A STUDY OF THE ACADEMIC NEEDS OF STUDENTS WITH VISUAL IMPAIRMENTS AT THE UNIVERSITY OF KWAZULU-NATAL (WESTVILLE CAMPUS)

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NOVEMBER 2005

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by

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Submitted in part fulfillment of the requirements for the degree of Masters in Social Work (M.SW), in the School of Social Work and Community Development in the Faculty of Humanities, Development and Social Sciences of the University of Kwazulu-Natal (Westville Campus)

<u>SUPERVISOR</u>: Ms R. Partab

November 2005

DECLARATION

The Registrar (Academic)

Dr E Mneney

University of Kwazulu –Natal

Dear Dr Mneney

I, Punjee Naidoo (Student Number: 7305962) hereby declare that the dissertation /thesis entitled:

"A STUDY OF THE ACADEMIC NEEDS OF STUDENTS WITH VISUAL IMPAIRMENTS AT THE UNIVERSITY OF KWAZULU-NATAL (WESTVILLE CAMPUS)"

is the result of my own investigation and research and that it has not been submitted in part or in full for any other degree or to any other university.

P. Naidoo
....

Punjee Naidoo

16 November 2005

ABSTRACT

Students with visual impairments are often confronted with major challenges at tertiary institutions. This dissertation investigated how students with visual impairments interact in an educational environment that is not designed with their needs in mind.

This study further highlighted some of the challenges faced by students with visual impairments at the University of Kwazulu-Natal (Westville Campus) from adequately achieving their academic goals. It also afforded the students with visual impairments an opportunity to become involved in the process of evaluating, planning and bringing about changes in the services that directly affected them. Further it is the intention that the findings of this study will increase the understanding of the university community of the needs of students with visual impairments.

This study was exploratory in design as the purpose was to collect as much data as possible in this area of study. A qualitative method using the non probability sampling method was used. This method allowed for the use of the researcher's judgement in identifying and selecting the respondents for the sample group. The sample consisted of 16 students with visual impairments registered at the Westville Campus during the period 2003-2004. To ensure that the respondents understood the procedure of the investigation, the contents of the consent form was made available in alternate format. This is in keeping with the principles of consultation, negotiation, agreement and co- ownership of

the research study. In the analysis of this study the information was gathered primarily from an in-depth interview with a schedule.

The findings indicated some of the major challenges experienced by students with visual impairments. These were primarily access to academic material, limited human and technological resources, implementation of accommodations during examinations and negative attitude of some members of staff. Recommendations to meet the students' needs focused on university wide education and awareness programmes. Hence, faculties will have to play an important role in facilitating the entry and success of students with visual impairments by making a paradigm shift from the medical/individual explanation of visual disabilities to understanding systemic deficiencies located within the barriers to teaching, learning and support.

DEDICATION

To my parents and my late brother

Thank you for your unconditional love
and support at all times

ACKNOWLEDGEMENTS

I would like to extend my sincere thanks and appreciation to the following persons who have made this dissertation possible.

- My Divine Master, Sri Sathya Sai Baba, thank you for your divine guidance, strength and inspiration at all times.

- My parents, Gopal and Sarojini Padayachee, thank you for your unconditional love and support.

- My loving husband, Vidya and my three adorable children, Pavitra, Narendra and Thriyentha, thank you for your patience, understanding and encouragement especially during challenging times in my studies.

- To all the respondents who willingly made themselves available to participate in this study, thank you for your patience and commitment in bringing about change.

- My Supervisor, Rubeena Partab, thank you for your continual guidance and support. Your words of wisdom and encouragement will always be remembered.

- The staff at Centre for Student Counselling, thank you for your support and motivation.

- Mr Vasi Nair, Paul Ramjagoo, Tharashni Moodley, Dr H Samaroo, Sam Moodley and Roshni Naidoo, thank you for your assistance at all times.

- To all my close friends and family members, whose names are too many to mention, thank you for your support and encouragement.

TABLE OF CONTENTS

Table of Contents (continued)

Table of Contents (continued)

LIST OF TABLES AND FIGURES

CHAPTER ONE

1.1   INTRODUCTION

Students with visual impairments admitted to the University of KwaZulu-Natal come from different political, social, economic, and cultural backgrounds. The plurality of their experiences imposes considerable constraints on the attempts to address the issue of their adjustment to university life. It was, therefore, vital to investigate the extent to which the support services at the University of KwaZulu-Natal (Westville Campus) cater for the academic needs and overall functioning of students with visual impairments. The social and emotional well-being of such students, one hardly needs mention, is a sine qua non of effective learning and academic achievement. The dislocated and fragmented nature of the pre-1994 educational system has been inimical to the smooth transition of learners to the tertiary environment. In response to addressing the needs of students with disabilities, the University established the Office for Students with Disabilities (OSD) in 1993.

> The many barriers facing students with disabilities can be eliminated easily, with little or no cost, by minor adaptations to the academic programmes, systems of evaluation and assessment or by the provision of support services.
> (University of Durban Westville (UDW) Draft Disability Policy, 2001:1).

The University of KwaZulu - Natal is guided by its mission statement which is in line with the Constitution of the country, the National Plan of Higher Education and other legislation relating to providing services for students with disabilities. Although students with visual impairments have access to support and technological services, they continue to encounter barriers in meeting their academic needs. Students with disabilities should no longer be categorized as "special needs" requiring "special attention", but should be embraced as integral components of education policy (UDW Draft Disability Policy, 2001:1).

Blind and visually impaired students at the University interact in an education environment that is, at times, designed primarily for the sighted (Bleakey, 2002, www.dailyillini.com/feb02/feb14/news/printer/news_story_01-printer.shtml.) One of the primary challenges in addressing the needs of students with disabilities is the provision of tertiary course material in accessible formats (Armstrong, 2002, www.humanrights.gov.au/disability_rights/education). Students, who require notes to be reformatted, spend a great deal of time and effort in accessing academic material, thereby compromising their social and personal life as university students. Armstrong (2002,www.humanrights.gov.au/disability_rights/education) strongly emphasizes that when materials are not available in accessible format, the student cannot fruitfully participate in other facets of university life as their whole focus has to be on attempting to access the material that their peers often take for granted.

1.2   RATIONALE FOR THE STUDY

Long before the adoption of the Constitution, the University recognized that access to education was no longer a privilege, but a right. Educational institutions would have to take steps to integrate students and staff with disabilities into the university community. This would entail collaborative teamwork, flexibility and the requisite support from all stakeholders. Shunmugam (2002:63) believes that by educating and supporting students with disabilities and enabling them to graduate, the University could contribute to their integration into the workplace and in so doing improve their life choices.

The researcher, who is the Co-ordinator of the Disability Unit, and, therefore, in regular contact with students with disabilities and other members of the university community, is aware of the systemic shortcomings in meeting the needs of students with disabilities. However, it is also important to ascertain from the students themselves, what these inadequacies are and how they could be overcome.

This study highlights the factors which make it difficult for students with visual impairments from achieving their academic goals, and thereafter explores effective means of redress. People with disabilities, using the support services at the university, should be empowered to determine certain aspects of programme delivery. This study, therefore, gives students with visual impairments an opportunity to engage in self advocacy by becoming involved in the process of evaluating, planning and bringing about changes in the services that directly affect them. Inappropriate and inadequate support services can contribute to learning breakdown or even exclusion.

If equity for learners with disabilities is taken seriously, higher educational institutions need to address this issue urgently. According to Boylan, as cited by Mathenjwa, *et al.* (2002), relatively little has been done to assess the needs of people with disabilities. The White Paper on an Integrated National Disability Strategy (INDS) (Office of the Deputy President, 1997) also emphasises the serious lack of reliable information on the nature and prevalence of disability in South Africa. Such an assessment is, therefore, vital.

The study by Simelane shows that tertiary institutions are meant to empower all students with the potential qualifications and skills to make them marketable (Mathenjwa, *et al.* 2002:2). Our higher education institutions must, therefore, ensure that their learning environments are conducive and enabling ones, especially where students with disabilities are concerned. This includes accessibility not only to buildings but also to academic material. The National Plan for Higher Education by the Ministry of Education in February 2001, commits higher education institutions to increasing the access of learners with special education needs. The Ministry expects institutions to indicate in their institutional plans the strategies and the steps, with the relevant time frames that they intend taking to increase enrolment of learners with disabilities. UKZN has, no doubt, been proactive in this regard; hence offering the background to this study.

1.3 AIM AND OBJECTIVES

The overall aims of this study are:

i)   to identify the factors that prevent students with visual impairments from adequately meeting their academic needs;

ii)   to consider if discriminatory practices exist against students with visual impairments that hinder their integration into the academic programme;

iii)   to foster, within the university community, an understanding of the academic needs of students with visual impairments and to find effective ways of addressing their needs; and

iv)   evaluate the support services provided by the Office for Students with Disabilities (OSD) at the Westville campus and make recommendations for the development and planning of more effective support services for students with visual impairments.

1.4 CRITICAL QUESTIONS

1)   What are some of the challenges experienced by students with visual impairments in accessing academic material?

2)   To what extent are the academic needs of students with visual impairments being addressed by the support services provided by the OSD?

3)   What are some of the barriers being faced by students with visual impairments in their academic performance?

1.5 METHODOLOGY

1.5.1 Data Collection Plan

Thyer, as cited by de Vos (1998: 77), defines a research design as a blueprint or detailed plan. A qualitative method is utilized in this study, as it ensures an in-depth study of the sample. To this end Creswell states that the qualitative researcher interacts with those

they study, thereby minimizing the distance between himself and those being researched (de Vos, 1998: 45). Hence the qualitative method is most suitable for this study as it has the flexibility and breadth to obtain the necessary information.

Rubin and Babbie (1997) state that exploratory studies are very valuable in social scientific research. This study is exploratory in design as the purpose is to collect as much data as possible in this area of study. In agreement with Bless & Higson-Smith (2000: 41) the purpose of this exploratory research is to gain insight into a situation, phenomenon, community or person. The findings will guide the OSD and the University management in improving the support services to students with visual impairments. The research was confined to students with visual impairments studying at the UKZN (Westville Campus).

1.5 .2 Methods of Data Collection
1.5.2.1 Interviews
According to de Vos (2002:292) interviewing is the predominant mode of data or information collection in qualitative research. He also states that face-to-face interviews help us to understand the closed world of individuals, families, organizations, institutions and communities (1998: 297). The main form of data collection was in-depth structured interviews with a schedule (annexure one). The schedule provided for the relatively systematic collection of data. It also served as a guideline for the researcher as it contained questions and themes that were considered important to the researcher and also ensured that all relevant topics were covered during the interview. In-depth interviewing was used as there was a need for understanding the perceptions and experiences of students with visual impairment with special reference to their academic needs at the university.

The interview was conducted according to a formulated set of questions with predominantly open-ended questions as this encouraged discussion on experiences, perceptions and suggestions. This method gave the researcher the opportunity to be flexible and to verify misunderstandings and misinterpretations of words or questions.

This is in keeping with Bless & Higson-Smith (2000:111) who state that all this is possible because in case of doubt the interviewer can ensure that respondents understand the questions and interviewers can also ask respondents for explanations concerning some of the answers. deVos (1998:30) notes that researchers are ethically obliged to ensure that they are competent and adequately skilled to undertake the proposed investigation. As the researcher is an experienced social worker she was able to use her diverse counselling skills optimally.

The respondents were given the consent forms in either Braille or in large print (font size 20) depending on the particular need/ preference of the respondent (annexure two). The researcher read out the consent form to the one respondent who cannot read either Braille or large font size before the interview was conducted. The respondents were interviewed by appointment at the OSD as they were familiar and comfortable with this venue. The duration of the interviews ranged from 45-60 minutes. The researcher took down notes during the interview which were later transcribed onto the interview schedule. In addition the questions and responses were also tape-recorded for later analysis. A tape recording does not only ensure verbatim recording, but it also gives the researcher the opportunity to communicate to the respondents that they are listening to what is being said, and to probe into important cues (Rubin& Babbie, 1997:392).

The broad structure of the interview schedule included five subheadings comprising of:

Section A – was comprised of questions that elicited information on the profile of the respondents. The respondents in this study were asked questions pertaining to age, gender, schooling, and incidence of visual impairment, registration and accommodation at university.

Section B – examined the support services provided to students with visual impairments by The OSD at the Westville Campus.

Section C - presented information on the academic challenges experienced by students with visual impairments at the Westville Campus.

Section D - yielded information on resources utilized to assist students with visual impairments.

Section E - elicited information on the suggestions made by the students with visual impairments to improve support services.

1.5.2.2 Sampling Plan

Arkava & Lane as cited in deVos (2002:199) define a sample as comprising the elements of the population considered for actual inclusion in the study. The non-probability sampling plan was used in this study. In a non-probability sample, units are deliberately selected to reflect particular features of groups within the sampled population. The sample is therefore not intended to be statistically representative. Similar to the approach used by Ritchie & Lewis (2003) the characteristics of the population were used as a basis of selection. The purposive or judgemental sample is based on the judgement of a researcher regarding the characteristics of a representative sample. The reason is that the particular features or characteristics will enable detailed exploration and understanding of the central themes which the researcher wishes to study (Ritchie& Lewis, 2003: 73). In this research this sampling method was most appropriate as it allowed the researcher to use her judgement in identifying and selecting the respondents to form the sample group.

1.5.2.3 Selection of the Sample

Selection of students for the sample was based on certain criteria viz.

- Students with visual impairments which include both students who experience blindness and students who experience low vision (partially-sighted) registered at the Westville campus in the year 2003 –2004. The sample consisted of 16 students with visual impairments.

1.5.3 Data Management

de Vos (1998:335) noted that the storing of data and its retrieval are at the heart of data management. According to Neuman (2003: 181) reliability can be improved by using a pre-test or pilot version of a measure first. A pilot study provides the researcher with the opportunity to make the necessary adjustments prior to finalising the research instrument to be used in the study. The researcher, therefore, conducted a pilot study with two students with a visual impairment to ensure that there were no difficulties in understanding the wording or interpretation of the questions in the interview schedule. The questions were understood without any difficulty. There was, therefore, no need to make any adjustments before administering the interview schedule to the sample population.

The interview schedule was used as the primary means to analyse the data. In this study the first step in analysing information obtained during the data collection phase was transcribing the taped interview so that important data is not omitted. The responses were thereafter grouped according to the questions asked. This process also enabled the researcher to identify broad themes, commonalities and any significant individual comments related to the research questions. The data was, thereafter, categorised to reduce the vast amount of information into smaller relevant pockets of information. Tables and figures were used to separate themes. Thereafter the researcher was able to draw conclusions.

