Students with Disabilities at the University Of KwaZulu-Natal – An Integrated Approach towards Awareness and Changing Attitudes

By

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Declaration

The Registrar (Academic)

Mr Simon Mokoena

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Dear Mr Mokoena

I, Jayshree Singh (Student Number: 209538421) hereby declare that the dissertation thesis entitled:

"Students with Disabilities at the University of KwaZulu-Natal – An Integrated Approach Towards Awareness and Changing Attitudes" 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.

Jayshree Singh

30 November 20117

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Dedication

In loving memory of my father, Mr Nundkumar Munoobhai. This is a dedication to all your hard work.

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List of Abbreviations

CAES	The College Agriculture Engineering and Science
CAS	Central Applications Services
CHS	The College of Health Sciences
CHUM	The College of Human Sciences
CLMS	The College of Law and Management Studies
CLMS)	The College of Law and Management Studies
DHET	Department of Higher Education and Training
DPSA	Disabled People South Africa
DRM	Disability Rights Movement
DSU	Disability Support Unit
EFA	Education for All
HEIs	Higher Education Institutions
ICT	Information and Communication Technologies
JAWS	Job Access with Speech
LAN	Local Area Network
PSET	Post School Education and Training
PWDA	Person with Disability Australia
PWDs	People/persons with Disabilities
QR	Quality Reform

SA	South Africa
SAA	Student Academic Administration
SDGs	Sustainable Development Goals
SWDs	Student with Disabilities
UDI	Universal Design Instruction
UKZN	University of KwaZulu-Natal
UN	United Nations
UPIAS	Union of the Physically Impaired Against Segregation
USAID	United States Agency for International Development
WHO	World Health Organisation
WWW	World Wide Web

Abstract

The study was motivated by students with disabilities and serves to provide research-based knowledge and insight in relation to awareness and attitude change towards students with disabilities within a university context. This study applies a qualitative inductive approached to capture the essence of how disability is lived, experienced and approached from the perspective of relevant staff and students with disabilities at the University of KwaZulu-Natal. The study involved identifying the primary academic-related factors in teaching and learning as well as the attitudes, level of awareness and assesses the barriers to inclusion. Non-probability purposive sampling techniques were applied. This convenient sampling technique allowed students with various categories of disabilities to be represented. The study targeted 20 students with disabilities of which 15 students took part in the study. In addition, five relevant key staff members from the academic and support sector that engaged with students with disabilities on a regular basis were also attained. An inductive theoretical thematic analysis was used to analyse the data obtained from semi-structured interviews with participants. The study was underpinned by three applicable psycho-social theoretical frameworks that guided the instrument, development and results of the study. These included Systems Theory, Maslow's Hierarchy of Needs and the Social Model of Disability. The findings revealed a significant need for ongoing awareness raising and training of university personnel. Lack of awareness directly influenced rates of retention, throughput and academic progress of students with disabilities. The university lacked collaborative relationships with relevant stakeholders and did not understand structural and environmental needs from the perspective of students with disabilities. Furthermore, existing attitudinal and structural barriers exposed student with disabilities to academic and psychological challenges. The frameworks were found to be applicable to the study and the possibility of extending Maslow's Hierarchy of Needs. The study's scope was limited in terms of sample size and

caution applied to emotional states of students with disabilities interviewed as well as minimal local studies to support or contrast its finding in the wake of a growing number of students with disabilities entering Higher Education Institutions in South Africa. As recommendations, the study motivates to improve platforms for students with disabilities to increase their participation in decision-making, policy formulation, teaching and learning and in exploring new avenues towards awareness and changing attitudes. Direction for future researchers can include a country-wide institutional study, a comparative study between a developed country and a South African university, and curriculum integration to promote awareness and inclusivity.

Keywords: Attitudes, awareness, disability, inclusive, integrated

Chapter One

1.1.   Introduction and Problem Statement

High school students with disabilities attending university have more than doubled since the 1980's, and figures are currently showing an 11% of university students have disabilities based on National Center for Education Statistics (2014). The researcher's view is that traditional contact universities face ongoing challenges with regards to offering quality services to students with disabilities as a means to promote effective integration, equal access and full participation in the academic programme. This entails the provision of academic support and assistive technology in response to students with disabilities. This study aims to examine the area related to the academic inclusion of students with disabilities which involves their personal experiences, quality of advice, information and support given to students with disabilities by disability coordinators, academics and support staff. The study further involves identifying the main academically related problems in the teaching and learning process as well as the attitudes and level of awareness of students with disabilities. This chapter introduces the problem statement and provides a background to the problem. It delivers the research questions that will be addressed and the objectives that the study wishes to fulfil. The chapter also provides a snapshot of the research methodology and outlines the motivation and need for the study as well as the contributions that the study intends to make.

1.2 Research Problem

There is a significant gap in the knowledge body which is emphasised in the review of selected most current literature that depicts a lack of research from a South African perspective into experiences of Students with Disabilities (SWDs) and relevant significant

others that they interact with in relation to inclusion and integration within the mainstream university environment (Terre Blanche et al., 2006). These 'others' include academic and support staff at the institution. South Africa has incorporated disability policies that even surpass other countries. These policies guide the concept of working with students with disabilities within a mainstream university environment. However, despite legislation mandated to protect such rights, SWDs still experience exclusion from formal higher education. The study lodges an enquiry into why, with all these policies supporting the inclusion, it is still evident that there is a mismatch between policy and practice as many students with disabilities still experience exclusion and marginalisation in a higher education setting.

The study is largely formulated around the academic inclusion of students with disabilities which involves their personal experiences, quality of advice, information and support given to students with disabilities by disability coordinators, academics and support staff. The study involves identifying the primary academic-related factors in the teaching and learning process as well as the attitudes and level of awareness of students with disabilities. The study further includes assessing the student recruitment, applications and the registration process as proposed barriers within an institutional environment servicing students with disabilities. The research is conducted in a two-part process and focuses on the perspectives of both students with disabilities, academics and support staff within a mainstream university environment.

1.3 Background of the Problem

A close examination of relevant literature such as Denzin and Lincoln (2013); Harbour and Maudous (2011); Riddell, Tinklin and Wilson (2005); and Clapton and Fitzgerald (1997),

builds on and incorporates an integrated approach toward awareness and change that is conceived from personal observations and a review of previously published, historical and theoretical work related to the topic (Terre Blanche, Durrheim and & Painter, 2006).

This research topic draws on information based on Riddell et al. (2005), where patterns of participation and actual experience of students with disabilities in higher education are explored. Other journal articles consulted involving widening participation and maintaining academic standards include: Ashworth, Bloxham and Pearce (2010); Vickerman and Blundell (2010); Shaw, Madaus and Banerjee (2009) and Fuller, Bradley and Healey (2004). These journal articles revealed gaps in quality of advice, information and support given to academic staff as many problems were related to difficulty in adapting current teaching and learning methods and lack of formats conducive to the learning style of SWDs. A comparison of different viewpoints was analysed in Riddell et al. (2005), where according to the mainstream model, individual students are provided with support to address and overcome barriers in the institutional environment. When a different approach is applied such as the Social Model of Disability, focus shifts to the environment that should change in order to acknowledge and remove existing barriers to SWDs. Furthermore, key to improving the experiences of SWDs depends on the attitudes, level of experience and understanding of staff members, rather than university policies and provision, that vary between different academic departments (Vickerman & Blundell, 2010).

The researcher consulted several legislatures such as: World Health Organisation (1999); United Nations (UN) Convention on the Rights of Persons with Disabilities (2006); The South African Constitution (1996); Integrated National Disability Strategy White Paper (1997); White Paper For Post School Education and Training (2013); including UKZN Policy on Student and Staff with Disabilities (2004), in an attempt to understand why despite government mandates to protect the rights of students with disabilities, barriers to access

especially within institutions of higher education still persist. Guided by Dr Nelson Mandela's philosophy on education as the key to surviving poverty and propelling the nation forward, an enquiry is lodged into why there is a mismatch between policy and practice as many SWDs remain excluded from formal education facing discrimination and marginalisation. Students with disabilities are still affected by a wide range of historical, individual, social, educational and environmental factors that, promote exclusion, challenge personal life circumstances, learning experiences and are denied participation in mainstream environments (Subrayen, 2011). The literature review further outlined the history of South Africa with respect to the provision of support, legislation concerning PWDs and reviewed issues related to the country's current status with regards to support and barriers faced by SWDs and key personnel at the university.

It is professed by Seyama (2008) that language reflects the values and attitudes of the social context in which they are used to break down barriers and participate in building a better society for all whereas a misuse of language and negative terminology can lead to labels and stereotyping that ultimately creates a culture of non-acceptance of diversity. Misconceptions and stereotypes make PWDs particularly vulnerable to words that emphasise disability further marginalising them.

Although significant strides have been made promoting positive perceptions, greater social awareness and addressing attitudinal barriers towards ensuring an inclusive education system for students with disabilities in higher education, there is not much research conducted within a South African context. This leaves a gap in this area of research.

1.4 Aim and Rationale

The aim of this study is to address the area of inclusion of students with disabilities in a higher education setting by ascertaining their experiences related to personal, quality of advice, information and support given to them by academic and respective support staff. This study also attempts to assess the student recruitment, applications and the registration process in relation to students with disabilities.

1.5 Research Questions

In light of the problem statement, background and rationale, the study undertakes to address critical questions in a two-part process focusing on staff (Part1) and students with disabilities (Part 2) in an attempt to understand perspectives from both sides.

Part 1

1. What is the available quality of advice, information and support given to students with disabilities?

2. What are the problems that are affecting students with disabilities in the teaching and learning environment?

3. What is the level of awareness of students with disabilities by staff and relevant/significant others?

4. What are the barriers that influence students with disabilities within the mainstream University environment?

5. How has the University serviced students with disabilities with regards to the applications and registration process?

1. What is the available quality of advice, information and support given to students with disabilities?

2. What are the experiences of students with disabilities in a higher education setting?

3. What are the attitudes of students with disabilities towards attitudes of academics, support staff and non-disabled students?

4. What are the current barriers and challenges experienced by students with disabilities within an institutional environment?

5. How has the University serviced students with disabilities with regards to the Application and Registration process?

1.6 Objectives

The objectives of the study in relation to the research questions are:

Part 1

1. To access the quality of advice, information and support given to academics and support staff involved with students with disabilities.

2. To identify the main academically related problems in the teaching and learning process that affects students with disabilities.

3. To assess the level of awareness of students with disabilities by university staff, and relevant significant others at all levels.

4. To understand barriers and challenges experienced by students with disabilities within a mainstream university environment.

5. To assess the University's Applications, Registration and Corporate Relations Division (student liaison and student recruitment) in servicing students with disabilities.

Part 2

1. To assess the available quality of advice, information and support given to students with disabilities.

2. To get an in-depth understanding of feelings and perceptions of students with disabilities.

3. To investigate current realities surrounding attitudes of students with disabilities towards the attitudes of academics, support staff and non-disabled students.

4. To identify barriers and challenges faced by students with disabilities within a mainstream university environment.

5. To assess available services regarding the Applications and Registration process and Corporate Relations Division (student liaison and student recruitment) in servicing students with disabilities.

1.7 Motivation for the study

The study aims to generate research-based knowledge that can help students with disabilities realise their full potential expanding educational and employment opportunities for all. Not many disabilities related studies in South African have been carried out to fill the gap therefore new knowledge is required to create awareness towards changing attitudes. As such the study is motivated by students with disabilities in relation to improving the conditions within the university supported by their personal experiences as well as the attitudes of all stakeholders that they may interact with in their daily experience of university life. Much of the wealth of information and rich data obtained from personal encounters and storied realities of students with disabilities and other stakeholders at the university can contribute to enhancing the eco-systemic and social environment in a higher education setting such as South African universities. The study attempts to utilise the new information obtained from

the research conducted at UKZN to influence decision-making, policy formulation, teaching and learning in relation to SWD and also look to explore new avenues towards awareness and changing attitudes.

1.8 Methodology

1.8.1 Research Design

The study adopted a qualitative approach as an adroit means of finding answers to the research questions set out above. The study assessed awareness and attitudes of all stakeholders involved with the affairs of students with disabilities which includes academics, support staff and students with disabilities in a two-part process using qualitative interviews.

Based on the interpretive paradigm the study takes this approach which involves engaging with the people who hold relevant knowledge on a professional level. According to Wagner, Kawulich and Garner (2012), questions involve an inquiry following a typical stance that focuses on:

1. Discovering new insights into a topic (phenomenon) about which very little is known. (for example, what are the experiences of students with disabilities in a higher education setting?)
2. Explaining or seeking to understand the reason why people have certain perceptions or act in the way that they do (What are the attitudes of students with disabilities towards attitudes of academics, support staff and non-disabled students?).

3. Exploring processes or systems that are best understood through interacting with those involved in the process (for example, how has the University serviced students with disabilities with regard to the applications and registration process?).

4. Describing the lived experiences of participants in a certain situation (for example, the individual experiences of students with specific disabilities in a higher education setting?).

The research is based on a phenomenological study focusing on the meaning that certain lived experiences hold for participants (Wagner et al., 2012). Further, the study begins with an in-depth study of individual experiences and expands on the experiences of others including the researcher's interpretation of underlying meaning and structure of the phenomenon. The study follows from interviews with students to elected members of university staff. Finally, the information will be analysed and interpreted from the perspective and understanding of the researcher while also tying into the theoretical frameworks.

1.8.2 Sampling

Terre Blanche et al. (2006) emphasised the importance of ensuring that the sample is representative of the population under investigation. Non-probability purposive sampling techniques used in this study concerning students with disabilities, is a convenient sampling technique often used by researchers when carrying out studies with undergraduate students (Terre Blanche et al., 2006). Wagner et al. (2012) asserts that this sampling technique also allows for other individuals such as academic and support staff who interact with students with disabilities to be included in the sample. A series of interviews therefore included students with disabilities, disability coordinators, academics, support staff, an applications

and information official, a corporate relations representative as well other elected individuals who work closely with students with disabilities at the University of KwaZulu-Natal. Wagner et al. (2012), claims that there are no rules concerning the most appropriate sample size in qualitative research and as a result of the in-depth nature of the study the sample size tends to be small.

Participant selection was based on a set criteria compiled in conjunction with Disability Coordinators to:

- select a representative sample for the study
- identify participants representing specific disabilities

Participants were selected based on availability and willingness to participate as well as on those who form part of the population under investigation (Terre Blanche et al., 2006). In other words, in this study concerning students with disabilities, a small group representative of students with disabilities and their specific type of disability were studied rather than a random sample of all students with disabilities in the University.

Although the University of KwaZulu-Natal has five campuses (Howard College, Pietermaritzburg, Westville, Edgewood College and Medical School), the researcher concentrated on the College of Humanities at the Howard College Campus, since it appeared that the majority of students with disabilities were concentrated there. In addition, there were significantly lower numbers of students with disabilities studying at other colleges at the time of the study. Approximately 15 students and five staff members were interviewed at the College of Humanities on the Howard College Campus. In terms of the generalisability of the study, external validity can be obtained where findings can be generalised beyond the confines of the study and the study setting, which includes institutions within the wider South African higher education context (Terre Blanche et al., 2006).

1.8.3 Data Collection Techniques

Semi-structured interview schedules were used as the data collection method for this study. A pilot study was conducted to test the reliability and duration of the interview questionnaires. Questions were open-ended, descriptive and non-directional allowing respondents to communicate their experiences in their own words without any restrictions (Terre Blanche et al., 2006). The study was informed by an interpretive paradigm which implies that not all questions may be established before the study begins but rather may evolve as the study progresses (Wagner et. al., 2012). Appointments were made for each interview with approximately thirty minutes to an hour duration on each. Interviews were recorded and transcribed to increase reliability. Transcribed interviews were used to conduct a detailed thematic analysis which will reveal common themes and patterns.

A final question allowed students to rate the best person to give an accurate account of the areas under investigation. Students were allowed to elect disability coordinators, academics or support staff to best represent them with regards to their experiences.

1.8.4 Storage

Interviews were recorded using a digital Dictaphone/recorder. All recordings were anonymously labelled using date/time stamps and alias names. The recordings were stored on an access controlled computer based only on the investigator's name and password. Access to the recordings can only be made available to the supervisor/co-supervisor should they require. This can be shared via a file-sharing application example, DROPBOX or physically using a memory stick. An outsourced service transcribed the interviews. However, the supplier had to sign a confidentiality form.

All recordings and transcripts of interviews are securely stored at the College research office for a period of 5 years based on arrangements with the supervisor and Ethics Committee.

1.9 Theoretical Framework

The applicable theoretical frameworks applied in the study include Systems Theory (Becvar & Becvar, 2014), Maslow's (1943) Hierarchy of Needs and also explores the Social Model of Disability viewed in contrast to the perspective of the medical model of disability. A paradigm shift is also discussed with an overview of the emancipatory and transformative paradigm that informs the study within the contexts of disability.

1.10. Contributions of the Study

The study is intended to make a range of significant contributions. These are listed below:

- The research adds value and increases understanding of experiences of students with disabilities as well as other stakeholders within a university environment.

- The presentation of the findings and the new information obtained from the research conducted at UKZN helped explore available avenues to implement strategic decision-making, to improve adherence to policy, advance teaching and learning, and explore new avenues towards awareness and changing attitudes.

- The study can influence the transformation of perceptions and existing attitudes and inform awareness and incorporate a more integrated approach to enhance the inclusion of students with disabilities in a higher education setting.

- The study provided insight into proposed adjustments to teaching and learning, improved support, explored a universal approach to curriculum design that aligned

with the UKZN policy and provided insight in terms of the modification of existing academic courses to accommodate the range of disabilities that individual students may have facilitating the incorporation of students with disabilities into a well-adapted University environment.

1.11 Chapter Overview

The research study consists of six chapters. A demarcation of the chapters and its contents are tabulated below.

Chapter	Content
Chapter 1 Introduction and Problem Statement	Provides a background of the problem based on a brief review of the literature as well as a legislative context for SWD in South Africa's higher education institutions. The aims and rationale of the study are explained. The study's research questions and motivation for the study are provided including an overview of the research methodology and contributions of the study.
Chapter 2 Review of Literature and Theoretical Framework	This chapter expands on the review of literature, global and current legislature and theoretical frameworks in relation to the study from a South African stand point. It explores barriers faced by SWD and the level of support provided by key stakeholders. This chapter describes the theoretical frameworks that underpin the study namely, Systems Theory and Maslow's Hierarchy of Needs as well as explores the strategic use of models of disability as the basis for understanding the causes and contexts of disability.
Chapter 3 Research Methodology	This chapter describes the research methods intended to fulfil the study. It describes qualitative research design employed in the study; location, sampling strategies used, and introduces the respondents. It further outlines data collection techniques and instruments used in the study as well as emphasises ethical considerations applied in the study.
Chapter 4	Presents a qualitative data analysis and an interpretation of the results with a

Data Analysis	detail discussion in relation to the literature and theoretical understandings that underpin the study.
Chapter 5 Discussion of Results	This Chapter further details the findings from the data analysis and discussion and demonstrates the application of the theoretical frameworks.
Chapter 6 Conclusion, Recommendations and Limitations	Based on the results and discussion of the findings, conclusions will be drawn. Further, recommendations based on the study's findings will be presented. This chapter summarises and concludes the study, outlining its contributions, limitations and implications.

Table 1. Demarcation of the Chapters and its contents

1.12 Chapter Summary

This chapter introduced the research problem and provided a background to the problem. It positioned the research questions and objectives and detailed the motivation and need for the study. The aims and rationale for the study are explained including an overview of the research methodology and contributions of the study. The next chapter expands on the review of the literature, global and current legislature and theoretical frameworks that underpin the study namely, Systems Theory and Maslow's Hierarchy of Needs as well as explores the strategic use of models of disability.

Chapter Two

Literature Review

2.1. Introduction

The purpose of the review of carefully chosen literature is to ensure that the study is supported by a relevant body of knowledge that can apply to a study of this nature. As such, the various definitions of the key terms, basic concepts and misconceptions, underpinning the field of disability studies are explored. A comparative exploration of legislation is conducted and an enquiry into a mismatch between policy and practice reviewed as many students with disabilities remain excluded from higher education. An analysis of statistical information is chartered with reference to comparative indicators over the years regarding registered SWD at UKZN. The various theoretical frameworks are also discussed. The Second Order Cybernetic Approach underpins this study. In addition, Maslow's (1943) Hierarchy of needs is consulted to ascertain that the need for self-esteem can be achieved through mastery or achievement resulting in university education becoming a goal for more people with disabilities. Furthermore, a paradigm shift is discussed as a means of emphasising a different worldview. In line with the theoretical frameworks applied in this study, the strategic use of models of disability provides a foundation for understanding causes and contexts of disability.

2.2 Defining Key Concepts of Disability

It is important to provide clear and unambiguous definitions of key concepts that need to be operationalised in the study (Terre Blance et al., 2006). It is mostly necessary to provide clarity in communicating and understanding the definition of concepts in the context in which they are discussed. In defining the concept of disability, this study examines the relevant literature within disability research and brings together the work of Devar (2015) and Seyama (2008) who found that there is no agreement on how the concept of disability can be defined and there are many definitions of disability within the South African HEIs. Based on Healey, Pretorius and Bell (2011) Higher Education Institutions (HEIs) have different ways of classifying disability and SWDs. The approach HEIs choose to support SWDs impacts on the quality of services and the manner in which they are provided (Devar, 2015). It was emphasised in Devar (2015) that those HEIs that applied the medical model showed little improvement on environmental challenges affecting individual SWDs in terms of negative attitudes and inaccessibility to buildings or services. The definition of disability utilised by most HEI is conceptualisation predominantly around the medical model framework. However, Healey et al., (2011) believe there are shifts towards an acknowledgement of external factors in ensuring inclusivity.

Other theorists have identified that members of disability communities seek to clarify the difference between an inherent characteristic of a person and the response of society to that characteristic. Denzin and Lincoln (2013) explain the term as follows:

- Individuals do not have a disability. Individuals have impairments that are physical, sensory, neurological, psychiatric, intellectual or other impairments
- Disability is due to barriers created by people by designing a world only for their way of living, without taking into account the impairment of others.

- United Nations Convention on the rights of people with disabilities define people with disabilities as "those who have long-term physical, mental or intellectual or sensory impairment which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others" (United Nations, 2006, p.1)

- People with disabilities are not hindered by their disability but by society's response to those differences or disabilities.

- The medical model of disability dominated conventional wisdom and created a state of dependency for people with disability

- Disability is characterised by the medical model as a personal problem for which one sought medical intervention.

- Based on the medical model persons with disabilities are the tragic victims of some terrible circumstances or event and are those people who need to be pitied

    (Denzin & Lincoln, 2013).

Denzin and Lincoln (2013) established that the medical model couched disability in terms of functional limitations and individual deficit that need to find cure or explanations as to why persons with disabilities (PWD) were not participating in their communities. Oliver (cited in Denzin & Lincoln, 2013) challenged positivism and argued that an interpretive paradigm sees all knowledge as socially constructed and a product of a particular time and place. In his explanation, Oliver revised the following question (Denzin & Lincoln, 2013, p 475):

"What complaints cause your difficulty in holding gripping or turning things?"

To read as follows:

"What defects in the design of everyday equipment like jars, bottles and tins cause you difficulty in holding, gripping or turning them?"

From this perspective, disability is a social problem requiring education, attitude change and adjustment on the part of both abled and people with disabilities (Denzin and Lincoln, 2013). Denzin and Lincoln (2013) referred to the Disability Rights Movement (DRM) that focused on the basic humanity of the disabled as being loved, cherished and nurtured within families and communities. The authors further claim that the DRM gave rise to what became globally known as the 'social model of disability'. As such, disability is regarded as a product of interactions between individuals and the environment and a construct that finds its meaning in social and cultural context, and not a characteristic that exists exclusively in the person.

According to Denzin and Lincoln (2013), the UPIAS (Union of the physically impaired against segregation) emphasised that students with disabilities are people who have impairments and disability is the negative social response to impairment in terms of the exclusion of impaired people from the political, economic and social organisation of their communities. In South Africa racism is a form of exclusion more than a political prejudice or obligation (Denzin & Lincoln, 2013). Denzin and Lincoln (2013) argued that disability is framed as a problem of social oppression and people with a disability described themselves as an oppressed minority. This raised concerns since in order to redefine disability one needed to change the perceptions towards people with disabilities. Reviewing the results of the study by Groce (1988/2003) of a community on Martha's Vineyard, Massachusetts, revealed that deaf people at the time did not live in a disabling society because everyone learnt to use sign language (Denzin & Lincoln, 2013). The current study supports this view where there is a shift in focus from disabilities to disabling social environments.

2.2.1 Disability

With reference to definitions listed above (Devar, 2015; Denzin & Lincoln, 2013; Healey et al., 2011 and Seyama 2008) disability in the context of this study will be defined as an umbrella term for physical and mental disorders for persons with disabilities within the mainstream University environment. In line with the World Health Organization's (WHO) action plan 2014–2021 where "disability" is used as an all-inclusive term for impairments that restricted participation portraying negative aspects of the interaction between PWDs and the environment. The World Health Organisation (2015) asserted that disability as a phenomenon is neither biological nor social.

For the purpose of this study, Higher Education refers to a University setting and the incorporation of students with disabilities therein.

2.2.2 Integrated approach

An integrated approach is when society, in this case Higher Education Institutions (such as universities) move focus beyond individual specific impairment and towards a more extensive and holistic view of incorporating a variety of impairments and adapting the environment respectively as opposed to trying to change or provide for individual disabilities of the student (Fuller, Bradley & Healey, 2004). All factors that form part of systems and subsystems need to be integrated in order to obtain a coherent understanding of the possible causes of barriers in learning experienced by students with disabilities (Burke, 2012). For instance, UKZN implemented a College-based university setup in 2010 to foster a more integrated system that is more academically-focused and student-cantered. A panel of external reviewers with a background of structures in their own institution applied their

minds in the implementation of the College Model at UKZN in October 2010. The panel included Professor Mzamo Mangaliso (University of Massachusetts), Professor Nigel Brown (University of Edinburgh), Professor George Magoha (University of Nairobi), Professor Ronnie Miller (University of KwaZulu-Natal) and Professor Bob Munn (University of Manchester). The model was adopted following consultation and in-depth research of a range of overseas institutions where the model was in operation (Mangaliso, Brown, Magoha, Miller, & Munn, 2010). This included Imperial College London; Universities of Aberdeen, Edinburgh, and Newcastle-upon–Tyne, and the University of Manchester Institute of Science and Technology (UMIST)/Manchester in the United Kingdom; and the University of Sydney in Australia (Mangaliso et al., 2010). This proved the effectiveness of the College Model from the perspective of developed countries, which inspired the implementation of the College Model at UKZN within a developing country (Mangaliso et al., 2010). Former Vice-Chancellor of UKZN, Professor Makgoba (2011) said that the college reorganisation at UKZN in 2010 was aimed at structural and functional efficiency. Furthermore, he emphasised the need for improvement in decision-making, research, teaching and learning issues. The College model brought UKZN in line with best international practice and modern trends in order to realise its vision and mission and to ensure the university emerged stronger and better (Makgoba, 2011). The new College based university setup at UKZN consist of variously integrated sub-systems which include the various colleges, schools within each college, college-based student support service as well as Disability Support Unit (DSU). A collaboration of their services implies providing a supportive, structured environment focused on the academic achievement of all students at the university (Raab & Adam, 2005).

2.2.3 Attitudes

Expanding on the above concept, Ison, McIntyre, Rothery, Smithers-Sheedy, Goldsmith, Parsonage and Foy (2010) explained that improved attitudes would permit PWDs to play an active role in their communities. The authors asserted that since attitudes predict behaviour attitudes can be improved with due consideration given to experience and the provision of accurate knowledge and facts about disability. Furthermore, attitudes towards PWDs can be improved by interventions aimed at increasing knowledge and promoting the breakdown of stereotypes (Ison et al., 2010).

2.2.4 Awareness

In light of this study, the focus is on 'awareness' and 'attitude change' to bring about behavioural change in individuals. Shapiro (2005) asserted that since awareness allows for critical thinking and choice, people become aware of a problem and can understand its causes and dynamics, allowing them to make choices to change their behaviour or situation. Thus improving knowledge, instilling values, fostering beliefs and shifting attitudes, is important to bring about change in incorporating students in a higher education setting and accepting disability as part of the norm (Global Education Monitoring [GEM], Report, 2015). It follows that people's behaviours can be changed by creating new social norms, legislation, and creating a shift in focus from individuals to environmental barriers. Shapiro (2005) asserts that with improved awareness individuals' attitudes and intergroup relations within higher education settings will conform to the new structures and behaviours as required by such structures.

2.2.5. Inclusion

Inclusion according to White Paper (1997) implies to move from individuals to a system as a whole, suggesting that society undergo change to accommodate the diversity of all people. This involves a paradigm shift from the 'specialness' of people to the norms of society and its ability to respond to this diversity (White Paper, 1997).

2.2.6. Special Needs Education

Disability at UKZN is seen as an aspect of special needs. White Paper (1997) focuses on the education system and its ability to accommodate learners with different special needs. Educational needs of a specialised nature include students with disabilities who:

- Have a need for: psychological, educational guidance, career and counselling service and life-skills
- Have sensory, physical and neurological disabilities
- Have varying degrees of mental disabilities
- Have emotional and/or behavioural difficulties
- Have severe developmental and health disturbances
- Have speech and language difficulties;
- Live in poverty, suffering from chronic malnutrition and street children
- Have general and specific learning disabilities
- Are gifted and talented students

(White Paper, 1997)

In addition to preferred terminology, language is key to aspects of disability studies (Seyama, 2008). Krauss and Chiu (1998) explain that words are a communicative exchange situated in

a social context that constrains the linguistic forms participants use. What this means is that words replicate the values and attitudes of the social context in which they are used. People use spoken language to express various aspects of their lives such as their social situations, perceptions, beliefs, and affirmations they make about themselves and others (Krauss & Chiu, 1998). Therefore, to break down barriers and participate in building a better society for all requires the appropriate use of language. The misuse of language and negative terminology can lead to labels and stereotyping that ultimately creates a culture of non-acceptance, categorisation, stigmatisation and discrimination (Philpott, 1994). For instance, in South Africa the misuse of terminology can reinforce discrimination against particular racial groups in society. It is therefore important to understand the effect of the words one uses as people with disabilities are particularly vulnerable to words that emphasise the inabilities of people (Seyama, 2008). Language can however also be used as a powerful tool to facilitate change and bring about social integration (Seyama, 2008). Seyama (2008) maintains that language development reflects the social context in which it is used. As such, language reflects the values and attitudes of that context. This relates to systems theory applied in this study, which focuses on context and the importance of communication within a social context, in a social system (Michailakis, 2003).

2.3. Myths Facts and Stereotypes About People with Disabilities

Stereotypes and constructions still exist today and have the influence to alter and affect the lives of individuals with disabilities as well as the lives of their family members and care providers (Block, 2016). By its definition, stereotypes are unchanging and can only be transcended once the stereotype is exposed as inadequate or false to experience (Block, 2016). In addition, Block (2016) explained that this word is a by-product of ignorance or

unfamiliarity. To overcome the inadequacies and familiarise UKZN of its diverse university community the study creates awareness by exploring misconceptions about students with disabilities through their own voices. All Stereotypes contain some experiential truth about encounters of SWD but when tacit theories and assumptions underlie public policy and social relations, they limit the full humanity of those who are affected by them (Block, 2016). It was further explained that the "myths of disability" are beyond stereotype and are deep-rooted conceptions that sociologists now call constructions (Block, 2016).

Stereotyping is part of everyday life in terms of intergroup relations with people who differ in terms of race, culture and gender including people with disabilities (Easterseals, 2016). Barriers to PWDs starts with people's attitudes rooted in misinformation and misunderstandings about disability (Easterseals, 2016). Such misconceptions are more disabling than the disability itself that spreads negative attitudes at universities. The study brings together the work of Naidoo (2005), and Myths and Stereotypes adapted from Easterseals (2016) to provide an overview of current experiences of SWD

Myth	Fact
Students with disabilities seek special accommodation in order to do less work.	Most students with disabilities work harder than non-disabled students alternatively they do not request an accommodation.
Providing accommodations is lowering academic standards at the university.	Lowering of standards is not allowed by law. Accommodation aligns students with disabilities to the university's standards.
Accommodation is an unfair advantage that students with disabilities receive over other students.	Providing accommodations places the student with disabilities on same level with other students.
Students with a disability who cannot perform academically do not belong at a	On meeting admissions and programme standards, students with disabilities are

university.	entitled by law to attend university.
Providing accommodations is time consuming and costly.	Majority accommodations require minimal time and money. Many adjustments to teaching and learning programs help all students learn better.
People with disabilities are more comfortable with "their own kind."	Grouping people with disabilities separately reinforced this misconception.
Equal opportunity means students with disabilities should not get any "special treatment" and be treated in the same way as other students.	Equal opportunity means ensuring reasonable adjustments are made to address barriers to students with disabilities. This does not provide them with an unfair advantage.
Never ask people about their disabilities.	People with disabilities do not mind answering question about their disability.
People with disabilities are very different from people without disabilities.	All people have similar needs which include getting an education, marriage, employment and all other daily needs.
Students with disabilities drop out of university more than other students do.	Students with disabilities withdraw from the university for the same reasons as other students do.
With the increased number of students with disabilities, great modification of course content is required resulting in lowering educational standards.	Minimal modification of course content is required as students with disabilities cover standard course content.
Accommodating students with disabilities at university is time-consuming and difficult.	Accommodation for students with disabilities require minimal adjustments to course material.
Disability limits an individual in every aspect, including the ability to be educated.	Students with disabilities can be productive and educated.

A one size-fits-all approach dominates institutions of higher education.	Students with disabilities have varied needs, and therefore a universal design system will enhance learning for all students.
Barriers to students with disabilities at university cannot be eliminated.	Everyone can promote change at the university by: - Understanding the need for accessible parking - Encouraging participation of SWD by using accessible meeting and event sites - Eliminating negative words or phrases used about disability - Accepting people with disabilities as individuals capable of the same needs and feelings as others.

Table 2. Myths and Facts about Students with Disabilities

2.4. Legislation

The researcher consults several legislatures in an attempt to determine if universities are adjusting accordingly with government mandates for better access and services through legislation. The following discussion lodges an enquiry into a mismatch between policy and practice as many SWDs remain excluded from formal education facing discrimination and marginalisation.

2.4.1 Global World View on Disability

A distinction between handicap, disability and impairment was discussed in WHO (1999). 'Handicap'is sees an individual in a negative context and refers to the inability of a person to

fulfilment a role that is normal (Seyama, 2008). It also refers to the interaction of persons and society. Furthermore, 'disability' is a lack of ability to perform activities within a range considered normal for all human beings as a result of impairment. It refers to the person. Seyama (2008) explained 'impairment' as any loss or abnormality of physiological or anatomic structure or function referring to organs of the body.

According to publications of the World Health Organisation's action plan (2014–2021), disability is seen as universal. This means that everybody can experience disability directly or indirectly at some point in life as one grows older. Seyama, (2008, p. 20) supported this view and argued that disability is actually a normal condition with no boundaries and described it as the "essence of the human condition". Previous authors such as Barnes and Mercer (1996) supported the understanding that bodily differences should not be allowed to mask our essential humanity. This study supports the WHO's global disability action plan (2014–2021) in its contribution towards awareness and changing attitudes for all people with disability.

The design and implementation of the action plan are based on and guided by the following approaches (WHO, 2015: p. 4):

"A human rights-based approach, based on the empowerment of PWDs"

"A life-course approach, continued care of overall health"

"A culturally-appropriate and person-centred approach"

"A multisectoral/community-based rehabilitation"

"The implementation of universal design"

The current disability study also focuses on the above approaches. It is outlined in WHO's global disability action plan, that support for persons with disabilities cannot be a "one-size-fits-all" solution (WHO, 2015: p.5). To achieve the plan's objectives, it requires that existing

regional and national obligations, policies, plans and targets be followed (WHO 2015). Article 9 (Accessibility), from the Convention on the Rights of Persons with Disabilities (2006), emphasise that there should be equal access to the physical environment and other facilities (WHO, 2015). This includes identifying barriers and removing them in order that buildings, roads and other facilities are accessible and usable by all people. To achieve such plans, there is no need for adaptation or specialised design. The WHO (2015) seeks to include inputs from PWDs to successfully remove all barriers. This study agrees with the WHO (2015) and includes the voices of the students with disabilities in an attempt to stimulate thought processes toward transformation and the successful removal of barriers to access university services.

2.4.2. United Nations (UN) Convention on the Rights of Persons with Disabilities (2006)

The following quotation was taken from Article 1, of the UN Convention on Rights of Persons with Disabilities (2006) which recognises the basic humanity of persons with disability:

"*The purpose of the present Convention is to promote, protect and ensure the full and equal enjoyment of all human rights and fundamental freedoms by all persons with disabilities, and to promote respect for their inherent dignity.*"

Denzin and Lincoln (2013), asserts that had all research being conducted along the lines of this guiding principle, persons with disabilities would have always been entitled to the provision of appropriate and adequate services based on a philosophy of inclusion and adherence to best practice (Denzin & Lincoln, 2013). Mostly done with the best of intentions,

people with disabilities were treated inhumanely and denied the right to education, employment and meaningful lives (Denzin & Lincoln, 2013). As a result, they became the product of cutting-edge scientific research into the cause and cure of disability until the disability rights movement (DRM) in the 1960s where the basic humanity of the disabled became recognised.

The United Nations Standard Rules on the Equalisation of Opportunities for People with Disabilities, (1994) compels South Africa (SA), as a member of the United Nations (UN), to maintain the minimum requirements in meeting responsibilities toward persons with disabilities (Seyama, 2008). Equal rights imply that every individual has equal importance. In the case of this study, it refers to equal opportunity within the context of the mainstream university. Also applicable to the university context is that it is imperative that the needs of students with disabilities be considered in the planning for such communities and the utilisation of all resources to ensure that every individual has equal opportunity for participation.

United Nations (UN) Convention on the Rights of Persons with Disabilities (2006) is based on the following principles:

- Respect for dignity, autonomy, which includes freedom of choices and independence
- Non-discrimination
- Inclusion
- Respect and acceptance of persons with disabilities
- Equal opportunity
- Accessibility
- Gender equality
- The right to preserve their identities

The United Nations (2006) undertakes to promote research and development as well as the availability and use of new technologies, including assistive technologies, suitable for persons with disabilities. It also asserts that technologies utilised can be at an affordable cost. The University of KwaZulu-Natal utilise assistive technology in serving students with disabilities but in other aspects in terms of service delivery to SWD, South Africa needs to adopt new technologies to advance in service delivery to persons with disabilities. As such UKZN must match policy with procedures promoted in United Nations (2006). For example, the institution needs to improve on the training of:

- professionals and staff working with SWD

- maintaining awareness campaigns and positive perceptions

- ensuring an inclusive education system providing a sense of dignity, self-worth, respect for human rights and freedom of human diversity (UN Convention, 2006).

To this end, the United Nations (UN) Convention on the Rights of Persons with Disabilities (2006) asserts that parties shall ensure that persons with disabilities are able to access general tertiary education with reasonable accommodation provided. This ensures development by persons with disabilities of their personality, talents and creativity, as well as their mental and physical education providing lifelong learning without discrimination (UN Convention, 2006).

2.4.3. The South African Constitution (1996)

After the new democracy in South Africa in 1994, a gradual but steady increase of students with disabilities was studied against the background of an apartheid-governed country. The South African perspective is drawn and interwoven through the struggles of a country that suffered racial, gender and cultural discrimination for many decades. This poses a question of

how South Africa may have dealt with the inclusion of yet another discriminated group of people that form part of the fabric of the nation's people. The South African Constitution (1996), which is considered the supreme law of the country, protects the rights of people with disabilities and denial of any constitutional right on the basis of disability constitutes a violation of the rights of persons with disabilities. Provision is made in the Constitution for affirmative action concerning people with disabilities where it promotes positive measures to be taken to support the achievement of persons disadvantaged by unfair discrimination. Ngcobo (2006) affirms that the Constitution of the Republic of South Africa, Act 108 of 1996, is billed as one of the most progressive constitutions in the world, and protects the rights of all citizens. As a result of the many struggles faced by the majority of South Africans, a Bill of Rights further highlights the right of all learners to basic education and equal access to educational institutions (Republic of South Africa, 1996). Ngcobo (2006) further explains that all subsequent education legislation and policies are founded on the Constitution, which recognises diversity and the provision of quality education for all learners within a non-segregated education system (Ngcobo, 2006). He claimed that these laws and policies formed the foundation for building an inclusive education and training system for all South Africans.

