatever that may be.

Disability poses numerous challenges to the disabled persons because they are always confused, having different mind-sets and at times wandering why nature should treat them the way they are (Ames 1977). Notwithstanding these dreadful challenges, the status of persons with disabilities is now changing worldwide as a result of modern infrastructure and improvements in technology that are now being used to provide assistance for them to live just like able persons be it at home, schools, workplace and wherever they find themselves (Ames 1977).

Koenig and Holbrook (2000:2) assert that "the significant and immediate consequence of visual impairment is the restriction in one's ability to travel through physical and social environments and to anticipate and exercise control over potentially hazardous situations." The skills needed to move safely and confidently through an environment are developed through instruction and training in O&M (Dodson-Burk and Hill 1989). The emphasis is that it encompasses much more than teaching students to use a long cane. It is multidimensional and should form an integral part of training. According to the Ontario Childhood Settings (2007), it begins early with the concept of development and continues with training in auditory skills, safety issues, and problem solving and in the use of assistive technology and community resources.

Parker (2009) indicates that subjecting students to a new learning environment may be frightening and that the best mode of imparting the skills the disabled need in the university environment is for the instructor to act as a bridge between the students and the objects. This would serve as a practical example and the student would have a feel for what such an object within the environment stands for (Parker 2009). Fazzi (2001: 3) points out that doing this will "encourage the student to have ownership within the learning process and become independent with the ability to act with minimum or no supervision."

Lahav and Mioduser (2002: 16) are of the view that "mental mapping of spaces, and of the possible paths for navigating spaces, is essential for the development of efficient orientation and mobility skills". Most of the information required for this mental mapping is gathered through the visual channel but blind people lack this crucial information and face great difficulties and many blind people become passive,

depending on others for continuous aid" (Lahav and Mioduser 2002: 16). This is a major setback in imparting skills in order for them to act independently. This challenge is however being tackled by the instructor at the University of Limpopo by ensuring that what has been thoroughly taught and put into practice would make them become independent and thereby discouraging unnecessary sympathy. The work of Harper and Green (2000: 1) made an ambitious contribution to the literature and proposed "a framework for travel by visually impaired people in order to provide the platform on which to develop future mobility and orientation systems to support ease of movement". This work is a major contribution to the concept of mental mapping of spaces. The instructor adopts substantially various models in this work and applied them during training.

The UN Convention on the Rights of Persons with Disabilities (UNCRPD 2006) states that "disability is an evolving concept and results from the interaction between a person's impairment and obstacles such as physical barriers and prevailing attitudes that prevent their participation in society". "The more obstacles there are, the more disabled a person becomes. Persons with disabilities have long-term physical, mental, intellectual, or sensory impairments such as blindness, deafness, impaired mobility, and developmental impairments. Some people may have more than one form of disability and many, if not most people, will acquire a disability at some time in their life due to physical injury, disease or aging" (UNCRPD 2006).

Parker (2009) emphasised the benefit of O&M to the persons with virtual impairment and Bourquin and Sauerburger (2005) have stressed the need for training in 'real-world' environments that can empower these people to overcome everyday hurdles in accessing their communities. Huebner et al, (1994) concurred with these assertions and said that through O&M, they would be independent across multiple environments.

In Article 1 of the UNCRPD 2006, it explicitly articulates the purpose of the Convention which is "to promote, protect and ensure the full and equal enjoyment of all human rights and fundamental freedoms by all persons with disabilities, and to promote respect for their inherent dignity. Persons with disabilities include those who have long-term physical, mental, intellectual or sensory impairments which in interaction with

various barriers may hinder their full and effective participation in society on an equal basis with others". In terms of Article 4, States are enjoined to prohibit all discriminatory tendencies from any quarters and in any forms on the basis of disability. It is against this backdrop that the state and its officials are enjoined to make provision to facilitate and enhance access to education and social life within a University environment. The O&M instructor's role becomes very important and relevant in bridging the gaps by ensuring that visually impaired students are able to avail themselves to the benefits, services, entitlements and rights to which other students have access.