1.6   ETHICS

Practical aspects of the research were discussed with the respondents, such as the use of tape recordings, the interview venue and the expected duration of the interview. The respondents were assured of confidentiality. The consent forms were in a Braille format, large print (font size 20) or in an audio recorded format, as this ensured that the respondents were clear about the contents.

1.7   DEFINITIONS OF KEY CONCEPTS

Visual impairment: Visual impairment is a generic term which covers a range of difficulties with vision and includes the following categories: blind, legally blind, partially sighted, low vision and cortically visually impaired.
(www.bced.gov.bc.ca/specialed/ppandg/planning_10.htm).

Blindness: is the loss of normal or correctable vision. Blindness can be partial, with loss of only part of the vision. It can also be complete, in which case there is no perception of light. Persons with vision worse than 20/200 are considered legally blind.
(http://www./uphealth.com/health/blindness_info.intml)

Legally blind individuals: are those whose visual sharpness or acuity (with glasses if needed) is 6/60 or worse in the better eye. This means that the legally blind person can see an object at 6 metres away, when compared with the normal sighted person who can see the same object 60 metres away. This means that she /he can only read the top line on a vision chart.
 (http://www./uphealth.com/health/blindness_info.intml

Low vision: low vision is a significant reduction of visual function that cannot be corrected by ordinary glasses, contact lens, medical treatment, and/or surgery. People with low vision may be classified as partially sighted and /or legally blind.
(www.low-vision.org/low-vision.html)

Assistive devices: refers to equipment or adaptation that is required by some learners to access the curriculum and participate in the effective process of learning. (Department of Education, 1997: iv).

 Support services: These include any device, mechanism or strategy that lessens or limits the handicap and enables people with disabilities to maintain their dignity and to live

independent lives within their communities. They also include personal assistant services, assistive devices and specialised equipment (Office of the Deputy President, 1997: 80).

Reasonable Accommodation : Any temporary or permanent modification or adjustment to a job, or to the working, living or studying environment which does not cause unjustifiable hardship to the University , that will enable a member of staff or student with a disability, to participate or advance in education or employment (UKZN-Policy on Students and Staff with Disabilities , 2004: 3).

1.8   LIMITATIONS

The study focused only on academic needs of students with visual impairments. It did not include a study of co-curricular activities, life skills programmes and the like. The sample of this study was confined to students with visual impairments and excluded students with a physical impairment, hearing impairment and other disabilities.

The researcher, as the coordinator of the disability unit, is familiar with the respondents in the sample. Anonymity, therefore could not be maintained. The respondents sometimes felt uncomfortable about answering certain sensitive questions. This limitation was overcome by the researcher explaining the purpose of the study, the need for input and how this can in turn help not only the students in the study but future students with visual impairments at the university. The respondents were assured that the information given would be treated with confidentiality and would only be used for the stated purpose of the research.

1.9   DIVISION OF THE STUDY

The chapters of this study are organized as follows:

Chapter 1: consists of the introduction and an overview of the study. It includes the aims, rationale for the study, critical questions, research methodology, ethics, definition of key concepts, limitations and division of the study.

Chapter 2 : includes a review of literature on existing legislation, models of disability, myths and stereotypes, support services, barriers to learning, reasonable accommodation, staff development programmes and technology.

Chapter 3: comprises a discussion of the analysis and results of the study.

Chapter 4: outlines the researcher's conclusions and recommendations.

CHAPTER 2

LITERATURE REVIEW

2.1   INTRODUCTION

According to current literature there has been an increasing number of students with disabilities pursuing higher education worldwide in the last decade (Beilke & Yssel (1999, www.findarticles.com/p/articles/mi_, Crous(2004), Wardle,(2000, http://www.bath.ac.uk/learning-support/webb/wardle.html)

This increase in enrolment can be attributed to the following factors (Hitchings et al. as cited in Crous (2004).

> Services and support now exist at post -secondary level for students with disabilities as a result of non discriminatory legislation in this regard;

> Students with disabilities aspire to enter professions or occupations that require post-secondary education; and

> Many students with disabilities are now receiving better academic preparation in high school.

In South Africa, Howell & Lazarus (2003: 62) maintain that

> the lack of appropriate and adequate provision for learners with disabilities at the schooling level has had a profound effect on the number of disabled people who have been able to access post-secondary educational opportunities.

The White Paper on an Integrated National Disability Strategy (INDS) pointed out in 1997 that, although no reliable statistics existed, higher education largely

remained out of reach for the majority of people with disabilities (Office of the Deputy President, 1997).

In the following studies as cited by Crous (2004), there have been many changes in higher education since the introduction of non discriminatory legislation in various countries:

Crous cited the following:

> Colleges and universities had developed systems that provided access to qualified students with disabilities to participate effectively in academic and social programmes (Hartman: 1993:9)

> There were changes in faculty attitudes and practices (Vogel et al 1999:173);

> Community awareness of the needs and problems of students with learning disabilities had increased (Niesen 1997:169, Levinson 1986:296); and

> Students' became more self –aware and their knowledge of their own disabilities improved (Ryan Price: 1992:10).

Despite these changes, students with disabilities continue to be under-represented in Higher Education (Malakpa 1997: 14) as cited in Crous (2004).

This chapter will focus on current, local and international legislation pertaining to disability with particular reference to visual impairment, causes of blindness, models of disability, self representation, terminology myths and stereotypes, support services, Office for Students with Disabilities, disability statistics at UKZN, barriers of learning, attitudes, reasonable accommodation, staff development programmes and technology in Higher Education.

2.2 LEGISLATION

2.2.1 International Initiatives

After the politicization of disability in the 1960's by disability activists and disability organizations across the world, various initiatives emerged to address the oppression and exclusion experienced by people with disabilities (Kanniappen, 2003: 11).

The rights of people with disabilities has been recognized at a global level by the United Nations Declaration on the Rights of Disabled Persons (1978). It states that people with a disability have a right to:

> ➢ respect and dignity;
>
> ➢ assistance to become as self – reliant as possible;
>
> ➢ education, training and work;
>
> ➢ family and social life; and
>
> ➢ protection from discriminatory treatment
>
> (http://www.ccc.newcastle.edu.au/student-support/Disability).

2.2.1.1 The World Programme of Action Concerning Disabled Persons (WPA)

The United Nations declared 1981 as The International Year of Disabled Persons which was not recognized by the then South African government. It was promoted by the NGO sector whose adopted theme was "Full Participation and Equality" (Office of the Deputy President, 1997). This resulted in the development of a disability rights movement in South Africa. The purpose of the World Programme of Action was to promote effective measures for the prevention of disability, rehabilitation and the realization of equal opportunities for persons with disabilities (Office of the Deputy President 1997:15).

2.2.1.2 The Standard Rules on the Equalization of Opportunities for Persons with Disabilities

The UN facilitated the drafting of the Standard Rules on the Equalization of Opportunities for Persons with Disabilities to provide governments with clearer guidelines on actions to be taken. The Standard Rules implied a strong moral and political commitment by the State to take action for the equalization of opportunities for persons with disabilities. They outline crucial aspects of social policies in the disability field, and provide models for the political decision – making process required for the attainment of equal opportunities (Office of the Deputy President, 1997).

2.2.1.3 U.N. Declarations

The inclusion and reaffirmation of human rights of people with disabilities in documents such as the Vienna Declaration and Programme of Action of 1993 and the Beijing Declaration and Platform for Action of 1995 also reflect the increasing recognition given to the plight of persons with disabilities around the world (Kanniappen, 2003).

2.2.1.4 Australia: Disability Discrimination Act

In 1992 the Disability Discrimination Act made discrimination on the basis of disability illegal in Australia. Section 22 of the Disability Discrimination Act made it unlawful for a university to discriminate against a student on the ground of the student's disability, inter alia:

> ➢ Refusing or failing to accept the person's application for admission

> ➢ The terms or conditions on which it is prepared to admit the student and

> ➢ Limiting the student's access to any benefit provided by the University

Payne (2002), www.adminutas.eduau/academic/acservice/meeting/talc/.

15

2.2.1.5 America: Americans with Disabilities Act of 1990 (ADA)

In America under the Americans with Disabilities Act of 1990 (ADA), a complaint can be filed with the federal government or with a private lawsuit under Title 11, charging a public college which has failed to make itself accessible to people with disabilities. Title II of the Americans with Disabilities Act states that no qualified individual with a disability shall be excluded from participation in or be denied the benefits of services or activities of a public entity. This same prohibition is applied to private entities through Title III of the ADA which bars the disability- based denial of the benefits of the services, programs, or activities of "public accommodations", including schools. (http://codibuffalo.edu/archives/colleges/.cul/disablaw.html

Based on the above legislation, there have been several cases where courts have found in favour of disabled students at American tertiary institutions, in terms of allegations of discriminatory practices on the part of the university or college. In South Africa there have not been many reported cases (Shunmugam, 2002:26).

2.2.2 South African Initiatives

In South Africa, prior to 1994, legislation contributed largely to the exclusion of people with disabilities. Although there has been, since 1994, some attempt to identify and eliminate discriminatory legislation from our statute books, many aspects of past discriminatory legislation remain. Equal opportunity for all is emphasized in The Constitution of South Africa and its Bill of Rights, Employment Equity Act No 55 of 1998 (Office of the Deputy President : 1998), Promotion of Equality and Prevention of Unfair Discrimination Act (Office of the Deputy President : 2000), The Education White Paper 6 Special Needs Education (Department of Education : 2001), Education White Paper 3, A Programme for the Transformation of Higher Education (Department of Education : 1997) and Disability Rights Charter. Section 29(1) of the Constitution refers to the fundamental right to basic education for all South Africans. This is further emphasised in the Constitution in Section 9(2), which commits the State to the

achievement of equality, and Sections 9 (3), (4) and (5), which commit the State to non -
discrimination. All these clauses are important for protecting all learners, whether with
disabilities or not (Department of Education: 2001).

Reyneke & Oosthuizen (2003: 91), state that for a long time the rights of disabled
persons have been ignored not only in South Africa, but also in the rest of the world.
Although many new laws were promulgated, the effectiveness of these laws still has to be
considered. At UKZN the institution is bound by its policy on disability to provide an
effective service for all, including persons with disabilities.

2.3   EXISTING DISABILITY STRUCTURES IN SOUTH AFRICA

It is important to distinguish between **organisations of** and **organisations for** persons
with disabilities, as this illustrates a shift in power over decision-making, from well-
meaning community members and service providers to people with disabilities
themselves. This has further socio-political implications because in South Africa and
many other parts of the world there has been a paradigm shift from the medical to the
social model. This has been due largely to the development of strong organisations of
disabled people (DPO'S) (Office of the Deputy President, 1997:11). These organisations
are controlled by people with disabilities themselves.

The following is a list of some of DPO'S in South Africa relevant to persons with visual
impairments:

> ➢ Disabled People's International (DPI)
>
> ➢   World Blind Union (WBU)
>
> ➢ African Union of the Blind (AFUB)
>
> ➢ S.A. National Council for the Blind (SANCB)
>
> ➢   Disabled People South Africa (DPSA)

> ➢ South African Federal Council on Disability(SAFCD)

> ➢ National Co-ordinating Committee on Disability(NCCD)

> ➢ Office on the Status of Disabled Persons (OSDP)

(Disabled People South Africa (DPSA) - Pocket Guide on Disability Equity, 2001)

2.4   CAUSES OF BLINDNESS

Lewallen & Courtright (2001,
www.nutrivit.org/ric/news/doc/blindness%20in%29africa2002.pdf)
found that blindness prevalence rates vary widely but evidence suggests that approximately 1% of Africans are blind. Approximately half the blindness in Africa is due to cataract. Trachoma and glaucoma are also important causes of blindness.

The International Agency for the Prevention of Blindness (IAPB) which is based in the United Kingdom and is an authority on eye condition in developing countries, has identified six major causes of visual impairment which are: Infections, malnutrition, onchocerciasis (river blindness), cataracts, glaucoma and trachoma. Worldwide, the leading causes of blindness are cataracts, onchocerciasis ("river blindness"), trachoma, leprosy, and vitamin A deficiency (www.luphealth.com/health/blindness_info.html).

Some of the causes of low vision are macular degeneration, optic atrophy, diabetic retinopathy, glaucoma, retinal detachment, trachoma, retinispigmentosa stroke, cataracts, corneal disease, and albinism.

2.5. MODELS OF DISABILITY

Models of disability are tools for defining impairment and, ultimately, for providing a basis upon which government and society devise strategies for meeting the needs of people with disabilities. Models are influenced by two fundamental philosophies. The first sees people with disabilities as dependent upon society and the second perceives people with disabilities as beneficiaries of what society has to offer (www.vertou.demon.co.uk/models_paper.htm).

2.5.1 Medical Model

Historically, disability has been regarded as a health and welfare issue and, until very recently, the education of learners with disabilities was largely influenced by the medical profession. (Crous, 2004: 231). Hence, Du Toit as cited in Crous (2004) believes that it gave rise to the clinical, medical, individual or healing (curative) approach to specialized education (Crous, 2004: 231). It would seem that the medical model typically views disability as the result of physiological impairment due to damage or disease. In many cases children with disabilities were removed from society and kept in institutions. They were, therefore, excluded from the mainstream activities of society (Crous, 2004: 231).

The medical model of disability, which has emerged from various negative stereotypes, relies on the false dichotomy of "normality" and "abnormality". It constructs a skewed view of life with a disability by focusing on the negative implications of impairment and not, for instance, on achievement, strength, insight and skill. This approach that views people with disabilities as less than "whole" rejects diversity, perceiving any human variation away from the universal experience of "normality" as a misfortune (www.ccc.newcastle.edu.au/student-support/Disability).

The medical model traces the source of the problem to a single impaired person, and concludes that solutions are to be found in the individual (www.vertou.demon.co.uk/models_paper.htm). The social attitudes, which result from

the perception of disability as a health and welfare issue, have invaded all areas of society. Dependency on state assistance has disempowered people with disabilities and has seriously reduced their capacity and confidence to interact on an equal level with other people in society.

Thus the dependency created by the medical model disempowers persons with disabilities and isolates them from the mainstream of society, preventing them from accessing fundamental social, political and economic rights (Office of the Deputy President, 1997: 9).

2.5.2 Social model

Since the beginning of the 1980's, disabled people's organizations all over the world have worked to reposition disability as a human rights issue. This resulted in a social model for disability, which is based on the premise that if society cannot cater for people with disabilities, it is society that must change and not the person. The disability rights movement, therefore, believes that the "cure" to the "problem" lies in restructuring society. Hartman (1993:9), as cited in Crous (2004) believes that students with disabilities add to the diversity on campus. According to this approach, disability is caused by barriers to learning and development which arise as a result of societal injustices inflicted on people with impairments. The Social Model views disability as a consequence of environmental, social and attitudinal barriers that prevent people with impairment from maximum participation in society. It is best summarized in the definition from Disabled Peoples' International (DPI): the loss or limitation of opportunities to take part in the normal life of the community on an equal level with others, due to social barriers (www.vertou.demon.co.uk/models_paper.htm).