After its first democratic elections in1994, South Africa participated in the 'Education for All' (EFA) processes, and was welcomed at the Mid-decade Review on Education for All (EFA) which was held in Amman, Jordan, in 1996 (Ngcobo, 2006). South Africa has embraced the EFA principles, goals, targets and guidelines contained in both the declaration and the framework for Action. Ngcobo (2006) explained that as a result of the transformation process in South Africa many educational issues, laws, policies and practices were formulated. Since 1994 and under the new democratic government, South Africa engaged in

fundamental education reforms as a means to break the shackles of its apartheid past (Ngcobo, 2006).

In a society governed by the democratic ethos, the provision of quality education to all learners, can help them realise their full potential thereby enabling SWDs to make meaningful contributions to that society throughout their lives (Ngcobo, 2006). The right to education is upheld in light of this statement, as a fundamental constitutional right. It ensures the creation of equal opportunities in the provision of education for all learners irrespective of their differences and that does not discriminate on the grounds of disability, ethnic origin, religion, language, gender, race, capabilities, sex, socio-economic status, sexual orientation or age (Ngcobo, 2006).

2.4.4. Integrated National Disability Strategy White Paper (1997)

Further legislation such as the Integrated National Disability Strategy White Paper (1997) requires institutions of higher learning to alter their service delivery so that it responds to the needs of persons with disabilities. The government can make a difference in the lives of persons with disabilities by revising policy from a social, economic and political point of view thereby addressing inequalities that marginalise PWDs in South Africa. The policy also supports a paradigm shift in addressing issues related to PWDs. Initially, the White Paper (1997) viewed disability from the perspective of the medical model and provided treatment or ways to curb begging. This philosophy implied that PWDs should not be feared, but rather pitied or helped as part of the impoverished. People with disabilities did not contribute to the aims, objectives and management of organisations that proposed interventions (White Paper, 1997). Persons with disabilities were seen as dependant individuals and the focus was on the nature of their impairment. As a result all interventions and therapy were based on the

diagnosis and labelling made by independent agents. The White Paper (1997) asserts that this lead to the ordinary needs of PWDs not being attended to contrary to WHO (2015) where it was explained that in order to successfully remove barriers and improve access to services it was essential to include inputs and personal experiences of persons with disabilities. The focus of this study is to include the experiences of students with disabilities in assessing and transforming attitudes toward acceptance of diverse populations within the mainstream university environment. The medical model projected PWDs as dependent, powerless people and isolated them from society. This prevented PWDs from exercising fundamental social, political and economic rights.

Based on the White Paper (1997), social exclusion appeared within:

- The Family system of the SWDs

- The structural environment servicing SWDs

- Available Services to SWDs

- Poor planning and design of curriculum to include SWDs

2.4.5. Disability as a Human Rights and Development Issue

According to White Paper (1997) to ensure equal opportunities for PWDs firstly requires that PWDs be acknowledged as equal citizens who also have rights and responsibilities. This embraces the human rights approach to disability where the needs of every individual are considered equally important and provides equal opportunities for participation of all in society (White Paper, 1997).

The White Paper (1997) stipulates that in addition to rights, people with disabilities have equal obligations in society and should therefore be provided with support to fulfil their responsibilities. For instance, at the university level, students with disabilities are obligated to

disclose their disability to lecturers and academics in order to receive the available services to assist them academically. Based on a human rights and development approach to disability, the White Paper (1997) asserts that focus must be placed on the removal of barriers to equal participation and the elimination of discrimination based on disability (White Paper, 1997).

2.4.6. White paper for post-school education and training (2013)

In personal communication with Dr Anlia Pretorius, Head of Disability Rights Unit at University of the Witwatersrand (2016), the recently published White paper for the post-school education and training approved by Cabinet on 20th November 2013, was discussed. The South African Minister of Higher education and training, Dr. Blade Nzimande formed a committee to work on a disability policy framework for the PSET (post-school education and training) system. Dr Anlia Pretorius is the appointed chairperson of the committee, who contributed to this framework. Similar to the integrated approached in this study. This Policy statement is to represent the government's vision for an integrated system of post-school education and training. The White Paper (2013) seeks to set out a vision for the type of post school education and training system it aims to achieve by the year 2030 to meet South Africa's needs. Based on its objectives, it lays the foundation for expanded access improved quality and increased diversity of provision. This relates to a study by Brandt (2011) on students with disabilities' experiences in different HEIs in Norway, where learning environments that comply with the principle of universal design are considered necessary (Brandt, 2011).

The White Paper (2013) focuses on improving universities' performance, student access, success and throughput rates highlighted as key challenges for the university sector. Furthermore, National Policy must give priority to improving access and success for

previously disadvantaged groups such as race groups, gender or disability status. The new Central Applications Services (CAS) set to be launched in 2019 is a crucial move towards supporting informed access to universities making choices and placement of students across the system more effective (DHET, 2016). This study is formulated around the integrated approach toward disability in line with White Paper (2013) where it states that the University Sector has embraced the concept of an integrated post school system.

2.4.7. University of KwaZulu-Natal- Policy on Students and Staff with Disabilities (2004)

This study aligns with the University of KwaZulu-Natal's, policy on students and staff with disabilities (2004) in that disability is a social construct. By its definition, UKZN Policy (2004, p. 2) asserts that:

"A person with a disability is a person limited or impaired in one or more functional activities which prevents full and equal academic, social and economic participation where impairment may be permanent, recurring or transitory and may be sensory, physical, cognitive or psychological."

The University of KwaZulu-Natal is committed to providing and sustaining an enabling environment to all students and staff by enacting the UKZN Policy on student and staff with Disabilities (2004).

The UKZN (2004) policy aims at ensuring reasonable accommodation for students and staff with disabilities to streamline participation in all aspects of the university. UKZN Policy

(2004) encourages students and staff with disabilities to advance in independent living that ensures dignity, self-sufficiency and responsibility. This complies with self-determination proven by Field, Sarver, and Shaw (2003) to be an essential component of success for SWDs resulting in experiences that are more positive.

University of KwaZulu-Natal endeavours to make its environments universally accessible and inclusive to all students and staff with disabilities in line with Field et al. (2003) Universal Design Instruction (UDI). Universal Design Instruction is seen as a new paradigm for university students with disabilities. It fosters self-determination by offering creative ways to include SWDs at a mainstream university. The UKZN Policy (2004) promotes the full participation of students and staff with disabilities in all aspects within a tertiary institution providing them with opportunities to realise their individual capacities while maintaining a safe and enabling built environment (UKZN Policy, 2004).

Amongst other legislation, UKZN Policy (2004), acknowledges and complies with the following:

- Employment Equity Act, 1988 (Act No. 55 of 1998)
  Code of Good Practice: Key aspects of the Employment of People with Disabilities
- Higher Education Act of 1997
- White Paper No.6, Special Need Education (2001)

In line with the international trend of providing quality education, South Africa has made significant strides towards the realisation of this goal (Ngcobo, 2006). However policy on its own cannot bring about change. Despite all its education policies, programmes and legislation South African Universities continue to face impending political issues that continue to impact on educational opportunities for all (Ngcobo, 2006). This includes the current politically motivated student uprising among South African universities namely,

the *"#FeesMustFall"* Campaign (2016). This campaign is a student-led protest movement for free education in South Africa. An increase in student fees sparked student protest action at South African universities in October 2015. Protests started at the University of Witwatersrand thereafter the University of Cape Town and Rhodes University joined the strike action that later erupted at UKZN (FeesMustFall, 2017). This exacerbated the challenges faced by students with disabilities at UKZN. Issues of safety and security posed a huge threat to SWDs at UKZN when protesting students clashed with police during protest action. In personal communication with DSU staff and SWD (2016) partially sighted students, students with physical disabilities as well as students with hearing impairments were gravely disadvantaged as they found themselves helpless in the outbreak of violence at the institution.

The UKZN Policy (2004) is willing to co-operate and collaborate with other relevant institutions to effectively meet the needs of staff and students with disabilities. The policy allows for the expertise and support services that enhance positive learning outcomes for students with disabilities. It further encourages research and policy development in the area of disability as in the case of this study with an aim towards interventions and service provision to meet the needs of SWDs. The key to compliance and implementation of the policy is the responsibility of every member of staff including all Deans and the Heads of Support Divisions accountable to the Vice-Chancellor in full cooperation with the Diversity Manager and Executive Director Equity (UKZN Policy, 2004).

South Africa incorporated disability policies that surpass other countries, but it is unclear if South Africa has strictly adhered to these laws. With all the policy and procedure in place, SWD seems to be either unaware of their rights or do not take full advantage of the available human and ecological resources (Harbour & Madaus, 2011). Ntombela (2013) identified that inclusion is a new paradigm that the South African government is promoting through

education. Ntombela (2013) explored challenges experienced by a student with a physical disability in his study at a South African University. He used an interpretive qualitative case study, from the narrative of a physically disabled student. Findings in Ntobela's (2013) study reveal that meaningful change is a lengthy process and that new policy proclamations do not necessarily translate to new practices.

Students with disabilities remain excluded from formal education despite legislation mandated to protect such rights (Harbour & Madaus 2011). The authors further affirm that students should arrive at higher education with the knowledge that the policy and law are on their side, and they should be ready to learn or work on any campus that is right for them, whether or not the campus itself is ready (Harbour & Maudous, 2011). Universities need to adjust accordingly with the government mandating better access and services through legislation. Ntombela (2013) argues that although universities are believed to be progressive places, it is not easy to change entrenched attitudes and practices. As a result, this study lodges an enquiry into why, with all these policies supporting inclusion, it is still evident that there is the mismatch between policy and practice as many students with disabilities remain excluded from higher education.

2.5. Comparative Disability Statistics

Inclusion is conceptualised as a response to a range and an increasingly diverse student population in higher education (Ashworth et al., 2010). The White paper for post-school education and training approved by Cabinet on 20th November (2013) proposed that participation rates be expected to increase from 17.3% to 25%, that is from just over 937,000 students in 2011 to approximately 1.6 million enrolments in 2030. University education is

becoming a goal for more people with disabilities due to greater inclusion in schools, the media and society building stronger foundations in general (Harbour & Maudous, 2011).

Kunc (1992) explained that goal seeking behaviours were influenced by unmet needs and was what made one feel anchored in a community through inclusion and acceptance. Maslow's Hierarchy of needs model is still used today as a means to understand human behaviour (Benson & Dundis, 2003). Not much literature on disability studies incorporated Maslow's Hierarchy of needs model but it was found that Kunc (1992), discussed disability where he emphasized the importance of belonging (Maslow's' third level of the hierarchy) as an important concept in inclusive education. In a study by Benson and Dundis (2003) understanding and motivating employees in a Health Care industry in the US revealed that training, like good quality education, has embedded social elements. Apart from meeting security and self-actualisation needs, it also relates to social belongingness and self-esteem (Benson & Dundis, 2003). Benson and Dundis, (2003) affirm that once a sense of belongingness is reached through mastery or achievement, one achieves a sense of self-worth. It then becomes possible to look to the fourth level, that being self-esteem, where the individual feels competent, confident and self-assured. Enhanced self-confidence as the individual learns and grows enables them to pursue self-actualisation – or to 'be all that one can be' (Benson & Dundis, 2003, pg. 316). From this it was established why the number of SWD at UKZN has gradually increased over the years and why more students with disabilities are able to satisfy basic self-esteem needs and reach for quality education and better prospect through entry into mainstream University.

2.5.1. Statistical information regarding the number of registered UKZN Students with Disabilities
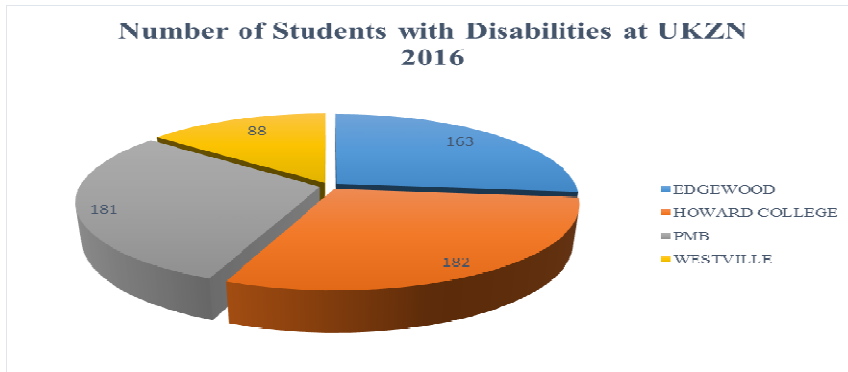
Figure 1. A number of students with disabilities at UKZN, 2016 (Disability Support Unit, 2016).

2.5.2. Category of Students with Disabilities at UKZN
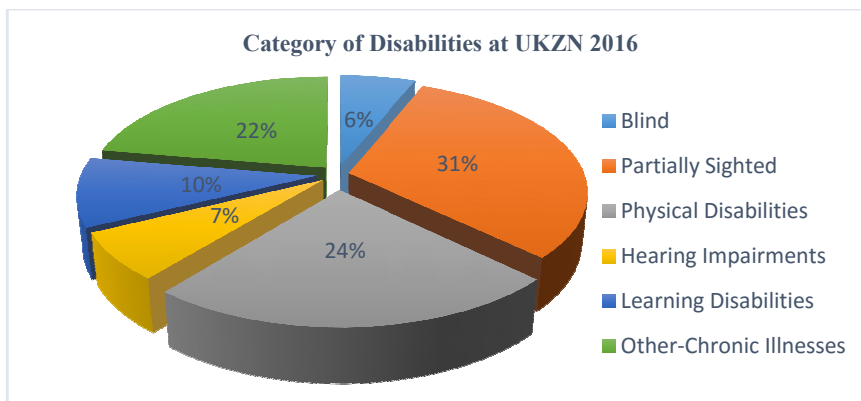
Figure 2. Categories of Disabilities at UKZN 2016 (Disability Support Unit, 2016)

2.6 Students with Disabilities in a Higher Education Institutions (HEIs)

Higher Education Institutions (HEIs) expect adjustments to be appropriate in terms of severity and presentation of the different forms of disability (Taylor, Baskett & Wren, 2010). The UKZN Disability Support Unit, (2016) illustrated this in Fig. 1 & Fig. 2 which included the number of students and the Category of Disabilities presented at UKZN including the successful incorporation of the first deaf student at UKZN in 2016. Americans with Disabilities Act (1990) brought public awareness to the rights of SWDs and emphasised self-determination theory in higher education. Self-determination is defined in Field et al. (2003) and is explained as helping SWDs engage in autonomous behaviours in order to harness their own strengths and abilities. Field et al. (2003) explained that self–determination is also important for successful transition to university and success resulting in a more positive experience for students.

Disability Support Unit (DSU) is a structure located in the Division of Student Services. Its core function is to operationalise equity of access for students with special needs enrolled across UKZN campuses. The latter will undertake to ensure that reasonable accommodation, timeously assessed and implemented, ensure students with special needs are able to optimise their learning opportunities (Disability Coordinator, 2017). Despite growing numbers, the DSU offices have not had a comparable increase in the number of staff to meet the demands for their services. In personal communication with DSU staff (2012), the researcher found that students with disabilities at UKZN also encounter similar problems in that staff limitations at DSU posed significant problems with regards to the assessment process (DSU, 2012). Blind students at the Howard College Campus (2016) conveyed that they lacked assistance from person's who guide them to and from different areas on the campus. Many universities have given their responsibility for disability services to other departments such as

counselling centres, health services or Deans of students. However, at UKZN, much of the responsibility lies with the DSU professionals who are mainly involved with interacting with various departments to provide appropriate support needed in servicing SWDs. DSU offices need to be (Houbour & Maudus (2011) :

- Well-resourced with support staff and equipment

- Properly funded

- Creative

- Think ahead

- Should have the support of executive management

Key to meeting these needs is to develop relationships with colleges, departments and schools across the university. Similar to Systems Theory (Becvar & Becvar, 2014), it would entail incorporating shared responsibility and relationships between relevant significant individuals. The focus is on developing coordinated and collaborates relationships with departments across the university or a combined integrated approach. While the DSU is housed within the Student Services Division, providing structural and curriculum access to SWDs is an institutional responsibility that can be accomplished primarily by building partnership and creating a sense of "shared ownership" or as Becvar and Becvar (2014, p. 88) explained, "shared responsibility."

2.7 Academic Teaching and learning

Recent emphasis has been on initiatives aimed at widening access to higher education to students with disabilities concerning issues such as the curriculum, teaching and learning and assessment. Based on a study conducted at the University of Brunei Darussalam in Southeast Asia, one of the main factors influencing the successful implementation of any inclusive policy is the positive attitude of teachers or educators (Bradshaw &Mundia, 2006). Negative

attitudes led to low expectations of SWD, which reduced learning opportunities resulting in a cycle of impaired performance lowering expectations by both educator and student. As such Campbell, Gilmore and Cuskelly (2003) explain that positive attitudes towards disability need to be applied early in their profession. Although educators may have positive attitudes, they still had concerns about the actual implementation of inclusion (Bradshaw & Mundia, 2006). Bradshaw and Mundia (2006) established that educator's beliefs affected their acceptance of inclusion. Where one believed that problems resulted from the interaction between SWDs and the environment they were more able to meet students' needs but where the problem was inherent in the SWDs, interaction became less effective (Bradshaw & Mundia, 2006). Drawing from the social model of disability applied in this study, politically correct and socially desirable behaviour influenced the successful inclusion of SWD (Bradshaw & Mundia, 2006).

Tinklin, Riddell and Wilson (2004) agreed that institutions had staffing and structures in place to develop policy and provisions for students with disabilities. However barriers to accessing the curriculum and the teaching and learning process persist. In a study conducted in an Australian university by Bradshaw and Mundia (2006), it was suggested that staff development and exposure to people with disabilities are key to successful inclusion of SWD. It was argued in Campbell et al. (2003) that traditional university courses designed to prepare lecturers to work with SWD, and direct contact with people with disabilities have little impact on attitudes towards disability. It emerged that to encourage positive attitudes towards disability level of contact was necessary however, a more effective way would include combining formal instruction and contact with SWDs to alter attitudes. In another study in Norway, HEIs expect to adapt the learning environments without compromising academic standards (Brandt, 2011). To achieve this Brandt (2011) tackled attitudes and disabling

behaviours to overcome barriers to inclusion. Taylor, Baskett and Wren (2010) proposed that United Kingdom HEIs should make reasonable adjustments to students with disability in an anticipatory manner in order that the transition from school to university is professionally manage to enable SWD to be assessed in a timely manner. These HEIs further expected to ensure that the adjustments were appropriate in terms of severity and presentation of the different forms of disability (Taylor et al., 2010). Such studies align with UKZN Policy (2004) and provide insight in terms of the modification of existing academic courses to accommodate the range of disabilities that individual students may have. A reform of the Norwegian HE system, the Quality Reform (QR), with the objective to provide equal rights to education for all, has strengthened the relationship between the HEIs and SWDs. Brandt (2011) affirms that one of the objectives of the QR is to ensure that SWDs receive more individual attention requiring adaptation to meet the needs of each student (Brand, 2011). UKZN is committed to providing modification that does not compromise the academic standard or the essential nature of the academic course.

Some professionals believe that emerging population of students with disabilities will compromise academic standards and are therefore reluctant to except the value of inclusivity of diverse students (Hourbour &Maudus, 2011). Taylor et al. (2010) argued that discrimination within the United Kingdom's higher education sector continues to be justified under the guise of maintaining standards rather than making adjustments to allow the student to meet academic requirements. In personal communication with Disability coordinator at UKZN (2016), inclusion of students with disabilities often exceeds expectations of College and support staff. He affirmed that SWD seldom demand significant modification of course material. Usually minor adjustments can make coursework more meaningful to students with

disabilities thereby contributing to universally acceptable curriculums and a positive classroom experience for everyone (UKZN, 2016).

"Providing higher education opportunities to all people is a logical step towards a society committed to the inclusion of all people." (Harbour & Maudous, 2011)

As such, it was recommended that a universally designed instruction be incorporated to create a curriculum and environments that are inclusive for all students from the onset (Harbour & Maudous, 2011).

2.7.1 Universal Design Instruction (UDI) and Self-determination

It was discussed in Field et al. (2003) that Universal Design Instruction (UDI) is designed to allow the university to expect that there will be diverse student needs and learning styles and to be prepared with effective strategies to make learning accessible to all students. Since disability, like human development, is both continuous and evolving it can be seen as naturally occurring, and as a result students with disabilities do not have to continually advocate for access. A curriculum design and institutional environments that are fully adapted to accommodate the greatest diversity of students will foster self-determination among students because options will be available to them that meet individual requirements (Field et al., 2003). The use of UDI as an effective strategy to promote responsibility and effective instruction for all will allow SWDs to receive appropriate support without emphasising the stigma usually attached to special accommodations (Field et al., 2003).

Field et al. (2003) recommended that disability personnel apply a comprehensive approach that focuses on self-determination for all and not adapt the teaching and learning environment purely for SWDs. A collaborative interaction of all stakeholders should become a priority.

The study by Field et al. (2003) indicates that a university wide focus on self-determination and UDI has many benefits. It ultimately increases achievement and efficacy for all involved including staff, college personnel as well as able-bodied students and SWDs. Research has demonstrated that a self-determined individual is more successful in achieving their set goals (Field et al., 2003). In studies such as Brandt (2011) and Harbour and Maudous (2011) universal design instruction encourages creative and inclusive pedagogy and values the diverse learner providing appropriately materials and environments to meet particular needs of SWDs in a way that all students can befit from them. For future research UDI is a much needed instrument to foster inclusion in higher education settings in South Africa.

Students with disabilities rely on the University community to support them in addressing academic challenges and social changes relative to the university experience. Field et al. (2003) affirmed that to actively explore interests, SWDs must develop their independence, academic skills and make important life choices to pursue opportunities. It is important that administrators, coordinators and staff explicitly encourage, students with disabilities. While complying with legal mandates to provide reasonable accommodation, administrators and other staff that work closely with SWD should assist in the development of their independence and self-determination skills (Harbour & Maudous, 2011). Without such encouragement and support, students are not successfully integrated and involved. As a result it becomes unlikely that SWD will fully engage with their campuses leading to a greater chance for at-risk students to feel isolated and withdraw (Harbour & Maudous, 2011).

In order for students with disabilities to ease the transformation from secondary school to a mainstream university, they initially need to understand their particular disability and what learning strategies work best for them. Field et al. (2003) agree that by emphasising universal instructional design and self-determination in the school systems would prepare SWDs to for

post-secondary educational and employment opportunities. As such SWD should consider the following proposed by Harbour and Maudous (2011):

- Students with disabilities must understand the support services available to them

- Educators must learn how to deal with specific disabilities of students and available accommodations such as extra time for tests, access to printed text, physical accessibility to classrooms)

- Implement universal design instruction

- Encourage discussions on service provision, awareness of SWDs, and improve integration and retention of SWDs.

- University should be welcoming and make SWDs feel safe, supported and encouraged to grow as individuals.

2.8 Awareness of Disability as a Diversity

By embracing the social model of disability universities are moving towards the acceptance of disability as diversity. The UKZN Policy (2004) aims at providing universally accessible and inclusive environments for all students and staff with disabilities. It further affirms that UKZN is equally committed to the removal of cultural, physical and social barriers that prevent people with disabilities from accessing and benefiting from the university. The problem is not that a person using a wheelchair. It is rather, the designers of a university space that failed to construct ramps and elevators. The solution is not focused on the individual but is systemic which ties in with our theoretical framework that encompasses System Theory.

The University of KwaZulu-Natal aims to raise the awareness and responsiveness of staff and students to the needs of students with disabilities by the promotion of the UKZN Policy

(2004) and by incorporating issues related to students with disabilities in staff development training sessions or appropriate student gatherings. Furthermore, the policy explains that it is the student's responsibility for disclosure and the concept of universal access is necessary to facilitate the full participation of students with disabilities at the university (UKZN Policy, 2004, pg, 12). The University of KwaZulu-Natal commits to providing opportunities to academic staff and fellow students to acquire the understanding and competencies necessary to meet the educational support, social and employment needs of students with disabilities (UKZN Policy, 2004).

Seyama (2008) contests this view in her study as she reveals that despite the awareness of accessibility issues there is still a lack of understanding and a lack of knowledge of how to implement systems effectively. There is therefore a need for design features enabling access by all, such as a universal design system that allows for access for all students. Seyama (2008) believes that when access issues are identified and discussed it will improve awareness and promote accessibility. She also believes that accessible resources, training, and tools are more effective if approached collaboratively such as involving examination staff, DSU staff and senior library staff to participate in formulating uniformity in the development of services to SWDs. Collaboration or integration at multiple levels from different areas of the campus including employing both top-down and bottom-up relevant university staff will enable the university community to embrace the policy as a clear sign that access to information by people with disabilities is a high priority (UKZN Policy, 2004).

2.8.1   Gender and Disabilities

Disability can affect all people including those who come from poor households, indigenous populations and ethnic minority groups. The high risk of experiencing disability lies in

inadequate legislation, negative attitudes, discrimination and lack of participation in decisions that affect the lives of PWDs (WHO, 2015). Clearly, the prevalence of disability is greater in developing rather than developed countries due to barriers that exist because persons with disabilities. As such, PWDs cannot freely express their opinions on an equal level as other (WHO, 2015). Such barriers contribute to females with disability experiencing a "double discrimination" because in addition to the above disadvantages they also face gender-based violence, abuse and marginalisation (WHO, 2015). As a result, women with disabilities are significantly disadvantaged in comparison with men with disability and women without disability. United States Agency for International Development (USAID), (2015) agreed with WHO (2015) that females with disabilities are subjected to multiple layers of discrimination and often face "double discrimination". Furthermore it was argued in USAID (2015), that this inequality is exacerbated for females with disabilities who are members of marginalised ethnic or racial groups or part of the lesbian, gay, bisexual, transgender and intersex community. The United Nations General Assembly (2013) noted an estimated 80% of PWDs are from developing countries and emphasised a need to include such persons including women in aspects of development (WHO, 2015).

Subrayen (2011) revealed in her study of SWD at UKZN, that higher education continues to be a challenge for women with disabilities. She affirms that women with disabilities face additional barriers when compelled to occupy traditional female fields by school counsellors. This inadvertently leads to greater obstacles for women with disabilities when they attempt to pursue a career in a male dominated profession (Subrayen, 2011). However, at UKZN Disability statistics (2016) reveal that there has been a gradual increase in the number of registered female students on campus (Fig 3.).

Females with disabilities within their communities can greatly contribute to the economic development of their countries (USAID, 2015). In addition USAID (2015) emphasised that the impact of gender discrimination against persons with disabilities hinders economic development, limits democracy, and erodes societies. Consequently, female students benefit from UKZN Policy (2004) aimed at making tertiary education universally accessible and inclusive for all students and staff with disabilities in the institution (fig.3). Furthermore Section 54(1) (a) of the Employment Equity Act No.55 of 1988 and the rights of people with disabilities UKZN Policy (2004) is committed to focussing its energy and resources towards the removal of barriers such as gender discrimination and disability that prevent people with disabilities from accessing or benefiting from the university (UKZN Policy, 2004).
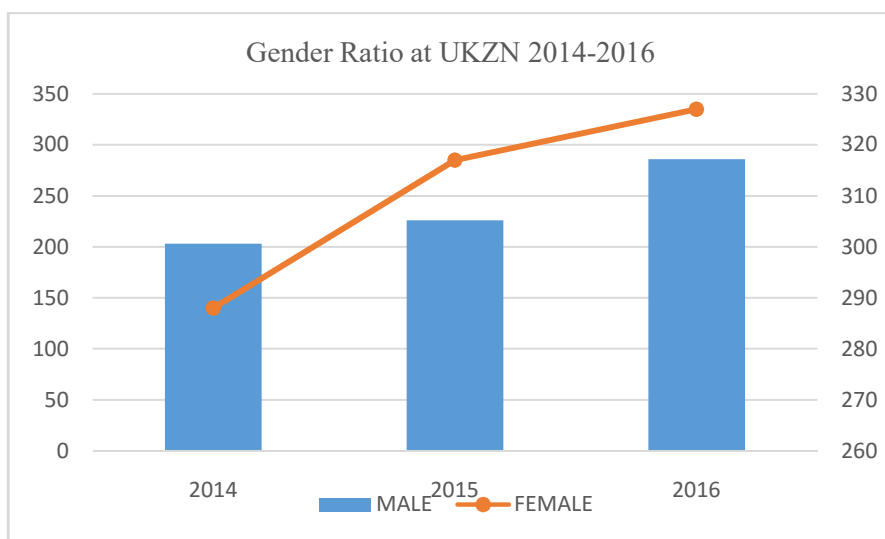
Figure 3: Gender Ratios (Disability Support Unit, 2016)

On International Women's Day 2016, United Nations (UN) officials called to 'Step It Up' for gender equality (UN News Centre, 2016). The "Planet 50/50: Step it up for gender equality" proposed by the United Nations, is in line with goals proposed by White Paper for post school education and training (2013) aimed at providing an integrated system of post school education and training similar to the approach used in this study. Based on breaking news

from the UN News Centre (2016) senior UN officials from around the world introduced the slogan "Step It Up" marking International Women's Day with more resources and greater political action to achieve gender equality by the year 2030. Secretary-General of the UN, Ban Ki-moon conveyed that women's empowerment led to society's advancement and included the following statement in his address:

"We have shattered so many glass ceilings we created a carpet of shards," he said. "Now we are sweeping away the assumptions and bias of the past so women can advance across new frontiers." (Secretary-General Ban Ki-moon, 2016)

(UN News Centre, 2016)

Secretary-General Ban Ki-moon, called for the year 2030 to be the deadline for the new Sustainable Development Goals (SDGs), one of which is to achieve gender equality ensuring inclusive and quality education for all (UN News Centre, 2016). Such measures are welcomed and greatly celebrated however; policy on its own cannot bring about change. UKZN, Section 8 of the Policy on Student and Staff with Disabilities (2004), states that the responsibility for implementation of the policy rests with all staff and as such the policy's implementation lies in the hands of all concerned parties within the University community.

2.9 Barriers and challenges experienced by students with disabilities within a mainstream university environment

2.9.1. Reasonable Accommodation

The University of KwaZulu-Natal has a diversity of students with disabilities. Notombela, (2013) explained that accommodation referred to all the adjustments that are necessary to

ensure that people with disabilities can function effectively with dignity and independence. Challenges result from the fact that what may be a reasonable accommodation for one student in a course does not necessarily constitute what may be a reasonable accommodation for another student in the same course (communication with DSU, 2012). As such, accommodation for SWD should be determined through communication and interaction with relevant stakeholders at the university in order to meet individual requirements. That way dialogues between colleges and DSU staff may contribute to meeting disability-related needs and the needs of specific academic programs efficiently and effectively (Zhang, Landmark, Reber, Hsu, Kwok and Benz, 2010).

In a study by Zhang (et al. 2010), the outcome of the findings revealed characteristics of both support staff and students with disabilities impacted on availability and provision of reasonable accommodation. The study included 206 faculty members from nine institutions that formed part of a major university system in the southern states of the United States of America (USA). Zhang et al. (2010) explained that attitudes and behaviours of school and college staff could either help or hinder students with disabilities. Bourke, Strehorn, and Silver (2000) revealed in a survey where it indicated that college member's beliefs regarding the efficacy of and the need for accommodations could affect the provision of accommodations. The main reason being that college or school staff members may be concerned that providing accommodation lower academic integrity. Although the general consensus is that it is fair to students without disabilities to provide accommodations to students who have disabilities, studies such as Houck, Asselin, Troutman, and Arrington (1992); and Vogel, Leyser, Wyland, & Brulle (1999) argue that there are other staff members who perceive accommodations, such as certain examination accommodations, as unfair to students who do not have disabilities.

Findings in Zhang (et al. 2010) indicated that staff member beliefs have the most direct influence on the provision of reasonable accommodations. Zang et al. (2010) put forth factors that affect University/College practice in the provision of reasonable accommodations to students with disabilities. These include:

- Staff must be aware of legal responsibilities

- The institutional must support provision of accommodations

- Staff attitudes towards SWDs

Zhang (et al. 2010) recommend training programs and interventions made to improve staff beliefs and enhance their provision of accommodations and support to SWDs.

In a study by Burgstahler et al. (2000), it was indicated that positive attitudes were more prevalent in staff members from recent times than those trained during traditional times. On the other hand, aspects discussed in Burgstahler et al. (2000) include university staff members who expressed having students with disabilities in their classes added richness and diversity to their courses. Having students with disabilities in their courses helped the instructors explore teaching and learning styles that allowed them to reflect on their teaching methodologies (Burgstahler et al. 2000).

At UKZN, the DSU has shown that college staff members rely on their services for information about their legal responsibilities pertaining to SWDs. Administrators and College staffs at university conveyed that lack of time was the greatest obstacle for providing help and accommodations to SWDs. Sweener, Kundert, May, and Quinn, 2002; Vogel et al., (1999) in agreed support of this finding showed that staff members are more willing to provide accommodations if such provisions are not time consuming.

2.9.2. The Accommodation Process and Disclosure

Shaw, Madaus and Banerjee (2009) outlined in their study that improved preparation and increased access to students with disabilities begins with identifying accommodations that have been most effective to them in high school. When advising disability services personnel at university about their particular disability, this background gives SWDs a history and circumstances of past use of the eligible accommodation. Shaw et al. (2009) explained that it is the student's responsibility to request accommodations and to explain his or her needs to the course instructors or lecturers. This implied that Shaw et al. (2009) favoured self-disclosure by SWDs by way of presenting supporting documentation to verify the nature of disability to the colleges. Colleges do not evaluate students and the provision of supporting documents is at the student's expense. A similar practice is adhered to at UKZN where it is the student's responsibility for disclosure and the provision of supporting documents to DSU to motivate for accommodation. Madaus and Shaw (2004) argued that the effectiveness of requested accommodations was up to the SWDs by monitoring progress and the effectiveness of the requested accommodations. Students with disabilities are expected to self-advocate therefore it is critically that they understand the specific nature of their disability and how they can be appropriately accommodated (Shaw et al., 2009)

There has been considerable debate in several studies regarding tensions between academic standards and widening participation for students with disabilities at university (Ashworth et al., 2010; Brandt, 2011; Riddell et al., 2007; Taylor et al., 2010). In an article by Ashworth et al. (2010) it was emphasized that there were problems with standards and assessment criteria in higher education institutions. It is important to maintain academic standards and therefore Ashworth et al. (2010) suggested recasting student achievement as different rather than inferior as it supported inclusion. It was further argued that disability legislation protects academic standards. Reasonable adjustments are not meant to change or lower standards to

accommodate students with disabilities rather, the focus is on assessment methods that allow SWDs equal opportunity to demonstrate their learning in accordance with applied standards (Ashworth et al., 2010).

Ntombela's (2013) findings suggest that universities must be organised in ways that support learning of all. He specified that accommodations are a critical part of inclusion and argued that without considerations for accommodations institutions were not in a position to address access. At UKZN, students are required to disclose their disability to the institution with supporting documentation of that particular disability. This is usually provided by a doctor, a psychologist, counsellor or school psychologist, and must provide a clear diagnosis, verifying the nature of the disability and its effects on university activity (Shaw et al., 2009). At UKZN, it is up to the student to decide if he or she will self-disclose to obtain accommodation. Shaw (et al. 2009) supported this and emphasised that the student has the ability to make these decisions in a timely manner, on registration, in their first year of study to ensure efficiency in inclusion.

At the University of KwaZulu-Natal, DSU staff consults with students who have disclosed their disability to the institution. The DSU staff then verifies this information with the third-party documentation of the disability and make accommodation recommendations, presented to the schools, colleges or other support staff for services, in the form of a letter about accommodations. DSU staff (2012) also consults with academics, lecturers and other support staff about particular circumstances and recommended accommodations. At UKZN it is the DSU that is mainly responsible for the administration of teaching solutions to dilemmas and proposing alternatives to lecturers and other support staff. The DSU staff also makes recommended accommodations to examination officials in advance in order to include SWDs in exam preparations. This includes examination timetabling and separate venue allocations.

2.9.3. Assistive Technology

It is important to encourage students to explore assistive technologies as part of their transition plan in high school (Shaw, et al., 2009). To initiate the use of appropriate assistive technologies when at the university may cause delays with the commencement of the academic program. Therefore, students with disabilities need to meet general technology competency expectations of university education (Shaw et al., 2009). This includes knowledge of spreadsheets, database basics, graphics, multimedia, and use of the internet. In addition, students also need to have an understanding of technology-based learning strategies such as how to function in a web-based class or online research (Shaw et al., 2009).

Coleman (2011) indicated that an assistive technology device could be any item used to increase the functional capabilities of an individual with disabilities. Many partially sighted students or students who are blind use computer software where print is enlarged, text is read out aloud or where it types what the student is saying such as Kurzweil and Jaws (DSU, 2012). In 1998, section 508 of the Rehabilitation Act (1973) required federal agencies to make their electronic and information technology (EIT) accessible to PWDs however, despite such laws mandated to increase accessibility, various issues still impact the successful implementation of assistive technology for curriculum access for students with disabilities. Coleman (2011) supports Shaw et al. (2009) in that timeliness and consistency of implementation may influence the use of assistive technology by students with disabilities at the university.

Assistive technology gives students increased access to electronic media. However, without proper formatting of such electronic media can create additional barriers to SWDs. In personal communication with the disability co-ordinator (DSU, 2012) revealed that graphs and pictures used in assessment formats were not accessible to blind students. At university,

colleges need to ensure that electronic resources increase access rather than limit it. At the University of KwaZulu-Natal support staff such as the DSU Information Access Officer facilitate accessibility of electronic resources and storage of digital files.

It is important that institutions committed to providing higher education to students with disabilities have website technology that is accessible and user-friendly to all students. Web-based technology facilitated admissions, applications, lecture timetables, class assignments and makes lecture notes available/accessible to students with disabilities. Students that are deaf or visually impaired benefit most from these websites and failure to meet this requirement increases the potential for discrimination against these students (Bruyère, 2008). Based on a study by the Employment and Disability Institute at Cornell University (2008) to identify potential barriers to website accessibility and usability, it was discovered that the college websites fared poorly in both accessibility and usability however many of the issues could be addressed without significant effort (Bruyère, 2008). The study also revealed that lack of knowledge and concerns about cost and time were potential barriers to accessibility and usability of websites.

There have been significant strides to expedite access and usability of assistive technology in studies such as Bruyère (2008); Shaw et al. (2009) and Coleman (2011). However, technology continues to develop to provide new access to SWDs. Universities continue to face challenges as new diverse student populations emerge, evolving technologies are introduced, quality instruction and the provision of appropriate support services, as well as its resultant security risks regarding examination question papers, arise. But it was argued in Harbour and Maudous (2011) that accessibility and usability of websites promoting learning are significantly more important than other minor issues.

2.10. The Integrated approach and liaison system, servicing students with disabilities

Attainment of a university education relates to employment and success. To this end people with disabilities want and are entitled to opportunities similar to their non-disabled peers including university education, employment and successful life (Palombi, 2000). Students usually, receive information through institutional representatives who visit the schools. In order for a university to attract students with disabilities, representatives from their respective department that deals with student recruitment, need to ensure that students with disabilities have sufficient information about the institution (Palombi, 2000). Through visits and literature distribution to secondary schools, staff can engage with students with disabilities to arrange on-campus visits that focus on services available to students with disabilities (Palombi, 2000). The author believes that students need to know the type and extensiveness of available support for special services to assist them in determining which college or university is most suitable to their specific needs (Palombi, 2000). To facilitate an integrated system, favouring accessibility and inclusive transition from high school to university, a liaison system needs to ensure that transition decisions take place in high school. Shaw (et al., 2009) supports this by explaining that high schools need to make sure that students are taking a course of study that would make them eligible to fulfil their university education goals. As a result, SWDs need to engage in activities that will prepare them for university education which includes becoming an independent learner and having social and interpersonal skills required (Shaw et al., 2009).

In terms of school liaison servicing students with disabilities, Shaw et al. (2009) explains that SWDs who intent furthering their education at university need to consider various aspects pertaining to university education. Such aspects include the size and location of the institution, its competitiveness with respect to cost and academic programs as well as the

availability of support services at that university (Shaw et al., 2009). Shaw et al. (2009) argued, that public high schools may offer individualised special education to SWDs that universities may not offer. Some universities offer reasonable accommodations to qualified SWDs mainly to project a notion that they are exercising non-discriminatory practices and relevant academic administration (Shaw et al., 2009). Therefore, the university community needs to ensure that it is prepared to assist SWDs in the transition process from high school to university. If a collaborative approach is achieved whereby public secondary school and university personal assist in the transition process, it will continue to foster accessibility and inclusive transition strategies to promote student success (Shaw et al., 2009).