ARTICULATING THE IMPORTANT ROLE OF THE INSTRUCTOR

Emphasizing the importance of the right to access education by all, the UNESCO (2012) asserts that "If the right to education for all is to become a meaningful reality, we must ensure that all learners have access to quality education that meets basic learning needs and enriches lives. Still, today, millions of children, youth and adults continue to experience exclusion within and from education around the world". The UNESCO Convention against Discrimination in Education (1960) and other international human rights treaties prohibit "any exclusion from or limitation to educational opportunities on the basis of socially ascribed or perceived differences, such as economic condition, ability, etc. Education is not simply about making schools available for those who are already able to access them". "It is about being proactive in identifying the barriers and obstacles learners encounter in attempting to access opportunities for quality education, as well as, in removing those barriers and obstacles that lead to exclusion" (UNESSCO 2012). One of the ways of making quality education available is to ensure that the plight of the disabled is addressed by allowing them to have access to basic assistance at any University to which they are admitted. Article 24 of the Convention fortifies the importance of education and classified education for the disabled and enjoins state parties to provide an inclusive education system at all levels and to provide lifelong learning directed to the realisation of their full potential by ensuring that they receive the support required, within

the general education system, to facilitate their effective education (UNESSCO 2012). This brings to fore the intrinsic role of an instructor in O&M in providing such professional services.

One of the significance of providing O&M services to the students with vision impairments is to ensure specific support within and beyond their regular curriculum in order for them to engage effectively with various environments (Lancioni et al. 1998). The instructor also instils the culture of belief in one's, confidence and self efficacy in visual impared students as a significant factor in the motivation to address the mobility challenges presented as a result of vision impairment.

The instructor's role is also to assist students in the development of spatial concepts, orientation and mobility techniques, long cane skills and transition programs within the university's environments. The instructor as a strategist assists in directing the student's attention to the environment to gather sensory information (Fazzi and Petersmeyer 2001). Students are encouraged to have ownership within the learning process and independence at a level appropriate to the individual student's development. O&M is a vital part of the student's educational plan, offering the opportunity for access to the world at large and safe acquisition of travel skills. In this respect, the students actively make use of their senses. "Helping the students to use their senses more effectively enables them to be more aware of their surroundings. This means that they often know when they are at a particular spot and, by closely examining it, can start to create a comfort zone for themselves. A comfort zone could be described as a place which is familiar to the students, where anxiety is lower, and where the students feel less stressed" (Naubethong State Special School 2011).

There are myriad considerations that affect the provision of O&M instruction for this unique population, some of which are identified here. As stated earlier, "orientation and mobility are the fundamental challenges in making visually impaired students independent on campus" (Long 1990). Concerning the independent functioning of visually impaired students on campus, all visually impaired students are compelled to familiarize themselves with their new rooms and the short routes to and from the rest rooms as soon as they arrive on campus. After suc-

cessful registration by students with visual imprements at the beginning of the academic year, the instructor completes the assessment forms that include personal details and the medical and disability history of the visually impaired students (Anthony 1993). The purpose of this is to have on record information about the health situations of the students in order to know how to respond to any eventuality should they occur. The record will provide guidance on what and how to take care of the affected student.

Provision and rendering of disabilities services present unique challenges to the instructor because of various needs of the students which are not similar but different and based on the situation of each student. Although there is no single approach that can be applied to all the myriad and complex conditions that confront students with visual impairments or blindness and multiple disabilities, several strategies and techniques, many of which are reported in the literature, seem to prove beneficial (Ellen et al. 2007). During O&M practices, one of the methods used is to ensure that students maintain physical contact with the environment. This "helps in concept-building and orientation and also provides a necessary sense of security" (Perla and O'Donnell 2004: 47).

The instructor usually elist the cooperation and support of the students and work together with them to develop the training programme. The programme is designed in such a way that it does not interrupt the students' lectures (Hazekamp and Huebner 1989). Training starts as soon as the programme is finalized. However, training is usually prolongoed because it is the first time that the student will be exposed to such skill training. The training programme includes sighted guide skills, pre-cane, cane techniques, street crossings and routes to and from the lecture halls (Lahav and Mioduser 2002). The instructor works after hours and on Saturdays because of the demand and the yearly increase in the admission intake of visually impaired students registering at the University (Jacobson 1993). The necessity of attending lectures also contributes to the need for after-hours training. Most of the students still embrace the habit of using their self-taught cane techniques. Training about the university environment is a continuous process because of the constant changes in the lecture venues. These activities and services being provided by the instructor are practical demonstrations of what the Convention prescribed to be done to provide basic assistance to the persons with disabilities as articulated in Article 4 which stipulates that:

To enable persons with disabilities to live independently and participate fully in all aspects of life, States Parties shall take appropriate measures to ensure to persons with disabilities access, on an equal basis with others, to the physical environment, to transportation, to information and communications, including information and communications technologies and systems, and to other facilities and services open or provided to the public, both in urban and in rural areas. These measures shall include the identification and elimination of obstacles and barriers to accessibility.

Skills of daily living (SDL) are also offered because they are very important and form part of making them independent. Most visually impaired students are more interested in learning how to sign, withdraw money from ATMs and count bank notes. Exploring the unknown can be very frightening and threatening for many visually impaired students. Only trust and confidence in the instructor and in the environment would allow them to reach out and interact. Against this backdrop, the instructor begins by taking the students to familiar places, "paying attention to environmental factors such as lighting, level of noise, temperature and so on. The instructor also practicalise the O&M by allowing the students to touch through her in order for them not to loose their sense of security and protection (Perla and O'Donnell 2004).