The social model of disability implies a paradigm shift in how we define disability. In a paper led by the Office of the Deputy President (S.A.), 1997 the social model can be understood by the following explanation:

- ➤ It is the stairs leading to a building that disable the wheelchair user rather than the wheelchair.

- ➤ It is the defects in the design of everyday equipment that cause difficulties, not the abilities of people using it.

Disability can be minimized by adjustments to the environment through more inclusive policies and practices. The degree of a person's disability, therefore, depends upon just how much or how little the physical and social environment can adjust. In addition to rights, people with disabilities should have equal obligations within society and should be given the support necessary to enable them to accept their responsibilities. This means that society must raise its expectations of people with disabilities. A human rights and development approach to disability focuses on the removal of barriers to equal participation and the elimination of discrimination based on disability.

The strength of this model lies in its placing the onus upon society and not on the individual. At the same time it focuses on the individual, whereas the medical model uses diagnosis to produce categories of disability, and assumes that people with the same impairment have identical needs and abilities

(www.vertou.demon.co.uk/models_paper.htm).

The Social Model faces two challenges viz.

- ➤ As the population gets older the numbers of people with impairments will rise and make it harder for society to adjust.

- ➤ Its concepts can be difficult to understand, particularly by dedicated professionals in the charity and rehabilitation organizations. They would have to be persuaded that their roles must change from that of "cure or care" to being less obtrusive by helping people with disabilities take control of their own lives.

(www.vertou.demon.co.uk/models_paper.htm).

The social model, therefore, emphasizes two things: the shortcomings of society in respect of disability and the abilities and capabilities. This model, however, fails to emphasize certain aspects of disability: Jenny Morris (1991) as cited in www.vertou.demon.co.uk/models_paper.htm, states that

> While environmental barriers and social attitudes are a crucial part of our experience of disability – and do indeed disable us, that this is all there is, is to deny the personal experience of physical and intellectual restrictions, of illness, of the fear of dying against prejudice.

2.6   SELF REPRESENTATION

A fundamental principle which informs the outlook of the disability rights movement in South Africa and internationally is the right to self representation. The right to equality guaranteed in the 1996 Constitution includes social and political equality at all levels. This means that people with disabilities ought to enjoy equal access to fundamental rights. People with disabilities can now determine how to influence the way in which academic programmes are delivered.

A key principle of self representation, which is fundamental to the realisation of the rights of people with disabilities, is recognition by others of the right of disabled persons to represent themselves in all processes of decision making. Mackelprang and Hepworth in Listening to the Voice of Individuals with Disabilities (Gilson et al, 1998) remind us that it is not enough for social workers to advocate for the rights of persons with

disabilities; they have an obligation to assist those individuals in advocating for themselves.

Development theories such as those of Piaget & Vygotsky emphasize active participation as an essential condition for learning and development. The development of any competency, from skills in mathematics to forming friendships, requires students to become engaged with the persons and objects in their environment (Simeonseone et.al., 2001). The Office of the Deputy President (1997) has acknowledged this by pointing out that people with disabilities are best equipped to change perceptions and attitudes towards disabilities. They should, therefore, play an important role in the development of strategies and projects through their legitimate organizations. People with disabilities want, first and foremost, to be seen as individuals and not just as a "disability". When you stress individuality first and disability second, it helps to highlight the humanity of people with disabilities. It likewise helps to learn the correct terminology to describe a specific disability as this reflects the individuality and diversity of people with disabilities (www.ccc.newcastle.edu.au/student-support/Disability). It is important to note that active involvement by people with disabilities in educational and civic life on all levels expands an awareness of how those outside the mainstream live as this allows communities in general to be more thoughtfully inclusive of all difference (http://www.independentliving.org/LibArt/ADAgaps.html).

2.7   TERMINOLOGY

Language plays a key role in creating and maintaining attitudinal barriers that are harmful to persons with disabilities. There are specific words used to describe individuals with disabilities (cripple, moron, victim, dumb) that have extreme negative connotations and are very stigmatizing. Society at large, including universities, should promote the use of appropriate language in reference to disabilities and people with disabilities. The following is an example of a list of unacceptable and preferred language to use when

referring   to   persons   with   disabilities
(www.butler.edu/disability/content/facultyguide.html).

Table 2.1-Unacceptable and Preferred Terminology

Unacceptable Term	Preferred Term
The disabled	Person with a disability
The visually impaired	People with a visual impairment
Confined to a wheelchair/wheelchair bound	Person who uses a wheelchair

Source: www.butler.edu/disability/content/facultyguide.html

2.8   COMMON MYTHS / STEREOTYPES ABOUT STUDENTS WITH DISABILITIES

In interacting with students with disabilities there are many myths which often result in misconceptions, stereotypes and negative attitudes. Negative attitudes toward students with disabilities are often more disabling than the disability itself. The following are myths and stereotypes about students with disabilities that often result in negative attitudes.

Table 2.2. – Stereotype or Myth and Fact

Stereotype or Myth	Fact
Students with disabilities who request to be accommodated are looking for a way to do less work.	Most students with disabilities have to work much harder than non-disabled students; many students with disabilities don't want to ask for help.
Providing accommodations	The law does not allow for the lowering of

means lowering academic standards.	standards for students with disabilities. Accomodations allow students with disabilities to meet the University's standards.
Accomodations give students with disabilities an unfair advantage over other students.	Providing accommodations simply "levels the playing field" for students with disabilities. Barriers created by a student's disability must be removed in order to fairly evaluate the academic performance of such students.
If a student with a disability can't perform like non-disabled students, she or he doesn't belong in college.	Students with disabilities have the same intellectual potential as non-disabled students. If they meet admissions and programme standards, they are entitled by law to attend and to receive accommodations.
Providing accommodations takes too much time for faculty and costs too much.	90% of all accommodations require minimal time and money. Many of the teaching adjustments that help students with disabilities are strategies that help non-disabled students learn better too.
Equal opportunity means that everyone is treated the same – so students with disabilities should not get any "special treatment".	Equal opportunity means ensuring that all people have access to achieving their potential. The application of reasonable adjustments addresses barriers to access. It does not provide any unfair advantage.
Students with disabilities are more likely to drop out of course than other students.	Students with disabilities are no more likely to withdraw from study than any other students and, if they do, are likely to withdraw from study as other students for the same range of reasons.

Enrolling greater numbers of students with a disability will necessitate modifying course content and compromise educational standards.	Students with disabilities cover the standard course content.
Providing for Students with disabilities is too time-consuming and their needs are too difficult to cater for at university.	Students with disabilities, like other students, want an education with its ensuring benefits. They are not only very experienced but motivated at identifying solutions and overcoming barriers that may appear daunting to others.
Disability limits an individual in every aspect of his or her functioning, including the ability to be educated.	Students with disabilities can work hard and be productive and should be expected to do so.
Conversations about disabilities in an educational setting are quickly dominated by the one size- fits- all-syndrome.	Students with disabilities have the same variety of needs and preferences as anyone else.
People with disabilities have a poor quality of life.	People with disabilities have needs just like those who are non-disabled, and they strive for a high degree of quality of life as other individuals.

Source: www.maine.edu/ac4.html. , www. acils.com/acil/myths.html,

www.butler.edu/disability/content/facultyguide.html and

www.mmu.ac.uk/academic/studserv/1

2.9   SUPPORT SERVICES IN EDUCATION AND TRAINING IN SOUTH AFRICA

The term "disability support services" usually refers to a range of services, facilities and adaptive equipment provided by a university or institution to assist students with disabilities to achieve their educational goals (Washington & Bruce 1999, www.deakin.edu.au/ncet/archives/information_and_orientation_guidelines.html).

"Equal opportunity" does not necessarily mean being treated the same as everyone else. In fact, equal opportunities may mean receiving additional assistance in order to be able to do the same things that other people usually do (Washington & Bruce 1999, www.deakin.edu.au/ncet/archives/information_and_orientation_guidelines.html).

Students with disabilities still have to use their own intellectual and /or creative abilities to achieve their educational goals. They have to prove that they can achieve what is required by a course just the same as other students do - even if they complete with little practical help or extra time.

The support students' need, fall into two categories: personal and technical. Personal support in higher education is generally provided by specialist, designated staff such as personal careers, note takers, readers. This also incorporates the changes teaching staff make to the way they deliver their sessions to cater for the individual needs of their student group.   Technical support can be made available by providing specialist equipment and resources eg. Braille printer
 (www2.vuw.ac.nz/home/publications/disabilities/staffguide/policy.html.).

The   Education White Paper 6 promotes a new approach towards organizing support. Support is redefined to move its focus away from supporting individual learners who are assessed to have "special needs" towards addressing barriers which prevent the system

from responding to their learning and other needs. To accomplish this goal, both physical and learning access must be provided. It means that reasonable alterations should be made in the teaching process to ensure full educational opportunity and effective communication.

The Minister of Education, in investing and making recommendations on all aspects of special needs and support services in education and training in South Africa, appointed the National Commission on Special Needs in Education and Training (NCSNET) and National Committee for Education Support Services (NCESS) (Department of Education, 1997: 1). The vision proposed by the NCSNET /NCESS is that of an education and training system that promotes education for all and fosters the development of individual and support centres of learning that enable all learners to participate actively in the education process and eventually participate as equal members of society. According to their study, some of the academic programmes at tertiary institutions have moved away from separate programmes for learners experiencing difficulty, to an influenced approach focusing on the transformation of the curriculum and institution so as to facilitate a more appropriate response to the diverse needs of learners. This has, generally, not included a focus on disability and has thus resulted in minimal access for learners with disabilities (Department of Education, 1997: 27).

2.10   OFFICE FOR STUDENTS WITH DISABILITIES (OSD) - UKZN-WESTVILLE CAMPUS

According to Wardle (2000, www.bath.ac.uk/learning-support/webb/wardle.html) most post secondary institutions have recognised disability as an issue, and responded by appointing staff to take responsibility for students with disabilities. At UKZN (Westville Campus) OSD is a central administrative liaison office for students with disabilities which was established in 1993. It is one of the programmes of the Centre for Student Counselling which reports directly to the Deputy Dean of Students. It focuses on the

positive development of students with disabilities. The mission of the OSD is to ensure that students with disabilities have an educational experience equivalent to that of a non-disabled student. This is in keeping with one of the goals of the University which is to create and develop an enabling environment for all learners and scholars to pursue studies in accordance with the principles of academic freedom (http://www.ukzn.ac.za/aboutas/mission.asp).

The OSD endeavours to ensure that students with disabilities have equal access to the academic programme. This involves working in partnership and close liaison with various constituencies on the campus with regard to issues of transport, accommodation, minimizing physical barriers in the environment and the presentation of academic material in an acceptable format for students with a visual impairment. This office has established a Resource Centre that is equipped with computer hardware and software for the reformatting of notes for students with a visual impairment.

Data gathered from OSD reflect that presently there are about forty students with disabilities who actively utilise the services of the OSD of which six are totally blind, three are legally blind and seven are partially sighted (Data Base of OSD: 2004). The other categories of disabilities include the following: hearing impaired, mental impairment, learning disabilities, paraplegia, mobility impaired, cerebral palsy, seizures, arthritis, and severe diabetes.

2.10.1 Programmes and Services

Some of the programmes and services rendered to the students with a visual impairment include the following: taping service, brailing service, reading assistance, note taking, computer training and access, faculty and library liaison, mobility training, volunteer training, pre-admission campus visits, bursary liaison, priority residence accommodation and specialized orientation to campus.

2.11 DISABILITY STATISTICS AT UKZN

The following table reflects the enrolment of students at UKZN in 2004.

Table 2.3. – Disability Statistics at UKZN (2004)

Year	Campus	Students with Disabilities	Other Students	% Students with Disabilities
2004	Edgewood	23	2003	1.2
2004	Howard College	80	20408	.39
2004	Pietermaritzburg	52	7918	.66
2004	Umbilo	14	2117	.66
2004	Westville	99	12564	.79
	Total	268	45010	.60

Source: Department of Statistical Management – UKZN

The students at UKZN who indicated in their registration form that they were impaired in some way represented 0.6 percent of the total population. According to Crous (2004:233) from a total of 168,974 students in the three institutions in his study, only 751 indicated in their registration forms that they were impaired in some way. This represented only, 0.4 percent of the student population. According to Malakpa (1997:14) and Hartman (1993:9) as cited in Crous (2004), the number of students with disabilities in Higher Education in the US is between 7 percent and 10, 5 percent.

2.12 BARRIERS TO LEARNING

Oduntan (2003: 3) asserts that

> acquiring higher education is a difficult task for most normally sighted individuals and realizing that the visual element is an important component of the sensory systems for learning, it becomes apparent that visual disability would have a profound effect on the educational pursuits of an individual. This, therefore, dictates the need for effective support programmes at tertiary institutions.

Howell & Lazarus (2003: 62) also believe that the barriers to accessing higher education arising from the schooling system are exacerbated by inequalities evident in higher education in South Africa. The impact of other barriers within higher education institutions themselves, continues to substantially limit the ability of these students to participate equally in the teaching and learning process and thus have the opportunity for fair chances of success. These barriers relate directly to attitudes to disability and learning; academic curricula; the physical environment of an institution; the organizational environment; the provision of teaching and learning support and academic development programmes; the allocation and distribution of resources; as well as the role that higher education plays within the society as a whole.

Many learners who experience barriers to learning drop out primarily because of the inability of the system to recognise and accommodate the diverse range of learning needs, typically through inadequate physical planning, curricula, assessment, learning material and instructional methodologies (Department of Education, 2001).

Wolfendale (1996), as cited in Howell & Lazarus (2003: 62), in discussing the higher education system in the United Kingdom, argues that in general higher education reflects a level of the education system which is associated with processes of rigid selection which filter(s) out the eligible few from the ineligible many. For students with disabilities in South Africa, their eligibility to higher education has been, and continues to be, substantially influenced by perceptions of their capabilities. Thus students with disabilities have reported being denied access to particular courses because they were believed to be unable to meet the course requirements.

Howell & Lazarus (2003: 63) are of the opinion that

> the dominant medical discourse and attention to individual deficit has also influenced the nature and provision of learning support systems for students with disabilities where they exist in South African higher education institutions.

As this area is under-researched it is difficult to give an accurate picture of what learning systems are available.