It is also important for admissions and Student Academic Administration (SAA) staff to be well acquainted with service procedures and accommodations that the university provides for SWDs. A study by Fuller, Bradley and Fuller (2004) argued that the main goal of developing and cultivating liaisons across high schools and the university is to create relationships that foster opportunity to share and exchange information in an effort to meet the needs of SWD more effectively and efficiently. Student Academic Administration (SAA) supports this in line with the vision of the university to provide efficient student-centred academic administrative functions (UKZN Website, 2017). Student Academic Administration (SAA) at the University of KwaZulu-Natal supports the following function across five campuses of the university (UKZN Website, 2017):

- Handling student enquiries and applications
- Coordinating processes between the university and Central Applications Office
- Publishing of undergraduate and postgraduate prospectus and college handbooks
- Co-ordinating examinations
- Record handling
- Compiling the lecture and exam timetables and venue bookings

The services of Student Academic Administration (SAA) are available on all five campuses of the university, namely: Westville, Howard College, Pietermaritzburg, Edgewood and Nelson Mandela School of Medicine (UKZN Website, 2017).

In support of improved accessibility and inclusive transition strategies for SWD, this study embraced the concept of an integrated university system facilitated by Department of Higher Education and Training [DHET], (2016) plans for the launch of the new Central Application Services (CAS) in 2019. It is seen as a crucial move towards supporting informed access to universities making choices and placement of students across the system more effective (DHET, 2016).

2.11. Recruitment and Admissions

As a South African University, in keeping with non-discriminatory practices the UKZN Policy (2004) promotes disclosure of disability, where it undertakes to assist students with disabilities who disclose on enrolment. Such disclosure is confidential, and the nature of the disability of students should not influence admission (Shaw et al., 2009). Once admitted to a course of study at the university SWDs will then liaise with the disability co-ordinator and the relevant school to obtain relevant course information and other requirements. To ensure that SWDs are considered in a manner consistent with mainstream students, admissions and SAA staff must adhere to set policies and procedures concerning admission and other requirements of SWDs (Palombi, 2000).

In the applications and admissions process, confidentiality and disclosure of disability are important in requesting reasonable accommodations. Palombi (2000) explains that a significant issue in the admission process at the university level is that a greater degree of responsibility is placed on the student to inform the university support staff of his or her

disability. This is supported by Shaw et al. (2009), who asserts that SWDs understand that they have the right to disclose or to not disclose their disability at University. However SWDs need to bear in mind that both decisions have consequences for educational outcomes at university. Some students feel more comfortable not disclosing as it also provides an opportunity to test their resilience and ability to succeed on their own. However, if the student does not self-disclose, accommodations are not necessary (Shaw et al., 2009). Palombi (2000) asserted that if SWDs decides not to request for accommodation they put themselves at risk of performing poorly. The university also needs to consider simplifying the application process or provide pre-admission workshops to assist SWDs obtain as much information about the various processes involved and understand the consequences involved regarding disclosure of disability (Palombi, 2000).

Admission staff need to be well equipped with knowledge and awareness of admission procedures and the application of academic and non-academic criteria concerning admission decisions. For example, admission staff should not rely solely on objective criteria such as grade 12 scores but also consider a personal interview, letters of recommendation, and personal statements in admission decisions concerning SWDs (Palombi, 2000). It is imperative that admission staff are aware of the type of services available at the university in order to recruit qualified SWDs at University. Application of the above criteria will ensure that SWDs have equal opportunity for recruitment and admission (Palombi, 2000).

2.12. Theoretical Frameworks

In the next section the theoretical frameworks will be discussed.

2.12.1. Second Order Cybernetic Approach

This study is guided by the voices and perceptions of persons with disabilities in a reciprocal relation to the researcher, which is a basic tenet of the Second Order Cybernetic approach from the premise of Ecosystemic Psychology. Second Order Cybernetic Approach involves the researcher who forms part of the system interacting with the Disability Services Unit of UKZN, influencing and being influenced by the system in a reciprocal way. This the researcher has achieved by being involved with the students and staff and having an existing relationship. The shift is from the Newtonian-Cartesean Epistemology where the individual is seen as the locus of pathology to Systems theory or Cybernetics, which moves from individuals viewed in isolation, and focuses on relationships between individuals (Becvar & Becvar, 2014). The focus is on reciprocity (give-and-take actions), recursion (circular causality) and shared responsibility. The researcher does not try to change the University System but makes or perturbs ways in which others define reality and tries to create a context in which people can think about changing attitudes thus encouraging awareness of diverse populations within a mainstream university environment.

The challenge is a representation of the University as a cybernetic system. Previously Hoffman (1985) suggested a way out of this difficulty, which was to think in terms of a conversational domain where the individual is no longer the focus of attention but the entire population including coordinators, staff and professionals as a small evolving meaning system. Current theorists such as Smith-Acuña (2011) applied systems theory in family therapy and in business and other disciplines. The origin of systems theory lies with Ludwig von Bertalanffy, an Austrian Biologist who explained that discoveries and contradictions

were understood by applying universal principals to all kinds of grouping of phenomena he called systems (Smith-Acuña, 2011). Haines Centre for Strategic Management (2013) defined the term 'system' as "a set of elements or components that work together in relationships for the overall objectives/vision of the whole". In addition, a system focused on the attainment of an organisation-wide shared vision of customer satisfaction within today's complex and changing environment. For the purpose of this study 'the system' referred to within the second order approach refers to UKZN as the mainstream university system.

2.12.1.1 Relationship and wholeness

Individuals are not dependent but mutually influence one another. Individuals are not isolated they take a relational perspective and focus on context or whole. The whole is greater than the sum of its parts, represented as follows:

$$1 + 1 = 3$$

Two individuals plus their interaction where the interaction provides the context of the relationship and wholeness refers to the size of a family system (Becvar & Becvar, 2014). Smith-Acuña (2011) applied systems theory in working with couples and family systems understanding individuals in the context of their relationships. It provided a shift in her thinking when working with couples and students. She also believed that the danger of emphasizing the problem of an individual could minimise the healing potential of the relationship (Smith-Acuña, 2011).

Based on the interpretation by Becvar and Becvar (2014), at the level of first-order cybernetics, the observer assesses and describes what's going on inside the system from an objective, privileged position outside the system or 'black box'. Similar to the Newtonian-

Cartesian epistemology reality exist out there. The therapist tries to change the behaviour of the client based on normative models, on set criteria about what is healthy or pathological behaviour (Becvar & Becvar, 2014). As a result, the focus is on "what" or "how" not the "why." i.e. the patterns of interaction between A and B, the context, the relationship, and the here-and-now – rather than searching for causes.

At the level of second-order cybernetics, there is no external environment. The previous theorist like Gray, Duhl and Rizzo (1969) believed that in second-order cybernetics the system is closed. What you see out there is a reflection of your own perceptions so there can be no objectivity. The focus is on the observer and the black box i.e. the larger context that includes both (see fig.4) Meaning that the therapist/researcher is part of the observed. Current theorist like Becvar and Becvar (2014) believe, reality is constructed based on the assumptions and or belief systems of the observer replacing linear causality with circular causality. Furthermore, feedback into the system is seen as self-regulating with respect to maintenance of the desired variable or a target to be reached.
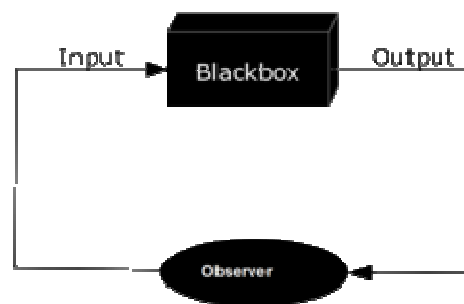
Figure 4. The Observer and the Black Box (Black Box-Wikipedia, n.d.)

A system responds to various perturbances in a way that it is consistent with its structure. It is a unified whole in which everything fits and makes sense (Becvar & Becvar, 2014). Thus the second order approach sees nothing as being negative, and believes that it becomes negative when perceived as negative.

The parameters of the second-order cybernetic approach to disability will now be explored based on Becvar and Becvar (2014).

Principles of Second-Order Cybernetic Epistemology

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                        │     Systems Theory      │
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    │  First Order Cybernetics │        │ Second Order Cybernetics │
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First Order Cybernetics	Second Order Cybernetics
The Principles of First Order Cybernetics	**The Principles of Second Order Cybernetics Applied in this Study**
Recursion	Wholeness and Self-Reference
Feedback	Openness and Closeness
Morphostasis	Autopoiesis
Morphogenesis	Structural Determinism
Rules and Boundaries	Structural Coupling
Openness and Closedness	Non-Purposeful Drift
Equifinality	Reality as a Multiverse
Equipotentiality	Epistemology of Participation
Communication and Information processing	
Relationship and Wholeness	
Goals and Purpose	
Wholeness	

Figure 5. Principles of Second-Order Cybernetic Epistemology

A discussion of the Second Order Cybernetic Principles will follow based on the work of Becvar and Becvar (2014).

2.12.1.2 Wholeness and Self-Reference

The system exists in the eye of the beholder or how we choose to define it. According to Becvar and Becvar (2014), decisions are based on our frame of reference or our epistemological premises. All our assertions are self-referential meaning we are making our own perceptions of what the truth is. The truth is not an absolute and therefore exists only as we choose to identify reality. Self-referential interactions give a system a sense of organisational closure or autonomy. Autonomy, described by Becvar and Becvar (2014), is the highest order of recursion or feedback process of a system. Deviation or stability is maintained by the organisation as a whole. To understand the University as a system it is important to look at it in its entirety not just look at one or some of its operational elements. We look at it from a perspective that recognises the observer as part of the observed. What we see reflects allot about us as it does about the object of our observation. Thus we can see that wholeness or self-reliance reflects both the internal structure of the system and the mutual interaction of all participants (Becvar & Becvar, 2014).

Wholeness is explained in terms of the University as a system. It is made up of a group of individuals who make up a complex unitary whole. The whole is distinctly different form the simple sum or contributions of the individual members because the University has structured rules that determine how all operational elements, students and staff members interact with one another.

2.12.1.3 Openness and Closeness

We do not talk about "input" into a system or "output" from external sources (as we would in first-order cybernetics) Here the system is closed and "feeding on itself". It is entirely self-referential. According to Becvar and Becvar (2014), at the level of autonomy, there is only internal negative feedback. The attitudes and interaction of the mainstream students and staff influence how SWDs within UNZN are included within the University and how well the University operates with such diversities. These interactions are referred to as perturbations and not inputs from outside the system. Take for example the University System remains a University System even after students graduate and leave the University. The structure is the relation between the parts as well as the identity of all parts that contribute to the whole system plus the observer is understood to be mutually interacting within a larger system whose boundaries are closed (Becvar & Becvar, 2014).

2.12.1.4 Autopoiesis

According to Becvar and Becvar (2014), autopoiesis refer to the way the parts relate rather than the nature of the part. Boundaries are necessary to distinguish a family from the larger context. Dynamics of interaction and particular relationships between members such as staff, academics and students specify and distinguish a boundary. The boundary does not cause the family nor does the family cause the boundary, each requires the other. The product of an autopoietic system is always itself meaning that a system does what it does in order to do what it does (Becvar & Becvar, 2014).

2.12.1.5 Structural Determinism

External stimulus does not 'input' into the system like disability laws and legislation. Our perceptions are not determined by an external stimulus. What we perceive is our own system the external system only triggers or perturbs your system and responds in a way that is determined entirely by its own structure (Becvar & Becvar, 2014). If two people watch a movie and one loves it, and another hates it, their responses are not determined by the movie (which is the external stimulus) but by their own structures. What you perceive is determined by your structure. Systems are 'structure determined'. This means that their actions are a function of how they are structured and you can perceive only what your structure allows you to perceive and nothing else. We cannot step out of our structures. The system determines its interactions by specifying which interactions it can undergo, what interactions it can accept and what responses it can make to these interactions. All the legislation that exists for disability can only bring about change within UKZN once applied accordingly limited to what the University structures allows. What this means is that whatever happens is fully determined by our structure and not by what we encounter in our environment. Thus we can see that the system is 'informationally closed', there is no flow of information into the system known as instructive interaction. There is no influence from the outside world, only a sequence of perturbations of the structure and compensations, which occur by changing the structure in order to maintain the overall organisation.

2.12.1.6 Structural Coupling

Becvar and Becvar (2014), states that since systems are structurally determined what a system does is always correct. The system does only what its structure determines it can do. Systems do exist within a medium that includes other systems and observers and Becvar and

Becvar (2014), defines the concept of structural coupling as the degree to which these systems are able to coexist. According to Becvar and Becvar (2014), in structural coupling organisms survive by fitting with one another and with other aspects of their context and will die if that fit is insufficient. In addition, change will only occur if the system allows it to without the organisation changing. The context in which a system exists is not deterministic but is a process of non-purposeful drift in which systems coexist. If we look at students with disabilities and other individuals those who thrive compared to those who don't comes from the degree to which structural coupling has or has not taken place. Those systems, according to the rules and laws of society, do so much better than those who choose to violate these social norms.

The structural coupling can be either achieved or not at all. Communication must bring about mutual understanding to establish compatibility and congruency (Becvar & Becvar, 2014).

2.12.1.7 Non-Purposeful Drift

A specific environment is not required for a particular system to exist. The development and growth of the system and its existence comes about because of mutual influence, feedback and adaptation with other systems in which it exists (Becvar & Becvar, 2014). Thus the context within which a system exists cannot be determined since there is no cause and effect. This process within a system is referred to as non-purposeful drift which continues as long as the system continues. For example when we work with students with disabilities we do not change them but work together with them to create a new context which is supportive of the desired behaviours. We also look at what is possible within a given structure or context. The strategy applied is to create a context in which the expected behaviour occurs naturally as an acceptable and logical response (Becvar & Becvar, 2014).

2.12.1.8 Epistemology of Participation

In second order cybernetics, the epistemological change is in thinking about relational processes that cannot exclude the observer from the system they are observing (Becvar & Becvar, 2014). As such the participant observer projects his /her own reality on the world to create a subjective experience thereof. From Becvar and Becvar's (2014) explanation, the epistemology of participation is an ongoing recursive process in which individuals and systems interact and adjust each other as they evolve and change. All knowledge is subjective, and in understanding reality, we are saying much about ourselves as what we are seeking to describe (Becvar & Becvar, 2014). Mutual perturbations exist between the SWDs and the researcher.

2.12.1.9 Reality as a Multiverse

Reality is always a particular system's reality where each person creates their own reality, which is different from everyone else's (Michailakis, 2003). This is based on each person's unique mixture of genetics, experiences as well as perceptions. For each person his or her reality is personally true and valuable. According to second order cybernetics there is no one universe but a multiverse of equally valid observer dependent realities (Becvar & Becvar, 2014). In addition, perception is a process of construction. For example, in a family of five each person's reality will be different from the family but at the same time is valid for each person. In this study, the voices of the participants carried their personal realities of their perception either as a student with disabilities within a mainstream environment or a staff member and their perceptions of disability. Reality is seen as a social construct and not events and objects 'out there' (Becvar & Becvar, 2014)

2.12.1.10 Contextual Research

Systems interact in a given context (circular causality) which is determined by the structure of the respective systems (Becvar & Becvar, 2014). The structure of the University cannot be changed but one can work together with students with disabilities to create a new context, which is supportive of their particular educational needs. This also involves taking into consideration what is possible within that given structure or system (the mainstream University environment) and creating a context in which the desired outcome is a logical response (Becvar & Becvar, 2014). As such, the study embraces the logic that disability does not exist exclusively in the individual but is a construct that finds its meaning in social and cultural context. As a result, this theory is relevant as it addresses students with disabilities, hearing their voices, emotions and perspectives relevant to the mainstream university processes.

Second-order thinking talks about the multiverse of reality where each person creates a particular version of the world and where no version is more correct or important than the other. In the second-order approach health is not a condition it is a way in which people describe their reality and relationships which is important to our understanding that disability is a perception created by the socio-cultural context within which it exists. Bevar and Becvar (2014) asserted that in psychotherapy a context is created in which people think about their thinking. It creates a context for change and does not impose change on the system. In second order psychotherapy, the therapist is not the expert but rather participates and makes or perturbs ways in which others define reality. Therapists can create a context in which people can think of change but cannot change people. The study does not attempt to change people but to transform or create a context in which people can think about change. The focus is on creating awareness thereby transforming attitudes toward understanding, acceptance, respect and appreciation for each other in terms of similarities and differences. Second order ethics

requires that we reflect on what impact our actions such as differences and biases we have on others.

Health according to second-order cybernetics is a way in which people describe their reality and their relationships (Becvar & Becvar, 2014). Minuchin (1974) referred to "enmeshed" family systems that resulted in psychosomatic symptoms. In second order thinking it is about how people come to think in pathological terms and what health means within their context of living. Behaviour is not labelled. A problem is valid only if a client sees it as a problem or communicates it as such. In psychotherapy, it is not the therapist but the family system that determines its own success in achieving its goals (Becvar & Becvar, 2014). Seligman and Darling (2007) applied the systems approach and considered theoretical and treatment aspects of families because when disability or chronic illness occurs it affects all family members. In this study disability is explored within the context of the university environment and affects all stakeholders within the university community. Problems experienced by SWDs may be seen as a problem in one context but as a solution or strength in another. Well-being is a 'fit' between person and context or system and environment (Becvar & Becvar, 2014). If the university environment is inclusive and supportive to SWDs, they will grow in strength and thrive.

2.12.1.11 System Cybernetics and Social Constructionism

Becvar and Becvar (2014) explained that in the cybernetic epistemology there are limits to certainty which promotes the interaction of ideas focuses on the appropriateness of dialogue and challenges the use of conscious control. As such, influence is understood to be mutual, and responsibility is seen as shared or a bilateral process.

Postmodernism and social constructionism is consistent with the systemic/cybernetic paradigm where there is subjectivity and where reality is understood as perceptually

constructed. Also consistent are both the focus on context and the importance of communication. Earlier theorist believed that in Systems Theory (Gray et al., 1969):

- Context must be understood from individual perceptions
- Systems theory is relevant to the modern world with its increasing complexity and change.
- Improves the understanding of groups, families, societies and cultures and bring them into transaction

The Systems Model provides a conceptual framework in which unrelated aspects are integrated. In this study, the university is explored with its various sub-systems such as administrative departments, schools and colleges which make up the unrelated aspects that have to work in collaboration to support SWDs. As such, this framework is most applicable to the current study, which brings together and justifies the use of an integrated and holistic approached towards awareness and changing attitudes. Previous studies such as, Hoffman (1991) and Auerswald (1985) applied Systems Theory and revealed that if one focused on the relationship as appose to the individual, then one sees the interlocking of behaviour over time and possible solutions to problems. These studies uphold the idea that reality is socially constructed. Hoffman(1991) asserts that the idea that a person hold about his or herself would only change when the ideas held by the people close to the person changed replacing the individual unit with the family unit in a mix of ecological and social understanding (Hoffman, 1991). Similarly, the environment needs to be adapted and attitudes of the university community transformed to assist SWD feel accepted. Hoffman (1991) saw systems theory as new and different in its approach, which was more participatory and less goal-oriented. As such, this study is not goal-directed but aims to transform traditional ideas of inclusion, improving access and removing proposed barriers within an institutional environment, servicing students with disabilities.

Auerswald (1985) applied Systems theory to transform the family system by experimenting with ways of responding to families in distress with this new epistemology. He believed he could only complete his exploration of the event-shape in time-space in an ecosystem expansive enough to see the problem in context. From the perspective of Systems theory or cybernetics, the only way to transform a situation is to transform the family. With reference to this study, it transforms the university's relational interactions by stepping through the cracks and doing an ecological exploration to find interventions that will produce a transformation in the surrounding contextual time-space (the University environment) (Auerswald,1985).

Current theorist such as Goldenberg and Goldenberg (2013), applied systems theory in psychotherapy. They also identified patient's symptoms as rooted in the dysfunctional family. The authors explained that all family members are equally "symptomatic," despite efforts by the family to locate the problem in one family member. In this disability study, one cannot locate a problem within individual SWDs; it is the structure or inflexibility of this system that maintains the symptomatic behaviour in the identified situation. To bring about change at UKZN one needs to understand the context in which the dysfunctional interaction occurs and then to treat the students as a group and try to transform existing interactions (Goldenberg & Goldenberg, 2013). Systems Theory according to Goldenberg and Goldenberg (2013) sees the system as a complexly organised, durable, and ongoing causal network of related components for example, the various colleges and schools of UKZN. In a way, the Systems Theory framework provides a platform for a therapist/researcher to view multiple causes and contexts of behaviour (Goldenberg & Goldenberg 2013).

Most early research in physical disability is cross-sectional and the young person is seen to exist in an environment that is a fixed entity, observed only at a single point in time and presumed to remain constant (Bronfenbrenner, 1989). In recent studies this view changes and

focuses on issues such as entry into mainstream university was seen as factors that alter the existing relationships between the person and environment and the dynamics of culture. Llewellyn and Hogan (2010) emphasise that any assessment of the competencies of persons with a disability must be interpreted in the light of the culture or subculture in which the person was brought up that may instigate developmental change. This placed emphasis upon perceptions of teacher, parents, peers, supervisors, trained researchers and the self-perception of the young person with a disability themselves. This is a key element of this study that focuses on an integrated approach to SWDs in a higher education setting. Current thinking such as Llewellyn and Hogan (2010) builds on such theories to include awareness of `over-interpretation' of individual behaviour. As such, cultural and sub-cultural environments within which a young person interacts needs to be considered when assessing competencies and other personal traits as it is likely to impact on their functioning and psychological well-being (Llewellyn & Hogan, 2010).

By its very nature, Systems Theory reminds us that we need to observe young people with physical disabilities in different contexts and environments, before making a clinical or psychological judgement (Llewellyn & Hogan, 2010). Such ecological systems look at how interaction in different contexts and environments can influence psychological well-being, as for instance, students with disabilities within HEIs. Storrie, Ahern and Tuckett (2010) believe that no single set of factors predicts success in supporting university students with disabilities. Universities should, therefore, embrace a holistic philosophy of inclusion, support and the training of all staff and academics to better support SWDs, in keeping with Systems Theory applied in the study in addressing challenging aspects of SWDs within UKZN.

2.12.2. Inclusion and the need to Belong-Maslow's Hierarchy of Needs

The earliest version of Abraham Maslow's (1943, 1954) hierarchy of needs includes five motivational needs, often depicted as hierarchical levels within a pyramid (McLeod, 2014). Maslow's (1943) hierarchy of needs theory provides an application framework in this study for determining more salient drives, affective complexes, need for staff/environmental modifications, and the underlying irrational belief systems of both the staff and the students. Based on Maslow's Hierarchy of needs model, if goal seeking behaviours were influenced by unmet needs and is what makes one feel anchored, in a community then to a large extent making the student feel secure, needed and appreciated is paramount (Benson & Dundis 2003). Since leaders have the ability to influence the lives of SWDs they need to provide opportunities and necessary training and skills to meet their needs. This will not only serve as motivation to SWDs, it will also foster commitment to achieve their educational goals (Benson & Dundis 2003). Since not much literature on disability studies incorporated Maslow's Hierarchy of needs, discussions by Kunc (1992), motivated its application in the current study. Previously, Kunc (1992) explained that the need to belong within a University community is vital for successful integration and involvement preventing isolation and withdrawal felt by students with disabilities. In recent studies, Benson and Dundis (2003) added that Maslow's model presents a means for understanding the needs of the individual and can enhance feelings of belongingness and self-esteem thus providing opportunities for self-actualisation.

McLeod, (2014) explained that Maslow's (1943, 1954) human needs are organised into a hierarchy of relative influence. This means lower level basic needs must first be satisfied before higher level growth needs are achieved. Only once lower level needs are reasonably satisfied, can one reach self-actualisation, the highest level (McLeod, 2014). It was also

emphasised that every person including SWDs desire to move up the hierarchy toward a level of self-actualisation. However, progress for most SWDs is often disrupted due to failure to meet lower level needs. Such needs included university life experiences, curriculum design accessibility and built environmental that may cause an individual to fluctuate between levels of the hierarchy. If a need has not been adequately satisfied, it will dominate as the major influence on the individual's experience, for instance without proper accommodation to meet particular needs of SWDs, performance will be poor (McLeod, 2014). As such only once a need has been met, does the person move on to greater concern with the needs of the next level? Maslow's categories of needs include:

1. Physiological needs

2. Safety needs

3. Love needs (affiliation needs)

4. Esteem needs

5. Self-actualisation needs

This five-stage model of Abraham Maslow's (1943, 1954) hierarchy of needs is illustrated within a pyramid below.
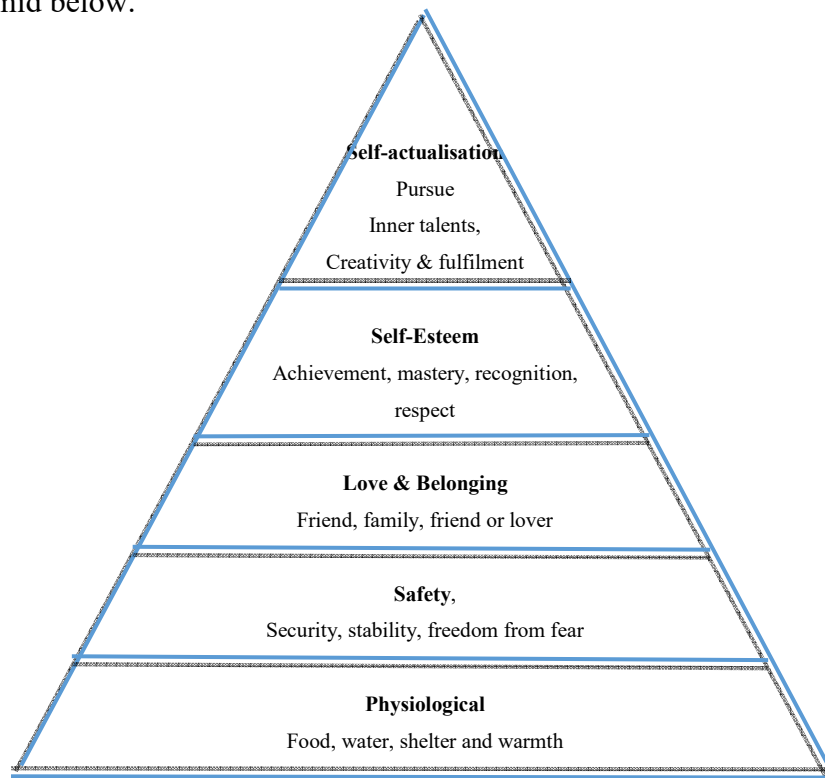
Figure 6. Abraham Maslow's Hierarchy of Needs (Jackson et al., 2014, p. 440)

2.12.2.1 Love and Belonging

To achieve a sense of belonging students with disabilities require acknowledgement (recognizing the person), approval (evaluating the person) and acceptance before a person is admitted to a group such as university students (Changing Minds, 2017). With approval SWDs gain respect, esteem and status, in which they gain power and control over their own lives (Changing Minds, 2017). McLeod (2014) explains that Maslow adopted a holistic approach to education and learning. Maslow focused on how physical, emotional, social and intellectual qualities of an individual influence learning (McLeod, 2014). Satisfying student's need for love and belonging create a supportive environment in the classroom fostering academic progress at an optimum rate until self-esteem is strengthened (McLeod, 2014).

2.12.2.2 Self-Worth and Self-Esteem

Abraham Maslow (1943) asserts that the self-esteem needs are closely connected to love and belonging needs. As such, SWDs needed to maintain a high evaluation of themselves based on real capacity, achievement and respect from others. Maintaining a sense of self-autonomy can prove to be vital to maintain a sense of self-worth in a mainstream university. Maslow explained that self-worth is an experience of unconditional and immeasurable positive self-regard (Calabro, 1997). Calabor (1997) suggested that it is emotionally difficult to accept the help that may now be required for the effective function of SWDs at the university. As such it can be quite challenging to some of the more rationally centered individuals with disabilities and requires that staff be proactive in dealing with SWDs to help maintaining their self-worth. In adjusting to disability at university, the student with disability's capacity for experiencing rational self-worth is most vulnerable (Calabro, 1997). Students with disabilities need to feel unique, valuable, and not inferior because they must depend on others for the many aspects of accommodation and basic mobility. Calabro, 1997 maintains that SWDs need to perceive themselves as strong, adequate, and having the option for choice, control, and relative independence in functioning (Calabro, 1997). Maslow's (1943) concept of self-esteem can be viewed as dependent on "real" achievements and physical attribute or capacities for successful inclusion within a mainstream university environment (Calabro, 1997).

2.12.2.3 Self-Actualisation

In terms of Maslow's (1943), hierarchy of needs theory, self-actualisation did not emerge until the previously mentioned four categories had been satisfied. He further defined self-actualisation as a desire to become more and more of what one is rather than becoming everything that one is capable of becoming (Calabro, 1997). McLeod (2014) emphasised that

Maslow did not equate self-actualisation with perfection, but rather it involved achieving ones potential. McLeod (2014) indicated that Maslow focused on positive account of human behaviour which focused on what goes right in a person's life. The current study supports this view and finds Maslow's beliefs to be appropriate in a study involving students with disabilities and the social model of disability. A study by Jackson et al. (2014) clarified that focusing on Maslow's hierarchy helped psychologists and health care professionals provide a more comprehensive care of the whole person rather than focusing on restoration of pre-illness function of mind, body, and spirit. Wholeness relates to the systems approach also applied in this study.

Maslow proposed five levels of needs (Fig. 4 above) that must be satisfied to promote health and well-being. The two lower levels of the hierarchy pertain to what is important in terms of the survival of a person. This includes physiologic needs such as the need for safety, security and stability. The three higher levels are psychological needs. These include the need to belong or the need for love, self-esteem and self-actualisation as well as creativity or fulfilment of potential, which is appropriate in this study of students with disabilities.

The five levels of Maslow's Heirarchy of Needs are explained in Table 3 by integrating the understandings of both Jackson (et al., 2014) and Kunc (1992).

Maslow's stage	Experiences of SWD's	Psychological intervention/solution
Physiologic	Basic concerns about physiological and survival needs such as clothing, shelter and food.	Provide family members with a clear explanation of various possible outcomes in order to empower them.
Safety	Once physiological needs are met, individuals are able to address safety and security needs such as being protected from danger and threats of bodily harm.	Provide interventions that target problems realistically. Provide active emotional support. Interventions need to be brief but frequent. Identify cognitive distortions that usual overemphasise the seriousness of the situation.
Love/belonging	Once safety needs are met, the need to belong and love needs become a priority. This includes the need for family, friendships and the community. Concerns about how much support they will receive as well as whether they will "fit in" with disabilities that may limit them.	Emphasise focusing on "here and now" in order to deal with limitations SWDs face in their new environment.
Esteem	Only when SWD feel a sense of belonging within a community do they develop self-esteem. Achievement and success in a given field of study also fulfil esteem needs as SWDs gain respect and recognition from others.	Interventions such as incorporating universal design as a way of accelerating attitude change awareness and increasing mastery.
Self-actualisation	Having satisfied self-esteem needs one developed an urge to pursue their talents that may be particular to an individual.	Encourage participation in formal counselling, psychotherapy at DSU or College based Support services to engage as a way of encouraging the acceptance of a new identity.

Table 3. The five levels of Maslow's Heirarchy of Needs (Jackson et al., 2014, p. 441; Kunc, 1992)

2.12.2.4 Application of Maslow's Hierarchy of Needs

The generalised principle of Maslow's hierarchy of needs has been applied in other settings and scientific fields such as business and social sciences to introduce a culture of change (Jackson et al., 2014). Similar trajectories have been adopted by standard hospice and palliative care medicine, in a study by Zalenski and Raspa (2006). This study applied Maslow's schema to hospice care to provide a theoretical and practical framework to achieve maximum human potential through the benefit of the hierarchy's comprehensive reach. The study involved treating distress symptoms such as pain and dyspnea, physical and emotional fears as well as provided acceptance and respect in the face of terminal illness (Zalenski & Raspa, 2006). The applications of Maslow's schema in the management of patient care and survivorship motivated and influenced the current disability study.

The perspective provided by Maslow's hierarchy of needs theory offers a powerful conceptual framework for researchers understanding of SWDs in higher education setting fostering inclusion and integration (Jackson et al., 2014). The application of Maslow's hierarchy of needs provides a framework for changing the culture and viewing SWDs more comprehensively. It focuses on creating team work within the university that prioritise addressing higher ordered needs associated with inclusion and integration of SWDs in higher education (Jackson et al., 2014). Such teams are composed of co-ordinators, staff, counsellors, therapists, psychologists, and social workers, who are able to join the students and their family in conversation about changing the culture toward providing holistic care to the SWDs at university (Jackson et al., 2014).

Jackson et al. (2014) used compensatory strategies where individuals use the own skills and abilities or develop new ones to 'off-set' their impairments. Compensation referred to the adjustment of goals or desires to be more compatible with what SWDs were able to achieve.

For example, a student pursuing a course in biology, that requires the use of increased visibility of microscopic equipment, is no longer a viable choice in view of his/her difficulties with sight. Compensatory strategies, for him/her, might involve harnessing other skills such as interpersonal skills and using these to engage, in for instance, the study of sales and marketing or Psychology (Jackson et al., 2014). Jackson et al. (2014) has had advancements in critical care with higher survival rates as a result of shifting focus from survival to a focus on the quality of life.

Maslow's (1943) hierarchy of needs provides the framework that emphasises psychological rather than physiological complaints experienced by survivors (Jackson et al., 2014). Kunc (1992) explained that to Maslow self-worth is experienced only when an individual experiences a sense of belonging within a community. Maslow's writings reflected that belonging has been missing from the educational structure for some time. Jacobs (2002) asserted that based on Maslow's beliefs, when a person is not completely satisfied they would be motivated to try to compensate for this perceived deficit. Jacobs (2002) explained that like SWDs who experience stigma, most people remain stuck at the lower levels of the hierarchy and continue to strive until they can achieve a sense of belonging, protection and love. A self-actualised person is confident and capable of satisfying relationships with others. Important to disability studies is that the self-actualised person has the courage to be different and are not overly concerned about the opinions of others (Kunc,1992).

People with disabilities invariably face difficulties however they preserver to live productive lives (Jacobs 2002). Jacobs (2002) further added that those who overcome their disability are 'sanctified' and held up as exemplars, while those who do not, are referred to as passive. Jacobs (2002) conveyed that the majority see PWDs as individuals who do not have abilities,

lack social functions or status. However, when PWDs are successful they believe that the person looses their disability. He believed that 'sanctified' created an ideal that only served to increase the 'otherness' of PWDs. Kunc (1992) argued that PWDs have to make choices and such choices define who they are. For instance, PWDs have to take responsibility for their own lives and learn how to live a rewarding life with their particular disability. The loss of dependence makes it necessary for PWDs to learn skills that will enable them to cope with their disability (Kunc 1992). This is seen by Kunc (1992) as something quite common in dynamic social order.

During the 1980s, Kunc (1992) explained that it became increasingly apparent that a different paradigm was needed to accomplish the goals set forth for special education. A paradigm shift that motivated SWDs to learn rather than focus on segregated classrooms and severity of the disability. Furthermore, he said that the special education practices of the past originated on an old paradigm where skills were seen as a prerequisite to inclusion or integration. An alternate paradigm reverses this order and requires educators to abandon their emphasis on skills and place the student in the regular classroom with appropriate support (Kunc, 1992). Kunc (1992) explained that a student's desire to belong or to be "one of the kids," provides the motivation to learn new skills. This new paradigm was represented as follows (Kunc, 1992):

STUDENT ==> regular classroom ==> skills

(with support)

Kunc (1992) emphasised that the paradigm recognising the importance of belonging is not a new concept concerning inclusive education. Zalenski and Raspa (2006) also believed that

belonging was essential and a prerequisite to accomplishing esteem needs as well as a sense of self- worth.

2.12.2.5 Paradigm Shift

In defining a paradigm, Becvar and Becvar (2014) refer to a set of presumptions about what the world is like, about the problems worthy of investigation, and about the methods appropriate for the investigation of these problems. The researcher explores a paradigm shift from the mainstream model to the social model of disability, an alternative perspective that focuses on a structural and environmental change to remove barriers to SWDs. It is when the old belief system ultimately is replaced by a new one, the world is seen from an entirely different perspective, and old events take on a new meaning. Systems theory applied in the study is a new belief system that is different in its approach, which is more participatory and less goal-oriented and focuses on relationships rather than individuals. Acceptance of a new paradigm requires that it be seen as an improvement over other possible explanatory systems (Becvar & Becvar, 2014). Through time disability has been characterised by the progressive development of various models of disability that have demarcated parameters which have influenced our response to disability (Clapton & Fitzgerald, 1997).

2.12.2.6 Emancipatory Paradigm

The emancipatory paradigm is similar to the participatory action model which according to Denzin and Lincoln (2014) is believed to support a closer link between academic knowledge creation and enhancement of concrete problem solving for all engaged stakeholders. The core idea was the creation of research and teaching that integrated researchers and relevant stakeholders in the same knowledge acquisition process (Denzin & Lincoln, 2014). Likewise,

the DSU in collaboration with the researcher has a common goal to unravel knowledge and understanding of the experiences of students with disabilities in a mainstream university environment.

Denzin and Lincoln (2014) explains that central to action research is a collaborative relationship we call 'co-generative inquiry'. This study aims to bring the experience and training of the researchers together to elicit a co-generative inquiry into the depth of experience and commitment of the local stakeholders which include (lecturers, academics and disability services staff at the University) utilising an integrative approach for the benefit of all. Wagner et al. (2012) maintains that sometimes researchers want to improve or change a situation that they are studying. Denzin and Lincoln (2014) established that the emancipatory paradigm is a new paradigm for disability research and proposed the following main features:

- Research must be political in nature, rooted in the social model and allows people with disabilities to control their own lives.
- The focus is on coping skills and strengths rather than on deficits of PWD.
- Research that examines the contextual and environmental factors of PWD that facilitate integration in society.

This sets the stage for a research paradigm that is able to capture disability as a complex, embodied the relationship between people with disabilities and their social environments, the transformative paradigm (Denzin & Lincoln, 2014).

2.12.2.7 Transformative Paradigm

Denzin and Lincoln (2014) explained that the emancipatory paradigm emerged in response to models of disability (such as the medical and social models of disability) to changes in the approaches to research in the disability community and emphasised placing power in the

hands of those with disabilities. Further, the authors explain that due to complications in the implementation of the emancipatory paradigm, recognition was given to the transformative paradigm to address issues of power and privilege in relation to the sustained oppression of people with disabilities. The transformative paradigm was identified by the researcher as a framework that could be used in conjunction with Systems Theory for research within the disability community at the UKZN in building strengths, solidarity and changing identity politics to a socio-cultural perspective. The Integrated National Disability Strategy White Paper (1997) asserts that institutions of Higher Education are currently undergoing a transformation. Three central features were identified in Green Paper on Higher Education Transformation (1996), and these include:

1. Increased participation of diverse students.

2. Increased collaboration between higher education and other social institutions.

3. Greater responsiveness to social and economic needs of students with disabilities.

In the following section, the researcher discusses literature on the models of disability which appear to affect policy and legislation formulation. Denzin and Lincoln (2014) explained that the emancipatory paradigm emerged in response to models of disability and to changes in the approaches to research in the disability community.

2.12.3 Models of Disability

Bricout, Porterfield, Tracey and Howard (2004) argue that that the correct use of models of disability enable us to represent information in a way that may aid understanding rather than to accept one model as being more correct than other models. Models of disability are applied as frameworks for understanding the causes of disability, and to find means to ameliorate

such causes Bricout et al. (2004). The authors' asserted that different models of disability apply different approaches in an attempt to reduce the impact of the disability. Each model is necessary and unique in its approach to disability which calls for strategic use of each model as a tool (Bricout et al., 2004). Models provide a systematic approach to understanding disability in context aligning with Systems Theory applied in this study (Bricout et al., 2004). Furthermore, models prove to be useful in terms of supporting work that aim to facilitate the lived experiences of people with disabilities so that the quality of life for SWDs can be enhanced (Bricout et al., 2004). Disability and the study of human development are not static, but subject to change throughout its life-span (Bricout et al., 2004). Thus, models provide different worldviews of SWD to explore future possibilities, as well as analysis and enhanced conditions in the here and now.