Every academic year, the DSU invites the University community to an event to inform and sensitise them about the issues of students with disabilities. This is done mainly to create awareness on how to interact with them within the university environment. For example, in one of the awareness events, management and the committee for persons with disabilities were invited for a lunch and subjected to eat while being blindfolded. This gave them an insight into what it takes to be blind and at the same time function effectively and efficiently just like able persons. This awareness campaign was successful and thereafter the story was published in the University magazine. As a result of this success, a letter was written to the Human Resource Department to the effect that in subsequent new staff inductions, a visit to the DSU should be part of the programme. Pursuant to this, all new staff members are expected to come to the DSU where everybody will discuss disability issues followed by a blind simulation activity; to wit: a tour of the Unit under blindfold.

In 2011, the awareness creation and campaign were very successful. University staff members and students were invited to join the DSU on a fun walk. The response was very encouraging and the comments and feedbacks from the attendees were very motivating and encouraging. The awareness has extended to as far as the shopping complex adjacent to the University where staff members were taught and trained on how to assist persons experiencing disabilities in case they meet them in and outside of the University.

Similarly, in 2011, the instructor was, on two occasions invited by the Centre for Academic Excellence at the University (CAE) to give presentations to the lecturers on the issues of how to handle the visually impaired students in the classroom. The lecturers responded ver positively and benefitted from the presentations. They now send lecture notes for the blind students to be transcribed to Braille at the DSU and allow students to record the lectures during the course of delivering lectures.

Before, visually impaired students used to be excluded from most of the campus activities. Concerned about this situation, the instructor invited the University health promoter to discuss about the inclusion of visually impaired students in the social and sporting activities on campus. Consequent upon this, some of the students joined Gentlemen's and Ladies' clubs. During one of the camp meetings organised by the University, one of the visually impaired students won a trophy during games. Even though the situation has changed for the better, there is still room for improvement.

The instructor has established a good relationship with other departments on campus. She also ensured that all facilities were upgraded to meet the demands of disabled students. More importantly, in housing, she has made representation to the housing department and the management on the need to make housing accessible to the students with disabilities by giving them first priority. This is being implemented on a yearly basis. With regard to security and parking, she informed the management and the University community of the need to ensure that

cars are parked at the designated parking areas to prevent unanticipated obstacles to the visually impaired. She also impressed on the need to erect different signs to facilitate smooth movement of the visually impaired students at different strategic locations. Furthermore, the O&M instructor goes out once a week to check if there is anything that might pose a danger to visually impaired students or cause disorientation. In case there is, she recommends swift action to remove the obstacle.

The appointment of the O&M instructor has drastically improved the lives of the disabled students on campus and in particular students with visual impairments. Visually impaired students are now able to go to their different lecture halls independently. Their academic performances are improving. In addition, the number of visually impaired students registered with the University has increased since 2010. All of these activities are not of one person show, the DSU staff members are very supportive and form part of the planning disability awareness campaigns by offering various assistance as at when the need arise.

CHALLENGES BEING ENCOUNTERED

During the course of training and after the students have settled in, there are many challenges that the instructor continues to face. They differ from one student to another and as such, the instructor treats them on a case by case basis and sometimes through group discussion and retraining (Blum et al. 2001).

One of the notable challenges is to discover that after training, the student's mobility has not improved (Soong et al. 2001). This notwithstanding, the instructor will have to continue to provide assistance in order to improve the condition of the student.

CONCLUSION

The researchers have demonstrated that being visually impaired is not a disadvantage but a challenge. Consequently, the society at large owes it a fundamental duty to ensure that virtually impaired persons have access to education by providing tools that will facilitate the realisation of the right to access to education by all. We have also demonstrated that institutions should be proactive and sensitive by ensuring

that durable and sustainable facilities are provided for the visually impaired students. The University of Limpopo has taken a giant stride in this direction to alleviate the problem of visually impaired students by employing a qualified professional O&M instructor who is now performing the important role of assisting these students on campus.

RECOMMENDATIONS

The University should incorporate designs that take into account the needs of visually impaired students when maintaining or constructing any infrastructure.

More importantly, it is recommended that able people should not sympathize with the conditions of the people with disability by giving them preferential treatments. Persons with disability would like to be treated like any normal person. This would enable them to integrate into the society, engage in games and be involved in sporting and other activities in which abled persons are involved. The awareness and campaigns on campus should continue and visually impaired students should be part of these activities.

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