Masambo (2003) noted that one of the greatest barriers facing students with disabilities at tertiary institutions is a lack of in-depth understanding of the concept of disability amongst academics and students. Howell &Lazarus (2003) mention that barriers arising from the curriculum have been evident in the methods and materials of teaching and learning used. The White Paper 6, as cited in Howell&Lazarus (2003: 67), argues that one of the most significant barriers to learning is the curriculum itself. In addressing the ways in which it can marginalise particular students, the curriculum needs to be understood in its entirety. It argues that this includes: what is taught, the language or medium of instruction, how lectures are organised and managed, the methods and

processes used in teaching or lecturing, the pace of teaching and the organising of time, the learning materials and equipment used as well, and most importantly, how learning is assessed (Department of Education, 2001a, 19) as cited in Howell Lazarus (2003).

Crous (2004: 246) is of the view that, in general, students with impairments are well aware of and acknowledge their impairments. This study has also found that the majority of students have stated that they do not have an academic handicap and that they do not want to be treated as such. With little or no help, they can cope in higher education and they should be given the opportunity to do so. The help they need, therefore, is not with regard to their impairments as such, but the removal of barriers to learning and development by reconstruction of the learning environment.

According to the Human Rights and Equal Opportunity Commission (www.hreoc.gov.au/disability_rights/education/forumdp.htm), students with visual impairments have been affected both positively and negatively by the changing information environment eg. access to internet, online library catalogues etc. These opportunities gave rise to some challenges.

> For students with print disabilities, universities, producers and publishers, and others who are involved in the provision of study materials that are accessible, there is a growing recognition that if prompt action is not taken to apply innovative approaches to the provision of accessible materials, then the opportunities will quickly turn into insurmountable barriers, and people with print disabilities will have significantly decreased access to higher education.

These challenges as discussed by the Human Rights and Equal Opportunity Commission (www.hreoc.gov.au/disability_rights/education/forumdp.htm) are of three basic types:

- ➢ Economic: for example, how to fund the production of accessible format materials for an increasing number of students studying a greater diversity of subjects.

- ➢ Technological: for example, that is how to provide access to a wide array of online resources, as well as the traditional paper-based ones; and

- ➢ Process, for example, this entails how to secure original materials in time for their production in an environment where there is casualisation and contractualisation of the academic workforce.

An important factor preventing learners from accessing the curriculum is the inadequate provision of material or equipment they may need for learning to take place. Such barriers often affect learners with disabilities who do not receive the necessary assistive devices which would equip them to participate in the learning process on an equal footing e.g. blind learners are unable to access the curriculum effectively if appropriate braille facilities and equipment are not available. Assessment processes, too, are often inflexible (Department of Education 1997:16).

According to Armstrong (2002, www.humanrights.gov.au/disability_rights/education/forum02/student_perspectivehtm) not having access to educational material in an appropriate format has repercussions not only on academic performance. The efforts spent on organising, negotiating and accessing materials curtail the amount of time left for a student to participate in other facets of tertiary life resulting in increased stress and anxiety. Armstrong (2002, www.humanrights.gov.au/disability_rights/education/forum02/student_perspectivehtm) contends that students who have a print disability will inevitably spend a greater amount of time and effort accessing academic materials, even when available in their preferred format.

Access to information is also another concern. Placing only print material in a library can create a handicap for people who have neurological or visual impairments. Students who cannot read print (i.e. books, papers, signs, forms) and, are not provided with audio-taped articles and books, would be severely handicapped when it comes to access to information, educational opportunities and future earning capacity (Washington & Bruce, 1999,www.deakin.edu.au/ncet/archives/information_and_orientation_guidelines.).

The HREOC Forum Discussion Paper (2002, www.humanrights.gov.au/disability-rights/education) found that many students with a print disability will, at some point, have to contend with the following stressors and the process may be ongoing:

- The great anxieties of falling behind in study due to lack or delay of course material in appropriate formats;

- Not being able to participate in tutorials due to lack of access of material;

- The pressure of producing own materials which consumes time that should be spent on studying , until assistance is available, if it ever is;

- The struggle for equal opportunity, taxing in itself;

- The student's main focus to concentrate on study material and complete course requirements; with additional constraints.

- Concentration levels and quality of study;

- Anxiety that affects not only study performance but also the person's personal life and health;

2.13   ATTITUDES

According to Antonak and Livneh (2000) the full acceptance of persons with disabilities by persons without disabilities can only occur when subtle barriers are removed. Most scholars and students agree that one of the factors inherent in the subtle barriers is the

attitude of health and rehabilitation professionals, teachers, employers, co-workers, educators and counsellors, parents, peers and persons with disabilities themselves.

The changing of attitudes is not something that happens automatically or spontaneously. Public education and awareness are central to the changing of attitudes. One of the greatest hurdles people with disabilities face when trying to access mainstream programmes is negative attitudes (Office of the Deputy President,1997:23). It is these attitudes that lead to the social exclusion and marginalization of people with disabilities. Negative attitudes are continually reinforced. "Disability is portrayed as a 'problem'. People with disabilities are viewed as helpless and dependent and in constant need of care and medical treatment" was found to be the case by the Office of the Deputy President, 1997.

Another difficulty facing people with disabilities arises when their capacity to be educated and function in the world is evaluated solely by limitations imposed by their disabilities. They essentially become defined by their disabilities, rather than their broad range of interests and abilities, eg. a student with visual impairment is encouraged to play blind cricket, a sport in which he has no interest (http::www.mmu.ac.uk/academic/studserv/1 2/28/2005).
This stereotyping of perceived needs of persons with disabilities often results in negative attitudes.

2.14 REASONABLE ACCOMMODATION

The student who is visually impaired may exhibit problems in one or more of the following areas:

> ➢ Inability to utilize visuals such as films, graphs, demonstrations, and written materials;

- Difficulty in taking traditional paper and pencil exams;

- Need for a longer period of time to complete assignments;

- Difficulty in focusing on small-group discussion when there is more than one group functioning due to noise;

- Need for a variety of low-vision aids to integrate the classroom;

- Feelings of social inadequacy and isolation due to societal barriers;

- Reduced personal independence;

- Difficulty initiating career choices due to employer misconceptions.

(www.butler.edu/disability/content/facultyguide.html)

Accommodation should be made where reasonable and where it does not cause undue or unjustifiable hardships to the university. Reasonable Accommodation aims to give students with disabilities an equal opportunity with all other students to demonstrate their abilities. The objective in providing study and assessment accommodation and services is to accommodate the functional differences that exist because of the student's disability thus minimizing its impact upon study

(Payne, 2002, www.adminutas.eduau/academic/acservice/meeting/talc/).

These accommodations are based on the premise that students with disabilities should be neither disadvantaged nor advantaged relative to other students. The principal object is to test student's knowledge, not their disability. Wardle (2000), in his study on how lecturers deal with students with disabilities, found that in many instances the student knows what is needed to be able to succeed, it is the lecturer who has a problem. This initiative is summed up in the words of Dr. Federico Montero, Head -WHO's Disability and Rehabilitation unit:

> Since we are the best experts on our needs,
> we need to show the solutions we want,

need to be in charge of our lives, think and
speak for ourselves-just as everybody else.

http://www.independentliving.org/)

Students, therefore, require their current situation and future needs to be reviewed on an individual basis. There could be a significant variance in the adaptive technology and alternative formats such as Braille and audio or hard copy large print and electronic text required (Armstrong, 2002, www.humanrights.gov.au/disability-rights/education).   In post–secondary settings it is the student's responsibility to request accommodations if desired, but a staff member can make a student feel more comfortable by inquiring sensitively about their additional need (www.mmu.ac.uk/academic/studserv/1).

With regard to alternative teaching methods, examinations and assessments, staff are sometimes unsure about where and how to draw the line between what is or is not an acceptable adjustment for a person with a disability eg. if a student's disability directly affects his capacity to complete the central and essential components of a course. Another example is a case where a student, whose capacity to speak was severely curtailed by a respiratory disability, but who wished to enrol in a counselling course. She was advised that it was unlikely she would be able to comply with the essential requirements of the course, which included simulated crises counselling, and that it would not be in the interests of her qualification if she were to be exempted from these requirements
(http://www.ccc.newcastle.edu.au/studentsupport/DisabilityResourceKit/overview%20a).
The approach and style of examination need to be changed, so that the student may be part of the examination process without feeling "accommodated".

There is a need to review courses to establish whether all compulsory activities and components are really essential to the particular qualifications. Situations have arisen where students are unable to comply with a specific compulsory aspect of a course due

to a disability, but the students have argued that this aspect is not one which will hinder them from working in that field after graduation. A flexible curriculum includes flexible teaching approaches, the use of appropriate technology, assistive devices, and other mechanisms to facilitate access to learners (http://www.ccc.newcastle.edu.au/studentsupport/DisabilityResourceKit/overview%20a).

Hampton and Gosden (2004), state that universities provide a competitive environment that in some way resembles the sporting field. But unlike the arrangements made for athletes with disabilities, for whom separate fields of competition are available, students with disabilities are required to enter into open competition with non –disabled students. To make this open competition fair, students with disabilities are provided with a range of accommodations to compensate. So to compensate, universities are required under the provisions of anti-discrimination legislation to make special concessions and accommodations for students with disabilities

(Nichols, www.canberra.edu.au/pathways/pap.).

2.15   STAFF DEVELOPMENT PROGRAMMES/CHALLENGES EXPERIENCED BY ACADEMIC STAFF

According to Wardle (2000, www.bath.ac.uk/learning-support/webb/wardle.html) some lecturers see teaching a diverse group as something they do as a matter of course, some with a commonsense approach and others seek to be more involved and informed. However, he believes that if more was done to support lecturers, the service to students would improve, especially for those who have high support needs.

Howell & Lazarus (2003:68) suggest that Higher Education institutions need to pay attention to the extent to which the academic curriculum is really accessible to all students. This requires commitment and awareness from lecturers themselves. It also

involves attention to academic planning and processes to evaluate and assess student performance. It is, therefore, imperative that academic staff receive the necessary support in the form of definite guidelines and policies on accommodations for students with disabilities from the institutions.

Wardle (2000, www.bath.ac.uk/learning-support/webb/wardle.html) outlines some of the challenges faced by lecturers in dealing with students with disabilities:

> Medical/deficit model of disability: lecturers sometimes experience difficulties in their interactions with persons with disabilities due to their perceptions of the meaning of disability. Lecturers, like the rest of the educational community, need to see the person as a person, not the disability, and also recognise that students are best qualified to assess their own needs;

> Disability awareness: most lecturers have no specific knowledge of disability, or think that disability is limited to overt physical disabilities only. Chafee and Sherr (1992) as cited by Wardle (2000) suggest that some lecturers cannot see the student as someone who can competently express his or her educational needs, and justifiably insist that those needs be met.

> Classroom management with diverse groups of students in multicultural or multilingual environment. If there is a hint, however, that the disability is being exploited for extra benefit, this may evoke unpleasant responses from both the lecturer and other students.

> Need to accommodate certain practical aspects of having a person with a personal assistant in the classroom eg a guide dog in the classroom.

> Knowledge of legislation about discrimination and equity: lecturers need to be made aware of how legislative changes regarding disabilities relate to classroom practice.

> Student support services: research indicated that the disability service was valued by lecturers. Many lecturers, however, tended to make referrals

solely to the disability service. Wardle(2000) is of the view that although it is important for students to be referred to the disability service to find out what services are available , it is also important for other student services to participate in supporting students. The support of students, therefore, can only be effective when there is a network of support, and an institution - wide commitment to it.

> Ignorance, fear and prejudice: concern for an extra workload are some reactions of lecturers. One comment from a lecturer who had a young woman with low vision in his class summed this up. When asked for assistance with course notes he said "if she tells me which overhead transparency (OHT) she needs, I will copy it for her." He did not read the OHT out in class, so how could she be able to identify it! (Wardle,2000:4)

Washington & Bruce (1999
www.deakin.edu.au/ncet/archives/information_and_orientation_guidelines.)

are also of the view that academic staff at universities are selected from amongst the highest performing people in research, academic studies and specific professions but, generally, they have no training in teaching except that which they have experienced as students themselves. The absence of ongoing in- service training of educators often leads to insecurity, uncertainty, low self esteem and lack of innovative practices in the lecture rooms. In learning to deal with diversity and meeting different needs among learners it is important to recognize that few lecturers at institutions for higher education have qualifications in education per se, and therefore require training in instruction or knowledge-transfer. The nature of teaching and therefore the capacity to meet different learning needs depend on the individual skills of the lecturers, rather than on knowledge-based skills acquired formally. The Department of Education confirms that there is growing realization of the need to equip lecturers with skills to facilitate learning more effectively, hence a number of institutions have initiated in- service courses for their teaching personnel (Department of Education, 1997:37) .

It is hoped that, through increased education and awareness training, staff will anticipate the need for adjustment of academic materials into a format that is most accessible to the individual student.

For this reason Armstrong (2002, www.humanrights.gov.au/disability-rights/education) states that it is important for staff to assess each student's needs on an individual level. The student knows best what works for them and what formats are most accessible

2.16 TECHNOLOGY

According to Banes & Seale (2004, wwwnew.techdis.ac.uk) one of the ways in which access to learning resources and teaching material can be facilitated is through the use of specialised technologies often called assistive technology.

The use of assistive technology, eg. audio-visual equipment, closed circuit televisions, Braillers, computer software for large print text and speech output varies amongst students. Technological advancements have led to the extensive use of the internet for accessing academic information. There is also the recent invention of electronic textbooks which will, hopefully, allow much easier access to alternative formats such as Braille, large print, speech programs as it should be a much simpler process to 'import 'the electronic text into different formats

(Armstrong, 2002, www.hreoc.gov.au/disability_rights.education/).

Cain & Orme (2001, www.warwick.ac.uk/ETS/interactions/vol5no3/Cain.htm) are of the view that training should be needs-based rather than system- based and it should focus on meeting the particular needs of the individual rather than introducing the user to the whole range of technical features of the device. Sometimes technology fails to deliver results owing to lack of training. Training is therefore important for the successful introduction of technology.

Adaptive technologies can make the library a more accessible place for students with disabilities. Lisieck (1999) found that the New Jersey Library for the Blind and Handicapped (NJLBH) offers audio recorded, Braille, and large print books to all New Jersey residents who are unable to read print because of a visual or physical disability. The most basic technology of voice output is books on tape.

2.17   CONCLUSION

It is not so much the disability which paralyses, but the thousand fold handicaps caused by society. It is not that one is disabled but that one is turned into a disabled person (Boylan 1991: 7). Globally there has been an increase in the number of students pursuing higher education in the last decade. This could be due to the changes in legislation which have made more services and support available to students with disabilities. Despite these changes, students with disabilities continue to be under-represented in higher education.