The medical model framework is predominant at HEIs and continues to conceptualise disability from this perspective. However, Healey, Pretorius & Bell (2011) affirmed that there is a shift towards the acknowledgement of external factors that influence inclusivity. As such the researcher explores a paradigm shift based on the perspective employed by the social model of disability. The Social model of disability emphasises the need for environmental change in order to address and remove barriers to SWD (Riddell et al., 2005).

2.12.3.1 The Medical Model

According to Clapton and Fitzgerald (1997), the medical model of disability progressed from the Religious model of disability where it replaced the priests as custodians of societal values and curing processes. The modern era evolved and challenged the religious model with reason and rationality. Thus the medical model took precedence and saw the individual and not society as having the problem thereby devaluing or dehumanising persons with

disabilities because of deficiencies (Bricout et al., 2004). Bricout et al., (2004) further asserts that the medical model couches disability in the context of pathology and impairment such as sensory, neurological and cognitive. As a result, with the impending diagnosis, this would raise concerns with the respective family of the PWDs about how to proceed which raises important issues of adaptation for the student with disabilities. Bricout et al. (2004) contend that the focus now shifts to the interaction between the person and environment as each evolves over time. It is argued in Clapton and Fitzgerald (1997) that western medicine sees the body an object that can be and controlled and those who cannot control their bodies are failures. This view is contrary to Systems Theory applied in the current study where what you see out there is a reflection of your own perceptions so there can be no objectivity and is therefore subject to each individual's perception of their disability (Becvar & Becvar, 2014). The medical models focus on diagnosis; it does not predict how the diagnosis will impact on the functioning of PWDs. It is the social model that provides a framework for understanding how the social environment impacts on the functioning of PWDs (Bricout et al., 2004).

2.12.3.2 The Social model

The study explores a paradigm shift from the mainstream model where students with disabilities are provided with support to get over barriers, to an alternative perspective informed by the social model of disability where the focus is on transforming the environment, in order that the barriers to students with disabilities are dealt with and removed (Riddell et al., 2005). The impact disability has on the life of an individual is determined by how much that person's environment and society denied him or her access to participate in that community. This is the reason why Disabled People South Africa (DPSA) (2001) argued that disability is imposed by society.

Majinge's (2014) study applied the social model of disability and expressed that society must provide equal services by removing barriers which hinder access to education. It was emphasised in Majinge's (2014), that the social model of disability also has human rights' implications, which include respecting human dignity and guaranteeing the equal treatment of people with disabilities. Majinge (2014) used the social model of disability to express the need to remove barriers which hinder access to facilities serving SWDs. The study outcome revealed that the social model interprets disability as a direct consequence of the failure of society to accept differing needs of people with disabilities and remove the challenges they encounter (Majinge, 2014).

In her study, Subrayen (2011) asserts that the social model of disability provides us with ammunition, not only to challenge the discrimination and prejudice of persons with disabilities, but also to articulate the personal and painful experience of impairment. In addition, she emphasised that PWDs are disabled by a social system, which excludes their participation. Subrayen (2011) identified that disability is not an outcome of the body but of the way in which society organised itself. As such Subrayan (2011) pointed out that the social model addressed challenges experienced because of disability, oppression and exclusion. As a result this study embarked on the exploration of personal experiences of SWDs and how the university as a system influenced the inclusion of SWDs.

In another study, Matshedisho (2007) emphasized that disability can no longer be perceived as a tragic personal state requiring medical control. He acknowledged that the social model demands specifically that SWD have rights to support services. He applied the social model of disability in his study and believed in the re-positioning of societies attitudes towards PWDs to facilitate and maintain a livelihood based on human rights (Matshedisho, 2007).

Shava (2008) emphasised that the social model is not a "quick fix" to all problems and barriers faced by PWDs. It merely emphasises the real barriers that affect participation . He took a rational approach and clarified that the social model empowers PWDs and offers realistic opportunities when confronted with such barriers. For instance, Shava (2008) acknowledged that there are impairments that will require timeous medical intervention. This study is not meant to be the ultimate solution to the numerous challenges SWDs currently face but its attempts to highlight concerns surrounding inclusivity suggesting how embracing the social model of disability could provide opportunities to create an all-inclusive university environment that promotes equal opportunities for all (Shava, 2008).

Seyama (2008) believes that there has been a shifted from dependence to independence based on the fact that PWDs have sought a political voice, are more politically active and have risen against social forces that create disability. People with disabilities can be educated, and it is the structures in society that create barriers which create disability. Since higher education has been based on a "normative experience" such inferior concepts marginalised persons with disability (Seyama, 2008). Previously, disability was conceptualised as a socio-political construct and based on human rights (Clapton & Fitzgerald, 1997). Recent legislation (such as : United Nations (UN) Convention on the Rights of Persons with Disabilities, 2006; WHO, 2015) embraces the conceptual shift from disability as a medical problem to participation and access to regular societal activities. The White Paper on an Integrated National Disability Strategy (1997), The White Paper on Special Needs Education (2001) and the Draft National Disability Policy (2007) all support the paradigm shift from a medical to a social model of disability. Seyama (2008) argues that although legislation brought some civil liberties to PWDs it has not significantly altered the way disability is constructed. Therefore, despite legislative changes, the lives of some PWDs remain unchanged. It was established earlier that despite various legislature a mismatch between policy and procedure persists.

The Integrated National Disability Strategy White Paper (1997) explained that according to the social model discrimination faced by PWDs is socially created and is not entirely based on their impairment. Legislature such as Integrated National Disability Strategy White Paper 1997 asserted that based on the disability rights movement (DRM) "cure" to the problem of disability lies in restructuring society which aligns with the framework of this study based on the social model of disability. The social model of disability's construction of disability changes the focus, for instance (Integrated National Disability Strategy White Paper, 1997):

"*It is the stairs in a building that disable the wheelchair user rather than the wheelchair.*
The design of equipment that cause difficulties, not the abilities of people using it.
People who do not accept alternative ways to communicate exclude people with communication disabilities."

It is further emphasised that Nation building, where all citizens participate in a single economy, can only take place if people with disabilities are included in the process (Integrated National Disability Strategy White Paper, 1997). Subrayen (2011) explains learning needs refer to what each learner requires to participate effectively within the process of teaching and learning and thus have access to the process of knowledge production within the institution. This study agrees with Subrayen (2011) that this may only be achieved through changes in the physical environment and paradigm shifts in the social construction of disability (Subrayen, 2011).

12.13 Chapter Summary

This review covered a wide range of issues highlighted in this study. The study involves an integrated approach to disability where various aspects of higher education were explored including teaching and learning, student liaison, applications and registration as well as challenges caused by the built environment, awareness aimed at changing prejudices and curriculum design accessibility to the greatest diversity of individuals. Definitions of key concepts are operationalised and myths, stereotypes and misconceptions that affect the lives of students with disabilities were explained. Numerous legislatures were consults in an attempt to determine if universities are adjusting accordingly for better access and services. Thus a mismatch between policy and practice is investigated as many SWDs still remain excluded from higher education. Systems Theory and Maslow's Hierarchy of needs form the basic framework of the study also formulated around the social model of disabilities where disability is viewed as a social, cultural, and political phenomenon in contrast to the clinical, medical perspectives on disability. Although significant strides have been made promoting positive perceptions, greater social awareness and addressing attitudinal barriers to SWDs at HEIs, there has not been much research within a South African context. This leaves a gap in this field of research. Where applicable, significant points identified in the literature review will be explored in relation to the university community at UKZN. The University of KwaZulu-Natal provides an intellectual lens through which one can examine everything ranging from cultural conceptions of normality to the social dynamics of stereotyping, discrimination and exclusion. The next chapter outlines the research methodology carried out to fulfil the study.

Chapter Three

Research Methodology

3.1 Introduction

This chapter details the relevant research method that was applicable to the study. The research method consisted of key constituents such as the method of sampling, participants of the study, location of the study and a discussion of the research design applied in the study. The research design is further broken down into instrument design, development, and data collection. The data analysis procedures are discussed and the ethical considerations of the study explained in relation to how they work together to address the research questions.

Research Questions and Objectives of the Study

The aim of this study is to examine the area of inclusion of students with disabilities in a Higher Education setting by ascertaining their personal experiences related to the quality of advice, information and support attained by staff in both academic and support sectors. This study also assesses the student recruitment, applications and the registration process in relation to serving students with disabilities (SWDs).

3.2.1 Research Questions

In light of the aim discussed above the study undertakes to address critical questions in a two-part process focusing on staff (Part1) and students with disabilities (Part 2) in an attempt to understand perspectives from both sides.

- **Part 1**

1. What is the available quality of advice, information and support given to SWDs?

2. What are the problems that are affecting SWDs in the teaching and learning environment?

3. What is the level of awareness of SWDs by staff and relevant/significant others?

4. What are the barriers that influence SWDs within the mainstream University environment?

5. How has the University serviced SWDs with regards to the applications and registration process?

- **Part 2**

1. What is the available quality of advice, information and support given to SWDs?

2. What are the experiences of SWDs in a Higher Education setting?

3. What are the attitudes of SWDs towards attitudes of academics, support staff and non-disabled students?

4. What are the current barriers and challenges experienced by SWDs within an institutional environment?

5. How has the University serviced SWDs with regards to the Application and Registration process?

3.2.2 Objectives

The objectives of the study in relation to the research questions are:

- **Part 1**

1. To access the quality of advice, information and support given to academics and support staff involved with SWDs.

2. To identify the main academically related problems in the teaching and learning process that affects SWDs.

3. To assess the level of awareness of SWDs by university staff, and relevant significant others at all levels.

4. To understand barriers and challenges experienced by SWDs within a mainstream university environment.

5. To assess the University's Applications, Registration and Corporate Relations Division (student liaison and student recruitment) in servicing SWDs.

- **Part 2**

    1. To assess the available quality of advice, information and support given to SWDs.

    2. To get an in-depth understanding of feelings and perceptions of SWDs.

    3. To investigate current realities surrounding attitudes of SWDs towards the attitudes of academics, support staff and non-disabled students.

    4. To identify barriers and challenges faced by SWDs within a mainstream university environment.

    5. To assess available services regarding the Applications and Registration process and Corporate Relations Division (student liaison and student recruitment) in servicing SWDs.

Location of the study

The study is located within the University of KwaZulu-Natal (KwaZulu-Natal, South Africa) and the actual site of the study was the Howard College campus. This was due to the sampling process outlined in the next section.

Research Method of Data Collection

The study adopted a qualitative approach to finding answers to questions about people's experiences. The study considered awareness and attitudes of all stakeholders involved with the affairs of SWDs, which included academics, support staff members and SWDs in a two-part process using interviews. The study applied semi-structured interviews with open-ended questions allowing for discussions in a conversational manner to extract relevant data (McQuerrey, 2017). Qualitative research methods, based on Terre Blanche et al. (2006, p. 272) are to describe and interpret people's feelings and experiences in "human terms rather than through quantification and measurement". The framework of the study was guided by a systemic approach where we developed a theoretical understanding of the participants 'lived' experiences (Burck, 2005).

Qualitative research from the perspective of social constructionism considers the accounts of research participants as 'constructed' within a particular research context (Burck, 2005). Thus, knowledge is created through social interactions over time and in relation to social structures, contexts and resources. Terre Blanche et al. (2006, p. 273, 274) emphasise that the "subjective experiences of people" and "making sense of that experience" involved interacting with them and listening carefully to what they had to say. This was achieved through interviews that engaged participants and ensured that the questions evoked in-depth expression and 'first-hand' accounts of personal experiences in 'rich detail' (Terre Blanche et al., 2006, p.273/274).

The advantages of interviews outlined in An evaluation toolkit for e-library developments [Evalued], (2006):

- Involves exploration of issues in an in depth way
- Reveals individuals feelings, perceptions and opinions

- Deepens understanding by allowing detailed questions to be asked

- Adds a human element to impersonal data

- Respondents own words are captured

- Follow-up can be achieved to clarify ambiguity

- Allows participants to provide a more expansive response

The disadvantages of interviews outlined by An evaluation toolkit for e-library developments [Evalued], (2006):

- Interviews are time consuming

- Are costly

- Interviewers may understand and interpret transcripts in different ways

Based on the above discussion, a qualitative interview approach was adopted over other forms of data collection process because complex and in-depth data is not easily obtained through other approaches such as questionnaires or survey approaches (McQuerrey, 2017).

3.5 Sampling

For the current study, the sample set consisted of two categories, SWDs and staff at UKZN. The staff component included relevant stakeholders such as a disability coordinator, academic, Head of department, a Psychologist and a representative from Corporate Relations Division that formed part of the university population. Terre Blanche et al. (2006) explained that it is important to ensure that the sample is representative of the population under investigation. Non-probability purposive sampling techniques used in this study concerning SWDs is a convenient sampling technique often used by researchers when carrying out studies with undergraduate students (Terre Blanche et al., 2006). Wagner et al. (2012) asserts that this sampling technique also allows for other individuals such as academic and support

staff who interact with SWDs to be included in the sample. Purposive sampling technique also allows the researcher to use her own judgement in selecting participants relevant to the study.

The University of KwaZulu-Natal consist of four academic colleges, that being:

- The College Agriculture Engineering and Science (CAES)

- The College of Law and Management Studies (CLMS)

- The College of Health Sciences (CHS)

- The College of Humanities (CHUM)

The student sample for this study came primarily from the College of Humanities (Howard College campus) as this was the College and Campus where most of the SWDs were based.

For the purpose of this study, current statistics reflecting categories of disabilities among students per college and per campus were consulted (see Table 4.)

CATEGORY	CAMPUS	CAES	CLMS	CHS	CHUM	TOTAL	CATEGORY TOTAL
Blind	Westville	1				1	38
	Edgewood					0	
	Howard College	0	1		19	20	
	Pietermaritzburg				17	17	
Partially Sighted	Westville	5	11	4		20	191
	Edgewood				54	54	
	Howard College	0	4	1	62	67	
	Pietermaritzburg	11	8	0	31	50	
Physical Disabilities	Westville	3	14	3		20	145
	Edgewood				41	41	
	Howard College	2	6	0	41	49	
	Pietermaritzburg	9	7	0	19	35	
Hearing Impairments	Westville	3		1		4	42
	Edgewood				15	15	
	Howard College	0	2	1	7	10	
	Pietermaritzburg	4	0	0	9	13	
Learning Disabilities	Westville	3	14	4		21	61
	Edgewood				4	4	
	Howard College	3	1	0	5	9	
	Pietermaritzburg	9	5	0	13	27	
Other - Chronic Illnesses	Westville	8	12	2		22	137
	Edgewood				49	49	
	Howard College	9	3	0	15	27	
	Pietermaritzburg	10	7	0	22	39	
TOTAL		80	95	16	422	614	

Table 4: Statistics reflecting categories of disabilities among students per College and per Campus as at 25th May 2016 (Disability Support Unit, 2016)

Table 4 highlights the number of SWDs registered in 2016. From the above statistical information, it is apparent that a concentration of registered SWDs is prevalent at the College of Humanities at the Howard College Campus. The College of Humanities also contains more students with various categories of disabilities appropriate for a representative sample selection of SWDs for the study.

From the statistics reflecting categories of disabilities table above (Table 4.) a sample set of 15 SWDs were selected of which 7 were males and 8 were females. All students selected to participate in the study were undergraduate students. Furthermore, the sample set consisted of

5 staff members interviewed at the Howard College Campus. The researcher had purposively sampled and interviewed a representative from each of the core areas under investigation.

The staff compliment comprised:

- A disability co-ordinator on the Howard College Campus

- A manager of Student Academic Administration (SAA);

- A school liaison officer

- An academic who worked closely with SWDs at the Human Sciences Access Program

- A College based Clinical Psychologist who worked in close association with SWD regarding assessment in relation to provision of accommodation and other psychological services.

3.6 Participants

Based on the above research approach and sampling technique, the participants who formed the sample set included:

- **Students**

Selection of student participants was to be representative of the population based on two set criterion:

- A representative sample for the study (i.e. students with disabilities)

- Participants representative of specific categories of disabilities

The sample was further characterised by:

- Female or male SWDs within the College of Humanities at Howard College campus.

- **Staff**

Selection criteria for staff members were based on the relevance of their interaction with SWDs as well as those who played a significant role in the life of SWDs at the university. Participants were selected based on availability and willingness to participate as well as those who formed part of the population under investigation (Terre Blanche et al., 2006). Wagner et al. (2012), asserts that there are no rules concerning the most appropriate sample size in qualitative research and because of the in-depth nature of the study, the sample size tends to be small. In other words, in a study concerning SWDs, a small group representative of SWDs and their specific type of disability was studied rather than a random sample of all SWDs at the university.

3.7 Process of contacting respondents

3.7.1. Staff

Upon obtaining Ethical Clearance from UKZN's Humanities and Social Sciences Research Ethics Committee, the respective staff members were contacted and invited via email to participate in the study. In response to the emailed invitation, appointments were made with each participant. The researcher then met with participants at their offices to conduct the interviews.

The first participant interviewed was the disability coordinator from the Howard College Campus. The disability coordinator worked at the university for 8 years and conveyed a wealth of knowledge and experience working with SWDs. He is passionate about his work with SWDs reflected in his enthusiasm to participate in the study. Many students expressed gratitude for his helpful nature and commitment to the Disability Services Unit. Students with

disabilities rated the disability coordinator at Howard College Campus to be the most appropriate person to give an accurate account of their experiences and problems.

A well-networked campus coordinator and manager of Student Academic Administration provided much insight and knowledge to the study. His 30 years' of experience working in a university environment enhanced the knowledge and understanding of the researcher and provided the much needed perspective of the growth of the inclusionary processes and acceptance of diversity within the university community.

The school psychologist was enthusiastic to discuss the role she played in the lives of SWDs at the College of Humanities. She recognises the diversity of the university community and provides equitable treatment without discrimination. She welcomed the study and supported the idea that close attention to contextual or societal factors affecting the level of impairment was highly important and necessary.

The academic staff member interviewed was the co-ordinator of the Human Sciences Access Programme (A programme that caters for students that come from economically disadvantaged communities). The academic accepted challenges experienced working with SWDs. She reflected confidence and a positive attitude in the ability to support SWDs. She is currently involved in the formulation of a 'life skills' class offered to every student at the university on how to interact with SWDs. She supports the design and delivery of inclusive curriculums to a diverse range of learners such as the use of alternate formats and adapting classroom materials and procedures to accommodate the needs of SWDs. She agreed with the studies objectives and the view that integrated new knowledge and exposure to SWDs increased awareness and promoted successful inclusion.

The representative from school liaison is responsible for initiating recruitment of students from high schools to university. In order to attract SWDs to UKZN, representatives from the institution need to ensure that SWDs at high school level have sufficient and relevant information about the institution. The school liaison officer achieved this through staff visitations to high schools, arranging on-campus visits and informing prospective students about the type and extent of support services and accommodations available at UKZN. He believes that in order to provide students with individual attention it is important for him to go to those schools and hear the voices of SWD explain their educational needs. He supported the research study and understood its value.

3.7.2 Students

The researcher consulted a system-generated list of SWDs obtained from the university's student database. In consultation with the disability coordinator at Howard College Campus, a sample set was drawn based on the understanding of available participants per category of disability. The list contained contact information, and the nature of disability of currently registered SWDs at the Howard College Campus. Selection of student participants provided equal representation of gender and included the only registered deaf student at UKZN as part of the sample set. Appointments were made by contacting students on their mobile phones and arranging to meet with them at the most convenient place for all SWDs, namely the Disability Support Unit (DSU). The researcher made personal visits to the DSU at the Howard College Campus to conduct the interviews.

3.8 Research Design

The study adopts a qualitative approach as an adroit means of finding answers to the research questions set out above. The study assessed awareness and attitudes of SWDs and respective stakeholders from the academic and support sector interacting with SWDs on a regular basis in a two-part process using qualitative interviews.

The research is based on a phenomenological study focusing on the meaning that certain lived experiences hold for participants (Wagner et al., 2012). Hence, the study followed from interviews with students to elected members of university staff. Finally, the data collected was analysed and interpreted with assistance from a professional statistician in line with the aim of the study whilst also tying into the theoretical frameworks.

3.9 Interview design and Development

In this study the researcher developed semi-structured interview schedules with open-ended questions and then formed the core objectives to extract the relevant data. The interview schedule was adapted to ensure appropriate questions were asked and asked in the right way (Terre Blanche et al., 2006). In an attempt to focus the study on achieving its objectives, primary research questions were derived (part 1 and part 2) presented in point (3.2.1.) above. Two interview schedules were derived based on these research questions. Part 1 consisted of an interview schedule for interviews with staff members and part2 consisted of an interview schedule for interviews with SWDs. The construction of both part1 and part 2 interview schedules were to ensure a consistent process of data collection across all interviews respectively. An interpretive paradigm informed the study, which implies that not all questions may be established before the study begins but rather may evolve as the study

progresses (Wagner et al., 2012). Hence, the interview schedules comprise two types of question:

- The primary research question

- Possible follow-up questions on answers to the primary question

Questions were open-ended, descriptive and non-directional allowing respondents to communicate their experiences in their own words without any restrictions (Terre Blanche et al., 2006). Attached herewith are samples of the interview schedules (Appendix A).

3.10 Charting of Research Questions to Theoretical Frameworks

Table 5 Reflects how the main research questions ties in with the theoretical frameworks applied in the study.

RESEARCH QUESTIONS: PART 1 Staff Members	THEORETICAL FRAMEWORKS	RESEARCH QUESTIONS: PART 2 Students with Disabilities
1. What is the available quality of advice, information and support given to SWDs? 3. What is the level of awareness of SWDs by staff and relevant/significant others	**Maslow's Hierarchy of Needs** Guided by Maslow's hierarchy of needs, all lower order needs must be first satisfied before higher order needs concerning self-esteem can be achieved. Improved access, quality education, attitudes and awareness are lower order needs to create a sense of belonging and motivation to achieve higher order need satisfaction.	1. What is the available quality of advice, information and support given to SWDs? 3. What are the attitudes of SWDs towards attitudes of academics, support staff and non-disabled students?
2. What are the problems that are affecting SWDs in the teaching and learning environment? 4. What are the barriers that influence SWDs within the mainstream University environment?	**The Social Model of Disability** Based on the social model of disability it is the environment that needs to change in order for the barriers to SWD be addressed and removed.	4. What are the current barriers and challenges experienced by SWDs within an institutional environment?
5. How has the University serviced SWDs with regards to the applications and registration process?	**Systems Theory** A systems approach involves multiple realities of the experiences of SWD and involves a collaborated/integrated approach to disability which includes all avenues of student interaction/participation within the mainstream university environment.	2. What are the experiences of SWDs in a Higher Education setting? 5. How has the University serviced SWDs with regards to the Application and Registration process?

Table 5. Charting of the Research questions to the Theoretical frameworks

3.11 Data Collection

3.11.1 Data Validation and Pre-testing

The purpose of interpretive research is to understand peoples' experiences. Research takes place in participants' natural settings where they are living. Participants add his or her interpretation of reality to explain what motivates their behaviour (Wagner et al., 2012). Although primary questions for the participants were prepared, some questions were established and evolved as the study progressed. Terre Blanche et al., (2006, p. 272) established that qualitative research methods describe and interpret people's feelings and experiences in "human terms rather than through quantification and measurement". Thus, the

meaning, purpose and the significance of the personal experiences for each SWD within the context of a Higher Education institution are explained in their own words.

Qualitative researchers apply a "naturalistic orientation" and believe that "nuisance variables", also called extraneous variables, form part of "real-world settings" appose to positivist who believes "nuisance variable" can be controlled or eliminated (Terre Blanche et al. 2006, p. 91). The impact extraneous variables have on the research outcomes are important to qualitative researchers because if they go unnoticed the study could have misleading conclusions (Terre Blanche et al. 2006). Extraneous factors, such as student protest action (for example, due to the fees-must-fall campaign) were considered in the study for any significant impact it may have had on the attitudes of SWDs. If ignored it could influence the understanding of barriers and challenges experienced by SWDs within an institutional environment (Andersson & Öhlén, 2005). Terre Blanche et al., (2006) affirms that in qualitative research, credibility is established by giving due consideration to extraneous factors throughout the study.

3.11.2 Validation of Interviews

Participants consented to have their interviews recorded on a dictaphone. The interview schedules were drafted to incorporate ethical issues. The researcher ensured that there was adequate memory space for all the interviews and that the dictaphone was fully charged. The interviews were recorded on the dictaphone and secured on file.

A pilot study was conducted:

- to validate the effectiveness of the interview schedules

- to test the reliability of the interview schedule and

- to test the value of the questions to elicit the right information to answer the primary research questions.

Transcripts of the interviews were compiled and validated against the recorded data. Once transcribed, the data from the recordings served to familiarise the researcher with the data. The transcripts contained rigorous, thorough and verbatim accounts of all verbal and non-verbal communication (Terre Blanche et al., 2006).

3.11.3 Administration of the interview

For each interview, appointments were made with approximately thirty minutes to an hour duration on each. In the interviews, the researcher engaged with the participants and ensured that the tone of the questions was evocative to encourage in-depth expression and "first-hand" accounts of personal experiences in "rich detail." (Terre Blanche et al., 2006, pp. 273-274). Interviews were recorded and transcribed to increase reliability. Transcribed interviews were used to conduct a detailed thematic analysis which revealed common themes and patterns in the data.

No	Dates of data collection	Method	Description of Participants	Duration	Location of interview
PART 1 : Disability Coordinators, Academic & Support Staff					
1.	28/10/ 2016	Interview	Disability Co-ordinator	1 hr 13 min	Westville Campus
2.	30/10/2016	Interview	Support Staff- Student Academic Administration	41 min	Westville Campus
3.	01/11/2016	Interview	Support Staff- Corporate Relation Division	45 min	Howard College Campus
4.	05/11/2016	Interview	College Psychologist	41 min	Howard College Campus
5.	07/11/2016	Interview	Academic/lecturer	35 min	Howard College Campus
PART 2 : Students With Disabilities (SWD)					
1.	05/10/2016	Interview	Other disability	30 min	Howard College Campus
2.	05/10/2016	Interview	Learning Disability	31 min	Howard College Campus
3.	05/10/2016	Interview	Partially Deaf	32 min	Howard College Campus
4.	05/10/2016	Interview	Blind	29 min	Howard College Campus
5.	05/10/2016	Interview	Blind	36 min	Howard College Campus
6.	25/10/2016	Interview	Partially Sighted	24 min	Howard College Campus
7.	25/10/2016	Interview	Physically Disabled	36 min	Howard College Campus
8.	26/10/2016	Interview	Partially Sighted	28 min	Howard College Campus
9.	26/10/2016	Interview	Physically Disabled	23 min	Howard College Campus
10.	26/10/2016	Interview	Physically Disabled	26 min	Howard College Campus
11.	27/10/2016	Interview	Blind	46 min	Howard College Campus
12.	27/10/2016	Interview	Partially Sighted	31 min	Howard College Campus
13.	27/10/2016	Interview	Deaf	36 min	Howard College Campus
14.	27/10/2016	Interview	Learning Disability	34 min	Howard College Campus
15.	27/10/2016	Interview	Physically Disabled	23 min	Howard College Campus

Table 6: Statistical information related to the administration of interviews of the two categories of participants.

Table 5 contains statistical information related to the administration of interviews of the two categories of participants in the study and includes the date, method of data collection, description of the participants, duration of each interview and the location of each interview session.

The opening question at the interview was to create an atmosphere of openness by requesting participants to talk about themselves, their background, about the type of study or students they were involved with and about the organisation. The researcher resumed the stance of a reflective listener and only interrupted to reflect on the interpretation of what was said. This encourages the participants to relate personal accounts of their experiences. At the end, the participants were allowed to reflect and add anything they had omitted to talk about, and if they had any questions, they were free to make enquiries with the researcher at any time.

3.12 Reliability Analysis

Since qualitative research could be regarded as "subjective" one must be careful not to impose one's own views on the data and present the "participants' views" of their reality (Tutorial Letter 103 for HRPYC81, 2015, p. 14). This refers to the issue of "reliability and validity". Reliability and validity are often discussed in quantitative research. In qualitative research reliability and validity are referred to as "credibility", "dependability" and "transferability" which are key concepts in increasing "trustworthiness" of qualitative research (Smith, 2006, p. 210).

3.12.1 Validity/Credibility

Internal and External Validity

Internal validity is a confirmation of the correctness of the study design. Pilot testing of the proposed instruments was a procedure carried out by the researcher to modify its contents and ensure that the instrument was clear and unambiguous.

External validity is the extent to which the results can be generalized to other populations or situations. To ensure the validity the study adhered to the following:

- Primary question was linked with possible follow-up quests to test and ensure the validity of the responses

- Validity was obtained through three techniques applied in the thematic analysis of the qualitative data :

    - Word Clouds

    - Tree Maps

    - Cluster analysis

- The way in which the study is conducted and reported is illustrative of the validity and reliability that align with the theoretical framework in Chapter 2.

In this study actual evidence of the findings are stipulated to convince the reader of its finding and discusses how conclusions are embedded and drawn from the data set.

3.13 Thematic Analysis

Thematic analysis was the approach used to facilitate the exploration of how the phenomenon of disability is lived, experienced and how SWDs and staff are motivated to assume roles

within the mainstream university (Andersson & Öhlén (2005). The researcher established that thematic analysis provided a flexible and useful research tool, which enabled her to obtain rich, detailed and complex accounts of the experiences of SWDs within the mainstream university (Braun & Clarke, 2006).

Qualitative analysis software NVIVO 10 was used to analyse the data. It assisted in uncovering trends and words that were similar in meaning and identified word clouds, tree maps and cluster analysis that formed main and sub-themes. Emerging themes become the categories or codes for analysis. The data analyst consulted was an external, unbiased, and objective person who worked closely with the researcher to identify the prevalence of overall themes, sub-themes, similar themes and excerpts from the data that captured something important or relevant to the overall research questions (Braun & Clarke, 2006, p.82.) The key themes identified across the data set are not usually prevalent but themes that captured important elements of how people experienced disability in a mainstream university environment. The write-up of the data analysis conveyed a compelling story that not only provided a description of the data but also presented an argument in relation to the research questions (Braun & Clarke, 2006).

3.14 Ethical Considerations

In any study involving human subject at the University of KwaZulu-Natal, ethical concerns are important, particularly with reference to planning, conducting, and evaluating research. The study was explained to be one of minimal risk to participants. Participants were informed that no harm pertaining to experimental treatment or exposure to physical or psychological harm or discomfort would be experienced in the research. However, for the benefit of all participants in the study, information concerning psychosocial support services was detailed in the consent document (see Appendix D), in the event that such support services became

necessary. The researcher ensured that the participants fully understood the nature of the study and the fact that participation was voluntary. The researcher assured participants that confidentiality of recovered data would be maintained at all times, and their identities will not be available or accessible during or after the study. The researcher acknowledged that she under no circumstances would be able to conduct the research without a properly signed Informed Consent Form because without a signed consent form the data collected is invalid.

3.14.1 Students

The Informed Consent Forms had to be signed before participation and the student had to be a registered student at the University of KwaZulu-Natal.

3.14.2 Staff

The selected staff members also signed Informed Consent forms and agreed to electronic recording of their interviews.

3.15 Chapter Summary

This chapter described the research methods intended to fulfil the study. It described qualitative research design employed in the study; location, sampling strategies used, and introduced the participants. It further outlined data collection techniques and instruments used in the study as well as emphasised ethical considerations applied in the study. The following chapter presents a qualitative data analysis and an interpretation of the results with a detail discussion in relation to the literature and theoretical understandings that underpin the study.

Chapter Four

Data Analysis

4.1 Introduction

This chapter features the analysis of the data collected and the discussion of the results. The study was qualitative in nature and this entailed the collection of qualitative data. The research design aimed to explore the lived experiences of students with disabilities (SWDs) in a higher education setting. The primary data emanated from interviews conducted via two clusters, that being the student cluster and the staff cluster. As such, the study adopted a qualitative and inductive approach to the analysis. A backdrop of literature is then provided to contextualise findings and the theoretical frameworks are applied via the results of the study.

4.2 Thematic Analysis of Qualitative Data

A qualitative design was used in the study and thematic analysis was the approach used to facilitate the exploration of how the phenomenon of disability is lived, experienced and roles assumed in society (Andersson & Öhlén, 2005). According to Braun and Clarke (2006, p.79) thematic analysis is a qualitative analytic method for "identifying, analysing and reporting patterns (themes) within data." It helps organise and describe your data set and goes further, and interprets various aspects of the research topic. Similarly, as asserted by Federay and Muir-Cochrane (2006), thematic analysis of qualitative data is where themes and major ideas are identified in the data. It also recognises patterns within the data that emerge as themes that become the categories or codes for analysis.

The themes in this study emerged from the data collected from interviews with participants. The qualitative analysis involved a method of using a process of thematic coding where themes emerging from the dialogues of participants (Federay & Muir-Cochrone, 2006). Thus the process identified how themes were generated from the raw data to uncover meanings in relation to the aim of the study.

4.3 Identifying Themes in Coded data

From the inductive coding process, themes emerged from the text identified which included sub-themes as well. These will be incorporated in the discussion. The research design was aimed specifically at understanding SWD lived experiences at a university within a South African context. The information was gathered and analysed to identify themes that responded to the research questions. Themes were gathered from the data using inductive and deductive thematic analysis.

The qualitative analysis software 'NVIVO 10'was used to analyse the data. This enabled detailed observations to uncover trends and word frequencies. In addition, word trees and cluster analysis was used. All these techniques aided in formulating the themes and sub-themes. The prevalence of overall 'themes and sub-themes' is important in capturing something important in relation to the overall research question (Braun and Clarke, 2006, p.82.) The 5 key themes identified across the data set captured important elements of how the respondents (staff and students) experience disability in a mainstream university environment.

Word Frequency analysis

Word frequency entail highlighting the words that are used most frequently based on certain parameters. These then create a visualisation known as 'word clouds'. Word clouds are graphical representations that researchers use for technical analysis of data. It displays up to 1000 (or more/less) words which are in alphabetical sequence in a range of font sizes. Frequently occurring words from the data set are in larger fonts allowing the researcher to easily identify key-words that will assist her with the technical analysis (Better Evaluation, 2013:1). What must be noted however, is that word clouds only display frequently occurring words. It does not necessarily reveal words according to importance (Better Evaluation, 2013: 1). Figure 7 displays the primary word cloud (word frequency analysis) of this study.

Figure7. Word frequency analysis of qualitative data (Nvivo 10, 2017)

The main words identified in the above word cloud include "Students", "disability", "like", "think", "know" and "university".

Word Trees

The word tree is a visual tool used in the thematic analysis that shows the different contexts in which words appear. The results are displayed as trees with branches representing the various contexts in which the word or phrase occurs. This helps to identify recurring themes or phrases that surround a word. The font size of the word that is used more frequently is displayed in larger font size (Better Evaluation, 2013). The words that were most frequently used were, namely disability, student, environment and university. These findings are not surprising given the topic under study.
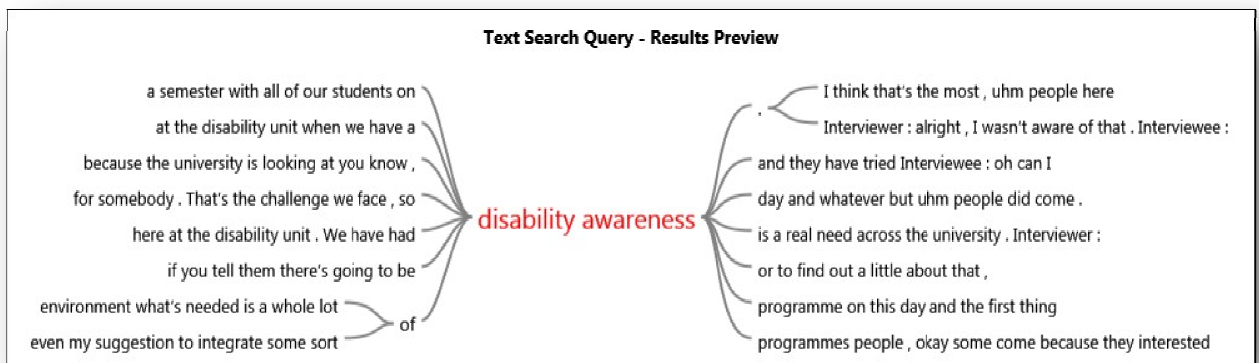
Figure 8. Example of a word tree from qualitative data (Nvivo 10, 2017)

Looking at the word tree above, certain sentences were noteworthy:

Words	Sentences
Diversity	Most people are not aware of the diversity of student population
Awareness	It is a challenge that disability awareness is a real need across the university
Intergrated	Need for intergrated awareness programmes
Environment	There is a real need for inclusive university environments
Disability awareness	People are interested and are likely to attend disability awareness programmes

Table 7: Sentences derived from word tree above

Other word trees used to identify recurring themes, phrases that surround a word or words and phrases that were most frequently used, are attached in Appendix C.

Cluster Analysis

Cluster analysis diagrams provide a graphical representation of sources or nodes to identify similarities and differences easily. Souces or codes in the cluster analysis diagram show similarities when they appear closer together than those that are far apart. The cluster analysis for this study's data is shown in Figure 9.

Figure 9. Bubble Cluster Analysis Diagram (Nvivo 10, 2017)

4.4 Core themes Analysed

The following section presented the results from the analysis. The presentation of each theme is divided into two main sections the analysis from the perspective of SWDs and the perspectives of relevant stakeholders (staff component) that form part of the university.

Based on the above methods outlined, 5 themes emerged from the data:

Themes	Sub-Themes	Description
1. Challenges to achieving ideal state	• Deficiency of organisational requirements • Challenges with services rendered by DSU • Student population too diverse	The first theme identifies the challenges the university faces in servicing SWDs at the university
2. Inherent, Attitudinal and Structural Barriers	• Inherited barriers • Attitudinal barriers • Structural barriers	The second theme explains how barriers affects the lives of SWDs critical to the achievement of educational objectives
3. Teaching and Learning: Roles and Functions	• The Key Operational Areas Servicing SWDs • Difficulties with SWDs • Difficulty with Lecturers	Theme three identifies the high levels of concern for meeting support structures within the university community that involves role clarity and collaboration of available resources.

4. Progressive Attributes	• Embracing disabilities strengths
	• More inclusive:
	  - Adequate resources and accommodation
	  - Formalised and structured mechanisms and support
	  - More supportive and accommodating of needs
	  - Increased understanding and exposure to SWDs promotes inclusivity
	  - Increased awareness
		Theme four highlights the universities progressive traits in servicing SWDs and explores how the university community responds to challenges.

5. Recommendations	Required action from the university - Adjustments to existing structures and facilities - Explore other avenues of support - Increase awareness, advocacy and understanding of disability - Integrated and collaborated solutions and improved communication and partnerships - More platforms to give voice to the disabled - Make administrative aspects more centralised and disability friendly	Theme five proposed recommendations in relation to promoting an inclusive environment for SWDs

Table 8: Core themes that emerged from the data

For the purpose of establishing factors that are of particular relevance to SWDs within the context of UKZN, each theme will be discussed with regard to their relevance to the research questions. Furthermore in the second part of each theme commonality of responses from both categories of participants (part 1 and part 2) will be contrasted and discussed in detail with the ultimate aim of establishing the standpoint of both SWDs and staff members within UKZN.

4.4.1 Theme One: Challenges to Achieving Ideal State

An overriding theme that emerged from the primary data focused mainly on challenges to achieving an ideal state in terms of the inclusion of SWDs at UKZN. This theme highlights the following subthemes concerning challenges related to the University:

- Deficiency of Organisational Requirements

- Challenges with services rendered by Disability Support Unit

- Student Population too diverse

4.4.1.1 Deficiency of Organisational Requirements

Discrepancies in organisational requirements indicated by the outcome of the study suggest that the university does not adequately support the SWDs. A student with disabilities has diverse needs and therefore the application of a standard repertoire of resources does not support inclusivity. This implies a need for more resources to better support SWDs. It is possible that the university is under the misconception that it adequately services SWDS and this is driven by SWDs who remain complacent with the limited accommodations they have received.

The university does make incremental changes in response to the diversity of SWDs, however, it is more a reactive rather than a proactive approach to disability. For instance, a SWD such as a deaf student influences change that drives the institutions to adapt in some way.

Staff respondent 1 argued in support of the above that discrepancies are due to resource constraints:

Students with disabilities are not a homogenous group of people. They are pretty diverse in their needs and for us to be able to provide to them a service consistent with their individual support needs we clearly could do better if we had more resources and support.

Student respondent 2 agreed that SWDs reflected complacency:

Sometimes students are complacent, they're happy with the little they get but there's actually much more out there for them, much more available.

Staff respondent 4 indicated that the universities efforts were not adequate to meet the demands of SWDs:

I guess they trying but I feel like I don't think, to be honest, I don't think it's good enough because in this day and age particularly, I don't see why it should be such a fight all the time.

Staff respondent 1 agreed that the lack of resources means that there is a reactive, rather than a proactive approach:

We react to the challenges, we don't have the funding and the support to be more proactive. This doesn't speak of equity of access, this speaks about discrimination.

These show inadequacy of the university in relation to requirements of SWDs. It is evident that the university needs to pay greater attention to supporting the diverse population for SWDs and their needs. Reference is made to Taylor et al. (2010) recommendation to supply appropriate and adequate support in relation to severity and presentation of the different forms of disability. This will guard against inadequately supporting various disabilities that

continually emerge with the intake of new students. This further challenges the university to align to a positive change in terms of organisational requirements.

4.4.1.2 Challenges with services rendered by the Disability Support Unit

The study revealed that there is an overwhelming dependency of the university community on the services of the Disability Support Unit (DSU). Despite growing numbers of SWDs, most DSU offices have not had a corresponding increase in staff to meet disability-related needs and the needs of specific academic programmes. As a result SWDs felt overlooked and misunderstood perpetuated by the following factors:

- The university is doing things for the sake of doing it and not understanding the principles of inclusivity.
- The lecturers are not seeing and attending to the specific needs of the SWDs.
- When SWDs encountered problems within the university sphere, they often turn to the disability coordinators for guidance or assistance. However, they assert that these staffs are often too busy.

Staff highlighted that relationships with core stakeholders were reactive, and as such, tends to promote discrimination rather than foster equity of access. Drawing from this, the results highlight key challenges regarding one of the disability coordinators:

- Students found the disability coordinator to be too busy
- Lack of clearly defined roles and boundaries

a) **Too Busy**

Student respondent 1 conveyed that the disability coordinator was always too busy:

It's like there's all the responsibilities on one person and if you go to any of the other staff they don't know anything. They say go to this person and he's always busy. They're always busy even though they try to make time to help you they are always busy.

Student respondent 5 notably shares the sentiments of student respondent 1:

Then what I will suggest is that firstly the workers at the disability unit, there should be more of them because I also believe that the shortage of staff at the disability unit is what leads to problems.

The disability coordinator and the operation of the DSU are fundamentally responsible for meeting disability-related needs and the needs of specific academic programmes efficiently and effectively and needs to take priority in overcoming barriers to SWDs as pointed out by Zhang et al. (2010). However, SWDs have pointed out in their responses that it is because the DSU is under-capacitated which leads to the overworking of existing key staff. This has direct implications in terms of the lack of staff resources to support the growing number of SWDs at the university.

Students struggled to obtain individualised attention and proactive resolution because of the inability of the DSU to sufficiently service SWDs.

Student respondent 1 emphasised that she did not receive individualised assistance:
So, they see you as a group, not as a person.
Contrary to what the SWDs relayed, the disability coordinator affirms that support has to be individualised and lack of resources means that there's a reactive, rather than a proactive approach.

Staff respondent 1:

The relationship between the examinations offices and the DSU is almost in a reactive way. Support for SWDs has to be individualised. DSU would bring to the notice of the exams

departments, academic departments and others, the individual specific needs of our students. We then provide to examinations disability specific knowledge and information.

It emerged from the study that the Disability Coordinator felt incapacitated due to resource constraints. This is supported by the response:

This is not ideal, simply because examinations has its own set of procedures and we now have to provide the support simply because resourcing and capacity building in examinations for example is determined by resource constraints.

Staff respondent 1 suggested a collaborative interaction with all stakeholders should become a priority:

We have 622 SWDs across 4 campuses and we are able to provide to them a support service on four of our five campuses. However, SWDs are not a homogenous group of people. They are pretty diverse in their needs and for us to be able to provide to them a service consistent with individual support needs we clearly could do better if we had more resources and support.

However, students feel unheard as Student respondent 10 complained:

The support staff, they don't pay attention to you. They will be busy talking but you got there but you want to talk to them. They won't be paying attention to you.

The Disability coordinator argued that self-advocacy of SWDs at university was necessary:

The DSU places a very important, advocacy on the roles that we play. We advocate for equal access, for accessible venues, accessible spaces for SWDs. We also help SWDs advocate for themselves. We give them the skills, we empower them with knowledge so they are able to go up to their lecturers and raise their issues. So advocacy has to be the most powerful tool for bringing about change that SWDs need to experience in the university space.

The responses indicate that access works both ways in that as much as the university undertakes to accommodate the greatest diversity of students, it is expected, that SWDs will self-advocate for access. Madaus and Shaw (2004) supports the UKZN Policy (2004) where it encourages students to self-advocate for access to advance in independent living which ensures dignity, self-sufficiency and responsibility. However, Field et al., (2003) argued that institutional environments fully adapted to accommodate the greatest diversity of students will foster self-determination among students.

b) Lack of clearly defined roles and boundaries

It is shown that much of the problem areas associated with the lack of individualised attention and/or the inability to provide particular attention to SWDs, coincide with the fact that there are clearly no defined roles and boundaries to integrate the services of relevant stakeholders in servicing SWDs based on the following:

- There exists confusion when it comes to delineating which support structures are responsible for what resulting in a tendency to shift blame.

- Given skills and empowered with knowledge, SWDs are not meeting expectations to self-advocate.

Staff respondent 1 added that despite being provided with the skills to self-advocate, little had been achieved in changing entrenched attitudes of SWDs:

We also help students with disabilities to advocate for themselves. So we give them the skills, we empower them with knowledge so they are able to go up to their lecturers and raise their issues.So, advocacy has to be the most powerful tool for bringing about change that SWDs need to experience in the university space. Because changing attitudes towards disabilities, in the minds of academics, support staff, of SWDs themselves has become engendered over time and it's not going to change overnight.

However, there have been positive movements towards increasing and formalising the level and type of support offered to SWDs. This includes:

- Links with other support structures such as counselling services
- Formalised and structured support for SWDs

Although there is an overriding dependency on the DSU in servicing SWDs, it remains an institutional responsibility that can be accomplished by building partnerships and creating a sense of "shared responsibility" among all staff at the university aligning to the theoretical framework of Systems Theory (Becvar & Becvar, 2014, pg. 88).

Applying reciprocity implies that there should be no confusion when it comes to delineating which support structures are responsible for what. Amidst confusing roles and boundaries, there can be a tendency to shift blame onto others which are illustrative of a lack of collaborative relationships with departments across the university. Consequently, only those people who work closely with SWDs tend to understand. This is indicative of recursion (circular causality) where the reaction of the SWDs is dependent on the reaction of staff and vice-versa (Becvar & Becvar, 2014).

4.4.1.3 Student population too diverse

It emerged from the study that SWDs felt that the university failed to understand their needs in relation to the diversity of SWDs. It appears the university is doing what it perceives to be right versus acting out of understanding concerning servicing SWDs. The university is adhering closely to policy proclamations and is not attending to the expressed needs of individual SWDs.

Staff respondent 1 had this to say about the diverse student population:

Diversity in this context then would be students who have disabilities, students who are black, students who are women, students who are generationally different. How are academics coping with such a diverse cohort of students?

It is not the problem of the SWDs in the college of humanities, it's the college of humanities that doesn't know it's student population well and because of that it doesn't appoint and apportion resources according to the needs of its students.

The statements of staff respondent 1 are a noteworthy acknowledgement of another applied framework, that being, the social model of disability where it was emphasised by Majinge (2014) that disability was a direct consequence of the failure of society to accept differing needs of PWDs and remove the challenges they encounter. Staff respondent 1 asserts that the College of Humanities does not appear to know its student population well and it is for this reason that it does not adequately provide resources to those who need it. This implies that it becomes imperative to identify the needs of a diverse population and expedite efforts to meet those needs (in an integrated manner) which can then, in turn promote better and more effective resource allocation by the College and even the university as a whole (Becvar & Becvar, 2014).

- Inadequately resourced to meet all needs

In servicing students with various categories of disabilities, the university clearly could do better with more resources and support. The study revealed the following outcomes in terms of current inadequate resources:

- Inadequate or inappropriate learning materials and resources,
- Delays in providing study materials in correct formats

       - Attributed to a breakdown in communication from the student themselves, and/or between schools units and colleges.

- Budgetary and resource constraints – makes it very difficult to cater for the diverse population of students with disabilities each with different needs.

Owing to the nature of the various categories of blindness, there are specific requirements as explained by staff respondent 1:

Different categories of blindness include: totally blind student, congenitally blind, advantageously blind, partially sighted student, tunnel vision, peripheral vision and albinism condition that are photo or light sensitive. Our services depends on how a person became blind, what level of services they receive prior to what level of skills they have acquired.

Student respondent 3conveyed the following:

You can't cater for everybody I guess. You can cater for the worst-off but not all, you know, that is what I found.

Failure to communicate requirements leads to the university, as a system, not being responsive to their individual needs. This is a barrier to success.

Staff respondent 2 complained about inadequate facilities:

Sometimes the problem is when you don't have the facility, you haven't got the venue then you might have a problem. That's why sometimes you have to think what we've got on hand before we can promise the student something you can't do.

This is supported by Staff respondent 1:

It's unfortunate that we are not resourced to the level of the needs of our students.

Staff respondent 2 believes the university is clearly not well equipped to provide the required level of support:

We haven't got this kind of facilities but obviously if it's specific, I don't think we'll have the kind of equipment.

Revisiting the theoretical frameworks of the study provides an understanding that the problem does not lie with a person with a disability such as one using a wheelchair, but rather that the designers of university space failed to construct ramps and elevators (Integrated National Disability Strategy White Paper, 1997). This speaks of the social model of disability where the study agrees with Subrayen (2011) who asserted that changes in the physical environment and paradigm shifts toward the social construction of disability will ensure effective participation of SWDs and full access within HEIs.

Along similar lines Majinge (2014), Shava (2008) and Seyama (2008) have placed emphasis on the social model of disability. Also applicable to the university context is that it is imperative that the needs of SWDs be considered in the planning and utilisation of all resources to ensure that every individual has equal opportunity for participation. In addition, there exists room for improvement in areas such as communication, feedback and support structures for SWDs. Ashworth et al. (2010), Ntombela (2013) and Zhang et al. (2010) supported this and added that dialogues between colleges and DSU staff as well as SWDs are highly essential in meeting disability-related needs, providing the optimum level of support and effectively meeting the needs of specific academic programmes.

4.4.1.4 Summary of Theme One

Theme 1: Challenges to Achieving Ideal State	
Key areas highlighted in theme 1 relates to challenges that the SWDs face with the university in relation toorganisational requirements, challenges with services rendered by DSU and student population being too diverse.	
Sub-themes	Key points
Deficiency in Organisational Requirements	Much responsibility lies with the DSU professionals who must collaborate with colleagues across the university to provide appropriate support needed in servicing SWDs.
Challenges with services rendered by Disability Support Unit	Despite growing numbers of SWDs, DSU offices have had a comparable increase in the numbers of staff to meet disability-related needs. Disability Coordinators - The Disability Coordinator felt incapacitated due to resource constraints and students found disability coordinators are often too busy. Lack of clearly defined roles and boundaries - There exists confusion when it comes to delineating which support structures are responsible for what results in a tendency to shift blame.
Student Population being diverse	The university appears to be insufficiently equipped to sustain future intake of SWDs and is inadequately resourced to meet all needs Due to this, it is difficult to cater for each of the needs of diverse SWDs especially when operating within budgetary and resource constraints.

Table 9: Summary of Theme One

4.4.2 Theme 2: Inherent, Attitudinal and Structural barriers

Another overarching theme that emerged from the data includes barriers to SWDs within a mainstream university. The study identified three categories of barriers to an all-inclusive environment servicing SWDs:

- Inherent barriers

- Attitudinal barriers

- Structural barriers

4.4.2.1 Inherent Barriers

This sub-theme focused on prevailing environmental issues from a resource point of view as well as academic and structural issues that revealed a layered form of social exclusion. The study established that a predominant barrier in dealing with SWDs is 'failure to communicate' exacerbated by the fact that SWDs are not given the platform to express their needs and experiences at university. Notably, the University of KwaZulu-Natal sees a growing number of SWDs and because of new trends and the entrance of new SWDs prominent challenges continually arise.

The study revealed the following inherited barriers:

a) Historical and political history defining focus

b) Political environment and striking

c) Existing organisational culture and structure

d) Not an inclusive model of support

e) Inappropriate and unrealistic administrative and registration requirements

a) Historical and political history defining focus

The university's political history created a measure of challenges that requires it to react. The study revealed that aspects such as race and gender, considered political in nature, are more at the forefront than disability issues. Much of the focus starts with race and gender before considering the issues of SWDs.

Staff respondent 1 highlighted this:

There's a greater focus on ensuring that we deal with question of race more than we dealing with the question of disability. In other words we are more willing to deal with gender than we are prepared to deal with disability. We prepared to weigh disability less than we weigh gender.

As a South African university, in keeping with non-discriminatory practices, the UKZN Policy (2004) promotes inclusion and undertakes to assist SWDs despite impending political issues. However, there seems to be a thrust towards emphasising the information and awareness of mainly African SWDs. The university needs to abide by Denzin and Lincoln (2013) who asserted that racism is a form of exclusion more than a political prejudice or obligation which create barriers, which creates disability.

b) Political environment and striking

There are also factors that are present in the university that have no bearing on being disabled. It affects all students equally, and that is the political climate such as the student protest action. In relation to SWDs and the 2016 student protest action at the university, the study made the following finding:

- The politically motivated student protest action affected partially sighted students, students with physical disabilities as well as students with hearing impairments.

- Various insecurity issues were brought to the fore, emphasising the extreme vulnerability of SWDs in the midst of politically motivated violence.

- Although the university has had a history of protest action, it is still not prepared in relation to SWDs during such circumstances.

From the utterances of student respondents, their personal experiences of the 2016 student protest action revealed events as it happened:

Student respondent 13:

It was the worst experience ever in my life when there was a strike. I'm the first deaf student here. I was so scared I was freaking out. And I didn't know if the cops were going to arrest me because I'm a deaf person how am I going to communicate with them?

Student respondent 7:

When there was a strike issue, we had a problem because I am partially sighted so I had problems because the police sometimes started shooting. I wouldn't see where they shooting. It was difficult because I had to miss class that day because I was scared of getting hurt or something.

The student protest action threatened the safety of the SWDs. Student respondent 14 urged the university to have some effective strategies in place to protect SWDs during such times:

This university can't do much but it saddens me to notice that this is on my heart. Like if something could be done.

Student respondent 6:

When there's strikes, lectures are continuing. Normal students can see the bullets coming and they run but us it is difficult because in January I was even shot on my shoulder.

Clearly, the university has not put processes in place to protect SWDs in such instances

where SWDs found themselves in the midst of violence (Golding-Duffy, 2017). In addition to the fear and insecurity caused by the outbreak of violence, SWDs reflected that they were also concerned about missing of lectures, which can affect their academic performances due to added stress in trying to catch up.

c) Existing Organisational Culture and Structure

It was emphasised in the study that, as a university of diverse cultures and a prominent historical background, there had not been much change in organisational culture at UKZN since the merger in 2004. The merger of University of Natal and University of Durban Westville gave rise to a continually evolving university community (Makgoba, 2007). As such, embedded in the existing organisational cultures at UKZN are the following challenges:

- Academics and lecturers have no specialised training to adapt teaching strategies to suit the needs of SWDs.

- Negative attitudes of lecturers who maintain concerns about the actual implementation of inclusive environments.

Describing the nature of the existing organisational cultures at UKZN, staff respondent 1 asserted the following:

So the system itself has not been changed fundamentally. From a resourcing point of view, from an architectural point of view, from a teaching and learning point of view, from a teacher, from an academic point of view where the academics themselves are not trained to embrace this new paradigm and then are expected to embrace a new cohort of students. So it's quite a deep layered level of what I would call social exclusion.

In addition he said:

That is the disjuncture between policy and the lived and practical experiences of people in general with disabilities. That is a lot of wonderful legislation in the world for that matter. Our people with disabilities live far from what's on paper.

The organisational culture at UKZN is formulated around the UKZN policy on students and staff with disabilities (2004) however; it does not appear that the university has strictly adhered to policy. Findings in Ntombela (2013) supports this in that change and new policy proclamations do not necessarily translate to new practices. The UKZN Policy (2004) conveyed that the responsibility for implementation of the policy vests with every member of staff, however, this is not the case as lecturers do not have the necessary training and knowledge on how to teach SWDs and do not have the requisite skills to understand the diverse learning styles of SWDs.

d) Not an inclusive model of support

Findings suggest that the model of support at the university is not one of inclusion and reflected an integrated approach that does not foster an inclusive approach. Such discrepancies revealed that the UKZN Policy on students and staff with disabilities (2004) requires modification to enhance inclusivity. Furthermore, the university operates within financial constraints that favour the majority of SWDs, which ultimately promotes exclusion. As such, this section explored the following aspects:

1) Financial constraints and inappropriate allocation of funds

2) Promotion of exclusion

In addition, staff respondent 1 emphasised:

It has to start with the executive management, because they are the custodians or the implementers of the policy.

This means that the process needs to start with management and leadership at the university that needs to buy-in to revising the existing UKZN Policy (2004) and give due consideration to how it fairs in terms of an inclusive model of support.

1) Financial constraints and inappropriate allocation of funds

It emerged from the study that whilst the university is promoted as being inclusive, it excludes SWDs purely on the grounds of budgetary constraints, thus are more inclined to favour the majority SWDs when allocating resources.

This is supported by staff respondent 1:

Maybe it is a money thing but then look at how much they spending on other departments and other units and other things, you think well, where's their priority.

The sentiments of staff respondent 1 are echoed by staff respondent 4:

That is the problem because the fear is that disabled people are costly. It's too costly to do this, it's too costly to have more students here because then what we'll have to do is put more money into student assistance, into staffing in the disability unit and all of that.

It appears from the above-mentioned that resource constraints do not form major barriers to SWDs. Rather, issues related to prioritising expenditure and the allocation of funds were emphasised as existing barriers to inclusion. The university needs to critically evaluate this and consider reworking the budget to provide more support and resources for SWDs (DHET, 2013).

2) Promotes exclusion

In the upkeep of the university's goal to value students in all of their diversity, the university finds itself in the midst of intense pressures due to challenges that a diverse population poses. Findings revealed that the university promoted exclusion of SWDs due to the following reasons:

- Move towards an inclusive environment plagued by an over-dependence on DSU

- Staff limitations at DSU posed significant problems

- Delays in the marking of scripts and lost scripts

Staff respondent 1 is adamant that the university has not made that move towards providing an inclusive environment, therefore, an overdependence on the DSU:

What we saying is very simple that the DSU is a creation of the university to help towards supporting academics and students so that we move towards an inclusive environment. The opposite has happened that there's been an over-dependence on the disability unit to bring it to the notice of the academics.

Student respondent 7 asserted that staff limitations at DSU posed significant problems:

Your paper is not fetched you have to wait longer hours before you write your test or exams sometimes. Its brings panic because when you ready to write and everybody else is writing you just feel, I'm going to forget everything. You feel this is being unfair. You just get frustrated and when you get frustrated, you get distracted.

Student respondent 9 revealed that there were delays in the marking of scripts and lost scripts:

So I wrote the test and then my script was taken to the coordinator but my script got lost cause other students were writing in the Student Union. Even the marks came out, I went to the notice board and I saw absent from the test. I wrote this test and I went there to ask and she said she didn't receive any script from the disability unit. A few days later, they found the

script.

The university's inability to support all students with disabilities entirely, promotes exclusion. Among other things, the university reactively secures sustainability by way of utilising what is available at present instead of providing students with curricula, teachers, infrastructure and support services designed around their needs (Houbour & Maudus, 2011). This is supported by studies such as Seyama (2008), Ashworth, et al. (2010) and Ntombela (2013).

e) Inappropriate and unrealistic administrative and registration requirements

It emerged from the statements of student respondents that they experienced problems of exclusion from the onset of their university life. For instance, the current applications process excludes learners with disabilities by virtue of length, accessibility and understanding when confronted with certain impairments. The study also revealed the following:

- The applications office appears to do things for the sake of 'ticking boxes' rather than doing it to accommodate needs from a place of understanding.

- Technological advances increased accessibility for some students but proved to inconvenience SWDs in rural areas.

Staff respondent 1 explained:

Currently there is a challenge in that, the current application forms are not in appropriate format for students who have, for example, visual challenges.

Reacting to whether technology influences levels of inclusion at UKZN, student respondents 11, 9 and 12 conveyed their views:

Student respondent 11:

Because I'm from rural areas so regardless of the online application or manual, I can't

access. When I'm at home I can't access the internet.

Student respondent 9:

An online registration, ay, I don't think it would have benefited me. I wouldn't say it's very helpful, an online registration. Especially for a person with a disability.

Staff respondent 12:

I don't like using the computer so I prefer to be done manually and I feel it's easy manually and when you do things manually you know that it's actually done.

Student respondent 9 added:

There's all these wonderful, brilliant ideas about the website and online registration but if you don't take into consideration the poverty aspect, which is really huge in South Africa. It's really not going to work.

Despite significant strides to expedite access and usability of assistive technology, in studies such as Bruyère (2008); Shaw et al. (2009) and Coleman (2011), UKZN needs to understand that electronic media that is not accessible can create additional barriers to SWDs. As such, the university needs to consider simplifying the application procedures and provide information about the various admission and application processes.

4.4.2.2 Attitudinal Barriers

Attitudinal barriers encompass the effects of various aspects that can reinforce discrimination through negative terminology, the passive acceptance of and resistance to changing prevailing attitudes, stereotypes and conceptions. This section highlights the following key areas:

a) Passivity-Reinforcing Stereotypes

b) Quality of Information

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a) Passivity-Reinforcing Stereotypes

It appears that the university operates on historical and prevailing attitudes that align with the passive acceptance of the status quo and which revealed a lack of proper action to challenge existing stereotypes and misconceptions. Take for instance the way the respondents speak. They speak in stereotypes such as "us", "them", "normal". Their language is very submissive rather than empowered and is very exclusionary:

Student respondent 10:

They see me as a normal person not taken into consideration that we not as normal.

Studies that support this include:

- Philpott (1994) agreed that the misuse of language and negative terminology can lead to labels and stereotype that ultimately creates a culture of non-acceptance, categorisation, stigmatisation and discrimination.

- Seyama (2008) asserted that to understand the effect of the words one uses, as people with disabilities are particularly vulnerable to words that emphasise the inabilities of people.

In addition, the study explored factors that reinforced prevailing attitudes, stereotypes and conceptions such as:

1) Passive acceptance of and resistance to changing prevailing attitudes, stereotypes and conceptions

2) Acceptance by those who are marginalised themselves

3) Evidence and operation of stereotypes

4) Stereotypes influence- Reinforces existing perceptions and stereotypes

1) Passive acceptance of and resistance to changing prevailing attitudes, stereotypes and conceptions

It appears that over time, little has happened to change existing attitudes of the university community (Zhang et al. 2010). Staff members feel students need to become proactive and advocate for access, however, SWDs felt the university has clearly not employed strategies to educate its staff in dealing with SWDs (Field et al., 2003).

Student respondents revealed the following:

Students declare in their statements that administrative coordinators, lecturers and even security guards, that form part of the university community, are still judgemental of them.

Student respondent 1:

I think that other people beside the coordinators and the lecturers like the guards and the security, they should also be aware that it's not only the disability students in wheel chairs or who have sight problem. There are others and you can't judge someone just by looking at them.

Student respondent 1went on to explain that racial matters caused her to feel like she did not fit in:

There's very few Indian disability students in our disability unit. So as an Indian student when you go into the disability LAN everybody's staring at you because they don't expect you to be there. It's like you don't fit in with them. You don't belong there. So I don't like that.

Student respondent 7 conveyed how they passively accept their own stereotypical way of thinking.

I don't know why and most of the time they think, even when you tell them you partially sighted they think maybe there's something wrong with your brain if you have a disability. They take it as if it's a disease.

Contrary to what students are saying, staff believe that the university has made significant progress over time in moving beyond race. Students with disabilities need to expect that the mainstream students' perceptions will be a challenge as they are experiencing diverse populations for the first time.

As conveyed by staff respondent 1:

In the time that have gone by, what has happened to train our academics to create conditions so that students with special needs should be able to go up to the academic department and raise the issue? Little has happened to change that.

It is not easy to change entrenched attitudes as staff respondent 1 attempted to explain:

Have to say this is a very slow process because changing attitudes, as I told you most of the attitudes towards disabilities, in the minds of academics, support staff of students with disabilities themselves have become engendered over time and it's not going to change overnight.

However, he admits that the university has made significant progress in moving beyond race:

We've moved beyond race, we now looking at body form and we not prepared to challenge our own perception about body form and therefore what we can't challenge we ignore.

Staff respondent 3 reflects in his statements that the focus changes to the perspective of SWDs who need to think about how the university will accept them:

How students with disabilities going to be accepted in a mainstream environment, they have to be aware of the mainstream student's perceptions and it's a bit of a challenge, it would affect them academically because there's stereotypes as mainstream students don't know how to deal with a diverse population and experiencing it for the first time.

The study revealed that there is no change to existing attitudes. The university has clearly not employed strategies to educate staff and students in dealing with SWDs (Harbour &Madaus 2011). While SWDs believe persistent racial matters and mainstream students still appeared arrogant and opinionated, staff have a difference of opinion whereby they feel that the university has made significant progress in moving beyond race reverting to what Ntombela

(2013) argued earlier that it is not easy to change entrenched attitudes and practices as change is a lengthy process. This view is shared in studies such as Subrayan (2011), Seyama (2008), Matshedisha (2007) and Ngcobo (2006).

2) Acceptance by those who are marginalised themselves

This study agreed with Naidoo (2005) who asserted that it is a misconception that people with disabilities are more comfortable with "their own kind." Grouping PWDs separately reinforced this misconception.

Staff respondent 5:

They feel a bit awkward about being referred to as access students or extended curriculum students. Because amongst the larger student body they feel there's stigma attached to it and they understand what it is to be labelled.

Staff respondent 4:

I'm worried, will enough students be exposed to students with disabilities through the buddy system? cause…who's the type of person that will volunteer for the buddy system? A person that is really sensitised and aware of a person who has different needs to theirs.

Although smaller classes are conducive environments for SWDs, it has little impact on promoting awareness and desensitising those that are considered as able-bodied. It makes sense that those who are most accepting are usually those able-bodied students who have a stigma or label already attached to them.

3) Evidence and operation of stereotypes

Evidence of unfavourable consequences and the operations of stereotypes in the everyday lives of SWDs at the university primarily involved:

- Lecturers overprotecting SWDs that felt excluded

- Students with disabilities felt excluded when lecturers do not involve them in class discussions

- Students with disabilities experience stigma when it came to getting notes and having a separate LAN. This inadvertently affected personal relationships with able-bodied peers.

- SWDs felt burdened with always having to explain their disability.

- Peoples' attitudes are often rooted in misinformation.

The following student respondents pointed out the potential for unfavourable consequences in instances where evidence and operation of stereotypes are ignored:

Student respondent 10:

They overly protect you. You feel like you are a mistake because you are a burden to other people. You can't be over protective. You can't over do things, just be simple, just be general. Just accept that I'm a visual impaired person. Should I encounter some difficulties I'll inform you.

Student respondent 9:

I think, even the lecturers, must be informed about the PWDs. A lecturer asking a question in class, must not be scared to point at the PWDs. Must point at them, ask the questions, make them feel as if they are part of the discussion.

Student respondent 7 felt that SWDs were stigmatised by the fact that were provided notes:

The lecturer gives you notes because you from the disability. It's just that stigma.

Student respondent 15 reflected that it affected personal relationships:

With some students its being discriminative in a way that they see you as different and they wouldn't befriend you.

Student respondent 3 said they didn't understand why SWDs had their own computer LAN:

We have a problem because other normal students from this university don't understand why we have our own LAN's. They just talk bad about us because we have our own LAN.

Student respondent 3 stated that explaining seems to be quite cumbersome:

You do explain, well listen I've got a disability. It doesn't matter because it doesn't change the ways they've seen you already. They unable or incapable of making a link to the disability having consequences.

People's attitudes are often rooted in misinformation as student respondent 3 explained, spreads negative attitudes at university:

We all aware that some people will think that since you have a disability, so you should get things, you shouldn't be learning as other students.

The findings clarified that the barriers that PWDs face begin with peoples' attitudes often rooted in misinformation and misunderstandings about disability (Easterseals, 2016). Such misconceptions are more disabling than the disability itself resulting in negative attitudes at the university.

4) Stereotype influence- Reinforces existing perceptions and stereotypes

It is apparent from the study that there is a lot of "treading lightly" and sensitivity around SWDs. The university community tries to be politically correct and sensitive, rather than just treating SWDs normally in a desensitised manner. This shows that this remains a contentious issue and people actually feel uncomfortable or unsure of how to deal with issues concerning SWDs.

The following key issues are drawn from the study relate to how the university reinforced misconceptions and stereotypes:

Students conveyed:

- Current arrangements for SWDs at the university reinforce existing stereotypes e.g. student residence.

- There is a lot of "treading lightly" and sensitivity around SWDs rather than just treating them normally in a desensitised manner

Staff conveyed:

- How one perceives people is how one will reacts towards them.

- Lecturers lacked understanding and were uncertain how to communicate with the deaf student, which affected their attitudes and how they engaged with the student.

- Students with disabilities are afraid to approach lecturers who display attitudes and stereotypes operating from existing held beliefs.

Staff respondent 1 supported the findings as follows:

Current arrangements at the university doesn't help the cause either. You go to any other campus, you find them in set residences. So, the attitude of the staffing and housing and whatever seems to fit into this stereotyping of PWDs and placing them in particular areas.

Similarly, student respondent 12, pointed out that student referred to residences as "disability residences" because majority SWDs resided in it:

To them it's a disability res just because there's people with disabilities that stay at that res they feel that it's a disability res but in actual fact it's not a disability res.

Evident in the following statements of staff respondent 5 and 1 show that there are a lot of 'politically correct behaviour and sensitivity' around SWDs:

Staff respondent 5:

I've learnt that students don't like to use this very kosher word, they quite happy with being called deaf. They say that is what they are

Staff respondent 1:

Clearly, the way in which people understand disability determines the way in which they engage with people. They are entrenching discrimination and discriminatory practices.

Disability is about social construction. The way in which we perceive people is the way in which we react towards them.

The student respondent stated that lack of understanding of lecturer's lead to negative attitudes that affected how they engaged with her:

I don't like their attitude because they don't know things like deaf culture.

Student respondent 15 explained how he was afraid to approach lecturers due to existing stereotypes operating from existing held beliefs:

Well I'd say that I feel distant from them. Lecturers some of them at times they have attitudes. You would then get scared to go and talk to them.

Studies that supported the findings revealed that all stereotypes contain some element of the truth that SWDs experience however when such tacit theories and assumptions interfere with social relationships, it limits the full participation of those who are affected by them (Block, 2016; Ison et al., 2010 and Naidoo, 2005). There is a dire need to change existing stereotypes at the university. In overcoming stereotype influences, the study applies Maslow's (1943) hierarchy of needs theory recommending a change in focus to salient drives, affective complexes and the need for staff and environmental modifications, as well as underlying irrational belief systems of both the staff and students.

- **Slow reversal of socially constructed meaning**

The study revealed that reversal of socially constructed meaning of disability and attitude change was a slow process in the minds of academics, support staff and SWDs themselves who have engendered stereotypes over time. Primarily findings revealed:

- Although changing attitudes is a slow process, staff remain confident that change is forthcoming.
- Barriers to society and the attitudes of people create disability.
- Disability, like human development, is continuous, evolving and naturally occurring. Therefore SWDs do not have to continually, advocate for access.

Staff respondent 1 uses blindness to clarify his explanation of how particular attitude towards PWDs creates barriers:

So practically this is what it would mean; somebody who is blind is not really disabled, he's visually impaired. He becomes disabled when the world in which we live has a particular attitude towards blindness and creates barriers for this person to be able to achieve his life goals.

The way people with disabilities or people with impairments have been treated from different societies, you will find that it has changed over time. As society evolved their approach to PWDs have changed. So, what was considered a barrier many years ago is no longer a barrier now. There are improvements; obviously, the time in which it's taking to evolve is slow.

Although it is a slow process, staff respondent 1 remains confident that change is forthcoming. This is supported by Field et al. (2003) who emphasised that disability, as human development, is continuously evolving and naturally occurring. As a result, SWDs may not have to advocate continually for access. Change is forthcoming. However, the time in which the university takes to evolve is slow and still far from achieving such objectives.

b) Quality of information

It emerged from the study that poverty of information was due to the university being not well marketed to SWDs. There does not seem to be a lot of information passed to and through schools, especially mainstream schools, as many SWDs interviewed heard about the DSU through friends and word of mouth. It was found that the following factors contributed to the deficiency of proper information:

1) Poor marketing and knowledge of DSU and available resources
2) Lack of awareness and understanding of disability or student population

1) Poor marketing and knowledge of DSU and available resources

The manner in which students came to know of services the university offers in terms of accommodating SWDs is surprising. The poor marketing and knowledge of DSU and available resources were discussed in relation to the following avenues:

- The Disability Support Unit
- Friends, contacts and referrals
- Orientation
- Lack of marketing in mainstream School
- Workshops

The Disability Support Unit

Student respondent 2 felt the DSU needs to market its services more adequately and thoroughly with a special focus on schools to ensure that students are aware of their services.

Staff respondent 5 added that much of the responsibility lies with the DSU professionals to provide appropriate support however with current staff limitations, it appears the DSU is laden with too much responsibility.

Student respondent 2:

I went to the disability service here that wasn't specifically marketed to me and once again you guys were very accommodating I didn't even know you had the extent of disability services that you do like you should really find a way that students could actually realise how good the disability services are here.

Staff respondent 5:

They applied to the university through the disability unit so all of that awareness happens through the disability unit.

Friends, contacts and referrals

Student respondent 14 along with other student respondents confirmed in their respective responses that they heard about the DSU from friends and word of mouth:

Student respondent 4:

I heard from few students that I knew from school that came here. I didn't know they had a disability unit but when others came here that's when I heard but I think that's what happens with most people. They hear from people that they know already

Student respondent 14:

When I came in and applied I didn't know I have to indicate my disability? I didn't know I didn't even indicate, I only say that I only got to know disability office thanks to, Mrs K (name omitted due to confidentiality and ethics).

Student respondent 11:

However, it was simple it was easy that I use my friend to enter the university. So that's what I'm heading to, I was about to say that if it wasn't for my friend, maybe I wouldn't have been here.

Orientation

According to staff, the university adequately marketed the DSU and other services offered in separate orientation programmes for SWDs.

Staff respondent 4:

We have an orientation program. Which is separate from the mainstream orientation program where they initially hear about psychologist services.

Lack of marketing in mainstream schools

Staff felt that only some special needs schools were informed prior to admission. It appears private schools had more access to information than mainstream schools. The voices of the respondents reflected that access to information at mainstream schools needed to improve:

Staff respondent 1:

I think the way in which students are made aware of the service is, in diverse ways. Students who come to university, having finished basic schooling, would come here either from a school, a special school, a mainstream school, a or maybe a private school and it depended on their levels of support within each of those schooling systems.

Private schools by their virtue of their high resource availability meet some of the needs of students with disabilities or special needs and so student come here having some information. Mainstream schools, often get to know little bit later in the academic year or maybe never at all,

Conveyed in their responses students came to know of disability related services through other means whereby:

- They learnt from an occupational therapist who was provided by their school.

- Their high school brought them to the university for a career expo.

- They only learnt about DSU when they arrived at university.

Student respondent 7:

No, not when I was still in boarding school. They came afterwards when I was already here. Yeah and then because I was not quite aware that we as disabled students had a disability unit office and what not.

Student respondent 5:

But then it wasn't directly the university but we had a, an occupational therapist which was provided by the school.

Student respondent 9:

We came here, my school came here for a career expo.

Workshops

Workshops expose different people from different backgrounds to different ways of thinking and perspectives, which ensured against marginalisation and exclusion (Phillips, 2014). Staff felt that there are adequate foundation programmes and workshops that create exposure to SWDs, helps increase awareness and desensitises students promoting integration and inclusivity.

Staff respondent 4:

They attend compulsory life skills workshops throughout their whole foundation year. It's scheduled to their timetables. So I'll take them for those life skills workshops so they know about me.

In addition, Staff respondent 4 emphasised that they held workshops in conjunction with the DSU:

So, we have integrated a lot of workshops. So, DSU coordinator (name omitted due to confidentiality and ethics) *and some of his colleagues will come and do a workshop once a semester with all of our students on disability awareness.*

A systemic approach involves inclusive transition strategies for better access and stimulates student success. This approach involves public secondary schools and university personnel working together to assist in the transition process. Although Shaw et al. (2009) asserted that applying a systemic approach encouraged collaboration and integration, it emerged from the study that the university does not apply this approach effectively. A study by Fuller et al. (2004) supported this view by emphasising liaisons across high/secondary schools and university which created relationships that foster the opportunity to share and exchange information. The university needs to better market itself concerning services it offers because some public high schools offered individualised special education to SWDs during their schooling career, which may not be offered at universities (Shaw et al., 2009).

2) Lack of awareness and understanding of disability or student population

Despite the progress to date, the lack of understanding leads to stereotypes and the reinforcement of stereotypes (Block, 2016). This is further influenced by inadequate resources and accommodations Subrayen (2011). Findings revealed that when lecturers are

informed, they are more able to adequately and appropriately deal with SWDs in ways that are responsive to their needs. When they do not understand, and operate on the assumption, behaviour becomes a stereotype, and is no longer meaningful or helpful.

Students raised the following concerns:

- The university community does not understand disability causing needless pain and humiliation to SWDs.
- The university lacked the ability to accept differing needs of SWDs and alleviate the challenges they encounter.
- The students with a physical disability felt lecturers where resentful in their approach due to lack of understanding.

Student respondent 1 felt humiliated when she had to disclose her disability to security guards in the presence of other students:

I was the only Indian disability student in that LAN and he said you not supposed to be here get out now. I said: "But I am a disability student you can't kick me out." Then he said show me your disability and I couldn't lift up my clothes in front of everybody and show it to him but he was demanding that I show it to him or get out of LAN.

I was almost in tears that day because I had an assignment due and I was typing it out in the LAN and he was demanding to know my disability.

Student respondent 15 felt that lecturers did not understand they just thought she was not ready for the test or that she did not want to write the test:

At times the lecturers don't understand, well not that I expect them to but then if they could just understand that you don't make yourself feel sick just because you don't want to write. Sometimes you can't even come for the makeup test. You're still at the hospital and they wouldn't understand.

Student respondent 9 with physical disabilities explained that he had to sit long hours on a wheelchair during lectures and felt that lecturers where resentful:

I cannot sit for a double period in class. My spine feels the pressure so I have to go and rest. Because the lecturer who like: "Just 2 hours, how do you get tired for like sitting only 2 hours?

Respondent 13 who suffers from deafness, felt lecturers appeared challenged by her mode of communication:

What I realised was if my interpreter is there, most staff or lecturers, they scared to talk to me because they don't know how to communicate with a deaf person because of sign language.

Staff experienced the following challenges:

- Lecturers need to take responsibility and educate themselves about disability.
- Lack of understanding poses challenges in changing perceptions about disability.
- Lecturers complained that SWDs disclosed their disability and requested special accommodation only during examinations.

Staff respondent 1 highlights the role a lecturer plays in understanding his or her students:

Academic say "I'm very cross with the disability unit because the disabled student was in my class and I didn't know". And the question I asked is "so you cross with the disability unit or are you cross with yourself?" You cross with yourself that you didn't make time to understand the students in your class.

In addition, staff respondent 1 explained:

Reasonable accommodations is badly understood or misunderstood. So, these are part of the challenges we face in changing the perception about disability. So that we accommodate everybody, including those with disability.

Thus, staff respondent 1 alleges in his statement that SWDs feel misunderstood:

And yes, at a university you find that students with disabilities often are misunderstood or treated in a patronising way. So it is one that I think is based on a lack of understanding of what it is to be disabled.