From the literature highlighting the challenges faced by students with disabilities it becomes evident that there is definitely a need for more public awareness and education programmes pertaining to the needs of students with disabilities. In order to provide a quality service to students with disabilities at tertiary institutions, academic staff development programmes focusing on disability should be an essential programme at all institutions. Just as there are Departments specific to Cultural Studies, African Studies, Gender Studies so too should there be a Department created specifically for Disability Studies. Although support services are now more accessible to students with disabilities in tertiary institutions there is still a prevalence of negative attitudes, and essential facilities and resources are lacking.

CHAPTER 3

ANALYSIS AND DISCUSSION

3.1 INTRODUCTION

This chapter contains the presentation and analysis of data of the study which focused on the academic needs of the students with visual impairments, both undergraduate and postgraduate students at UKZN (Westville Campus). In the analysis of this study, the information was obtained primarily from using an interview schedule that was administered to 16 students with visual impairments including both blind (9) and partially sighted (7) students. Altogether a total of 16 interviews was conducted, one with each respondent. The length of the interview ranged from 40 mins - 1 hour.

The data from the interview schedule was manually analyzed. The small number of respondents facilitated this process. The data analysis involved the following processes:

> ➢ Grouping the responses of the respondents according to the questions asked;
> ➢ Reviewing the data for identifying broad themes, commonalities and any significant individual comments;
> ➢ Drawing conclusions.

The themes arising from the interview schedule were as follows: demographic profile; support services; academic challenges; resources and suggestions to improve support services.

The research findings are presented in the form of tables, graphs, interpretations and discussions. The results of both blind and partially sighted respondents are presented together where possible. Sometimes, however, there was a need to discuss their particular responses separately as their experiences and challenges were peculiar to each of them.

3.2   DEMOGRAPHIC PROFILE

3.2.1   Age and Gender

Table 3.1 : Age and Gender

Age	Male	Female	Total	%
17-20	-	-	-	-
21-25	4	4	8	50
26-30	3	3	6	37
31-35	1	1	2	13
Total	8	8	16	100

The age distribution in relation to gender is shown in Table3.1. The sample was equally representative of both genders. Fifty percent (50%) of the respondents that were in the age range of between 20-25 were first entry level students.

Benshoff et al (1990) as cited in Neale (http://www.bath.ac.uk/learning-support/webb/neale.htm) undertook research that suggests that generally students with disabilities tend to be older than those without disabilities. University study may sometimes become an option later for people who acquire a disability. Difficulties dealing with the compulsory education sector mean that students with disabilities are not as likely to go straight on to tertiary education after secondary education. In addition the age of the respondents also indicates that some of them started their schooling late or they encountered delays and as a result they got to the university in their early twenties.

3.2.2 Marital Status

Figure 3.1. - Marital status
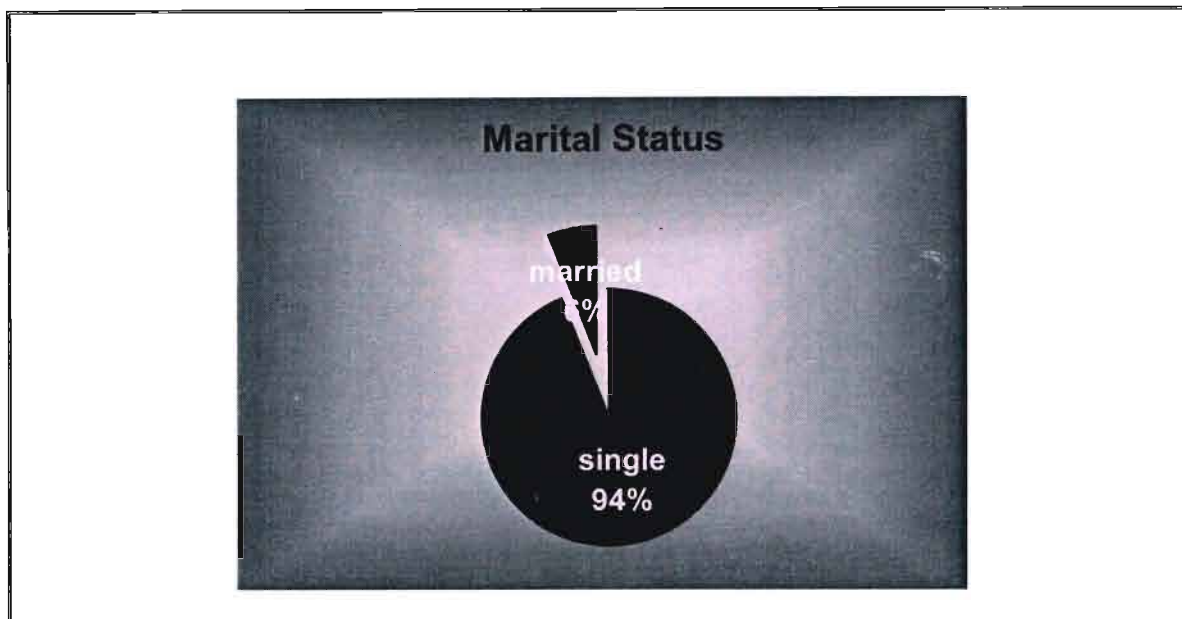
Ninety four percent (94%) of the respondents were single. Six percent of the respondents were married.

3.2.3 Secondary Schools

Table 3.2. : Type of Secondary school attended by the respondents.

School	Frequency	Percentage
Mainstream schools	4	25
Special schools :		
Open Air	2	13
Arthur Blaxall School for the Blind	5	31
Zamakuhle School	5	31
TOTAL	16	100

The respondents received secondary education both at special schools and at mainstream schools. Seventy five percent (75%) of the respondents attended special schools. The

facilities at these schools varied. One of the schools did not have basic facilities such as electricity. This impacted on their adjustment to the transition from secondary to tertiary institution. They were not exposed to computers or electric typewriters which are essential resources in tertiary institutions. Twenty five (25%) of the respondents with low vision that attended mainstream schools reported that they experienced tremendous difficulties in coping with their academic demands at secondary level. They did not have access to academic material in alternate formats eg. large print or audio recordings. However it was largely through their perseverance and assistance from staff, friends and family that they completed their secondary education. One respondent reported that he used to take down class notes during his lunch breaks as he had to be in close proximity to the blackboard to enable him to see the writing. All the respondents reported that the language of instruction in both the special and mainstream schools was in English.

3.2.4 Format of Academic Material in School

Table 3.3 Format of academic material in school

Format of academic material	Frequency	Percentage
Special Schools		
Braille	6	38
Audio cassettes	12	75
Computer (JAWS)- disks	-	-
Large Print	5	31
Mainstream School		
Standard Print	4	25

Thirty eight percent (38 %) of the respondents who learned to read Braille in school received their academic material in Braille as they were most comfortable with this format. Nineteen percent (19%) started reading Braille between the ages of six to eight years. One respondent started learning to read Braille at the age of fifteen years. She therefore had a preference for academic material in audio recorded format. Seventy five percent (75%) of the respondents received their academic material in audio cassettes and had sighted peers reading to them. Thirty one percent (31%) received their academic material in large print. Nineteen percent (19%) that attended mainstream schools did not have access to reformatted academic material. One of the respondents did not experience visual impairment in secondary school. It was therefore not necessary for him to use academic material in an alternate format.

3.2.5 Onset of visual impairment

Table 3. 4. : Age of onset of visual-impairment

Age	Frequency	Percentage
Birth	6	38
1-8yrs	5	31
9-12yrs	-	-
13-14yrs	2	13
15-18yrs	-	-
19-22yrs	3	19
Total	16	100%

The onset of visual disability varied amongst respondents ranging from birth to adulthood. Thirty eight (38%) of the respondents were born with a visual impairment. Sixty nine percent (69%) of the respondents (from birth to age 8) had visual impairments and this impacted on their early schooling. This partially accounts for the small percentage of students entering the tertiary institutions at a later age compared to normal sighted students.

Thirty one percent (31%) of the respondents experienced normal vision for a limited period. Thereafter they experienced visual impairment which ranged from partial sightedness to blindness. Nineteen (19%) of the respondents experienced the onset of the impairment between nineteen to twenty two years. The extent of the impact of the disability on a person's life is influenced by the degree of impairment, the age at which the impairment occurs and the person's range of experiences in early life. People who are blind from a young age may have only partial knowledge of many objects and ideas that people with normal vision take for granted.

(www.usq.edu.au/studentservices/disabilityservices/strategies/blind.)

3.2.6 Other Disabilities

Ninety four percent (94%) of the respondents reported that they did not have any other disability. One respondent had a finger amputated.

3.2.7 Causes of visual impairment

Table 3. 5 : Causes of visual impairment amongst the respondents.

Cause	Frequency	Percentage
Cataract	4	25
Glaucoma	4	25
German measles	1	6
Albinism	1	6
Kerataconus	1	6
Myopia	2	12
Other	3	18
Total	16	100

Blindness as a result of cataract and glaucoma accounted for fifty percent (50%) of the individuals interviewed. This is also supported by a study by Lewallen & Courtright (2001, www.nutrivit.org/ric/news/doc/blindness%20in%29africa2002.pdf) who stated that approximately half the blindness in Africa is due to cataract, and that glaucoma is also an important cause of blindness.

3.2.8   Registration at UKZN (1998-2004)

The respondents in this study were enrolled at (Westville Campus) from 1998-2004

Table 3.6. : Registration at UKZN :1998-2004

Year Enrolled	Year Of Study	Frequency	Percentage
1998	Honours	1	6
1999	Masters	1	6
2001	Honours/Postgraduate Diploma	2	13
2002	3rd year of study	1	6
2003	2nd year of study; 1st year of study - discontinued studies at end of first term.	2	13
2004	1st year of study	9	56
TOTAL		16	100

Twenty five percent (25%) of the respondents were enrolled for postgraduate studies. Fifty six percent (56%) of the respondents were in their first year of study.   One respondent, six percent (6%) discontinued his studies at the end of the first term. According to this respondent he experienced difficulty in coping with full time employment commitments, family responsibilities and academic demands.

3.2.9 Degrees Registered

Table 3.7. : Degrees registered for by respondents

Degree	Frequency	Percentage
UNDERGRADUATE STUDENTS :		
B.Acc	1	6
B.A.	8	50
B.A.Llb.	1	6
Sports Science	1	6
Speech & Hearing. Therapy	1	6
POSTGRADUATE STUDIES :		
Honours in Business Management	1	6
Postgraduate Diploma in Business Management	1	6
Honours in Human Resource Management	1	6
Masters in Public Health	1	6
TOTAL	16	100

Fifty percent (50%) of the respondents registered for the B.A. Degree. In 2004 one of the respondents enrolled for the speech and hearing therapy degree. This entailed major accommodations for both the student and the departments concerned eg. the respondent mentioned that the Department of Anatomy had the format of assessments changed to accommodate the student.

The academic performance of the respondents in postgraduate studies is shown below.

Table 3.8. : Academic performance of the 4 participants in postgraduate studies in terms of number of years spent on a degree.

Time spent in a degree	Frequency	Percentage
Spent the minimum specified number of years for their study	1	25
Spent an extra 6mths or one year than required for their level of study	1	25
Spent two extra years	1	25
Spent three extra years	1	25
TOTAL	4	100

A large percentage (75%) of the respondents who were blind spent longer than the expected number of years for the completion of their degrees. Some of the challenges that they encountered were difficulty in accessing academic material timeously, negative attitudes by some academics, teaching strategies adopted by some academics that excluded the involvement of students with visual impairments and assessments in some courses. This is also noted in www.dest.gov.au/highered/eippubs/eip03_7/2.htm that the problems that students with disabilities encounter in attempting their coursework and study demands have a substantial impact on whether they finish their studies within the specified time period.

3.2.10   Residence of Respondents

Table 3.9. : Residence of respondents

Accommodation	Frequency	Percentage
Residence (on campus)	12	75
Residence (off campus)	1	6
Home	3	19
Other	-	-
Total	**16**	**100**

Seventy five percent (75%) of the respondents lived at residence on the campus. Nineteen percent (19%) of the respondents stayed at home as they found this to be a more convenient arrangement. One respondent was forced to stay in the off-campus residence as he had registered after the allocation of rooms in the on –campus residences had been completed.

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3.3   SUPPORT SERVICES: (OFFICE FOR STUDENTS WITH DISABILITIES (OSD)

The UKZN (Westville Campus) has an office that provides academic support services to students with disabilities. The aspects explored in respect of OSD in this study included, utilization and accessibility of the services, resources and gaps in services.

Table 3.10. : Awareness of OSD Services by Students with Disabilities

	Frequency	Percentage
Prior to registration	9	56
Registration	6	38
Other	1	6
Total	**16**	**100**

Fifty six percent (56%) of the respondents became aware of the services during the pre-registration period, thirty seven percent (37%) during registration and six percent (6%) in their third year of study. Programmes are held during registration and on a regular basis thereafter with all campus stakeholders to create awareness of the services available at OSD.

Table 3.11. : Utilization of the services offered by the OSD

SERVICES	YES	NO
Personal Counselling	75	25
Career Counselling	75	25
Application for financial aid (bursaries)	100	
Volunteer services	69	31
Lifeskills training	63	37
Computer training	75	25
Note taker services	63	37
Liaison with faculties, departments, library, etc.	100	
Co-ordinate examinations	100	

Based on the above responses it is evident that students with visual impairments who were aware of OSD made extensive use of the services. All (100%) the respondents sought the services of the OSD with regard to liaison with both academic and non-academic departments and bursary applications. Sixty three percent (63%) of the respondents utilized the notetaker services which is a needs-based service. Ninety percent (90%) of the respondents sought the services of the OSD with regard to the reformatting of notes.

It was encouraging to note that all the respondents (100%) evaluated the services of the OSD as being good. They, however, identified a few inadequacies in the services of the OSD. One of the inadequacies identified was the limited communication between the OSD and other stakeholders, faculties, schools and departments. The respondents noted

that they were sometimes confused as there was inconsistency amongst the stakeholders on the ways in which their needs were addressed. Washington & Bruce (1999, www.deakin.edu.au/ncet/archives/information_and_orientation_guidelines.) assert that the majority of academic staff have had little experience in working with students with disabilities and are often not aware of the role of disability support workers. However with appropriate support services, many students can follow the curriculum with adaptation of learning resources or instructional methods. When necessary, however, the curriculum should be modified to cater for individual needs. (www.bced.gov.bc.ca/specialed/ppandg/planning_10.htm).