Staff respondent 2 revealed that lecturers complained that only when it came to examinations SWDs disclosed their disability and requested special accommodation:

Well the biggest problem I encountered during exam time, the lecturers said they don't know that a student got a disability because during the lectures, during the tests, everything seemed to be normal but when it comes to exam they say the student wants extra time, they want enlarged paper, they want a scribe, whatever.

Staff respondent 2 believed that such problems arise due to non-disclosure of disability on registration:

Because certain disabilities, when they apply to universities and they ask for disabilities they put "no". Now if you don't stipulate it, obviously you won't pick it up

The study reveals that there is a lot of assumption going on about what is right in terms of adequate services for SWDs. Block (2016) believed it is a result of existing held beliefs versus what needs to be done concerning the provision of adequate and appropriate accommodations. The latter comes with understanding SWDs and their needs (Ntombela, 2013). There are very little recognition and understanding of what disability entails and what the requirements are. Understanding comes with awareness which entails educating people and making them aware of the concept of disability. This marks an unmet and urgent need to raise awareness about disability. Ntombela (2013) supported this and highlighted that accommodation and all adjustments need to be provided in a way that ensures that PWDs can function effectively with dignity and independence. This was supported in McLeod (2014);

Ntombela (2013); Zhang et. al. (2010) and Ashworth, et al. (2010) who maintains that poor accommodation due to poor understanding and awareness does not address access.

The influence of understanding the provision of adequate and appropriate accommodations are based on the following factors:

a)   Breakdown in collaboration and communication between role-players

b)   Poor accommodation due to poor understanding and awareness

c)   Think it is physically apparent only

a) Breakdown in collaboration and communication between role-players

In theme one, it was established that communication was key in terms of accommodation for SWDs and the inadequacy of resources. The study revealed that communication is also imperative when it concerns understanding and accepting diversity. Staff expressed the key concern of communication. There is a breakdown in communication between SWDs, between the different units and colleges at the university.

As expressed by staff respondent 2:

The biggest problem here is communication. If you got a disability you go to the DSU and that's where you get all the support and help. So, it's a communication between the disability office to the lecturer and that's where it's not happening.

In addition, staff respondent 2 felt that it was important to collaborate services between role-players:

Lecturers don't know, they're surprised that a student got extra time so they question me. The disabilities office needs to inform the lecturer, the college office and school managers.

This was supported in Becvar and Becvar (2014) where it was asserted that communication must bring about mutual understanding to establish compatibility and congruency. Inherent in this is the communication between the DSU and lecturers of SWDs to raise awareness and accommodate students accordingly.

- **Large class sizes**

A lecturer admitted that when classes are large, it can be difficult to detect SWDs. However, findings indicated that although smaller classes of SWDs promote favourable learning environments which are seen to improve academic performance by virtue of adequately attending to their needs, it, however creates stigma or labelling.

Students felt:

- In large classes, it was too noisy especially for those students with hearing impairments.
- Larger classes also created problems for students with visual impairments.

Staff respondent 1 conveyed this:

It's so difficult in mainstream where the classes are just so big. Everyone's going about, so preoccupied with their own stuff and you know it's so difficult.

Student respondent 3 is a student with a hearing impairment, explained her situation:

I'm studying psychology and it is a very common course the venues are very packed. If you sitting at the top you always get the noisiest students who seem to care less. So, if you do get a seat at the top you have to pick that up on your hearing aid.

Students respondent 7 with sight impairments also complain that larger classes hindered his/her ability to record or capture notes in any form:

We can't see so we can't write, we just sit and listen. Sometimes we record and it's not clear because the recordings are not clear because students make noise in class.

Clearly from the responses of SDWs, large venues create unfavourable learning conditions for those students with visual and hearing impairments. It needs to be recognised that communication in terms of accommodation for SWDs includes understanding and accepting diversity (Tinklin et al., 2004). Students with visual and hearing impairments inadvertently experience a breakdown in communication due to visibility and level of noise in larger venues.

b) Poor accommodation due to poor understanding and awareness

It emerged from the outcome of the study that accommodations are a critical part of inclusion. Therefore understanding and awareness of particular needs of SWDs are imperative to foster access.

Students raised the following concerns in terms of the implementation of assistive technologies:

- SWDs felt incapacitated without the use of certain technologies that were effective to them in high school.
- The university struggled with issues such as timeliness and consistency of implementation of assistive technology.

Student respondent 8 revealed that they did not received accommodations as required to meet specific needs:

Some of them they underestimate us, they sometimes not aware of the support that they supposed to give us.

Added to this, respondent 8 conveyed in his statements that the often failed in his attempts to obtain the necessary support:

In most cases I've been trying all my best to get support from my colleagues, from other students and sometimes go and consult with the lecturers. But, not all of them are always willing to help.

Student respondent 10 conveyed under examination conditions that accommodations could be more advanced:

I had a problem, because I had to write for 6 hours. I was using one hand and using the computer. But I think like the university should have like there's so many equipment that are advanced for people that have disabilities.

From the utterances of the students above, it becomes clear that the university community needs to address the issue of reasonable accommodation for SWDs. Students' request to have advanced equipment to initiate the use of appropriate assistive technologies, however, provision of appropriate accommodation are based on two criteria (Shaw et. al., 2009):

- Meeting general technology competency expectations of university education

- Successful implementation of assistive technology for curriculum access such as voice output software Kurzweil 3000 or JAWS 4.02 for blind or low-vision users (San Diego State University, 2017).

In studies by McLeod (2014); Ntombela (2013); Zhang et al. (2010) and Ashworth, et al. (2010) it was emphasised that accommodations are a critical part of inclusion and argued that physical inclusion, without considerations for accommodations, does not address access.

c) Physically Apparent Disabilities

The findings conveyed that misconception includes stereotypes of disability whereby people think of disability in terms of the physical identity of disability (being physically visible) as

opposed to those disabilities that may not be easily visible. For instance, a student in a wheelchair takes priority over a deaf student because he/she appears to have a more 'visible disability' versus the latter who may go unnoticed. Operating in accordance with this form of stereotyping, avails a student for special treatment because if a student's disability is not visible then they are seen as "everyone else," without disability. As a result, students are concerned that:

- Obvious physical disabilities do not need explaining because they fit the stereotypical definition of disability while SWDs who do not have overt disabilities go unnoticed and experience negative attitudes.
- Students with disabilities feel alienated misunderstood and excluded from persistent inappropriate behaviours that reinforce the cycle of stereotypes.

Student respondent 3 felt that lecturers behave inappropriately:

The course coordinator is not accepting any excuses from a doctor's note or anything like that and she'll say; "You must have had an accident and it has to have been really bad." They would elaborate on how severe: "You almost died and then you miraculously came to campus."

In their own interest, SWDs need to understand the benefit of notifying relevant stakeholders as one student respondent 3 affirmed:

You also need to understand that you need to notify them so you can benefit academically as well.

The study uncovers a culture of silence perpetuated by SWDs who further exclude and alienate themselves because they are victims of an already entrenched belief system that exists in society. Such misconceptions and stereotypes reinforce unspoken gaps. If not

confronted and addressed, these misconceptions will perpetuate stereotypes invariably leading to more resistance to change (Block, 2016).

4.4.2.3 Structural Barriers (Social Model of Disability)

The study recognised that the structural environment has posed significant barriers to SWDs at UKZN. This has challenged the university to focus on an integrated approach to understanding barriers to learning experienced by SWDs. Structural barriers includes interaction between individuals and the environment focusing on removing barriers that hinder access to learning within the university's built environment (White Paper (1997). The study centres on the physical environment and accessibility.

4.4.2.3.1 Physical environment and accessibility

If the university's physical environment is inclusive and supportive to SWDs, they will grow in strength and thrive. Based on the analysis of the study, the university needs to pay more attention to how the structural environment influences the student population from the perspective of SWDs. The university does not appear to understand the student population. It focuses on doing what is right versus acting out of understanding.

The study revealed that SWDs primary concerns include:

- The university environment that does not allow for normal wheelchair access.
- Lecture venues that are not easily located.
- Venue space seems to create additional obstacles.
- Environmental problems such as inaccessible venues, venue location, and architectural flaws compromised study time.

The difficulty experienced by a student with a physical disability is outlined by student respondent 9:

In any institution of higher learning you won't survive without an electric wheel chair. That's all I can say because the environment is not allowing you to push yourself manually.

Staff respondent 4 comments that ramps were inaccurately constructed:

Some things like ramps at ridiculous angles. Put a ramp there, but zero thought into what is the standard requirement for a wheelchair ramp. It's like you wanted a ramp so we've put a ramp here for you, now attend class but it's ridiculous.

Staff respondent 1 supported the abovementioned and included other existing structural barriers:

The physical environment is not very conducive to SWDs. You find most often that the wheelchair user in a lecture venue sits right at the back. Not out of choice, but out of the fact that the venue is inaccessible for him or her. Major challenges that confront SWDs in the physical architectural environment include:

- *Steps and no ramps.*
- *Steps that doesn't have rails*
- *Doesn't have a wide enough door way.*
- *Doesn't have (revolution) facilities.*
- *Lighting is not conducive.*
- *Inappropriate signage*
- *There isn't a clear plan of accessible routes*

Student respondent 2 explained:

I think the biggest thing is because it's a big university it's distracting. I can't focus on campus anywhere. I have to go off campus to do work. There's no real quiet place. So that's the biggest environmental challenge.

Student respondent 6 expressed difficulty:

Buildings are quite complicated but like with the maps, I can't read the maps so I have to ask for some venues. So, that's the only difficult part

Apart from not easily locating the tutorial and lecture venues at the university, the venue space itself seems to create additional obstacles for SWDs based on their specific disabilities. Take for instance the deaf student who has to have her interpreter accompany her when she attends lectures. It was emphasised by student respondent 13 that small venues do not adequately accommodate for both the interpreter and the deaf student:

Me as a deaf person its fine but the thing is the venue. Some of them are really small and you know at times there needs to be a bit of space between me and my interpreter.

Other physical environmental- related problems experienced included how SWDs lost study time due to the geographical location of lecture venues and available space.

It emerged from student respondent 7's statements that students have difficulty locating venues which pose major challenges to attend lectures:

The only challenge I've faced is venues. Sometimes the venues are hidden so I take long to find the venues. Sometimes I miss class, 3 times before I find the venue so those are the challenges I faced.

The statements of student respondent 9 reflect frustration and dissatisfaction that there is not much they can do about these problems and assign liability to unchangeable geographic conditions:

There are things that you cannot change which are geographical.

Tying in the concept of the social model, the extent and experience of disability is determined by how much the person's environment prevents him/her from participating on an equal level with others (Riddell et al., 2005). It is apparent that the university has not understood barriers to SWDs in order to adapt the environment accordingly.

The University of KwaZulu-Natal needs to embrace the application of the social model of disability to provide a safe and enabling built environment that guarantees an all-inclusive society is promoting equal opportunities for all people (Shava, 2008).

Key areas explored to understand limitations imposed by the physical environment include:

    a) Further marginalisation that displaces into the psychological domain

    b) No follow-up and poor maintenance

a) Further marginalisation that displaces into psychological domain

The study discovered obstacles in the structural environment at the university that displaces into the psychological domain. This poses extraordinary challenges to SWDs resulting in further marginalisation and SWDs feeling unwelcome. In this regard, the university again demonstrates that it does not have an inclusive model of support. Vital for successful integration of SWDs within the university is the need to feel like they belong. To prevent SWDs from feeling isolated and withdrawn and to ensure successful integration and involvement of SWDs requires that the university ensure that SWDs feel a sense of belonging. It is paramount that all students feel secure, needed and appreciated, appealing to their need for belonging and inclusivity as proposed by Maslow's (1943) Hierarchy of needs model.

Students conveyed the following:

- Psychological elements embedded in the physiological environment such as feeling isolated, discomfort from not fitting in, feeling they should not be here, feeling left out, and, for being grateful to be accommodated.

- The university needs to provide accessible resources, training and tools that are available more widely through a spirit of collaboration and community.

Student respondent 9 indicated that this was not the case, as he/she felt isolated from other students at lectures:

I'm coming into a lecture venue and I see other kids sitting there in the lecture venue. That cause a little bit discomfort as you are seated at the front because you cannot sit with other students and it's a little bit negative for me, it puts you under pressure.

Staff respondent 1, who revealed psychological elements embedded in the physical environment, notably supports the sentiments of student respondent 9:

- *That student feeling marginalised walks into a lecture venue which physically marginalises you. So it moves from the psychological to the physical.*
- *It creates a sense in that individual that I actually should not be here and almost in the sense that I should be grateful that they have accommodated me.*
- *Because of that, you find participation rates of SWDs during lectures very little.*
- *Psychologically I feel like I don't belong here. I must be grateful for being here and therefore I must be quiet.*

Student respondent 12 pointed out obstacles that were often overlooked that affect a student who is partially sighted or has low vision:

Some places that have glass doors, it's quite humiliating because sometimes you can't really see whether it's open or it's closed and then you actually find yourself walking into a door.

Not only is walking into a glass door humiliating but it can be physically dangerous to SWDs. It can also cause SWDs to feel clumsy and discourage their efforts to maintain self-confidence (The physical displaces into the psychological domain).

Based on Maslow's (1943) hierarchy of needs theory physical, emotional, social and intellectual qualities of an individual influence learning (McLeod, 2014). Therefore, the

university needs to take into consideration all aspects to ensure the physical and emotional wellbeing of SWDs.

In support of the above statement, staff respondent 2 asserted:

If you got good support then obviously you going to pass, you going to make it but it depends on what support you get from the DSU, from the university as it's definitely something that is going to affect you psychologically. You feel:"I'm left out".

The university needs to focus on changing its existing culture to accomplish a more comprehensive type of success for SWDs. Thus, the university needs to focus on providing a supportive environment to SWDs as Benson and Dundis (2003) suggested understanding the needs of the individual can enhance feelings of belongingness and self-esteem (Maslow's (1943). The study reveals that outreach into the psychological domain of SWDs from the university community is necessary to provide a culture of care and understanding.

b) No follow-up and poor maintenance

Equal access to physical environments eliminating obstacles and barriers to accessibility is paramount (Convention on the Rights of Persons with Disabilities, 2006). However, at the university it appears that the physical environment is not conducive to the needs of SWDs. Voices of the students revealed:

- Lack of ramps while lifts are not always in good working order despite many attempts to report this matter.

- Due to poor maintenance of the university's structural environment, SWDs found that they had to avoid certain routes around the university.

- Staircases are difficult to use.

- Poorly constructed surfaces that became hazardous over time to walk on or steer a wheelchair through.

- Complaints from SWDs are rarely acknowledged and takes months to be attended to, if at all.

Students with disabilities have raised concerns but are often told that the problems lies in the structural limitations (availability of space) to accommodate the full capacity of the student population registered for the particular module. Notably, failure to communicate means that student requirements are not shared, and the university as a system won't be responsive, which is a barrier to success.

Student respondent 7 complained about lack of maintenance:

It takes longer for the university to fix the things.

Staff respondent 1 explained:

Getting to the lecture venue, often if there's not ramps I'll have to use a lift, if the lift doesn't work I can't get there and all of these things impact on the learning of a student.

Student respondent 14 also voiced her concerns about lighting:

Well for instance Shepstone 5 where we go for ACLE, the lighting is poor.

The following conversation revealed additional structural barriers often overlooked by the university.

Student respondent 5:

There are some places I wouldn't be able to get there myself unless I'm accompanied by someone. The stairs, sometimes there are places where I would say there are not evenly constructed. I sometimes end up avoiding those routes because of that fact and choosing other routes to get to specific places.

Student respondent 9:

No it's more than just their everyday use of the university structures, the physical space I've seen some of our students on crutches battling to get upstairs like being late for class because the elevator is out and they have to go up three flights of stairs and it gets reported but nothing gets done.

In additions, the same student conveyed that these problems had serious implications on academic progress:

That really impacted me because I ended up getting a 60 percent which is not my average mark. I'm usually an A student.

Student respondent 9 conveyed:

Lecture venues might not be suitable and they will report it and we'll be told that there's no other lecture venue that can accommodate loads of students.

Drawing from Article 9 (Accessibility), from the Convention on the Rights of Persons with Disabilities (2006), equal access to physical environments eliminating obstacles and barriers to accessibility is paramount; however, from the utterances of SWDs, this is not the case. The study presented an array of structural barriers that limit accessibility at the university resulting in serious repercussions on the academic progress of SWDs.

Figure number 10 is a graphical representation that illustrates the impact of structural barriers on disability at UKZN.
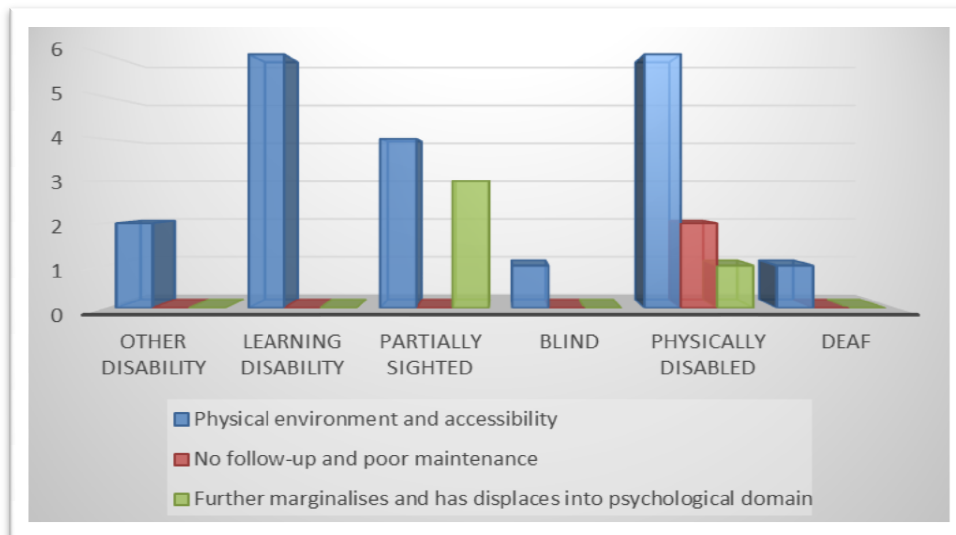
Figure 10. Types of Disability and Challenges with the Physical Environment (Nvivo 10, 2017)

Figure 10 illustrates that the structural environment has posed significant barriers to SWDs at UKZN. It is apparent that the university's structural environment limits accessibility at the university. Furthermore it hinges on safety issues and providing an enabling built environment that guarantees inclusivity (Shava, 2008).

4.4.2.4 Summary of Theme Two

Theme 2: Attitudinal and Structural Barriers	
Key areas highlighted in the second theme relates to what challenges the university community in terms of inherent barriers, attitudes, stereotypes and structural barriers and demonstrates how these factors impact on the day-to-day lives of SWDs critical to the achievement of educational goals.	
Sub-themes	Sub-headings
Inherited Barriers	Historical and political history defining focus: - Too much emphasis on race and gender overpowered disability related issues. This political and historical focus fosters discrimination. Political environment and striking

	- The politically motivated student uprising among South African Universities left SWDs vulnerable in the midst of violence. Existing organisational culture and structure: - The study emphasised that as a university of diverse cultures and a prominent historical background, there has not been much change in organisational culture at UKZN to suit the needs and learning styles of SWDs. Not an inclusive model of support - The university is not factoring disability within universities transformation plans, resulting in discrepancies that points toward revising the UKZN Policy (2004) Promotes exclusion - Student respondents reflected frustration with staff limitations at DSU. Inappropriate and unrealistic administrative and registration requirements - Students conveyed that the university application process needed to be simplified and that they required more information about the various admission processes.
Attitudinal Barriers	Passive acceptance of and changing prevailing attitudes - Passive acceptance of stereotypical ways of thinking is applied by staff who work with SWDs. It does not appear to be easy to change entrenched attitudes. - What students with disabilities need to expect when at university is that that the mainstream student's perceptions will be a challenge as they too are experiencing diverse populations for the first time. Acceptance by those who are marginalised themselves - Grouping PWDs separately reinforced misconceptions as they are restricted to those already labelled and stigmatised. Evidence and operation of stereotypes - Misconceptions are more disabling than the disability and spreads negative attitudes at universities Stereotypes influence- Reinforces existing perceptions and stereotypes

	- It is apparent that current arrangements for SWDs at the university and entrenched attitudes of lecturers reinforce existing stereotypes. - Leaders have the ability to influence SWDs and enhanced student motivation thereby encouraging commitment to educational goals. Slow reversal of socially constructed meaning - Although changing attitudes is a slow process, staff remain confident that change is forthcoming.
Quality of information	Poor marketing and knowledge of DU and available resources - There is a need for more marketing and visibility of DSU at schools. Lack of awareness and understanding of disability or student population - Inadequate resources and accommodations are based on a lack of understanding of the needs of SWDs. The university needs to challenge the discrimination and prejudice of PWDs. Breakdown in collaboration and communication between role-players - If alternatives ways to communicate were not applied in working with those students with communication disabilities, it would result in those SWDs feeling excluded. Communication was seen as a key problem that also affected those students with communication disabilities. Large Class Sizes - While small classes created stigma or labelling, larger classes created problems for students with visual impairments and students with hearing impairments. Poor accommodation due to poor understanding and awareness - A lack of adequate and appropriate accommodations is a significant problem seen as a critical part of inclusion, therefore, understanding and awareness of particular needs of SWDs is imperative in fostering access. Physically apparent Disabilities - People usually think of disability when they are able to detect it. This results in stereotypes that lead to students such as those on wheelchair being given priority over those SWDs whose disability goes unnoticed such as students with hearing impairments.

Structural Barriers	
Physical Environment and accessibility	Physical environment and accessibility - The structural environment has posed significant barriers to SWDs at UKZN. This shows that the university is not compliant with disability needs and regulations. This challenges the university to focuses on an integrated approach to understanding possible barriers to learning experienced by SWDs that involves adapting the structural environment. Further marginalisation that displaces into the Psychological domain Although structural in nature, there are obstacles at the university that appeared to have resulted in psychological distress which posed extraordinary challenges to SWDs No follow-up and poor maintenance - At the university, it appeared that the physical environment was not conducive to SWDs. The university displayed a poor response to complaints about lack of maintenance of facilities and structural flaws by SWDs that had serious implications on academic progress.

Table 10: Summary of Theme Two

4.4.3 Theme Three: Teaching and Learning: Roles and Functions

Theme 3 reflects the sentiments of staff and SWDs regarding key operational areas within the university and explored how the characteristics, attitudes and behaviours of both support staff and SWDs influenced the provision of reasonable accommodation. This theme explored the following significant aspects:

- The Key Operational Areas servicing Students with Disabilities

- Difficulties with Students with disabilities

- Difficulty with Lecturers

4.4.3.1 Key Operational Areas Servicing Students with Disabilities

The study indicated that key operational areas at the university have a significant impact on the provision of reasonable accommodation to SWDs.

The study revealed the following findings:

- Attitudes and behavioural characteristics of both support staff and SWDs affected:

    - Availability of support services

    - Availability of relevant personnel

- To meet individual requirements of SWDs efficiently and effectively, the university requires ensuring ongoing and effective communication and interaction with the relevant stakeholders such as the Examinations Department, the DSU and various colleges at the university, and the School Liaison Department as well as through inputs from SWDs. As such, in applying an integrated approached the university can employ recommendations and strategies implemented at the College of Humanities (the largest college with SWDs) to other colleges at the university.

Key operational areas of the university explored in the study included:

a) Examinations Department

b) Disability Support Unit (DSU)

c) College Support

d) School Liaison Department

a) Examinations Department

The study provided insight into how the examinations section fared in servicing SWDs based on the following aspects:

1) Assistance upon instruction from the Disability Support Unit
2) Accommodate SWDs examination requirements

1) Assist upon instruction from the Disability Support Unit

It was found that only when working in conjunction with the DSU could the examinations department adequately provide examination supports for SWDs. Examination support included but was not limited to providing question papers with enlarged fonts and in Braille, separate venue allocation, invigilators to scribe for SWDs who required them and venues with ramp access for students on a wheel chair.

Conveyed in the conversation with staff respondent 2 of Student Academic Administration was the role his division plays in servicing SWDs:

When it comes to exams, we get a different kind of request from the disability office so we have to handle those kind of requests from them and we have to make sure that we try and help the students out with, whatever the disability office requests from us.

In addition to his effort to provide appropriate services, he commented:

We have to work close together with the disability office to ensure that the student gets what they want.

Staff respondent 2 emphasised that communication is imperative in providing appropriate examination supports to meet individual needs of SWDs during examinations effectively.

2) Accommodate student's examination requirements

In exploring the examination section, the study presented some of the challenges experienced in accommodating SWDs for examinations. This was due to the handling of examination scripts being declared the responsibility of examinations section because lecturers refused to wait the full duration of the examinations with extra time allocations. This raised concerns regarding delineating responsibilities.

Staff respondent 2 had the following to say in relation to the collection of examination script:

When students get extra time, they finish forty five minutes later. The lecturers they can't wait. So we wait, obviously we have to do that, the lecturers can't wait for forty five minutes more but it's our job to ensure that the paper comes safely, that's what we do.

The respondent revealed that Examinations Department made special provision to accommodate all students during examinations. The challenge being that it was up to the Examinations Department to wait the extra 45 minutes per examination for those SWDs writing exams with extra time allocation. Furthermore, it was up to the examinations department to ensure that the examination scripts were securely stored until the lecturers could avail themselves to collect SWD's scripts.

Staff respondent 2 explained:

We as exams, we try our best to accommodate all students and we ensure that they are all okay, to ensure they are taken care of. There are special considerations when it comes to exams. Each students request is different so they have different requirement.

Findings revealed a tendency to shift blame onto examinations section which was illustrative of a lack of collaborative relationships with examinations and lecturers at the university. Examination staff and lecturers needed to meet each other halfway, and work collaboratively rather than just holding each party accountable. Applying reciprocity (shared responsibility)

will ameliorate confusion when it comes to delineating which support structures are responsible for what (Systems theory) (Becvar & Becvar, 2014).

b) The Disability Support Unit (DSU)

The study assessed the services of the DSU and argued that the DSU should be responsible for monitoring the academic progress of SWDs and provide necessary human interventions based on compensatory strategies to assist students to proceed with academic programmes.

The Disability Support Unit is explored under the following aspects:

1) Guidance
2) Link to further support services

1) Guidance

The study indicates that, progressively, SWDs need monitoring and advice informing them of their performance in the course of study. This entails:

- Providing platforms where Academic staff and DUS can collaborate on academic performance

- Persistent human intervention, counselling and guidance throughout their academic course of study.

- Awareness of SWDs of the necessary adjustments that may be required to align with their respective compensatory strategies.

Staff respondent 2 believes the DSU should monitor the academic performance of SWDs:

Depends on how you have to counsel them, tell them you have to pass the first year, second year, this is what you do. You have to have the process monitored and tell them exactly what's happening.

He stressed:

I think the first year is a challenge but once you past the first year there should be normal with what they are doing. The whole idea is the DSU must be there, they need the human intervention, they need constant help and they need to be guided.   Whether its exams, lecturers, any personal problems, there have to be someone they can talk to all the time.

Well you see, it depends on the disability they are limited to certain areas of study. Obviously if you are fully blind you can't become a pharmacist because you can't read medicines but, you can do law because you see a lot of lawyers today are blind. So if you are in a wheelchair you can't do sport science.

The study affirmed that SWDs initially need to have a good understanding of their particular learning disability and what strategies work best for them (Field et al., 2003). However, SWDs should be allowed his/her field of choice provided they meet academic requirements like any other student. They should not be denied a place because of their disability. The university needs to harness the ability to initiate accessibility and inclusion mechanisms such as counselling and consistent monitoring of academic performance applicable to all students and provide SWDs with much-needed guidance. The application of compensatory strategies embraces a study by Jackson et al. (2014) where he promotes a focus on the quality of life.

2) Link to further support services

Study outcomes imply that the DSU takes on the responsibility of supporting SWDs throughout their university life making provisions primarily from an access perspective.

However, this does not speak of inclusion. How universities are organised and how they support the learning of all is a critical part of inclusion. To promote access required building partnerships and developing relationships with colleges, departments and schools across the university and embracing an integrated approach toward servicing SWDs (systems theory) (Becvar & Becvar, 2014).

In agreed response to this staff respondent 1 said:

The DSU is currently viewed as the office that supports SWDs from access right to graduation so you find that we support that. So what are the levels of our support? It's been to provide information, knowledge and all of that so that these departments are able to ensure that PWDs can equally enjoy what they offer.

Staff Respondent 2, reflected that much of the responsibility concerning SWDs lies with the DSU:

Our facility, we are here to help students but if it's something we can do, we can do. If it's something we can't do then we have to refer them to the DSU. They are there to help the students.

Similarly, staff respondent 3 and staff respondent 4 also rely on the efficiency of the DSU:

Staff respondent 3:

I know the DSU is very actively involved when there's exams

Staff respondent 4:

Either they getting the support they need from the DSU or it's something that's been assessed and diagnosed and they know they go to the DSU and get the accommodations that they need.

Staff respondent 4 added:

She got assessed down at the disability unit and just in terms of what they could help with and now she gets a reasonable accommodation. Now she's got the support that she needs and she's excelling.

Evidently, staff respondent 5 acknowledged that it is the DSU that is involved with providing support for SWDs:

The DSU takes care of that. We give them our papers, they translate it into whatever medium the students' needs and they conduct the exams. Well they take care of all the needs that the students have.

Drawing from the abovementioned statements from staff members, although the consensus is that the DSU should be solely involved with providing physical and programmatic access to SWDs, this should be an institutional responsibility. The DSU should adhere to what Field (et. al., 2003) recommended, that disability personnel should focus on how to improve methods of instruction and encourage self-determination instead of merely providing accommodations for SWDs.

The university, as an institutional response, needs to take action in terms of collaborating services and to delegate responsibility, resources, funding, policies, awareness, universal access with an integrated approach to serving SWDs instead of relying solely on the services of the DSU. As specified by Ntombela (2013) accommodations and physical inclusion of SWDs without considerations for how universities are organised and how they support learning for all does not favour access.

c) College Support

From the statistics obtained for the purpose of the study, it appears the College of Humanities at the Howard College campus (UKZN) has the highest concentration of SWDs (See Table 4, Statistics per college in chapter 3).

Staff respondent 4 and 5 believed that the College of Humanities is:

- well equipped, supportive and sensitive toward SWDs and explained that they make a concerted effort to know who their students are

- offers reasonable adjustments to addressing potential barriers ensuring that all people have access to achieving their potential

- offers the Humanities Access Programme in the first year of a four year (Extended Curriculum) Bachelor of Social Science degree (BSS4) that caters for students from disadvantaged educational backgrounds (College of Humanities Teaching & Learning Unit, 2017).

Life Skills is one of the modules offered in the Humanities Access Programme curriculum that:

- Create platforms for SWDs to engage with the university community.

- Equips SWDs in areas of academic and psycho-social skills to meet challenges of studying at university.

- Assists all students to engage with SWDs thereby desensitising students towards disability and educating them about the different forms of disability at the university.

The responses outlined below supported this:

Staff respondent 4:

I think we are an exceptionally sensitive unit. We have:

- *A very supportive direct line manager,*
- *The Psychologist is sensitive towards SWDs*
- *We're always continuously assessing, reassessing, finding out how they are.*
- *The class is always small, we know exactly who the students are, where they come from, their backgrounds.*
- *Staff are very supportive, we do try and help in whatever ways we can.*
- *I think we are quite well equipped*

The response from staff respondent 5 correlates with staff respondent 4:

This is the program that caters for students that come from seriously disadvantaged communities

We do also accept between 4 to 6 students from the disability unit and clearly these kids come with a certain disability and we just create that space for them.

This shows that the College of Humanities' staff members feel confident that they are sensitive and supportive through the various processes that they have detailed in addressing potential barriers to SWDs.

d) School Liaison Department

The study revealed that the university attracts SWDs from secondary schools through school visits and literature distribution. This is done through the university's School Liaison Office. Institutional representatives from the Department of School Liaison engage with SWDs to arrange on-campus visits, workshops and Parent Orientation Days that focus on services available to SWDs at UKZN. However, it appears that their efforts are insufficient. This is for the following reasons:

- There is no follow up on whether their efforts are effective
- The university needs to broaden its perspective to include more schools and available services to support SWDs.
- There is a lack of collaboration with relevant stakeholders such as the College of Humanities or the DSU in dealing with the recruitment and acceptance of SWDs from high schools.

Staff respondent 3 explained:

So we don't even deal with the follow up applications once they get here. We only deal with the students before they get to university.

Staff respondent 3 continued:

Not every single degree is able to enrol the students. We accommodated to some extent.

Staff respondent 3 asserted:

Our role is only to get them here. Once they in the university, it's the units in the university that have to take over.

The university offers reasonable accommodations and auxiliary aids to qualified SWDs in keeping with non-discriminatory practices instead of providing a reasonable accommodation by understanding and structuring according to student needs (Shaw et al., 2009).

In order for the university to attract SWDs, institutional representatives from the School Liaison Department need to ensure that students with disabilities have sufficient information and regular follow ups must be done to ensure that the strategies that they employ to attract students to the university are effective. (Palombi, 2000).

4.4.3.2 Difficulties experienced in relation to Students with Disabilities

Difficulties identified described the lived experiences at the university of SWDs. The study explored the following key aspects that relate to challenges SWDs faced at the university:

a) Challenges to academic performance due to disability

b) Internalised stereotypes

c) Learned treatment

d) Students are not transparent about disability

e) Want to be normal and fit-in by passively accepting status quo

a) Challenges to academic performance due to disability

This section demonstrated the challenges to academic performance due to disability and revealed the following problem areas:

Staff perspective:

- Students suffering from deafness tend to battle with language competencies as assessments are in English thus it serves as a barrier.

- There are a diversity of students at the university from various cultural and linguistic backgrounds. However at UKZN, along with all other institutions in the country English is the mode of instruction and pose challenges to academic progress.

For instance, the deaf student whose compensatory strategies do not align with the language of instruction at UKZN may experience significant challenges in achieving academically.

Staff respondent 5 explained that English is not always the first language of SWDs:

Academically speaking, the information or rather the exams are written in English. I have found that the student who is deaf does not have a very good command of the language and she's not quite aware that she doesn't have the best of that command in terms of the language

What generally considers people who are white, coloured and Indian to have English as their first language so when a student who is deaf and presents with problems in English we realise how little we know about other communities in our society in terms of capabilities and disabilities.

The student perspective indicates that:

- Notes are not readily available or easily accessible to students with physical disabilities and visual impairments.

- Students with disabilities are challenged where the only method of acquiring prescribed

study material is through online sources.

Student respondent expressed difficult with note taking:

It creates challenges because firstly, especially when the students are taking notes and you can't do that. That creates a challenge.

Visually impaired student respondent 6 complained about using online resources:

My eyesight sometimes staring at a computer for too long my eyes end up hurting. Sometimes we don't get a course pack or we don't have prescribed text books so we have to study for readings online.

Harbour and Maudous (2011) outlined that the university should be welcoming and make SWDs feel safe, supported and encouraged to grow as individuals. Students with disabilities rely on the University community to support them in addressing academic challenges. It is important that the university staff must encourage and work closely with SWDs in developing their independence and self-determination skills because if a need has not been adequately satisfied, it will dominate as the major influence on the individual's experience. Without proper reasonable accommodations to meet the needs of SWDs, performance will be poor (McLeod, 2014).

b) Internalised stereotypes

It is apparent from the study that people at the university make decisions based on assumptions. For instance someone who has a disability, that is not overtly noticeable, are seen as "everyone else." This frustrates SWDs because when people operate on the assumption there is poor accommodation. This can often lead to negative perceptions:

Conveyed in Student respondent 10's response:

And sometimes feel like my disability is not taken seriously because that's what I thought when I got there and there's no one and I was like oh okay maybe they saw that it's me. I'm

not blind or I'm not in a wheelchair and they were like no she'll go and write with the others, you see.

On the other hand, Student respondent 11 felt inferior when people acted overprotectively:

But, those people who are overprotective or caring, they not good. They make you feel inferior.

It is apparent that the university needs to strike a balance between what it perceived adequate support and when it operates from existing held beliefs. The latter creates an interaction we believe is true which further entrenches and reinforces our existing beliefs. This is supported by studies of Zhang (et al. 2010) and Bradshaw and Mundia (2006). There is no intention from the university to break this vicious cycle and challenge the status quo by eliminating held beliefs about disability.

c) Learned treatment

Student respondents displayed that they have come to learn that at university they need to become independent or self–reliant.

This was conveyed in student respondent 9's response:

Firstly I would like to say when you come to a university from a special school, it's a very different environment. It's not like where you come from, where everything was prepared for you, even the ramps, everything.

Self-determined individuals are more successful in the achievement of their stated goals (Field et al., 2003). Field et al. (2003) showed that self-determination is an essential component of the successful transition to higher education and student success, resulting in more positive experiences for SWDs. The UKZN Policy (2004) encourages students to advance in independent living that ensures dignity, self-sufficiency and responsibility.

d) Students are not transparent about disability

It was discovered that an on-going challenge faced by the university is the degree of transparency from SWDs regarding their disability status. Staff perspective revealed that in as much as it is expected that the university accommodates SWDs, students need to make an effort to disclose their disability in order to be provided with the appropriate supports. Moreover, the university needs to be proactive and share this information with key stakeholders to ensure successful inclusion of SWDs.

Staff respondent 1:

Students maybe feel that if they declared it they might get excluded from certain courses or certain modules and hence don't declare it.

As staff respondent 2 explained, the student needs to take responsibility to express their needs:

I always say that they must inform because you can't expect the student to go and tell the lecturer I got a problem. Even if you tell the lecturer, the lecturer says where is your documents to say that you got a medical problem?

Staff respondent 4 feels that SWDs do not want lecturers to know the status of the disability:

It could also be that they don't want the lecturers to know.

Transparency regarding disclosure of disability from the perspective of SWDs was:

- Lecturers must be understanding and supportive of the expressed needs of SWDs and not meet it with a negative attitude.

- Students with disabilities had trouble due to their own inner conflicts and attitudes in confronting lecturers about their disability.

- Some students appeared to understand that nondisclosure could affect their academic performance.

- Students with disabilities disclose their disability on a need to know basis and do not feel

like explaining the disability.

- Students with disabilities are not convinced that it will make any difference to disclose a disability to lecturers and believe that it will only lead to further stigmatisation.

- Lecturers are unable or fail to detect the SWDs because they try to fit in usually out of fear of exclusion or being a burden.

- Students with disabilities assume lecturers "should know", and do not realise that lecturers can overlook them because the disability is not overt or because there are too many students in the lecture hall.

The following student responses supported the above findings:

Student respondent 15 felt that lecturers will not understand and based on this assumption they do not feel the need or the wish to explain:

Well it's kind of difficult if you have to explain okay you were sick, this happened and they will want you to get into details.

Student respond 8 understands the implications of non-disclosure of disability:

So it's kind of difficult but personally I don't mind because at the end of the day if I can stay back and sit and not go upfront and tell them this is what is happening to me, which means I won't succeed.

Student respondent 3 agreed with the abovementioned:

You also need to understand that you need to notify them so you can benefit academically as well.

Students with disabilities are aware that the onus is on them to declare their disability and overcome that fear of disclosure at the university. However, student respondent 1 replied that they wanted to fit in:

I like to fit in. I like to be like the rest of the students. So I don't like to tell them, tell anyone.

Student respondent 1 felt it inconvenienced lecturers to disclose their disability during

lectures:

It happened once or twice where I had to call the lecturer outside the classroom and tell him I have this problem and he had to leave the class of 300 students to come outside with me so I could tell him.

Student respondent 3 felt that it would not make any difference to disclose their disability:

I don't believe that they will do anything special if you do have a disability. It doesn't matter because it doesn't change the ways they've seen you already.

Student respondent 1 said that there were benefits from disclosure:

I went up to him and told him I'm a disability student and he treated me a lot different than he treated the rest of the students. He asked me if I understand everything and he sent me notes, and that was because he was aware that I had a disability.

Nonetheless, from the utterances of some SWDs there are prevailing negative attitudes and unapproachable parties. For instance, student respondent 15 revealed:

Lecturers some of them, at times they have attitudes. You would then get scared to go and talk to them.

Student respondent revealed that lecturers made you angry:

That lecturer, I was angry with him because he was like: "You can see!" I could see from there but when I'm sitting in class I couldn't see.

Student respondent 1 felt lecturers' response to the disclosure of disability varied:

It varies from lecturer to lecturer. So it depends on the lecturer. Some of them have a don't care attitude about everything and you find some of them to be very caring.

Student respondent 12 conveyed that some lecturers were unapproachable:
Like one of my lecturers, I'd have to eventually go to her but she's not an approachable person.

At university, SWDs are obligated to disclose their disability to lecturers and academics in order to receive the available services to assist them academically. Shaw (et al., 2009),

asserted that SWDs have the right to disclose or to not disclose their disability. Both decisions carry advantages and disadvantages and students have the ability to decide if he or she will self-disclose. Some students prefer not disclosing their disability as it allows them test their resilience and ability to succeed on their own. However, Palombi (2000) argued that if a student with a disability does not request accommodation they risk performing poorly. Inadvertently, when SWDs disclosed their disability, it benefitted them. Furthermore, this is not met with any negative attitudes from people whom they deal with and know. Inherently, it could be internalised issues of SWDs of having difficulty with inferiority complexes or feeling excluded. Consequently, students found that on disclosure, there was a two-fold benefit. Lecturers appeared understanding and attentive and they easily acquired support. As a result, the study shows that disclosure can be beneficial.

e) Want to be normal and fit-in by passively accepting the status quo

The study found that some students with disabilities want to blend in and not disturb the status quo. They want to be "normal" and do not want to be fussed over, accommodated or treated differently. In addition, more information is required to increase understanding of what disability entails and all stakeholders need to be informed and work collaboratively. Furthermore, prevailing attitudes of the university community result in the SWDs feeling that they can manage quite well by themselves.

Student respondent 2 felt a need to pretend so that they can fit in and feel accepted for who they are:

You don't want to be disabled. It's not something you want. You don't want to be accommodated for, you want to be able to do it by yourself so I try to do it.

Student respondent 1 did not want to be secluded but also did not want to be treated

differently:

It's not that I want to be secluded, I don't want to be secluded. I want to be with the rest of the students but I don't want to be treated differently. You don't want to be stared at as well or singled out. I rather act like I'm any of the other students.

Student respondent 2 felt they needed to prove to themselves that they could achieve academic success:

You don't want to be accommodated for, you want to be able to do it by yourself so I try to do it.

Student respondent 3 found that if you did not disclose, you were not debated over. He also emphasised that he preferred that he was unnoticed and does not want to go against the status quo:

Provided you make an issue of it, nobody really makes a fuss over you.

You can literally walk in as a student and leave as any other student. I've in a way come to like that.

But what I would like from them is I don't know I live a very quiet life, I live a low-key kind of life and I prefer it never being mentioned around me.

Student respondent 3 asserted:

Like there are times where I can't concentrate, there are times where like I do hear ringing in my ear and stuff. Things that they will never understand and I can't get them to understand. So they try and relate to you is good because they try to make you feel comfortable like that. But realistically they will never truly understand your situation, I don't expect them to.

Students with disabilities work the system to their advantage and in ways that best suit them. They do not inform the lecturers of their disability, as they want to be "normal" and fit-in. The concept of 'fitting in', ties in with Maslow's (1943) hierarchy of needs model, where the importance of belonging is emphasised (McLeod, 2014). To achieve a sense of belonging,

SWDs require acknowledgement, approval and acceptance and when this is achieved SWDs gain respect, esteem and status. Consequently, this encourages them to gain power and control over their own lives (Changing Minds, 2017).

4.4.3.3 Difficulties experienced by Lecturers

This sub-theme explores difficulties that the lecturers experienced in dealing with a diverse cohort of students at the university. The following key aspects relate to lectures at the university:

a) Delays and inept methods of delivery and resources

b) Lecturers forget about students with disabilities

c) Lack of support

Figure 11 is a graphical representation of disability and difficulty with lecturers illustrating key areas of challenge.
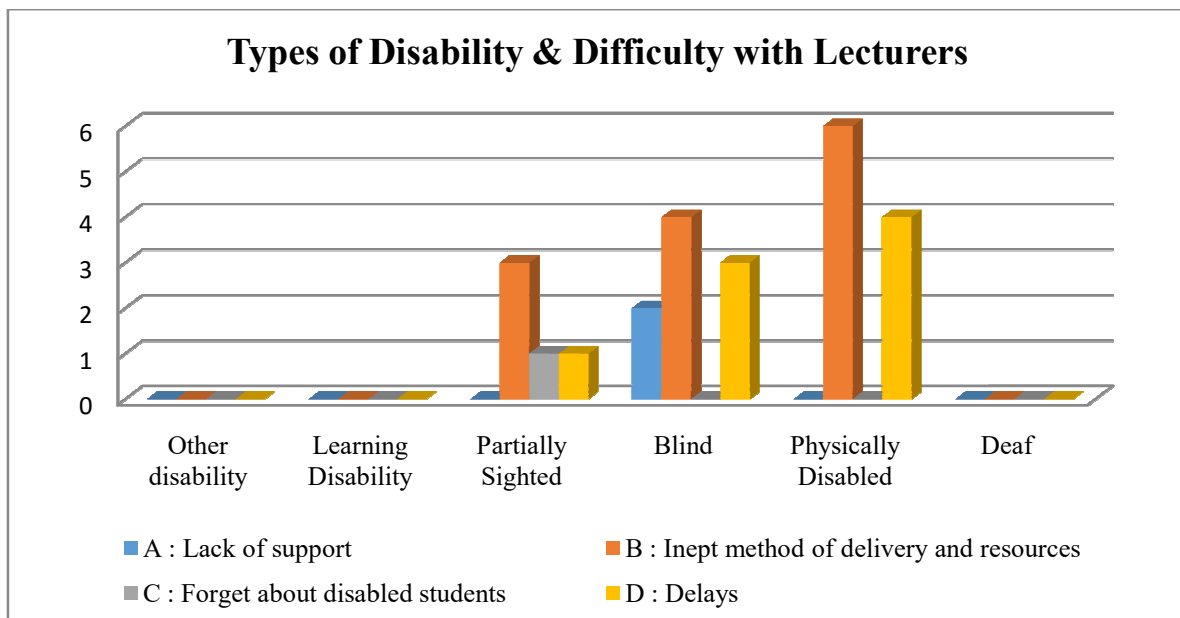

Figure 11. Types of Disability and Difficulty with Lecturers (Nvivo 10, 2017)

a) Delays and inept methods of delivery and resources

The study emphasised that the university needs to tackle attitudes and disabling behaviours to overcome barriers to inclusion. In so doing, the university needs to understand that communication is vital especially between the DSU and lecturers in order to raise awareness and accommodate SWDs accordingly.

From the responses from staff, it appears that academic staff have no specialised training to adapt teaching strategies to suit the needs of SWDs. Furthermore, lecturers do not have the requisite skills to understand the diverse learning styles of SWDs.

In agreement with the above, staff respondent 1 conveyed that lecturers were not trained to teach a diverse cohort of students:

Academic staff at a university are not trained to teach they do not have teaching skills to impart knowledge. They have knowledge, but if they are not trained to teach that knowledge they will not have the requisite skills to understand the diverse learning styles of students.

In addition, staff respondent 1 emphasised the importance of appropriate training:

Because you are not trained to do that you are going to impart knowledge with no real idea of whether its reaching the audience. The question would be then is the problem the student? Or is the problem the method of delivery?

Evident in staff respondent 4's statement, is that lecturers are also not very cooperative when approached:

When I go and speak to the lecturer they not accommodating them. I've asked a lecturer if I could have her slides and she said no.

Consequently, from the perspective SWDs the following arguments ensued. Student respondent 15 demonstrated in her response that lectures are not open-minded. She also mentioned that dialogues between the student and lecturer could foster good relationships:

Well I think the lecturers must come at the same level with students and not take it that they are superior. Maybe the student can tell you something that can help. If it can help me then it

can help other students.

The following students expressed how they felt about their lecturers:

Student respondent 8:

They don't understand what disability is.

Student respondent 2:

A lecturer called me out on my hand writing and spelling in the front of a lecture for a test.

Student respondent 5 conveyed that lecturers are enforcing rules in the classroom that exclude SWDs. As a result, students feel that they are not taken seriously:

I personally believe they do not take us serious. He also told me to make any means to ensure that tasks that are given in the lecture room are completed.

Student respondent 5 reflected how delays influenced studies:

I would advise the disability coordinators as well as the lecturers make sure that our papers are provided at the appropriate time as we need more services than other people. They should try to sort out the problem of test scripts days before the writing date because that might have an impact on a student finishing his or her exam.

Student respondent 7suggested that lecturers be proactive and upload notes to them in advance to avoid delays keeping in mind that SWDs are trying to keep up with the mainstream students. However, this does not seem to be happening.

We usually go to them, tell them to please upload notes on the LAN. In most cases they take very long and other students write in class .Help us by uploading the notes earlier so that we can be in one pace with others students.

But we find challenges, they take longer, when you want something scanned, they take a week sometimes. When you need it urgently

Student respondent 5 conveyed that lecturers do not provide proper tools:

Okay so the lecturer doesn't take it upon himself to ensure that you are given the proper tools to complete whatever work has been laid out

Student respondent 11 and 8 conveyed that blind students are unable to participate or understand lectures where pictures or maps are used:

Student respondent 11:

 When they happen to display a picture, they can't explain it. They just display a picture and say what is on your picture, what is your take. And what can be my take on something that I haven't seen. I wouldn't be able to see a map and lecturers do not usually explain what's on the map.

Student respondent 8:

We lack much information as in most of our lectures, they using more visual stuff. For me who's partially blind, they more using slides, they more pointing at things. They using more information in things that would need someone to use his or her sight to get a better understanding of some of the themes that we cover.

Holistically, from the responses, it is found that:

- Lecturers are not open-minded and cooperative when approached.

- Constructive dialogues between SWDs and their lecturers can foster good relationships.

- Lecturers are enforcing rules in the classroom that exclude SWDs.

- Delays in the provision of lecture notes affected learning outcomes of SWDs.

- Additional barriers to SWDs include improper formatting and content such as graphs and pictures used in lectures or assessments were not accessible to blind students.

These problems can be attributed to a breakdown in communication usually from the student themselves, or between the different schools or colleges of the university. Communication is

vital between DSU and lecturers to raise awareness and accommodate SWDs accordingly (Becvar & Becvar, 2014; Brandt, 2011).

b) Lecturers forget about students with disabilities

The study uncovered that lecturers tend to forget they have SWDs in their class.

Staff respondent 5 conveyed in her statements that sometimes SWDs are forgotten:

I completely forgot that she was a disabled student in terms of hearing. So, that was a challenge because sometimes you can completely forget that such a student is there.

She explained that she did not identify SWDs in her class:

But, yeah there are times where our students would look totally okay because you get so absorbed in what you are doing that you forget that there is somebody who's is definitely challenged.

Student respondent 12 is in agreement with the fact that lecturers do not know who is in their class:

You have to tell them that like you need this kind of assistance because some of them don't know who in their class has a disability that needs that kind of assistance.

Based on the responses above, it can be established that those students with visible physical disabilities are the ones who don't explain to lecturers because they fit the stereotypical definition of disability. Furthermore, where the classes are smaller, the lecturers can interact more with SWDs and gain exposure and understanding of the nature of the disability which can promote the provision of appropriate accommodations. Returning to what Bradshaw and Mundia (2006) suggested, staff development and exposure to people with disabilities are key aspects regarding the successful inclusion of SWD. Derived from the study by Bradshaw and Mundia (2006) altering attitudes effectively in a favourable direction involved a combination of formal instruction with structured and direct contact with SWDs.

Taylor et al. (2010) recommended that reasonable adjustments for SWDs need to be made in an anticipatory manner in order that the transition from school to university is professionally managed. Drawing from staff respondent 1's argument above, academics do not know much about disability and therefore are unaware of SWDs in their classes. This results in poor accommodation for SWDs that often leads to negative perceptions and feelings towards the lecturers.

c) Lack of support

The study indicated that lecturers are blamed for inept methods of delivery of course materials, and not adequately accommodating SWDs. However, lecturers assert that they do not receive sufficient support to do so:

Staff respondent 4 supported this finding:

I think lecturers get de-motivated because they not are getting assisted at the level they need to be assisted at. So they doing their best and then they still get fingers pointed at them but they trying their best to work in a context that's not very supportive.

Studies such as Brandt (2011) and Bradshaw and Mundia (2006) concur with the argument that although lecturers have accepted responsibility for their inability to provide appropriate supports in terms of presentation of lectures or learning material to SWDs, they have expressed that the university has not been supportive enough in providing appropriate means to assist them. Bradshaw and Mundia (2006) outlined 3 variables that affected inclusion, that being, the lecturers the SWDs and the availability of support services.

4.4.3.4 Summary of Theme Three

Theme 3: Teaching and Learning: Roles and Functions

Theme 3 reflected the sentiments of staff and SWDs regarding key operational areas within the university and explored how the characteristics, attitudes and behaviours of both support staff and

Sub-themes	Sub-headings

SWDs influenced the provision of reasonable accommodation.

Sub-themes	Sub-headings
Key operational areas servicing SWDs	• **Examinations Department** Assist upon instruction from the DSU Accommodate students examination requirements
	• **Function and Purpose of the Disability Support Unit** **Guidance** The university requires to initiate counseling and consistently to monitor academic performance as key role players in accessibility and inclusion mechanisms and provide necessary guidance throughout their academic course of study. **Link to further support services** The DSU takes on much of the responsibility of supporting SWDs however this should be an institutional responsibility. The university needs to take action collaborating services and delegating responsibility to all stakeholders instead of relying solely on the services of the DSU.
	• **College Support** At the College of Humanities, a concentration of SWDs led to initiatives to launch compulsory life skills classes to engage with all students and promote awareness of the diversity of the student population. • **School Liaison Department** Student Liaison Department ensures that SWDs have sufficient information about the institution through visits and literature distribution to secondary schools, on-campus visits, workshops and Parent Orientation Days that focuses on services available to SWDs at UKZN.
Difficulties experienced by SWDs	**Challenges to academic performance due to disability** - The university faces challenges with SWDs in terms of the proficiencies with which they arrived at university. - There are no processes in place for a student to acquire their notes efficiently.

	Internalised stereotypes SWDs are frustrated when a disability that is not overtly noticeable creates challenges as people operate on assumption resulting in poor accommodation.
	Learned treatment When students with disabilities arrive at the university from special needs schools, they find that the environment is very different and they have to become independent or self–reliant.
	Students are not transparent about disability An ongoing challenged faced by the university is the degree of transparency from SWDs regarding their disability status. Students with disabilities are expected to disclose their disability to receive the benefit of accommodation. Students with disabilities revealed that there are prevailing negative attitudes and unapproachable parties.
	Want to be normal and fit-in by passively accepting the status quo The study found that SWDs want to blend-in and not disturb the status quo. Due to prevailing attitudes, SWDs take on the notion that they can manage well without accommodation.
Difficulties with Lecturers	**Delays and Inept methods of delivery and resources** - Often lecturers are unable or fail to detect SWDs. They do not understand the learning styles of SWDs and/or lack the practical training. - The university requires changing negative attitudes and disabling behaviours to overcome barriers to inclusion such as lecturers who provide course materials and present lectures that limits accessibility and do not adequately accommodate SWDs.
	Forget about students with disabilities - Lecturers do not know much about disability, and therefore are unaware of SWDs in their classes. This results in poor accommodation that leads to negative perceptions and feelings towards lecturers.
	Lack of support - Lecturers expressed concern that the university has not been supportive enough in providing appropriate means to assist them in providing course materials and methods of teaching that adequately accommodating SWDs

Table 11: Summary of Theme Three

4.4.4 Theme Four: Progressive Attributes Offering Holistic Support

A prominent theme arising from the data dealt with progressive attributes of the university. Theme 4 explores an area of the study that relates to how the university community responds to challenges. In order for the university to embraces a holistic philosophy to better support SWDs in addressing challenges requires the application of Maslow's (1943) hierarchy of needs theory as well as Systems Theory (Becvar & Becvar, 2014) to changing the existing culture to accomplish a more comprehensive type of success for SWDs.

The theme explored the following key areas:

- Focusing on strengths of students with disabilities
- More inclusive strategies for students with disabilities

4.4.4.1 Focusing on strengths of students with disabilities

The university needs to change its perspective on how it views SWDs. To see greater advantages, a shift in focus to strengths, rather than on deficits, of SWDs is required. Consistent monitoring and assessment of student's compensatory strategies will give way to educational opportunities for SWDs in the attainment of their set goals. There is a growing recognition of the strengths and limitations associated with certain disabilities. For example, people with deafness tend to battle with spoken language and assessments thus serves as a barrier.

In a study by Sarchet et al., (2014) it was found that students with hearing impairments (including deafness) learned just as much from the text as they did from sign language or

spoken language. Interpreters of sign language can overcome barriers to learning by a shift in focus to academic strengths. It was noted in Sarchet et al. (2014) that students with hearing impairments and deafness have fewer opportunities for vocabulary learning than hearing students and this had long-term academic consequences. Individuals need to be encouraged to use existing skills and abilities or develop new ones over the impact of their impairments. Thus, even when they are provided with vocabulary support such as sign language, spoken language, real-time text(subtitles), and printed materials, students with hearing impairments do not have sufficient competence with the English vocabulary. As a result they are unable to fully benefit from reading materials which demonstrates that "one size does not fit all" (Sarchet et al., 2014). Furthermore, it is essential that the university recognizes that hearing impairments have lifelong implications for learning. Therefore acknowledgement of such challenges is necessary for all students, support staff and lecturers in order to succeed in their educational endeavour (Sarchet et al., 2014).

Staff respondent 5 advises:

The visually impaired students seem to adapt very easily. Their ability in English is much better than most and their ability to write and communicate with academic language.

De Lotbinière (2012) asserted that SWDs own preferences and strengths have to be considered. It is important to know the learning styles of blind students in order to work with their strengths. For example some prefer Braille while some are better with audio recordings and oral presentations.

Staff respondent 5 echoed this in the following statements:

Blind students have a very keen sense of hearing so they absorb very easily and they absorb a lot. Because in terms of their sense, the visual sense is not being activated in class, it's more the oral when listening to.

In addition, staff respondent 1 explained that similarly, students with physical disabilities also

possessed compensatory strengths:

Students who are physically disabled like the ones in the wheelchair they are very forward thinking and in terms of maturity, he was ahead of his age. So the students used to wait for him to contribute after they got to know his mental capabilities

Denzin and Lincoln (2013) supported the above in that focus should be on coping skills and strengths rather than on deficits of PWD.

4.4.4.2 More inclusive strategies for students with disabilities

To foster a conducive environment that promotes learning, the university needs to apply positive attitudes towards disability.

- What SWDs have come to realise, is that in comparison to other institutions, UKZN fared well in terms of conducive environments in servicing the needs of SWDs.
- Although the university is expected to accommodate SWDs, students need to also take it upon themselves to harness learning opportunities to increase performance.

Student respondent 9 supported this:

One of our vice principle went there to UCT to check and she found out that the environment was not conducive.

Student respondent 3 and11 projected the university in a positive light:

That's one of the best experiences actually because I know I did go via the disability unit to get into Howard. I have performed as well, I kept my end of the bargain as well.

Student respondent 11 asserted:

Let me start by appreciating that UKZN as a whole afforded us an opportunity to study. They try, by all means, to create a conducive environment for PWDs. That is good.

The UKZN Policy (2004) is committed to providing an inclusive environment for all students in the institution however negative attitudes lead to low expectations of SWDs. This reduces learning opportunities resulting in a cycle of decreased performance and lowering expectations by both educator and student. A study that supported the above was Campbell, Gilmore and Cuskelly (2003), who explain that there is a need for positive attitudes towards disability to providing an inclusive environment for all students.

Furthermore, the study explored other key areas that foster inclusion such as:

a) Quality of advice, information and support

b) Formalised and structured mechanisms and support

c) More supportive and accommodating of needs

d) Increased understanding and exposure to SWDs promotes inclusivity

e) Increased awareness

a) Quality of advice, information and support

The outcome of the results revealed that the university fared well in terms of the provision of adequate resources and accommodation. In terms of the university meeting and maintaining quality advice, information and support, SWDs projected positive reactions toward the university with respect to the provision of reasonable accommodations.

The following student responses supported this:

Student respondent 2:

I think the university has done it quite well. I've never had a problem getting an exam venue, from you guys. You guys have always been really good with that and I think yeah in terms of that this university is pretty good I haven't had much of a negative experience in terms of any of those sort of things.

This was supported by student respondents 14, 5, 6, 7, and 8 who felt that the university provided adequately to support their needs:

Student respondent 14

What more can they provide. I can't complain much. It's enough for one to get to the end goal, to education.

Computer facilities received appraisals from student respondents 5, 6, 7, 8 and 11

Staff respondent 5:

Most of the things they are able to access through the internet so it works for us, the whole internet process. Because there's books that they need to look at they can access it online so they don't have to necessarily go into the library to get that information at this level.

Student respondent 11:

I can't comment much on LAN's because there is (JAWS), there is (Zoom text). There's Adobe Reader so you are able to read the PDF format advice. So with LAN's I think they're good.

Student respondent 5:

We do have Braille machine being provided, we do have computers being provided.

Student respondent 6:

Honestly, we get everything around here because when we writing exams or tests we get extra time. Like each hour we get 15 minutes for every hour and according to our disabilities we are catered for.

Student respondent 7:

The DSU and Financial Aid provides assistive devices and so on. We get that in order to buy recorders, buy magnifiers, to avoid situations of disruption.

Student respondent 8:

I managed to get my stuff printed out in a font that is good for my sight and they've been helping us get text books.

Based on the student responses, the University of KwaZulu-Natal has made significant strides toward inclusivity in servicing SWDs. The DSU, therefore, aligns with the philosophy of inclusion and adherence to best practice put forth by Denzin and Lincoln (2013) concerning the provision of appropriate and adequate services.

b) Formalised and Structured Mechanisms and Support

The study projected the university in good standing in terms of:

- Government mandates for better access and services through legislation (Harbour & Maudous, 2011).
- The university strives to adequately accommodate SWDs and provide coordinated and collaborate relationships with stakeholders.
- Students with disabilities were satisfied with systems in place and how involved the DSU is in assisting students.

Statements made by staff respondent 1 complements the above in his response:

UKZN has been providing a structured disability service since 2004. Prior to that, students were being supported on an ad hoc "nice to do" basis.

The DSU offers strong support to SWDs as outlined by student respondent 11:

The help of disability support unit, disability officers do like tremendous work. Its enables us to access the academic environment and achieve all our objective.

The university successfully incorporated the first deaf student. This was supported by staff

respondent 5:

It is the first time we trying something like this and disability unit has provided for us a translator for the student.

From the utterances of students with disabilities below, it appeared that they were satisfied with systems in place and the DSU:

Student respondent 3:

Anywhere on campus, provided you get the DSU involved, there will always be somebody to assist and help you.

Student respondent 9:

I'd say that the DSU is the best solution because they help you with everything. Your registration, your application, even if you have a change of mind, they will help you.

The University of KwaZulu-Natal has made significant strides in mandating better access for SWDs through the DSU as evident in the utterances of the respondents above aligning with UKZN Policy (2004). It is expressed in the UKZN Policy (2004) that it is the aim of the university to ensure all SWDs are provided with adequate and appropriate accommodation in all aspects of their participation at the university.

c) More supportive and accommodating of needs

It appears from various student responses that the university does show initiative and consider the needs of SWD.

This section focuses on the following:

- Does the university involve the participation and interaction of all stakeholders including

the input and experience of SWDs to participate in decision-making? (co-generative enquiry).

- The university works collaboratively, meeting relevant stakeholders halfway to maintain a level of understanding that promotes inclusivity.

- The university helped SWDs feel a sense of belonging and they did not have to explain their disability or requirements to receive needed cooperation from relevant stakeholders

Student respondent 10 conveyed that the university is making a concerted effort in accommodating SWDs:

I saw beginning of the year is most students were being assisted by support staff in everything that they were doing. Either they were going to cashiers or filling out the form or applying for (NSFAS). That's what I saw, they were being supported

Student respondent 11 supported this:

Supportive in the manner that they are very willing to equip you and provide necessary skill that will allow you to face the outer world and that is good.

Student respondent 13 expressed her satisfaction as well:

I struggled a bit because I'm the very first deaf student at UKZN and amongst speaking people. But fortunately I have my interpreter and when I first came here it was a great experience for me.

Student respondent 15 appreciated the fact that she was given time to do her test:

They accommodate us if maybe you have missed the test. So I actually do get time to study even if you were at the hospital, I'd say that.

Student respondent 3 felt the DSU made a concerted effort to include them in decision-making:

They more than willing to actually go the extra mile and really take initiative and actually consider the students that do have disabilities. They hold meetings, they try to make us feel included in this campus life society.

In some specific instances, student respondents explained how lecturers and academics went out of their way to accommodate SWDs. As for instance, ensuring access to videos they presented in class:

Student respondent 6:

We had movies and the lecturer would email me, send me the video so I can watch it again and read the subtitles. So I'm pretty much accommodated.

Student respondent 8:

Called me, to sit me down for consultations and explain things I couldn't catch, because of my disability in class and some were willing to give extra support in terms of explaining stuff that needed someone with sight to understand better.

The support staff if you engage with them, they will be supportive. I've seen that some of my lecturers, if I come and tell them I have a certain problem they immediately make some means to meet me half way.

Generally, understanding is a huge issue and the above-mentioned attitudes of relevant stakeholders project a positive response to a variety of challenges experience by SWDs at UKZN. It is reasonable to imply that the university is aware of the diverse needs of its student population and in the instances mentioned above, rose to the occasion providing increased understanding and support to its most destitute students. Findings revealed that to maintain this level of understanding prompts increased awareness amongst the university community, informing people of their rights and responsibilities, meeting relevant stakeholders halfway and working collaboratively rather than just holding every other party accountable (Shapiro, 2005).

d) Increased Understanding and Exposure to SWDs Promotes Inclusivity

Over the past 13 years, since the implementation of the UKZN Policy for staff and students with disability (2004), awareness and understanding on the part of the university ensured familiarity with expectations of SWDs among the university support staff. This ameliorates implementation of interventions that spoke directly to the needs of SWDs, rather than just doing things for the sake of it.

Staff respondent 5 asserted that exposure to SWDs promoted inclusion:

Our team is a group of people who have been teaching this unit for quite a while so they familiar with their expectations. We try to make students comfortable as possible so if there are challenges they can come to us and talk about it comfortably.

Student respondents 12 supported staff respondent 5:

My lecturers and I have an understanding. I get to interact with the lecturers more, they do understand my needs and they accommodate me in any way that they can

Staff respondent 5 concurred with student respondent 12 about understanding the difficulties SWDs experienced:

We teach in small groups so it's much easier to understand these difficulties that students may have and we are more approachable in the eyes of students because they get to know you at a very personal level as compared to a class of 800 or 900 people where there's a complete disengagement.

Student respondent 12 conveyed that possible negative attitudes persist although this is not always the case:

When you approach some people, you feel like they going to make you feel like you want special treatment but that's not the case with most of my lecturers. So, it makes it easy for me in terms of my studies. It's mainly the lecturers are understanding.

Student respondent 3 shared this view about the disability coordinator:

Whenever I need help, whenever I need assistance all I have to do is drop an email and he's more than willing to have a chat with me. If I had any problems, anyway in which he could make it better he's always there for me.

In view of staff respondent 5, SWDs appear to be well treated at the university, as there have been no complaints:

I've never had them complain about how they been treated by the other students. I've never seen anything that was untoward. So I think for our students this is a very good place for the disabled.

Staff respondent 1 felt the DSU enhanced performance of SWDs:

However, we've observed that when students were referred to the DSU after poor academic performance, once they've come to the unit and got support they seem to perform better.

Staff respondent 5 agreed with the above and acknowledged that once SWDs felt accepted, they performed better:

Because I think once you're accepted by others then everything else falls into place. I'm so proud of our SWDs, they really do well.

Student respondent 5 expressed feelings of belonging:

It's been a pleasure having them on my side because firstly it made me embrace my disability fully as I know I have people on my side that are willing to help me at any time regarding my academic work and I have made a lot of progress in my academic life.

Holistically, this shows that:

- Involvement of DSU enhanced performance of SWDs.

- Many student respondents felt that their lecturers were approachable.

- Once a student felt accepted by staff, they performed better.

In a study by Bradshaw and Mundia (2006), it was suggested that staff development and exposure to PWDs are key to successful inclusion of SWD. In light of the above discussion, it makes sense that once a student felt accepted, they performed better. This aligns with Maslow's Hierarchy of needs theory where enhanced feelings of belongingness and self-esteem provided opportunities to advance and succeed. Kunc (1992) supported this in that the need to belong within a university community is vital for successful integration and involvement preventing isolation and withdrawal felt by SWDs.

e) Increased awareness

Derived from the results was that with increased awareness and acceptance, academic performance improved. It enhanced critical thinking and decision-making, resulting in relevant stakeholders shifting focus on causes and dynamics of problems, allowing them to make choices to change their behaviour or situation (Shapiro, 2005).

Staff respondent 1 feels confident that the university has made significant progress in fostering access through awareness:

The way in which the university reaches out to the community about its services has improved over the years because now School Liaison make schools aware of the existence of disability support services.

Conveyed by staff respondent 4 was that there had been some progress in terms of formalised workshops and awareness campaigns:

*So we have integrated a lot of workshop. DSU coordinator (*name omitted due to confidentiality and ethics) *and some of his colleagues will come and do a workshop once a semester with all of our students on disability awareness.*

Furthermore, student respondent 13 added:

We celebrate deaf international awareness month is in September. Different people come together. In Pietermaritzburg, I went to this demonstration to make sign language, an official language.

Student respondent 3 confirmed that the university initiated awareness days:

With our disability unit, what they actually do is, they make awareness days, they try to spread awareness

These responses indicate overall that the university has made significant progress in fostering access through awareness. In addition, progress has been made in terms of workshops and awareness campaigns (such as deaf awareness month) to increase awareness of the available services and supports offered at the university.

The university appears to be on track with awareness initiatives in line with Shapiro (2005) and thus needs to capitalise on efforts to improving knowledge, instilling values, fostering beliefs and shifting attitudes to motivate change in incorporating SWDs and accepting disability as part of the norm (GEM Report, 2015). This will increase awareness and acceptance and promote academic performance (Shapiro, 2005).

4.4.4.3 Summary of Theme Four

Theme 4: Progressive Attributes offering holistic support	
Theme 4 explored how the university community responds to challenges. The university embraces a holistic philosophy to better support SWDs in addressing challenges.	
Sub-themes	Sub-headings
Focusing on strengths of students with disabilities	The university focuses more on its ability to support disabilities and is unable to see greater advantages by focussing on strengths rather than deficits of SWDs.
More inclusive Positive attitudes towards disability is needed to foster a conducive environment that promotes learning	• Quality of advice, information and support Students with disabilities reflected positive attitudes in their responses pertaining to whether the university provided reasonable accommodations. • Formalised and Structured Mechanisms and Support The University has made significant strides in mandating better access for SWDs through its UKZN (2004) policy. • More supportive and accommodating of needs The university is taking the initiative and considering the needs of SWD and maintaining a level of understanding that prompts increased awareness amongst the university community. • Increased Understanding & Exposure to SWDs Promotes Inclusivity Awareness and understanding on the part of the university ensured familiarity with expectations of SWDs and ensured that the interventions put in place are responsive, and speak directly to their needs. Academic performance was positively influenced by acceptance. • Increased awareness The university has made significant progress in implementing workshops and awareness initiatives to improve access to available support services that enhanced acceptance and motivated SWDs to perform academically.

Table 12: Summary of Theme Four

4.4.5 Theme Five: Recommendations

Theme 5 explores the recommendations proposed by staff and students on how the university can better support equity of access through various avenues to improve awareness, communication and understanding creating platforms to give voice to SWDs in overcoming difficulties experienced.

4.4.5.1. Required action from the University

Staff respondent 1 felt that to support SWDs; the university is not adequately resourced:

Is the student services division adequately resourced to support students with disabilities? I think we could be better, we could be supporting students better, but in the current context, we are providing to students a reasonable level of service.

The model of support at the university is an integrated approach but does not foster inclusion. Respondents have stressed that it should begin with management and leadership at the university who need to revisit the existing UKZN Policy (2004) to facilitate and enhance inclusivity. The study established that there are many assumptions going on about 'what is right' in terms of adequately servicing SWDs (see discussion about 'what is right' in section 4.6.2.2 (b) (2) versus what supports inclusion and reasonable accommodation. All of this can only come with an understanding of SWDs, and this is not happening at the university.

The following key aspects dominated the theme:

a) Adjustments to existing structures and facilities

b) Explore other avenues of support

c) Increase awareness and understanding of disability

d) Integrated and collaborated solutions, improved communication and partnerships

e) More platforms to give voice to students with disabilities

f) Make administrative aspects more centralised and disability-friendly

a) Adjustments to existing structures and facilities

The study demonstrated that the university community showed little recognition and understanding of what disability entails therefore what the requirements are. This marks an unmet and urgent need to raise awareness of disability. Staff and SWDs have made recommendations hereunder and conveyed their dissatisfaction with existing structures and facilities at the university.

Staff perspectives revealed:

- The UKZN online system is not adapted to assist SWDs access the universities website.
- There has been no action from the universities to protect SWDs despite several outbursts of protest action at UKZN

Staff respondent 1 in support of the above mentioned the following:

Our online system now doesn't have the accessibility bar, which is quite a simple cheap addition that we could have. So the web services would have to then work together with specialists so that we can make our webs more interactive with people with disabilities.

Staff respondent 1 suggests providing separate exits for SWDs to evacuate lecture and test venues fast enough in situations where there is an outbreak of violence:

During protest action you find that SWDs can't get out of those venues fast enough especially when they go in, they chant and start throwing desks and if they are writing a test, there should be a separate exit for SWDs.

Student Perspective revealed:

- Available space at the DSU and the computer LAN does not accommodate learners appropriately and students suggested re-vamping space.

- Poor lighting systems require upgrading.

- Poor maintenance of LAN equipment such as broken keyboards and the LAN is not ideally suited to SWDs.

- One LAN is not enough to support the diversity of needs of SWDs.

- Signage and the names of university buildings pose problems to students with visual impairments who require fonts be enlarged to improved visibility.

In support of the above the following dialogues, student respondent 10 and 14 complained about the available space at the DSU and the LAN and suggested re-vamping space:

Student respondent 10:

Even in the DSU when you get there it's not a space that is created for us I really wish they could just revamp their space. I understand its small but it's not user friendly for us.

Student respondent 14:

So I don't want it to be like I'm cheating or something, it's just I need my space like can you just be far away? Like far away, space would be nice

Student respondent 4 had concerns about poor lighting in the venues:

The lighting is poor can we upgrade our lighting systems for every room like can we do that.

The student complained about broken keyboards at the LAN and no space to do written work:

LANs, they need to change it as well. You know those pieces where you can write using your hand when the keyboards are not working properly.

Student respondent 2 proposed that one LAN is not enough to support the diversity of needs of SWDs:

The biggest thing with the red LAN is if you're just sitting quietly and doing written stuff, you can't get rid of it because it's the blind guys that get the talking software, that's distracting. I mean it is unfair to say get rid of it because I understand they need it, much more than I need a quiet space.

Student respondent 12 had problems with signage and the names of university buildings and requested fonts are enlarged to improved visibility:

I feel they should change the font, they should make it bigger. Like, if it's its L2 it should be written in large.

In implementing changes to accommodate the greatest diversity of students, the university needs to take into consideration the various aspects of the type of adjustments required, guided by what the students themselves have proposed. For instance, there is not enough space to support the diversity of needs of SWDs. For example, blind students are seen as too noisy with their talking software and this does not work with other SWDs, particularly those with learning disabilities, as these students required a quiet environment to help focus.

Furthermore, with the increasing number of SWDs at UKZN, when it came to examinations the provision of special venues proved to be a challenge.

Staff respondent 2 recommended expanding the DSU to include examination rooms to accommodate SWDs:

Our numbers of disability increase every year so it's when they come to exams they should have a special venue for them. So, they can be in one house, one place. But it makes sense to write exam in one venue all the time. It depends on what the university can offer to accommodate these kinds of students, we definitely need to do more.

As such, the university needs to be aware of the importance of:

- Separate venue allocation for different types of disabilities or medical conditions.

- Classes need to be smaller in order that lecturers can interact more with SWDs and understand needs to accommodate them better.

In Staff respondent 2's view the importance of separate venue allocation was based on different types of disabilities or medical conditions:

They have to be taken care of separately because some people got so many different kinds of medical problems.

Staff respondent 5 in support of smaller classes conveyed the following:

We teach in small groups so it's much easier to understand these difficulties that students may have. We are more approachable in the eyes of students because they get to know you at a very personal level as compared to a class of 800 or 900 people where there's a complete disengagement with each other as human beings.

Drawing from Ntombela (2013), the university needs to understand that appropriate accommodations are a critical part of inclusion and from the above responses, forming good relationships based on trust is fundamental in engaging SWDs.

b) Explore other avenues of support

In exploring other avenues of support, the study identified that existing organisational culture and structure at the university prevents or resists rapid change. This includes historical injustices that orientate the focus of the University, such as race, that is receiving primary attention over disability. To overcome potential stagnation of existing organisational culture, the study explored:

1) The buddy system as an avenue of support that could work given certain limitations.

2) Appropriate means of testing and proper formatting of study materials.

1) **Buddy system**

The buddy system may work as an avenue of support for SWDs. Green Teacher (2013) described the buddy system as a technique that allowed people without disabilities to help those people with disabilities.

Staff respondent 3 argued that the buddy system could work:

They might have a system that's integrated into the university that works. The buddy system is easy. There might be easy ways in which we can integrate translators in the system.

Staff respondent 3 maintained that the buddy system could expand on learning:

I think it could. Like I said, every student can learn from everybody else. So, it doesn't have to be one-way.

However, staff respondent 4 expressed concern with the buddy system, as he believed that it might affect participation:

I'm worried, is it enough? The buddy system is a very good idea but the thing is that the student doesn't get to participate in that lecture so that's quite a problem.

This shows that the Buddy system can work but is subject to limitations as well. A study by Green Teacher (2013) supported the importance of the buddy system at university in that it provided instructional assistance, enhanced safety and fostered inclusion. A study by Foster (2011) in support showed that SWDs increased their interaction with all students when they participated in peer buddy programmes.

2) **Appropriate means of testing and proper formatting of study materials**

The findings revealed that learning materials and methods of assessment posed additional barriers to SWDs at the university. As a result, SWDs are affected psychologically where they feel unwelcome and a lack of belonging at the university. The following outcomes were

discussed:

- For the benefit of people who are visually impaired, library materials such as reserve books, recommended dissertations and journal articles need to be available in Braille.

- Need for more oral presentations

Student respondent 11 and 2 supported this in the following statements:

Student respondent 11:

I'm sure it will be difficult for them to put every material in Braille but those reserve book, recommended dissertation, recommended journals. They can try to do them in brail for the benefit of people who are visually impaired. It's motivating.

Student respondent 2 admits to performing extremely well with oral presentations as opposed to written work.

Like for me oral presentation would have been a lot better however you can't do everything orally that's the problem.

Just seeing the difference makes you happy. I mean from going from the middle of the classroom to the top just because they asked you talk about it instead of writing it.

Persons with disabilities are entitled to the provision of appropriate and adequate services based on a philosophy of inclusion and adherence to best practice (Denzin & Lincoln, 2013). As such, the university is compelled to provide appropriate means of testing and proper formatting of study materials.

- **Audio recordings and books**

Results show that SWDs experienced difficulty in facilitating access to lectures and study material through the use of audio recordings and books. Firstly, although an audio recording of lectures could improve attendance of SWDs, staff respondent 4 emphasised in her statement that lecturers do not grant permission for such recordings:

I think if they do ask for permission they get told no,

Secondly, the university should make audio books available because it would be easier for students with visual impairments to listen to articles or course packs instead of reading them.

Student respondent 12 agreed:

All course packs, have fonts that are very small and we don't always have the opportunity to come here and scan a book because it takes a long time. So, I feel they should have audio books because it would make it easier to actually listen to all these articles that are in the course packs instead of reading them.

Students with disabilities found that magnifiers were not effective and caused discomfort from holding a magnifier for too long among other problems.

Student respondent 12 suggested the following:

I have this magnifier I use to read. As much as it makes the writing bigger, after a while it gets tiring holding it and those things run out of battery. So, I feel that they should have audio books.

Furthermore, staff respondent 3 recommended that the university explore other avenues such as, consider what international universities are doing to address the needs of SWDs:

Your cost saving factor is if you look at what international universities are doing, what other software is available. There might be free software, we don't know about it.