3.4 CHALLENGES

All the respondents stated that they experienced problems in addressing their academic needs as a result of their visual disability. According to Oduntan (2003:) visual disability has a profound effect on the daily activities, vocational and avocational activities of an individual. It may also dictate these and other aspects of one's life. The needs of students vary greatly depending on each person's individual impairment and personality (answd.blogspot.com/2004_06_01_answd_archive.html).

It is important to remember that students with visual impairments have unique needs. The unique educational needs created by a visual impairment may be summarized as follows (http://wiu.k12.pa.us/VisuallyImpaired.html).

> Students with visual impairments often require individual instruction since instruction for learning-specialized skills may not be provided in a meaningful manner;

> Students with visual impairments often need adapted skills such as specialized books, materials and equipment for learning through alternate modes;

> Students with visual impairments are limited in acquiring information through incidental learning since they are often unaware of subtle activities in their environments.

According to Armstrong (2002, www.humanrights.gov.au/disability-rights/)

each student requires their current situation and future needs to be reviewed on an individual basis with it being noted that one student may require multiple forms of adaptive technology and alternative formats such as Braille and audio or hard copy large print and electronic text.

Some of the challenges experienced by the respondents were:

3.4.1 Access to academic material

Access to academic material appeared to be the greatest challenge reported by all the respondents. They reported that the greatest difficulty and frustration in coping with their academic demands was the difficulty in accessing academic material timeously. This was often due to the delays by some of the lecturers in furnishing either them or the OSD with the required academic material. Some respondents reported that they felt humiliated when they had to repeatedly ask a lecturer for academic material. In addition they also experienced delays by the OSD in reformatting academic material. This was due to the limited human resources at the OSD.

The major challenge facing blind students in tertiary institutions is the mass of printed material they encounter –textbooks, class outlines, schedules, tests, films, videotapes (www.svsu.edu/stuserve/disserv/visual.html).
Generally by the time students with visual impairments reach tertiary level (unless loss of vision is recent), they have probably developed their own strategies/ methods for dealing with the volume of visual materials. It is therefore helpful for the lecturer and student to meet before the semester starts to review the student's methods and needs (www.svsu.edu/stuserve/disserv/visual.html).

In respect of the attitude of lecturers and other staff, all the respondents stated that they experienced varied responses ranging from over helpful to unhelpful. Some respondents felt intimidated by the negative attitude of some lecturers. They felt that they were discriminated against in various ways. Thirteen percent (13%) of the respondents

reported that a lecturer embarrassed them in the presence of their entire class by threatening to deregister them because they did not receive their reformatted notes in time.

All the respondents reported the problems that they experienced in receiving academic material especially the copies of transparencies only after the completion of a section. This gave them limited time to prepare for tests and examinations. They experienced difficulty in following the lecture as they could not read the contents of the transparencies on the overhead projector. Some lecturers wrote on the board with little or no consideration for the visually impaired students. They also did not read the contents for the benefit of these students. All students need quality teaching to perform at their optimal level as learners (www.dest.gov.au/highered/eippubs/eip03_7/2.htm). Studies by Shunmugam (2002), Oduntan (2003) and Crous (2004) which explored some of the barriers experienced by visually impaired students in tertiary institutions also revealed that students with disabilities at other tertiary institutions experienced similar problems in accessing academic material.

Armstrong (2002, www.humanrights.gov.au/disability-rights/) noted that having to deal with inaccessible study materials and even having the inevitable time delay in acquiring them often challenge a student's psychological well-being in that they are more prone to stress and anxiety over and above the general anxiety of adapting to a tertiary education system. He stated further that not having access to tertiary materials in an appropriate format had repercussions reaching far beyond those of academic performance. The time required organizing, negotiating and occasionally compromising in the pursuit of accessible materials curtails the amount of time left for a student to participate in other facets of tertiary life.

Payne (2002, www.adminutas.eduau/academic/acservice/meeting/talc/Appendix/60201.) also noted that when provided with information in the appropriate format the students with disabilities are able to study as effectively and independently as other students. Without timely access, however, students are not able to participate effectively and to

meet assessment time-lines. While extensions to time-lines are often provided because materials are unavailable this often compounds the problems for students who are then completing assignments at the same time as they are preparing for examinations.

The respondents, who were partially sighted (66%), also felt that they were discriminated against as most academic departments failed to provide them with the course packs in large print. These students incurred additional expenses in photocopying these course packs. They sometimes experienced difficulty in photocopying in view of their visual disability. It is also noted in the Disability Discrimination Act Part 4 Learning and Teaching Good Practice Guide (http://www.skill.org.uk/info/), that discrimination against applicants or students that have a disability can take place in either of two ways, by:

> ➢ treating them "less favorably" than other people, or
> ➢ Failing to make a "reasonable adjustment" when they are placed at a "substantial disadvantage" compared to other people for a reason relating to their disability.

Ninety percent (90%) of the respondents who were partially sighted stated that sometimes they had to try to convince their lecturers and other staff that they had a disability. This was often a very painful and humiliating experience. One respondent commented that "the blind students were better of" as people were sympathetic towards them. The respondents perceived that many of the staff at the university lacked a thorough understanding of the needs and capabilities of students with a visual impairment. They stated that many of the lecturers did not know how to deal with students' visual impairments. French (1993 :70), a partially sighted physiotherapist, reported that she experienced similar problems of disbelief.

> By denying the reality of my disability I protected myself from the anxiety, frustration, disapproval and disappointment of the adults in my life. Disbelief remains a common response of able-bodied people when we attempt to convey the reality of our disabilities.

She stated that sometimes partially sighted students would say that they can see although they can't. This tendency to disbelief is exacerbated by the ambiguous nature of impairments such as partial sight. It is very hard for people to grasp that although persons who are partially sighted appear to manage "normally" in many situations, they need considerable help in others.

In addition to academic material all the respondents stated that they did not have access to university notices in an alternate format. They were therefore dependent on their friends to update them on current university news. Sometimes they failed to receive important information regarding issues that affected all students.

3.4.1.1 Special Considerations by Lecturers
The respondents discussed the following special considerations made by some lecturers:
- sometimes gave them copies of notes / OHP;
- photocopied certain texts-bigger font size ;
- Read out questions in worksheets ;
- Gave worksheets in bigger font size;
- Allowed to do a project with a partner even if it was an individual project
- Explained the contents of the OHP;
- Read out what is on the board .
- Produced academic material in advance ;
- Provided lecture notes;
- Arranged for special consultation times;
- Explained diagrams.

There was an inconsistency in the manner in which lecturers responded to their particular needs. As noted in the literature review, with regard to alternate teaching methods, examinations and assessments, staff were sometimes unsure about where and how to draw the line between what is or is not an acceptable adjustment for students with disabilities. It is important for lecturers to remember that these students are first and foremost students. All students are motivated to attend an educational institution for the

same reason. They want freedom of choice, intellectual satisfaction and career opportunity. Students with disability do not want o be singled out by discrimination or over protection. They just want a 'fair go' like everybody else

(www.ccc.newcastle.edu.au/student-support/DisabilityResourceKit/Overview%20of...).

3.4.1.2 Most pleasant experience with a staff member

Sixty percent (60%) of the respondents identified the Disability Co-ordinator as being the person they had the most pleasant experience with on the campus. The following comments were noted :

- ➢ assistance with admission at the university "she made it possible"
- ➢ "she goes out of her way to help students"
- ➢ "we are treated with respect"
- ➢ "assistance with bursary application"
- ➢ "liaison with other departments"

Twenty five percent (25%) of the respondents reported their interaction with the student assistants as being the most pleasant experience ,viz

- ➢ "staff at OSD are always encouraging- they give you hope"
- ➢ OSD staff member "assisted with accessing academic material"
- ➢ Student assistant "attended a course with her"
- ➢ OSD staff are understanding

Twelve percent (12%) of the respondents reported their experiences with the lecturers as being most pleasant. They noted the following:

- ➢ Lecturer asked her "how she is coping with a test"
- ➢ Lecturer "explained each transparency to him"

3.4.1.3 Most unpleasant experience with a staff member

The following was noted as the most unpleasant experiences with staff members:

- ➢ Lecturer did not make special arrangements for him to write a test by reformatting the question paper;

- Lecturer embarrassed her in the presence of the whole class for not taking down notes;
- Lecturer embarrassed them in class by threatening to deregister them;
- Lecturer embarrassed respondents by expressing disbelief about disability;
- Oral test was imposed on the respondent whilst the rest of the students were given a written test.
- Examinations department did not make arrangements for a scribe to assist respondent even though prior arrangements were made.
- Invigilator insisted that student use a grid which was not reformatted to answer questions.
- Lecturer asked her friend in her presence to convey a message to her as if she was unable to hear "tell your friend that she has to hand in her assignment by the end of next week."

According to Holden (www.ksu.edu/dss/visualim.inf) the visually impaired frequently encounter problems in college which are not academically derived but rather have to do with interpersonal relations. Visually impaired students are often treated as less than human. People may talk about them in their presence as if they are unable to hear. Beilke & Yssel (1999,www.findarticles.com/p/articles/mi_Mofcr/is_3_33/ai_628394444) found in a Midwestern university study investigating students with disabilities perceptions of faculty members' attitudes, that students often found faculty willing to make instructional accommodations, but encountered a less than positive classroom climate .

Nichols (http://www.canberra,edu,au/pathways/pap...) is of the view that the most important ongoing requirement is the establishment and maintenance of mutual respect between the learner with the disability and the educational or training institution and its staff. Students should be enabled to maintain their personal dignity and should not be exposed to ridicule, harassment or other inappropriate treatment because they need to have certain accommodations to be successful in reaching their goals. They should not

be obliged to keep offering proof that they still have disabilities or that they still need to be accommodated , although clearly the onus of disclosure and self-advocacy is on them.

Wardle (2000, www.bath.ac.uk/learning-support/webb/wardle.html) in his study on how lecturers deal with students with disabilities concluded that lecturers find it difficult to cope with the needs of students because of a lack of knowledge, and a view that the problem is located in the individual student, rather than in the way education is structured.

3.4.2 Examinations

Although all the respondents acknowledged the accommodations made by the university with regard to extra time, reformatting of examination question papers and sometimes changing the structure of the question paper to accommodate their specific needs and the use of scribes, they generally experienced frustrations and felt discriminated against during tests and examinations. Discrimination as discussed in the Disability Resource Kit means imposing a condition or requirement that, although it is the same for everyone, unfairly excludes or disadvantages a person with a disability.
(http://www.ccc.newcastle.edu.au/student-support/DisabilityResourceKit/)

Test-taking posed a challenge for most students. The students' needs vary greatly depending on the disability and type of test that is administered. However for students with disabilities test-taking presented insurmountable obstacles (www.washington.edu-doit-faculty-strategies-academic-testtaking. One respondent reported that he felt helpless when an invigilator refused to believe that prior arrangements were made with the examinations department for him to use a scribe for a multiple choice examination. This paper required reading 100 questions which was a strain on his eyes. Another student who is partially sighted student reported that he felt traumatized when an invigilator insisted that he uses a grid to enter his answers. He experienced difficulty in identifying the lines in the grid. He felt strongly that he was being discriminated against and insisted that the examiner mark the question paper on which he had ringed the answer. This request was acceded to by the examiner. Thirteen percent (13%) of the respondents who

are blind related unpleasant experiences in preparing for tests and finding out on the day of the test that the lecturer had forgotten to make the necessary accommodations.

All the respondents (100%) who were blind expressed strong emotions about the frustrations and insecurities they experienced during examinations when using computers with the specialized software. They related unpleasant experiences of losing documents and losing their train of thought when the computer shut down on its own during the course of the examination. They felt that the university should provide better and more reliable computer facilities for them. Their results would then be a true reflection of their academic ability.

Students are the best source of information about strategies that work for them. As noted in the following website (www.washington.edu-doit-faculty-strategies-academic-testtaking)

Typical test- taking accommodations for students who are blind should include:
> readers and /scribes;
> audiotape tests;
> extended test-taking time;
> tests in computer format to allow the conversion to speech output;
> tests in Braille.

Typical test-taking accommodations for students with low vision include:
> Alternative test locations if lighting is problematic;
> Enlarged print text;
> CCTV (closed circuit television) to enlarge the print and graphics.

3. 4.3 Environmental problems

Students with visual impairments sometimes experienced problems with mobility on the campus. Some of the difficulties they experienced were:
> construction on campus without danger warning signs;

> obstacles on the pathways such as cars, dustbins;

> tree branches not trimmed and;

> students sitting at the entrance to buildings

> seating at the back of the lecture venue

3.5   RESOURCES

3.5.1   Assistive Devices

Table 3.12. : Assistive Devices   and the number of respondents who use each device.

Device	Blind	Partially sighted	Percentage
Braille	6		38
Typewriter	7		44
Large print	1	7	50
Audio tapes	9	7	100
Computers-JAWS	9		56
Computer -zoom text	1	7	50
Scanner (with assistance)	8	2	62

"Assistive devices" refers to equipment or adaptation that is required by some learners to access the curriculum and participate in the effective process of learning (Department of Education: 1997). A large percentage (94%) of the respondents used Braille, typewriter, audio tapes, computers with JAWS, and the scanner. The students, however, do not have direct access to a scanner and the Braille printer because only the staff at OSD are allowed to access this equipment.

The assistive devices utilized by students were based on their individual needs and preference. It was not a case of "one size fits all". It was found that reading and writing are often much slower processes for people with visual disabilities. Extra time may be needed to use the necessary aides such as magnifiers. (www.usq.edu.au/studentservicess/disabilityservices/strategies/blind.htm)
Students who are partially sighted used academic material in a large print. However the font size varied depending on the intensity of their eye condition.

3.5.2 Library

All the respondents utilized the facilities at the library. They, however, reported that the non availability of academic material in either Braille or large print posed a problem for all of them. They always had to depend on student assistants and their peers to assist them to read and access material from the library since the library did not have identified members of staff to provide special assistance to them. They felt strongly that the library should have a designated member of staff to assist. Another limitation identified by respondents is that the library does not have textbooks in electronic format.

3.5.3 Computer laboratory

All the respondents utilized the resources at the computer laboratory. Fifty percent (50%) of the respondents with low vision reported that the computer laboratory had limited resources for their use. The blind students reported that they experienced great frustrations and anxieties with the technical problems that they encountered with the computers with specialized software. They were happy with the relocation of the computer laboratory to the library. The absence of an in-house structured training programme and trained technical staff familiar with the specialized software often created feelings of inadequacy and insecurity. This in turn impacted on their academic performance.

Caine & Orme (2001 www.warwick.ac.uk/ETS/interactions/vol5no3/Cain.htm) also noted that technology can be used by visually impaired students to take advantage of learning opportunities in higher education. However technology often fails to deliver

results due to lack of training, so training is vital to the successful introduction of technology.

3.5.4 . Mentors

Table 3.13 : Benefits of the Mentorship Programme

Benefits of the mentorship programme	frequency	percentage
Academic guidance	12	75
Adjustment at university	4	25
Total	**16**	**100**

All the respondents stated that they benefited from the mentorship programme. Seventy five percent (75%) of the respondents benefited from their academic guidance and the other twenty five percent (25%) benefited only in their input in respect of their adjustment at university.

3.5.5 Peers

All the respondents reported that they received extensive support from their peers. They often engaged in group studying which gave them the opportunity to share ideas and increased their understanding of the subject material studied. Sometimes the respondents depended on their peers to read to them thereby gaining access to academic material. Eighteen percent (18%) of the respondents were selected to participate in the peer education programme.

3.6   SUGGESTIONS TO IMPROVE SUPPORT SERVICES

The respondents made the following suggestions to improve services for students with visual impairments at the UKZN (Westville Campus)

> ➤ Books with large print and Braille in the library;

- ➤ Invigilators informed in advance of adaptations /reasonable accommodations for students with disabilities;
- ➤ Students to have access to scanners – they can sometimes access material on their own;
- ➤ Access to a photocopier;
- ➤ Books in electronic format;
- ➤ A designated assistant at the library to assist students with disabilities in accessing information;
- ➤ In-house Computer training programme for students with visual impairments;
- ➤ Workshops and awareness programmers with members of the university community - to improve their understanding of the needs of students with a visual impairment;
- ➤ Library should have a facility to Braille reading material;
- ➤ The development of a system to ensure that students get their academic material timeously;
- ➤ Study room with facilities (plug points, soundproof) at both residence and library;
- ➤ Work-study programmes to include students with disabilities-to give them the opportunity to gain work experience;
- ➤ The IT Department to have trained technicians familiar with the specialized software;
- ➤ The computer laboratory to have a full time technician to provide support and assistance to students with a visual impairment.

According to the philosophy of the Independent Living Institute,

> people with disabilities are the best experts
> on their needs, they need to show the
> solutions they want, they need to be in
> charge of their lives, think and speak for
> themselves - just as everybody else.
>
> (,www.independentliving.org/LibArt/ADA.gaps.html)

In accordance with this philosophy the respondents in this study have made several suggestions as to how to improve services focusing on issues of awareness, resources, teaching strategies and other inadequacies in services.

The provision of adequate resources would enable students with disabilities to be independent and self sufficient. This would be in accordance with one of the objectives, 3(e) of the UKZN Policy on Students and Staff with Disabilities,

> encourage and assist students and staff with
> disabilities towards independent living in a
> manner that ensures dignity, self sufficiency
> and responsibility.

It should also be noted that in Crous's study (2004: 244), a large number of the students in his sample requested that all study material and other documentation should be made available in Braille, on audio and videotape (where applicable), and on CD-ROM or the internet. In addition, examples of requests and recommendations in this regard included the following, "Audiotapes should have deep indexing to indicate page numbers"; All printed matter should always be in "large print nicely spaced" and it should be "dark black on white". One of the students recommended that the university should try to obtain disk copies of prescribed books for the sole use of disabled computer users who cannot read the printed books.

3.7   SUGGESTIONS TO IMPROVE UNDERSTANDING OF UNIVERSITY COMMUNITY.

The respondents made suggestions on how to improve the understanding of the university community of the needs of the students with visual impairments.

Some of the suggestions made were viz.

> ➢ Visually impaired students to be involved in the awareness programmes- to discuss their experiences and challenges;

- ➤ Devise programmes with lecturers on orientation and mobility of students with a visual impairment;
- ➤ Hold workshops on teaching strategies;
- ➤ Engage in disability awareness programmes with the staff at residence;
- ➤ Prepare workshops to dispel the myths on disability;
- ➤ Commit sports programmes to include students with disabilities;
- ➤ Ensure that university notices are in Braille and large print;
- ➤ Disseminate information bulletins on disability services to sighted students at registration;
- ➤ Ensure that students with visual impairments are allocated individual rooms at residence.

Vancil (1997: 23) supports the last suggestion; he also stated that having a roommate was a problem when you have a visual impairment. Some of the difficulties that he experienced/ identified in having a roommate were viz.

"I needed a quiet place to listen to books on audio tape, hear the speech synthesizer on my computer, meet with a reader, not have my belongings removed". Therefore the need for a single room.

Active involvement of people with disabilities in educational and civil life on all levels expands our awareness of how those outside the mainstream live. This allows our communities to be more thoughtfully inclusive of all difference. (http://www.independentliving.org/LibArt/ADA .gaps.html)

3.8   OTHER COMMENTS

Employment

Seventy five percent (75%) of the postgraduate respondents expressed their frustration and disappointment in their prospects of securing employment. They stated that although there is legislation in place they did not see the implementation in practice in the open labour market. Thirteen percent (13%) of the respondents were employed as switchboard operators on a contract basis at the institution. Of the four postgraduate students, one

chose to continue with postgraduate studies immediately. The other three embarked on postgraduate studies after failing to secure employment. Embarking on postgraduate studies was not a financial burden to these respondents as they received substantial bursaries from the Department of Labour.

3.9   CONCLUSION

In the context of this study the respondents were given an opportunity to evaluate present practices and make suggestions on how to address the inadequacies in services. From the analysis of the data it is evident that access to academic material timeously, negative attitude of some lecturers, implementation of accommodations at examinations and limited technological resources were the major challenges experienced by the respondents.

CHAPTER 4
CONCLUSIONS AND RECOMMENDATIONS

4.1   INTRODUCTION

This study highlighted the challenges faced by students with visual impairments from adequately achieving their academic goals. Respondents were given an opportunity to become involved in the process of evaluation, planning and bringing about changes in the services that directly affected them. It is further hoped that the findings of this study will increase the awareness of members of the university community of the needs of students with visual impairments. The data analyzed in this study was obtained from an interview schedule that was administered to sixteen students of UKZN (Westville Campus) with varying degrees of visual impairment.

From the findings of this study it is evident that students with visual impairments at the Westville Campus were experiencing barriers in achieving their academic goals. Some of the major challenges were access to academic material, limited human and technological resources, implementation of accommodations at examinations and the negative attitude of some members of staff. This chapter outlines the main conclusions of the study, followed by recommendations.

4.2.   Support Services – Office For Students With Disabilities (OSD)

The issues covered included utilization and accessibility of the service, resources and inadequacies in service that were identified by the respondents. Although all the respondents evaluated the services of the OSD as being beneficial they identified a few deficiencies in the services. The major challenges they identified were inadequate human, material and technological resources.

The OSD presently has only two permanent members of staff. In addition it utilizes the services of five student assistants who are employed on a contract basis. This entails a loss of trained and skilled assistance as new student assistants have to be trained

annually. The students with visual impairments have to be constantly re-orientated to the newly appointed student assistants.

There were limited technological resources available at the OSD. This often resulted in a delay in the reformatting process. Presently there is only one Braille Printer which is over utilized sometimes resulting in its breaking down completely. This causes a backlog and further delay in the reformatting process. In addition the absence of specialized software for the scanner resulted in extensive editing that had to be undertaken in the conversion from printed material to alternate formats. This contributed to a further delay in the reformatting process.

Feedback from respondents indicated that there was inconsistency in responses by various stakeholders in addressing the needs of students with visual impairments. Although all stakeholders were invited to education and awareness programmes on disability related issues, not all made themselves available to attend. This resulted in varying degrees of understanding of disability and the accommodations and inclusive practice necessary for students with disabilities; some staff acknowledged the challenges faced by students with disabilities, whilst others were ignorant of their needs.

Recommendations:
- The university management needs to address the issues of human resources at OSD by making provisions for a permanent staff structure. Shunmugam (2002) and Oduntan (2003) also support the need to ensure that there is sufficient staff to deal with the issues of assisting students with visual impairments;
- Apart from student assistants the OSD should have permanent members of staff to ensure an uninterrupted service to students with disabilities;
- It is further recommended that there is an increase in the number of assistive devices to adequately meet the needs of students with disabilities. Oduntan (2003) also supports this recommendation that funding and support should be made available to address the need for more assistive devices.

4.3. Accessing Academic Material

All the respondents expressed their frustrations and difficulties in accessing academic material in alternate format timeously. These delays resulted in their studying under pressure as they had limited time to prepare for tests and examinations. These findings were similar to the studies done locally and internationally (Shunmugam2002; Crous 2004; Oduntan 2003; Armstrong 2002.) According to Shunmugam (2002:63) the delays and limitations experienced in accessing academic material suggested that there is a lack of integration and inclusion of students with visual impairments in the activities of the university.

Wardle (2000, http://www.bath.ac.uk/learning-support/webb/wardle.html), as cited in the literature review, found that in many instances the student knows what is needed to be able to succeed; it is the lecturer who has a problem. This often results in a breakdown in communication between student and lecturer.

In addition all the respondents reported that they did not have access to university notices on academic matters in alternate formats. They had to depend on the goodwill of friends to inform them of the existence of these notices and thereafter read to them. This put them in a compromising situation as they sometimes had to miss out on important information eg. deadlines for change of curriculum etc.

Recommendations:

- The reformatting of academic material to be made available timeously through co-operation by academic staff;

- The academic staff to make available hard copies of transparencies to students with visual impairments prior to the commencement of a new aspect of study material;

- Academic material sent to the OSD for reformatting should be of a high quality print as this would facilitate and expedite the reformatting process.

- Academic departments should include a budget for addressing the special needs of students with disabilities.

- Academic staff should make themselves readily available to students with disabilities to discuss the challenges that students experience in accessing academic material;

- The OSD in collaboration with students should arrange education and awareness workshops on the academic needs of students with visual impairments for academic and non academic staff. This would help the staff to have a better understanding of the needs of students with visual impairments and the accommodations they require to access academic material. This recommendation is supported by Shunmugam (2002), Oduntan (2003), and Crous (2004) in their studies at local universities;

- The teaching staff should provide reading lists well in advance of the beginning of a term. This would give the OSD and the students concerned an opportunity to work in advance of the academic programme thereby enabling them to access the academic material at the same time as their sighted peers.

- Public Affairs and all other stakeholders /departments to make all university notices available in alternate format eg. Braille, large print and electronic media.

4.4. Examinations

Although all the respondents acknowledged the accommodations made by the university for tests and examinations, many respondents (50%) reported that they experienced feelings of frustration, anxiety and stress when their needs were not adequately accommodated by the examination department. In addition some of the respondents, twenty five percent (25%) felt disadvantaged with some of the assessment methods utilized, eg. open book examination.

The respondents, thirty one percent (31%) who used computers for examinations reported that they experienced feelings of insecurity and inadequacy which affected their

concentration levels when they encountered technical problems with the computers during tests and examinations on more than one occasion. Their results were therefore not a true reflection of their academic ability.

As discussed in the analysis, test taking can present insurmountable obstacles for students with visual impairments. Many of the respondents reported that their needs were not adequately accommodated by the examination department. Students' requirements may vary from one type of environment to another eg. a student who manages well in a multiple-choice examination with additional time, might require significantly more time for an essay type examination.

Recommendations:

- The OSD arranges specific training programmes on the needs of students with disabilities with invigilators;

- The examination department should inform invigilators of the needs of students for a particular paper prior to the examinations;

- The technological aides used in examinations eg computers with specialized software should be regularly upgraded. The technicians at the IT Department should be familiar with specialized software used by students with visual impairment eg. installation of specialized software;

- The examination department should adhere strictly to the recommendations made by the OSD in addressing the needs of students with disabilities during examinations. Should the department, however, experience difficulties in making certain accommodations, the OSD is to be informed timeously so that alternate arrangements can be explored with the student;

- Examination results should be available to students with visual impairments in alternate format, viz. Braille, large print etc.;

- Assessment methods be flexible, dependent on the needs of the student. If a lecturer is in doubt he/she should liaise with a student to ascertain how he/she might be able to do specific aspects of an assessment most effectively;

- Academic staff should ensure that assessments appraise the essential skills or knowledge needed for the module and

- Examination papers be presented in alternate format eg. Braille, audio recording. Examination papers may need to be printed on coloured paper to avoid visual processing difficulties.

4.5.   Technological Resources

All the respondents reported that there was a lack of adequate technological resources eg scanners with specialized software and limited facilities for students with visual impairments at the Westville Campus. As a result the respondents were dependent on the OSD to make available all academic material in alternate format. This dependency reflects an adherence to the medical model as discussed in the literature review in that it limits the respondents' opportunities to be independent/self sufficient. In addition the respondents did not have access to in-house training programmes. This therefore limited the use of the existing equipment.

Recommendations:

- The IT Department should provide adequate technological resources to enable students with visual impairments to access academic material independently eg. scanner with specialized software;

- The IT Department, in collaboration with the OSD, should provide in –house computer training for students with visual impairments. The university policy should be underpinned by the fact that the training of students with visual impairments is needs-based rather than system-based.

- The staff at OSD should be trained to assist students with visual impairments in the use of specialized equipment eg use of scanner to enable them to scan their own notes.

4.6. Library Services

All the respondents (100%) stated that they often experienced difficulty in accessing academic material at the library. Some of the difficulties included

- locating books, journal articles etc.;
- absence of a designated staff member to assist students with visual impairments, and
- textbooks not available in alternate format eg. Braille, large print.

Thirty one percent (31%) of the respondents who used audio tapes to access academic material experienced difficulties in studying at the library in view of the absence of soundproof study rooms.

Recommendations:

- A digital library should be developed so that students with visual impairments can access academic material in an electronic format. This will also help expedite the reformatting process. Shunmugam (2002) and Crous (2004) also made similar recommendations in their studies;
- The library should identify at least one designated member of staff to provide support services to students with visual impairments eg. to locate books, journals etc.;
- The library should ensure that there are soundproof study rooms in the library;
- Library and information resource staff can assist by providing extended loan periods.

4.7. Attitude of Staff

The respondents noted that their contacts with academics ranged from unhelpful to very helpful. Respondents often experienced feelings of humiliation and insecurity by the negative attitudes displayed by some of the academics. This was evident by the delays experienced by respondents in accessing academic material. In addition, twenty five percent (25%) of the respondents who are partially sighted had to try and convince the lecturers that they, in fact, did have a disability. The perception of the respondents is that academics did not have an understanding of the needs of students with disabilities.

Negative attitudes are one of the greatest hurdles people with disabilities face when trying to access mainstream programmes (Office of the Deputy President, 1997).

Recommendations:

- The OSD, in collaboration with students with disabilities and other specialists eg. educators from the Arthur Blaxall School and mobility instructors from Kwazulu - Natal Blind and Deaf Society should conduct education and awareness programmes with all members of staff regarding the needs of students with visual impairments. These programmes should also include a component on teaching strategies as academic staff can play an important part in supporting students with disabilities by modifying teaching techniques. Some of the aspects to be included in teaching strategies and assessments are:

  - The lecturer to provide reading lists or module outlines in advance to allow time for arrangements for taping or brailling of texts to be made.

  - In cooperation with the Disability Co-Ordinator the lecturer can assist the student in finding readers, note-takers or tutors, as necessary, or pair the student with a sighted student or laboratory assistant.

  - In addition to ensure that information is received in appropriate formats –enlarged copies of the required size, brailled information or audiotapes-for all important and current information ought to be prepared.

  - Reserve front row seats for low –vision students.

  - Ensure that students with visual impairments are notified of organisational changes in an appropriate way eg notices in large print. It would be difficult for a student with a visual impairment to locate a lecture room if it was changed at the last minute.

    The lecturer should during lectures:

    a) Face the class when speaking.

b) Identify themselves by name, in case the person does not recognise the voice.

c) Indicate verbally when they are entering or leaving the lecture room.

d) Convey orally whatever they have written on the blackboard or shown on overheads

e) Ensure that objects are not to be moved from their usual places without letting the affected person know.

f) Keep corridors or lecture rooms clear of objects

g) Provide alternative means for students to register for tutorial groups.

h) Be flexible with assignment deadlines.

i) Vary their presentation methods and teaching strategies

j) Provide students with lists of new technical terms and give oral and written instructions

k) Ensure that course material is of good print quality as this can help reduce the time taken to transfer the material to alternate formats.

l) Advise students with print handicap about the most relevant course material, as it is not always possible to transcribe all recommended reading material in a course.

m) When necessary, arrangements be made for students to use a reader or writer eg. Multiple choice questions (100 questions) for a student who uses the format of audio recording.

n) If in doubt ask a student how he/she might be able to do specific aspects of an assessment most effectively.

o) Describe, in detail, visual occurrences or chalkboard writing.

p) Have tactile 3Dmodels, raised line drawings, or thermoforms available to supplement drawings or graphics in a tactile format when required.

- The OSD, in collaboration with the lifeskills officer, to arrange further lifeskills training on assertiveness and self advocacy for students with disabilities to empower them to approach staff on issues that directly affect them. Respondents sometimes felt intimidated by members of staff.

- The Skills Training and Development Department should consider providing disability training as part of induction and development programmes for all staff, including part-time and contract staff. The institution should ensure that training programmes are flexible enough to allow specific training on working with students with particular disabilities to be made available to individual staff when the need arises. eg .designated time for staff development should be created.

4.8. General Recommendations

- The university's school liaison office in collaboration with the OSD should provide information on admission procedures and criteria to feeder schools as this would avoid disappointment and wrong expectations at enrolment. Shunmugam (2002) adds further that orientation programmes should be held with both grades11 and 12 at these schools.

- The OSD in collaboration with the department of student records and admissions to compile a resource index that would provide students with the necessary information on the resources and services available at the Westville Campus during registration. Sections within the index to include: Admission and enrolment procedures, reasonable accommodations, library services, emergency procedures, social and sporting activities, contact telephone numbers etc.

- Students with visual impairments across the campuses at UKZN should establish a forum. The purpose of the forum would be to provide current and prospective university students who are blind or partially sighted and tertiary education staff

with an opportunity to discuss issues of concern relating to educational support services. The forum will also deal with issues related to the availability and use of new and emerging adaptive and generic technology for persons who are visually impaired (www.progsoc.uts.edu.au/lists/dmail/1998/05/mns00017.html). In addition the forum will help to establish uniformity of services and procedures across the campuses.

- Individual assessments of students with disabilities are conducted by health sciences eg. optometry, occupational therapy to determine reasonable accommodations, as student needs differ widely. This would reduce the risk of stereotyping.

- In order to integrate persons with disabilities into the academic mainstream, all faculties should include in their brochures /information bulletins – a brief outline / statement of support services available to students with disabilities in alternate formats.

- At the beginning of each semester a meeting should be held with the OSD and the students concerned with the faculty /department to set in place conditions or reasonable accommodations prior to the commencement of the semester. This would ensure a comprehensive support programme for the student with a disability.

- The academic departments should have a special budget to address some of the academic needs of students with disabilities eg. photocopying of transparencies or course packs in large print.

- The university should introduce a module / certificate course (non-degree) on disability studies at both undergraduate and postgraduate levels. This would provide students and staff with the opportunity to become more familiar with disability-related issues.

- The university should encourage employers to employ students with visual impairments. The OSD in collaboration with Student Employment and the KwaZulu -Natal Blind and Deaf Society should:

  ➤ provide visual awareness training to companies.

- with the visual awareness team visit the company and assist the employers and other employees on how best to work with and assist people who are blind and partially sighted at the workplace.
- run a one day workshop on employment opportunities for students with visual impairments in the open labour market.

- Through the university provide work experience for students with disabilities by including them in the workstudy programme of the university. Presently many of the students with disabilities are not eligible to participate in this programme as they are in receipt of bursaries and are therefore not considered to be financially needy. There is, therefore, a need for the university to review this policy and consider other forms of remuneration eg dual transcript or an honorarium.

- In addressing **environmental problems** the following considerations are important for students with visual impairments :

  - supporting access around the campus with appropriate signage and information, such as large print and Braille notices.

  - the university community should be sensitive to possible environmental hazards to visually impaired students such as misplaced furniture in walkways. In addition they should be aware of emergency routes and provide assistance to students when appropriate.

4.9   CONCLUSION

This study has indicated that there are several factors contributing to the barriers experienced by students with visual impairments in achieving their academic goals at UKZN (Westville Campus).

According to Odundan (2003) and Bleakney (2002, www.dailyillini.com/feb02/feb14/news/printer/news_story_01-printer.shtml)

institutions of tertiary education were not built with persons who are visually impaired in mind, neither were teaching personnel trained for effective interaction with such students. These could be possible reasons for some of the barriers experienced by students with disabilities at tertiary institutions.

It is hoped that through increased education and awareness training, staff will anticipate the need for adjustment of academic materials into a format that is most accessible to the individual student.

An ethos at UKZN (Westville Campus) should be developed that embraces equal opportunities with the active participation of students at all levels of service provision. that directly affect them. The institution should be guided by the principle adhered to by disability organizations "nothing about us without us". This is likely to ensure that developments are both effective and efficient in increasing access and improving the quality of experiences of students with disabilities in higher education.

4.10 FUTURE RESEARCH

In view of the limited research on disability in tertiary institutions in South Africa, this study would make a contribution to the existing body of knowledge. Results from this study could also be used to evaluate the extent to which members of the university community are complying with the Disability Policy of UKZN.

It is suggested that for further research that

- a study be undertaken on the attitudes, challenges and experiences of academic and non academic staff in providing support services to students with visual impairments.

- An exploratory study of the perceptions, understanding of service providers towards the needs of students with disabilities across the five campuses be undertaken.

- Why the entry age of students with visual impairments into Tertiary institutions is higher than sighted people?

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APPENDIX ONE

MINI –DISSERTATION
A STUDY OF THE ACADEMIC NEEDS OF STUDENTS WITH VISUAL IMPAIRMENTS AT THE UNIVERSITY OF KWAZULU-NATAL (UKZN - WESTVILLE CAMPUS)

INFORMED CONSENT

I am the Disability Co-ordinator at UKZN (Westville Campus), presently studying for a Masters Degree in Social Work. As part of my studies I am required to undertake a research project.

The purpose of the study is to identify the factors that prevent the students with a visual impairment from adequately meeting their academic needs. You would thereafter be given the opportunity to make recommendations for the development and planning of more suitable support services.

You will be required to participate in an interview which would last for approximately 1 hour. The interview would be conducted in the offices of the Disability Co-ordinator at a time that is convenient for both you and the co-ordinator.

The interview will be taped for the purposes of compiling a report on the findings of the researcher. Please be assured that all information from the interview will remain confidential. You have a right to withdraw from the study at any stage and for any reason.

Thanking you for your willingness to participate in this study.

Kindly sign below.

Yours sincerely,

PUNJEE NAIDOO
RESEARCHER

SIGNED ON THIS _____ DAY OF _____ 2004.

NAME: _____ SIGNATURE: _____

APPENDIX TWO

A STUDY OF THE ACADEMIC NEEDS OF STUDENTS WITH VISUAL IMPAIRMENTS AT THE UNIVERSITY OF KWAZULU-NATAL (WESTVILLE CAMPUS)

A. **PROFILE OF RESPONDENTS**

1. **DEMOGRAPHIC DETAILS**

1. AGE: 17-20 ☐   25-30 ☐

    20-25 ☐   Over 30 ☐

2. GENDER: Male ☐   Female ☐

3. MARITAL STATUS: Married ☐   Single ☐

    Divorced ☐   Separated ☐

4. SECONDARY SCHOOL ATTENDED: _____

5. WAS THIS A SPECIAL ☐ OR MAINSTREAM SCHOOL? ☐

6. WHAT WAS THE LANGUAGE OF INSTRUCTION IN THE SCHOOL?

    _____

7. IN WHAT FORMAT DID YOU RECEIVE YOUR ACADEMIC MATERIAL?

    AUDIO ☐   BRAILLE ☐

    COMPUTER (JAWS) ☐   OTHER ☐

    Do you read Braille?   Yes ☐   No ☐

    If no, please specify. _____

8. IF YES, AT WHAT AGE DID YOU START READING BRAILLE? _____

9. DO YU HAVE ANY OTHER DISABILITY?   YES ☐   NO ☐

    If yes, state the nature of disability. _____

    _____

10.　ONSET OF INCIDENT OF VISUAL IMPAIRMENT:

10.1　WERE YOU BORN WITH VISUAL IMPAIRMENT?　YES ☐　NO ☐

10.2　IF NO, AT WHAT AGE WAS THE ONSET OF THE VISUAL IMPAIRMENT?

_____

11.　WHAT WAS THE CAUSE OF THE VISUAL IMPAIRMENT?

_____

2.　REGISTRATION AT UKZN (WESTVILLE CAMPUS)

12.　IN WHICH YEAR DID YOU REGISTER AT UDW?　_____

13.　CURRENT YEAR OF STUDY?　1st YEAR ☐　2nd YEAR ☐

3rd YEAR ☐　POSTGRADUATE ☐

14.　DEGREE OR DIPLOMA REGISTERED FOR:　_____

15.　WHERE DO YOU RESIDE DURING THE ACADEMIC YEAR?

HOME ☐　UNIVERSITY RESIDENCE ☐　OTHER ☐

**B.　SUPPORT SERVICES PROVIDED TO THE VISUALLY IMPAIRED
STUDENTS BY OFFICE FOR STUDENTS WITH DISABILITIES (OSD)**

16.　DO YOU UTILIZE THE SERVICES OF THE OFFICE FOR STUDENTS WITH
DISABILITIES?　YES ☐　NO ☐

17.　WHEN DID YOU BECOME AWARE OF THE SERVICES PROVIDED BY
THE OSD?

_____

18. INDICATE THE SERVICES YOU UTILIZE AT OSD

	YES	NO
PERSONAL COUNSELLING		
CAREER COUNSELLING		
APPLICATIONF OR FINANCIAL AID (BURSARIES)		
VOLUNTEER SERVICES		
LIFESKILLS TRAINING		
COMPUTER TRAINING		
NOTE TAKER SERVICES		
LIAISON WITH FACULTIES, DEPARTMENTS, LIBRARY, ETC.		
CO-ORDINATE EXAMINATIONS		

- OTHER (PLEASE SPECIFY)

_____

_____

19. ARE THE SERVICES OF THE OSD ACCESSIBLE TO YOU?
    YES ☐   NO ☐

20. IF NO, HOW CAN THEY BE MADE MORE ACCESSIBLE?

_____

_____

21. WHAT OTHER SERVICES SHOULD BE PROVIDED BY OSD THAT WOULD HELP YOU WITH YOUR STUDIES?

_____

_____

_____

_____

C. **ACADEMIC CHALLENGES EXPERIENCED BY THE VISUALLY IMPAIRED STUDENTS**

22. DO YOU EXPERIENCE DIFFICULTIES IN COMMUNICATINGYOUR SPECIAL NEEDS TOLECTURERS/STAFF?

YES ☐   NO ☐

IF YES, PLEASE EXPLAIN

_____

_____

_____

23. DO YOU EXPERIENCE DIFFICULTIES IN ACCESSING ACADEMIC MATERIAL?

YES ☐   NO ☐

IF YES, PLEASE EXPLAIN

_____

_____

_____

24. WHAT SPECIAL CONSIDERATIONS DO YOU RECEIVE DURING EXAMS OR TESTS WITH REGARD TO TIME, STRUCTURING OF QUESTIONS?

_____

_____

_____

25. HOW DO LECTURERS AND OTHER STAFF MEMBERS ACCOMMODATE YOUR INDIVIDUAL NEEDS WITHIN THEIR PROGRAMMES? EXPLAIN.

_____

_____

_____

26. WHAT WAS YOUR MOST PLEASANT EXPERIENCE WITH A STAFF MEMBER IN ADDRESSING YOUR ACADEMIC NEEDS?

_____

_____

_____

27. WHAT WAS YOUR OST UNPLEASANT EXPERIENCE WITH A STAFF MEMBER IN ADDRESSING YOUR ACADEMIC NEEDS?

_____

_____

_____

D. **RESOURCES**

28. WHAT OTHER RESOURCES DO YOU UTILISE TO ASSIST YOU WITH YOUR STUDIES, E.G.

	YES	NO
▪ LIBRARY		
▪ COMPUTER LABORATORY		
▪ MENTORS		
▪ PEERS		
▪ OTHER (PLEASE SPECIFY)		

_____

If no, why? _____

_____

29. ARE THERE RESOURCES ACCESSIBLE?

YES ☐   NO ☐

IF NO, HOW CAN THESE RESOURCES BE MADE MORE ACCESSIBLE?

_____

_____

_____

E. **SUGGESTIONS TO IMPROVE SUPPORT SERVICES**

30. WHAT ARE YOUR SUGGESTIONS TO THE UNVIERSITY TO IMPROVE SERVICES FOR STUDENTS WITH VISUAL IMPAIRMENT IN ADDRESSING THEIR ACADEMIC NEEDS?

_____

_____

_____

31. WHAT ARE YOUR SUGGESTIONS TO IMPROVE UNDERSTANDING OF MEMBERS OF THE UNIVERSITY COMMUNITY OF YOUR DISABILITY?

_____

_____

_____

32. ANY OTHER COMMENTS?

_____

_____

_____

_____

_____

_____