South Africa indicated congruency with international trends and has made significant strides toward the provision of quality education and support to PWDs (Howell, 2006). Ongoing transformation in South Africa brought numerous educational issues into focus which resulted in new laws, policies and practices and a political will to transform the education system of South Africa (Ngcobo, 2006). However, the reality is that, in terms of inclusion of

SWDs at university, developed countries seem always to have the resources to address challenges that developing countries such as South Africa does not (Ngcobo, 2006).

c) Increase awareness and understanding of disability

The study found that when SWDs are aware of what they need to succeed, what services are available to meet these needs, staff awareness and appropriate accommodation, it equips them with a recipe for success. However, from the statements of respondents, disability awareness is a real need across the university.

Regarding awareness, staff respondent 1 conveyed the following:

Most disabled student don't want people to feel sorry for them. They want to be treated equally as other students but to recognise that they have accommodation needs. That's the challenge we face, so disability awareness is a real need across the university.

Staff respondent 1elaborated in his response that since the university invited SWDs, it needed to meet their needs in all their diversity:

One is to better understand the profile of your students and when you invite people to your university in all their diversity then you have to meet their needs in all their diversity.

However, staff respondent 2 argued that people may not know about a disability and can only recognise it when it presents physically.

People don't know about disability students; they just take for granted they are okay, I see nothing wrong with you but sometimes they might have a psychological problem. So people can't see those things, you only recognise it physically.

He suggested that people be continually informed and aware which is something the university is yet to undertake.

They don't know that's why I said it's something you have to keep informing people about. But, it's something we still have to do, its work to be done.

There is very little recognition and understanding of what disability entails, and therefore what the requirements are. Therefore student respondent 11 felt the staff should be briefed about what to expect:

Staff must get a briefing about the disability. They must brief that individual about disabilities. What is disability? What is expected of you?

Student respondent 4 and 8 supported this and felt that the understanding of disability was key:

Student respondent 4:

You see here in the environment what's needed is a whole lot of disability awareness. I think that's the most people here in the campus are coming from different arrears. So they don't understand disabled people.

Student respondent 8:

Disability is not an illness. I would like our staff to come to a point where they understand the challenges that students face and they can be aware of things that they can do in order to help us, all students to perform academically.

From the above discussion, it is apparent that:

- Understanding of disability is a huge issue, and more information is needed to increase such understanding of all stakeholders.

- People who do not understand disability need to talk and listen to SWDs and come to know their needs directly from them.

- Interaction and exposure to SWDs help to increase awareness and de-sensitises people thereby promoting further integration and inclusivity.

By using strategies that promote responsibility and effective instruction for all students

throughout their tertiary education SWDs can receive appropriate instruction and supports without emphasising stigma usually associated with the provision of special accommodations (Field et al., 2003).

Drawing from the presented arguments, understanding comes with awareness, which comes from educating people. Based on Field et al. (2003), the university needs to incorporate a curriculum design and environment that are fully adapted to accommodate the diversity of students. Also clear from the student responses were that by improving the definition and scope of disability, will help to define the range of responsibility that each staff member is tasked with to assist with role clarity. The university portrayed an image that reflected that it had transformed from the medical model to the social model of disability (Healey, Pretorius & Bell, 2011), however, such shifts requires the university to move focus from the individual displaying the disability to the environment that forms barriers (Riddell et al., 2005; Fuller et al., 2004).

d) Integrated and collaborated solutions, improved communication and partnerships

The study uncovered that the university is required to establish more formalised links and collaboration between the various sub-systems to offer holistic support (Systems Theory) (Becvar & Becvar, 2014).The new College-based university model setup at UKZN consist of various integrated sub-systems which are expected to work together in collaboration with their services to provide an academically-focused, student-centered, supportive and structured environment for the entire university community (Raab & Adam, 2005). As such, and in relation to SWDs, the following aspects were outlined in the study:

- The university needed more emphasis on teamwork to facilitate available expertise and

support services to enhance the achievement of a positive learning environment for SWDs.

- The university needed to broaden its horizons and embrace disability as a transformation issue.

- Communication and information is key to understanding how to deal with SWDs as part of the diversity that exists within the student population at the university.

- The onus is on the SWDs to overcome internalised fears and speak up about problems they experience, whilst at the same time the university must respond and share information acquired from SWDs with all key players to ensure success.

To achieve this initiative, staff respondent 1 placed emphasis on teamwork:

We have to work close together with the DSU to ensure that student gets what they want and so we have to work together as a team. You can't do work alone. Because if you are dealing with students, it's nice to consult.

In addition, he continued:

That's why it's good to have workshops, it's good to have meeting with the disabilities office and see how we can work together and improve things.

On a broader context, staff respondent 1 suggested working with other universities within South Africa emphasising disability as a transformation issue:

To improve the quality of support of SWDs in South African HEIs areas to focus on would be disability as a transformation issue. The second thing we can do is work with other universities.

It was supported by staff respondent 2 and student respondent 1, 2 and 6, that communication and information were key to understanding.

Student respondent 1:

I think maybe the disability unit could inform the lecturers in the beginning of the semester like how many SWDs are in their class and who are the disability students.

Student respondent 6:

At the beginning of the year they could just have data and email our lecturers that we need this kind of assistance. Cause some do understand.

Student respondent 2:

If the disabilities office can communicate to the lecturer, a list of students who got disability problems and this is what they need, I'm sure they'll know about it.

Staff respondent 2 agreed with the above and explained that communication was vital:

But if that lecturer has been informed from the disability office, then he'll be aware of it so it won't be like a shock to him when it comes to exams. So, it's communication between the disability office to the lecturer.

The university requires the variously integrated sub-systems to work together as a team in collaboration of their services, with good communication and information to understand how to deal with SWDs. As a result, academics, coordinators and other support staff are not likely to be surprised to find SWDs in their lectures, during tests and examinations.

Staff respondent 2 argued that, ultimately, the onus is on the SWDs to disclose their disability. Even though lecturers are expected to take the time to find out student needs, students must also take responsibility to express their needs:

If you lecture in a class of 300, your job is to lecture that's all but where the problem is when you having tests, exams, the person can't read the board, those kind of things then the student must tell the lecturer.

In these instances, SWDs need to make their needs known, but lecturers must also be understanding and supportive of their expressed needs. However, student respondent 2 argued that lecturers do not understand and explaining seems to be quite cumbersome:

Instead of having the students always do that. Like with every single lecture I had to go there, hand in a little letter and explain what accommodation they need to give me. Whereas, I think if the DSU communicated to staff members on your behalf.

The focus should be on developing coordinated and collaborative relationships with departments across the university (Becvar &Becvar, 2014). The UKZN Policy (2004) further encourages research and policy development in areas that focus on informed interventions and sustainable service provision as in the case of the present study. Drawing from the above arguments there is a need for formalised support bringing into focus the UKZN Policy (2004) where it professes that cooperation and collaboration with all stakeholders are needed to meet the needs of SWDs effectively. This provides understanding through communication and ensures the provision of appropriate accommodation.

e) More platforms to give voice to the SWDs

The study revealed that the university lacked definite platforms with which SWDs can express their views, express their lived realities and promote awareness and understanding.

Staff respondent 4 and 5 put forth the following suggestions:

Staff respondent 4

Platforms, where SWDs can present their experiences to staff members. So even if it's within a school. So, I'm just thinking because that research indaba is really good but it would be fantastic if it could be presented at departments or school level as well.

Staff respondent 5:

Or maybe a report gets put together and it can be given to each of the schools and included in staff meetings where these experiences of students and how we as staff or the school can accommodate SWDs.

Staff respondent 5 continued with her suggestion of life skills classes:

Life skills classes should be offered to every student and should be made compulsory for at least one semester and I think this is where such issues should be brought and how to engage with students who are differently abled. Like we offer life skills classes here.

But it's something that they've been thinking about. It is an important thing I think.

Student respondent 11 adding to the above, suggested awareness could be provided in different forms for instance, providing practical experience:

At a lecture about the disability and you can also try and demonstrate like practical experiences. Like for a blind person, just take a blind fold and put on the eyes of the lecturer and I think if he or she feels the practical experience, he will know that sometimes this life is not easy.

Staff respondent 5 asserted the following:

I think more people need to take an interest because the attendance is completely optional and some people choose not to go for these. Therefore, it should be made compulsory for everybody to go to some kind of session where they taught how to engage, where one should be engaging with SWDs.

Initiatives to create such platforms for interaction extended beyond programmes such as access and needed to be made compulsory not only to SWDs but to all mainstream students and staff as it creates a mutually beneficial exchange of knowledge (Virdi-Dhesi, 2014). Thus, included in such initiatives were compulsory life skills classes to promote awareness of the diversity of the student population (Tinklin et. al., 2004). The life skills initiative involves sessions where all students are taught how to engage with students with different disabilities. Staff responses above conveyed that for such initiatives to be effective a suggested strategy of implementation to promote awareness and to ensure the initiative reaches everyone is by making attendance compulsory for everybody (Zhang et. al., 2010 and Bradshaw & Mundia, 2006).

f) Make administrative aspects more centralised and disability-friendly

The study disclosed that the current application process and required documentation itself

excludes learners with disabilities including those who are from impoverished backgrounds by virtue of length, accessibility and clarity.

From student respondent 11's perspective, it can be identified that online applications are not helpful as it is a problem for all students from impoverished backgrounds to access the website:

I recommend the online applications in a sense that it will help those who can do it but I also recommend that they mustn't end the manual application so that those people who can't afford will still have an opportunity.

However, the manual applications also pose problems as staff respondent 3 convey in his statement:

I think the CAO really needs to come up with a better document for them because the current document that we have is about six pages long, it's quite a lengthy document, and they rely on someone in the school to help them fill out the document.

As much as the DSU is supposed to support students with their administration requirements, the Student Funding department and Residence Affairs of UKZN follow the same requirements and processes as mainstream students, which is difficult for them. Student respondent 1 recommends having the process changed and more centralised for SWDs. He suggested that relevant staff from Student Funding department and Residence Affairs come over and have the signing done in a central, accessible location such as at the DSU:

Residence and the student funding, they don't separate the disability students from the rest of the students so we have to follow the same lines with them and we aren't treated any differently.
Maybe they need to come over to the disability unit and make themselves available?

In making administrative aspects more centralised and disability-friendly, the university needs to focus on what the students are voicing. Aligning with the WHO (2015), in order to

successfully remove barriers and improve access to services it is essential to include inputs and personal experiences of PWDs. A student with disabilities recommended the following:

- To simplify the applications process and provide more information in alternate formats to SWDs.
- To retain the manual application process as websites were not always accessible to all students. Going forward, the website should be universally accessible.

The study conveyed that transforming attitudes toward acceptance of diverse populations required serious consideration especially in making administrative aspects more centralised and disability-friendly. Findings in Ntombela (2013) revealed that meaningful change is a lengthy process and that new policy proclamations do not easily follow through in practice. However, there is a need to move toward an integrated and all-inclusive model of support and assign a timeframe within which to achieve it.

4.4.5.2 Summary of Theme Five

Theme 5: Recommendations	
Theme 5 explored the recommendations proposed by staff and students in their experiences with the inclusion of SWDs at the university. The study explores various avenues to improve awareness, communication and understanding creating platforms to give voice to SWDS in overcoming difficulties experienced.	
Sub-themes	Sub-headings
Required action from the University	Adjustments to existing structures and facilities - In implementing changes to accommodate a diversity of SWDs, the university needs to take into consideration the various aspects in relation to adjustments required, guided by what the students themselves have proposed. This includes but not limited to single and smaller venues and class sizes.
	Explore other avenues of support - Buddy system

	To overcome potential stagnation of existing organisational culture, the buddy system was considered as an avenue of support that could work given certain limitations.
	- Appropriate means of testing and proper formatting of study materials The study recommended that SWDs be provided with learning materials and methods of academic testing in appropriate formats such as in Braille or oral presentations as difficulty experienced in accessing lecture and study material such as audio-recordings and books posed additional barriers to SWDs.
	Increase awareness and understanding of disability Disability awareness to 'all' at the university is a real need and requires effort and understanding.
	Integrated and collaborated solutions and improved communication and partnerships The study uncovered that the university is required to establish more formalised links and collaboration between its various integrated sub-systems. These sub-systems must work together in collaboration of their services with all stakeholders to meet the needs of SWDs effectively.
	More platforms to give voice to the SWDs The university lacked definite platforms with which SWDs can express their views, current lived realities, and promote awareness and understanding. More formalised platforms are needed. Awareness initiatives could be effective if attendance was made compulsory for all learners.
	Make administrative aspects more centralised and disability-friendly Student with disabilities recommended simplifying the applications process and providing more applicable information whilst also retaining the manual application process as websites were not always accessible to all students.

Table 13: Summary of Theme Five

This concludes the analysis and discussion of the relevant themes that were generated from

the data. The next section highlights some of the other discoveries made by the study from

the data collected. These may not have been a part of the intended study objectives, but hold significant value in relation to the study.

4.5 Other Discoveries made by the study

While the study was set out to answer the research questions, the qualitative and inductive nature of the study expedited the new discoveries, not within the scope of this study. Nonetheless, these discoveries are hereby listed as a means to add value to the current study and may inform future researchers.

a) Universal Design Instruction (UDI)

The study uncovers a new paradigm for university SWDs which refers to the Universal Design Instruction (UDI). Such a design can promote the following:

- Anticipate the needs of diverse learners

- Makes HEIs more accessible and inclusive to a wide variety of students

- Promote the full participation of students in all aspects within HEIs

- Promote responsibility and effective instruction for all students without the stigma attached to special accommodations (Field et al., 2003).

In studies such as Brandt (2011) and Harbour and Maudous (2011), at the University of Connecticut, it was shown that the implementation of UDI would increase achievement and effectiveness among students, both with and without disabilities.

b) Curriculum Integration

The study promotes the integration of Life Skills classes offered in the College of Humanities' Access Programme. Life skills classes are described in detail in theme 3, section 4.6.3.1 (c). The study proposes to have these classes integrated into the first year programme offered to every undergraduate student as a compulsory addition to the curriculum. This was supported in a study conducted in an Australian university by Bradshaw and Mundia (2006) who suggested staff development and exposure to PWDs are key to creating awareness and successful integration of SWD.

c) Effective way of altering attitudes towards SWDs

The study shows that an effective way of altering attitudes favourably is to combine formal instruction and encourage the university to provide opportunities for direct contact with SWDs. Derived from a study by Bradshaw and Mundia (2006) in theme 3, section 4.6.3.3 (b) and supported by Zhang et al. (2010) who recommend training programmes (such as pre-service or in-service training) to provide necessary, exposure to PWDs and through interventions made to enhance provision of accommodations were key to successful inclusion of SWD.

d) Include inputs and personal experiences of persons with disabilities

This study revealed the experiences of SWDs in assessing and transforming attitudes of the university community towards acceptance of diverse populations. As such, it encourages involvement and inputs of SWDs in policy formation. It is vital to include the experiences of

SWDs and their recommendations and modifications to improve accessibility. Giving voice to SWDS is supported by WHO (2015) and discussed in detail in theme 5, section 4.6.5.1(e).

e) Work with other universities

The study revealed that there is a need for universities in South Africa to work together to create mechanisms to improve accessibility and inclusion that focuses on disability as a transformation issue and implement strategies to improve the quality of support of SWDs in South African HEIs as discussed in theme 5, section 4.6.5.1(d).

f) Strategies to Cope with Protest Action at University

Protest action posed huge threats to SWDs at UKZN especially students with hearing and visual impairments. The study also raised awareness that SWDs are not safe once within a lecture or test venues in situations where there is an outbreak of violence. In going forward, it is crucial that UKZN considers revising the UKZN Policy (2004) mandating an action plan for the safety and security of SWDs in the midst of protest action at the university. Recommendations are detailed with supporting dialogues in theme 2 section 4.6.2.1 (b). Drawing from Bradshaw and Mundia (2006) who asserted that politically correct and socially desirable behaviour influenced the successful inclusion of SWD.

g) Integrating the Buddy System

The Buddy System is shown to have potential through the study and can be applied to the university. As shown in a study by Foster (2011) in 4.5.1.2.1 above, the buddy system can be seen as an effective strategy.

4.6 Chapter Summary

This chapter formed the core of the study. The study involved a very in-depth and thorough discussion of the results that have come to light via the analysis process. This has enabled the researcher to explore several important findings that the qualitative research interviews revealed. The inductive theoretical thematic analysis used in the study made it possible for the researcher to examine the data from the interviews while concurrently contrasting existing literature to explain and support the results. A variety of themes emerged and revealed that the university operates in the midst of forces that drive change as well as those that inhibit change. Amongst several challenges and shortcomings that the university is confronted with, the environment presents some opportunities that the university can benefit from to bring about much needed change. A presentation of other discoveries made by the study concludes this chapter. The subsequent chapter allies the key findings that will be drawn from this chapter in relation to the research questions and to the theoretical frameworks.

Chapter Five

Discussion of Results

5.1 Introduction

The previous chapter presented a very detailed analysis, interpretation and discussion of the results. The purpose of this chapter is to draw out and present the key findings from the analysis and discussion in relation to the research questions of the study. Furthermore, an application of the theoretical frameworks is made via the findings.

5.2 Key Findings of the Study

5.2.1   Quality of Advice and Information

The study provided evidence that the university lacks an inclusive model whereby it does not meet the quality standards required to sustain SWDs efficiently and effectively. The findings showed that the quality of advice and information provided to SWDs portrayed the university in poor light due to its inadequacies in servicing such students. There is a dire need for more resources to better support SWDs. Lack of resources means that there's a reactive, rather than a proactive, approach escalated by the fact that it is operating within budgetary and resource constraints as reflected in servicing its first student with deafness referred to in Chapter 4, theme 1, section 4.4.1.1.

Relationships with core stakeholders were also identified as being reactive, which tended to promote discrimination rather than foster equity of access. Furthermore, the university

appears to be over dependent on the DSU in servicing SWDs, given that the DSU is under-capacitated which leads to overworking of existing key staff reflected in section 4.4.1.2 (a). This has direct implications in terms of the lack of staff resources to support the growing number of SWDs at the university. A further finding indicated that the university required to work collaboratively with relevant stakeholders as a lack of this was illustrated by role confusion and a tendency to shift blame onto others are shown in section 4.4.1.2 (b). This showed relevance to Systems Theory (Becvar & Becvar, 2014) applied in the study.

In addition the university has not well marketed the DSU and available service to SWDs at schools to cultivate liaisons for information exchange to improve outreach and accessibility reflected in section 4.4.2.2 (b). However, the university did make significant attempts to compensate for this deficiency by providing adequate information such as curriculum integration (life skills classes), school visits and literature distribution about the available services, workshops, orientation day and on-campus visits discussed in theme 3, section 4.4.3.1 (d).

Although there was some positive response from SWDs regarding the provision of reasonable services, this was merely due to the complacent nature of SWDs at the university discussed in theme 4, section 4.4.4.2 (a) and theme 1 section 4.4.1.1.

The study found that there is increased importance of the role of autonomy and self regulation. The UKZN policy on Students and Staff with Disabilities (2004) encouraged students to self-advocate for access to advance in independent living which ensures dignity, self-sufficiency and responsibility referred to in 4.4.1.2 (a). However, it is hereby argued that if the university was fully adapted to accommodate the greatest diversity of students it would logically promote self-determination among SWDs.

5.2.2 Problems –Teaching and Learning

The study notes that the teaching and learning process for students with disabilities is compromised and not inclusive. This study noted that servicing SWDs is an institutional responsibility accomplished by building partnerships and creating a sense of shared responsibility among all staff at the university relevant to Systems Theory (Becvar & Becvar, 2014) applied in the study. Reviewing the results, the study concluded that the university lacked collaborative relationships with departments and required improvement in areas such as communication, feedback and support structures for SWDs referred to in section 4.4.1.3.

It was pointed out in 4.4.2.2 (b) that there was breakdown in communication between SWDs and the different units and colleges at the university. This study stressed that communication is vital to bring about mutual understanding and to establish compatibility and congruency amongst all stakeholders.

The study revealed that from the lecturer's perspective large classes made it difficult to detect SWDs while smaller classes promote favourable learning environments (refer to section 4.4.2.2 (b) (2a). However, from the perspective of SWDs, smaller classes created stigma or labelling and large classed were too noisy for students with hearing impairments or deafness and created problems for students with visual impairments. Arising from further analysis of this study, lecture notes that are not readily available or easily accessible impacted negatively on learning outcomes of SWDs. Students with disabilities were challenged in acquiring prescribed study material through online sources. The study established that such discrepancies arose from existing held beliefs about what adequate support entailed (refer to section 4.4.3.2, b). This was exacerbated by lecturers who do not have specialised training to

adapt teaching strategies or lack the requisite skills to understand the diverse learning styles of SWDs portrayed in section 4.4.3.3 (a).

This study demonstrated in 4.4.3.2. (d), that an on-going challenge faced by the university is the degree of transparency from SWDs regarding their disability status. The study correlates with Shaw (et al., 2009) that SWDs have the right to disclose or to not disclose their disability and explored the consequences thereof in 4.4.3.2. (d). Additional barriers to teaching and learning for SWDs include lecturers who are unaware of SWDs in their classes resulting in poor accommodation for SWD and further resulting in negative perceptions and feelings towards lecturers because only those students who fit the stereotypical definition of disability received support as emphasised in section 4.4.3.3 (b).

Lecturers have accepted responsibility for their inability to provide appropriate support in terms of presentation of lectures or learning material to SWDs including the provision of improper formatting and content such as graphs and pictures used in lectures or assessments. However, they have expressed concern that the university has not been proactive in providing appropriate means to assist them in servicing SWDs discussed in section 4.4.3.3 (c).

5.2.3   Level of Awareness

The study demonstrated that the university community showed little recognition and understanding of what disability entails. This, in turn, reflected a lack of awareness of the difficulties and hardships of SWDs. The study pointed out that some lecturers went to the extent of forgetting about SWDs in their class depicted in section 4.4.3.3 (b). This marks an

unmet and urgent need to raise awareness of disability (refer to 4.4.5.1, a). The lack of adequate and appropriate accommodations is a significant problem as such accommodations are seen as a critical part of inclusion. This positioned understanding and awareness of the needs of SWDs as fundamental in fostering access as shown in section 4.4.2.2 (b).

The study argued that poor accommodation due to poor understanding and awareness did not address access as seen in section 4.4.2.2 (b). Rather, it fostered discrimination and prejudice of SWDs. The provision of adequate and appropriate accommodations to SWDs entailed understanding disability which comes with awareness by educating people and making them aware of the diversity of SWDs at the university referred to in section 4.4.5.1 (c). The study established that awareness ensured lecturers were well informed and dealt with SWDs adequately and appropriately in ways that responded directly to their needs discussed in section 4.4.2.2 (b).

Limited adherence to policy and relevant legislature concerning SWDs was also found. The UKZN Policy on students and staff with Disabilities (2004) promotes awareness and understanding on the part of the university ensuring familiarity with expectations of SWDs as shown in 4.4.4.2 (d). However, findings were contrary to the UKZN Policy on students and staff with Disabilities (2004) showing limited adherence in practice. This drew attention pertaining to disability, intolerance, human rights and social justice issues.

Students with disabilities raised concerns that the university community does not understand disability causing emotional pain and humiliation to SWDs discussed in 4.4.2.3.1. In view of this, the study concluded that such intolerance, disrespect and violation are largely due to

limited awareness and education and did not reflect the values of the institution. Rather it reflected that the roots for social exclusion were deeply embedded in limited attention given on a legislative dimension. This included The White Paper on an Integrated National Disability Strategy (1997), The White Paper on Special Needs Education (2001) and the Draft National Disability Policy (2007) including the South African Constitution (RSA, 1996) all of which are located within the legislative context of South Africa.

This study in correlation with Subrayen (2011) found that ignorance about reasonable accommodations accessibility and alternative teaching strategies left SWDs to endure emotional and physical abuse. The researcher found this to be a contributing factor to lower rates of retention, throughput and success amongst SWDs. The university needs to understand that to raise awareness communication is vital especially when delegating responsibility and resources with an integrated approach to serving SWDs as explained in section 4.4.3.1(b). As such, the study found the principles of Systems Theory (Becvar & Becvar, 2014) to be applicable by implementing strategies employed at the College of Humanities to other colleges at the university (refer to section 4.4.5.1) creating a holistic approach to awareness.

Further analysis revealed that with increased awareness and acceptance, academic performance improved showing relevance to the Maslow's (1943) hierarchy of needs model discussed in 4.4.4.2 (e). The study emphasised that awareness lead to critical thinking and decision-making, and encouraged a shift to causes and dynamics of problems to making informed choices to change behaviour or a situation (Shapiro, 2005).

Overall responses from the participants indicated that the university had made significant progress with awareness initiatives. For instance progress has been made in terms of

workshops and awareness campaigns (such as deaf awareness month) to increase awareness shifting attitudes to motivate change in incorporating SWDs shown in section 4.4.4.2 (e). A further finding revealed that if SWDs are aware of what their needs are and how the university can assist them to meet those needs, it will promote staff awareness and the provision of appropriate accommodation thereby empowering them for success.

Staff argued that there are adequate foundation programmes and workshops that create exposure to SWDs, help increase awareness and de-sensitises able-bodied students thereby promoting integration and inclusivity as explained in section 4.4.2.2(b). However, awareness initiatives cannot be effective if attendance was poor. The study revealed that the university lacked definite platforms with which SWDs can express their views to promote awareness and understanding. Initiatives to create such platforms for interaction are not enough if it is not made compulsory at all. This was emphasised in section 4.4.5.1 (e).

5.2.4 Barriers to inclusion

Historical

Findings in the study revealed that barriers to accessing Higher Education in South Africa for SWDs are exacerbated by inequalities evident in its political and historical past as well as current political instability discussed in 4.4.2.1 (a). Reviewing the outcome of the study, the researcher came to the realisation that this political and historical focus continues to limit the ability of SWDs to participate equitably in the teaching and learning process at the university level. For instance, race and gender takes priority over disability-related issues. This is compounded by recurrent student protest action such as the 2016 fees-must-fall campaign emphasised in section 4.4.2.1 (b).

A prominent emphasis contained in the findings points to the need for transformation starting with the UKZN Policy on Students and Staff with Disabilities (2004) as discussed in section 4.4.2.1 (d). Furthermore, SWDs urged the university to realise the staff limitations that were impacting heavily on their ability to obtain much-needed support that was critical to the achievement of their educational goals explained in section 4.4.2.1 (d).

Attitudinal

Attitudinal barriers were viewed in terms of how it reinforced discrimination. For instance, the study found that negative terminology, the passive acceptance of and resistance to changing prevailing attitudes, stereotypes and conceptions formed an attitudinal barrier to SWDs discussed in section 4.4.2.2.

Physically apparent disabilities and associated stereotypical behaviour of staff and students at the university also posed barriers to inclusion of SWDs. The study maintained that this served as a barrier to SWDs in acquiring appropriate services on an equal level with students with overt disabilities referred to in section 4.4.2.2(b).

It further appears that a lack of proper action to challenge existing stereotypes and misconceptions were inherent in the way the respondents spoke using exclusionary terminology. The researcher's interpretation of the responses of SWDs revealed that there remained racial matters in addition to arrogant and opinionated attitudes of the mainstream students highlighted in section 4.4.2.2 (a).

Staff argued that mainstream students were also experiencing challenges as they were exposed to SWDs for the first time. However, staff reflected that although changing attitudes

was a slow process, they were confident that change at UKZN was forthcoming. The findings concurred with Easterseals (2016) that the root cause of barriers to SWDs is based on misinformation and misunderstandings that creates negative attitudes about disability. The SWDs expressed that such discrepancies felt more disabling than their particular disability which contributed to negative attitudes at the university discussed in section 4.4.2.2. (a). In applying Maslow's (1943) hierarchy of needs model, this study recommended that in overcoming stereotypes it was essential to shift focus to salient drives, affective complexes, staff and environmental modifications and belief systems of both staff and students as shown in section 4.4.2.2 (a).

Other barriers included:

- Issues such as timeliness and consistency of implementation of assistive technology as electronic media that is not accessible can create additional barriers to SWDs referred to in 4.4.2.1 (e).
- English as a medium of instruction at most South African HEIs created language and communication barriers challenging students with hearing impairments or deafness in the knowledge acquisition process discussed in section 4.4.4.1.

Structural

Structural barriers include interaction between individuals and the environment showing relevance to the social model of disability (Riddell et al., 2005). From the analysis of the study, the researcher gathered that the university does not understand the structural needs from the perspective of SWDs. The findings revealed the university environment was not conducive to normal wheelchair access (referred to in section 4.4.2.3.1). Lecture venues

compromised study time as they posed significant challenges in terms of location, space and architectural flaws.

Furthermore, the study provided evidence that the structural environment at the university affected SWDs psychologically. This left SWDs feeling marginalised, unwelcome and inflicted feelings of isolation, withdrawal and a reduced sense of belongingness. All of which are essential requirements to ensure the successful integration of SWDs at university engaging Maslow's (1943) Hierarchy of needs model referred to in section 4.4.2.3.1 (a).

The study in support of the Convention on the Rights of Persons with Disabilities (2006) promoted equal access to physical environments. However, the study presented an array of structural barriers that limit accessibility, significantly influencing the academic progress of SWDs.

5.2.5   Role of university in application and registration

The study found that in adhering to non-discriminatory practices, the university offered reasonable accommodations and relevant academic administration to qualified students with disabilities highlighted in Chapter 2, section 2.10. However, the study concurred with Shaw et al. (2009) who asserted that to foster accessibility and inclusive transition strategies, a more collaborative approach is needed whereby public secondary schools and university personnel assist in the transition process adhering to Systems Theory (Becvar & Becvar, 2014) applied in the study.

The study reflected that it is important that prospective SWDs know the type and extensiveness of the available support services to facilitate accessibility and inclusive transition from high school to university. On the other hand, the study emphasised that knowledge and awareness of admission staff to the type and extent of services available at the university is a necessary requirement for recruitment and admission of qualified students with disabilities. Furthermore, the study confirmed in Chapter 2, section 2.11, that the university promoted disclosure of disability on enrolment as it did not influence admission but was necessary to ensure appropriate supports were made available to SWDs.

Students with disabilities pointed out that the current application process posed difficulties in terms of its accessibility, clarity of information and the application document itself was lengthy. This forced SWDs to seek assistance from staff in the colleges or DSU offices to assist in filling out the document shown in section 4.4.5.1. The study found that to make administrative aspects more centralised and disability-friendly the DSU, Student Funding department and Residence Affairs of UKZN must support SWDs with their administration requirements in a favourable manner.

It is important that institutions committed to providing higher education to students with disabilities have website technology that is accessible and user-friendly to all students. However, SWDs debated that while web-based technology facilitated admissions, applications and registration for some SWDs, it posed significant challenges to SWDs from rural areas discussed in section. 4.4.2.1(e). As a result, SWDs requested the university retain its manual application process as websites were not always accessible to all students.

Staff concurred that the UKZN online system is not adapted to assist SWDs to access the universities website. Computer LANs are not ideally suited to SWDs and reflected that availability of space at the computer LAN, poor lighting and maintenance of computer LAN equipment also posed challenges. Other findings concerning the applications and registration process included students with visual impairments who experienced difficulty in locating university buildings during the applications and registration process. This was primarily due to poor visibility of signage and the names of university buildings.

Staff believed that if SWDs overcame internalised fears and spoke about problems they experienced, as in the case of this study, it will shed some light on the difficulties experienced during the application and registration process and assist in creating a more disability-friendly university environment.

In response to the research questions the study sought to expose and explain the pressures and painful experiences of SWDs. The outcome of the findings demanded inclusivity, equalisation of educational opportunity and human dignity be reflected in the procedures and policies associated with the inclusion of SWDs. The key findings revealed the need for significant commitment on the part of the university to remove barriers to inclusion and to address challenges raised by SWDs. Addressing these issues will ensure and expedite much needed transformation at this institution of Higher Education with an intention to ignite a similar response in other HEIs in South Africa. The next section explores the appropriateness and relevance of the theoretical frameworks in relation to the findings.

5.3 Application of the theoretical frameworks

The frameworks that underpinned the study were Systems Theory (Becvar & Becvar, 2014), Maslow's (1943) hierarchy of needs theory and the Social Model of disability (Riddell et al., 2005). These were guided by an interpretive paradigm to provide a theoretical understanding of the participants 'lived' experiences. This section explained the relevance of the theoretical frameworks and how it is applicable through its instruments and findings.

5.3.1 Systems Theory

The use of this framework to underpin the study is appropriate as it encompasses working collaboratively in a system using an integrated approach to foster inclusivity (Becvar & Becvar, 2014). The study applied Systems Theory (Becvar& Becvar, 2014) as it relates to the current College model-based university setup at UKZN which consist of various integrated sub-systems. These are expected to work together in a collaboration of their services to provide a university that focuses on positive attributes such as being academically focused, prioritising student needs and providing an environment that is well structured to support inclusivity (Raab & Adam, 2005). Systems Theory was used to understand the university as a system by looking at it in its entirety and not just its operational elements. Systems Theory compels the university to shift from individuals viewed in isolation, and focus on relationships between individuals, suited to the study in that it promotes inclusivity (Becvar & Becvar, 2014).

The appropriateness of the theoretical framework stemmed primarily from the following key principles of Systems Theory applied in the study:

- Wholeness and Self-Reference

- Structural Determinism

- Recursion

- Reality as a multiverse

Each of these principles is now discussed.

a) **Wholeness and Self-Reference**

Although Shaw et al. (2009) asserted that applying a systemic approach encouraged collaboration and integration, it emerged from the study that the university does not apply this approach effectively. The study uncovered in section 4.4.5.1 (d) that the university is required to establish more formalised links and collaboration between the various sub-systems to offer holistic support (Becvar & Becvar, 2014).

The university needed more emphasis on teamwork to facilitate available expertise and support services to enhance the achievement of a positive learning environment for SWDs. As such the study encouraged building partnerships and developing relationships with the colleges, schools and departments and across the university to foster a holistic approach towards servicing SWDs. This was supported in Bradshaw and Mundia (2006) where interaction with SWDs and staff development promoted inclusivity of SWD at the university.

b) **Structural determinism**

Structural determinisms provided insight into limitations the university expressed in terms of its ability as a system to support SWDs such as structural limitations and failure to provide maintenance thereof, referred to in 4.4.3.1(b). This principle of Systems Theory is detailed in chapter 2 (Becvar & Becvar, 2014).

c) **Reciprocity and shared ownership**

Reciprocity and shared ownership highlighted issues of role confusion experienced by the various integrated sub-systems within the university. Although there is an overriding dependency on the DSU in servicing SWDs, it should remain an institutional responsibility. The application of reciprocity in delineating staff responsibilities is explained in 4.4.1.2 (b).

d) **Reality as a multiverse**

Second-order thinking talks about a multiverse of realities where each person creates a particular version of the world and where no version is more important than the other. It is important to understanding that disability is a perception created by the socio-cultural context within which it exists. In Chapter 2, Hesse-Biber and Leavy (2006, pg. 19) explained: "a multiverse of observer dependant realities".

The reality SWDs faced at the start of their university life varies as students reflect their own understandings of what it means to be at a university. Students felt that the applications office appear to do things for the sake of 'ticking boxes' rather than doing it to accommodate needs from a place of understanding. Technological advances were faced with negative attitudes when students did not meet university competency levels. Therefore, the outcome of the study revealed while technological advances increased accessibility for some students, proved to inconvenience SWDs in rural areas.

5.3.1.1 Findings in relation to the framework

Based on Systems Theory, the study revealed that the university needed to broaden its horizons and embrace disability as a transformation issue. This was highlighted by the following aspects uncovered:

- The university is required to establish more formalised links and collaboration between the various sub-systems to offer holistic support.

- Focus on reciprocity (give-and-take actions), recursion (circular causality) and shared responsibility thereby creating a context in which people can think about changing attitudes thus encouraging awareness of diverse populations within a University environment.

- Change the focus to creating awareness thereby transforming attitudes toward understanding, acceptance, respect and appreciation for each other in terms of similarities and differences.

- Second-order ethics requires that one reflect on what impact one's actions, such as differences and biases have on others.

- Systems Theory (Becvar & Becvar, 2014) is appropriately stemming from the outcome of the study where it was revealed that integrated and collaborated solutions improved communication and partnerships, therefore, fostered an all-inclusive university environment.

Becvar and Becvar (2014) explained that Systems theory focused on the appropriateness of dialogue and challenged the use of conscious control. As such, influence is understood to be mutual and responsibility is seen as shared or a bilateral process. This is pertinent to the study in addressing issues of staff limitations and responsibility. The university, on the other hand,

needs to take action in terms of collaborating services and delegating responsibility with an integrated approach to servicing SWDs instead of relying solely on the services of the DSU.

From the above discussion, it implies that the application of this framework can promote collective responsibility, awareness, acceptance and effective instruction for SWDs throughout their educational continuum.

5.3.2 Maslow's Hierarchy of Needs

The application of Maslow's (1943) hierarchy of needs theory highlighted SWDs feelings of belonging, inner perceptions and difficulties experienced when obstacles in the structural environment displaced into the psychological domain. To this end, Maslow's (1943) hierarchy of needs theory employs a focus on drives that are more salient as well as affective complexes, need for environmental modifications, and the underlying irrational belief systems of staff and the students.

The study applied Maslow's (1943) hierarchy of needs theory in relation to the following key aspects:

- Physical, emotional, social and intellectual qualities of an individual does influence learning (McLeod, 2014).
- To achieve a sense of belonging, contact and exposure to SWDs results in acknowledgement, approval and acceptance promoting comfort respect and friendship thus performance improves. (Changing Minds, 2017; Office of Disability Employment Policy, 2015).

- Supportive environments to SWDs to enhance feelings of belongingness and inclusivity (Benson & Dundis, 2003).

- Feeling of acceptance correlated to better performance and enhanced feelings of belongingness and self-esteem providing opportunities to advance and succeed. Kunc (1992) supported this in that the need to belong within a university community is vital for successful integration and involvement preventing isolation and withdrawal felt by SWDs.

5.3.2.1 Findings applicable to the framework

In his study Maslow's (1943) Hierarchy of Needs emphasised that the responsibility to encouraged SWDs to fulfil their own unique aspirations (self-actualisation) lied with university staff to provide a supportive environment which is highly relevant to this study (Chapman, 1995-2010). Maslow's concept of self-actualisation relates directly to academic challenges and opportunities SWDs face in their daily lives and it requires that the university allow for personal development by giving meaning and purpose not merely for their academic achievements but for life as well (Chapman 1995-2010).

The use of Maslow's (1943) Hierarchy of Needs theory in the study has relevance especially because it is ideally simple and an elegant model for understanding many aspects of human motivation among SWDs within a university environment. The study found this framework applicable as a sense of belongingness is reached through mastery or achievement and enhanced self-confidence. This enables SWDs to pursue self-actualisation or to 'be all that one can be' (Benson & Dundis, 2003, pg. 316). Once students with disabilities are able to satisfy basic self-esteem needs, it drives them to reach for quality education and attain their set goals.

5.3.2.2 Proposed adaptation/extension of the model based on the study's findings

In light of the findings, it was established in the study that the incorporation of 'inclusivity' as an extension to the 'belongingness' construct, which is a fundamental human need, was not explicitly represented in the five-stage model of Maslow's (1943, 1954) hierarchy of needs and therefore advocates for adaptation. In essence, this study conveyed that in structure and terminology, it is not precise. Later versions of the theory with added motivational stages are not so clearly attributable to Maslow (Chapman 1995-2010). In the same way as these extended models have been inferred by others from Maslow's work, this study introduced 'inclusivity', not as a distinct levels in the Hierarchy of Needs but as an additional aspects of motivation at the 3rd level of the hierarchy (Belongingness and Love needs). Findings in support this additional aspect is shown in section 4.4.5.1. Chapman (1995-2010) confirmed that where Maslow's Hierarchy of Needs is shown with more than five levels then this is an extension of the interpretation of Maslow's work by other people.

The original five-level model was later adapted to include an additional sixth, seventh and eighth level. These levels were named Cognitive (6th level), Aesthetic (7th level) and Transcendence (8th level). However, at the level of Belongingness and Love (level 3) 'inclusivity' is distinctly different to any of the previous motivators (Family, relationships, work groups). The original five-level Hierarchy of Needs model remains a classical representation of human motivation, and this adaptation serves best to illustrate an important aspect of inclusion as a motivator in achieving academic success.

Therefore, the researcher illustrated a diagram to represent Maslow's hierarchy of needs, at the level of 'belongingness' where it represents inclusivity as part of this level on the

pyramid. (See Fig. 13, the proposed adaptation of Maslow's (1943, 1954) Hierarchy of Needs

theory.)
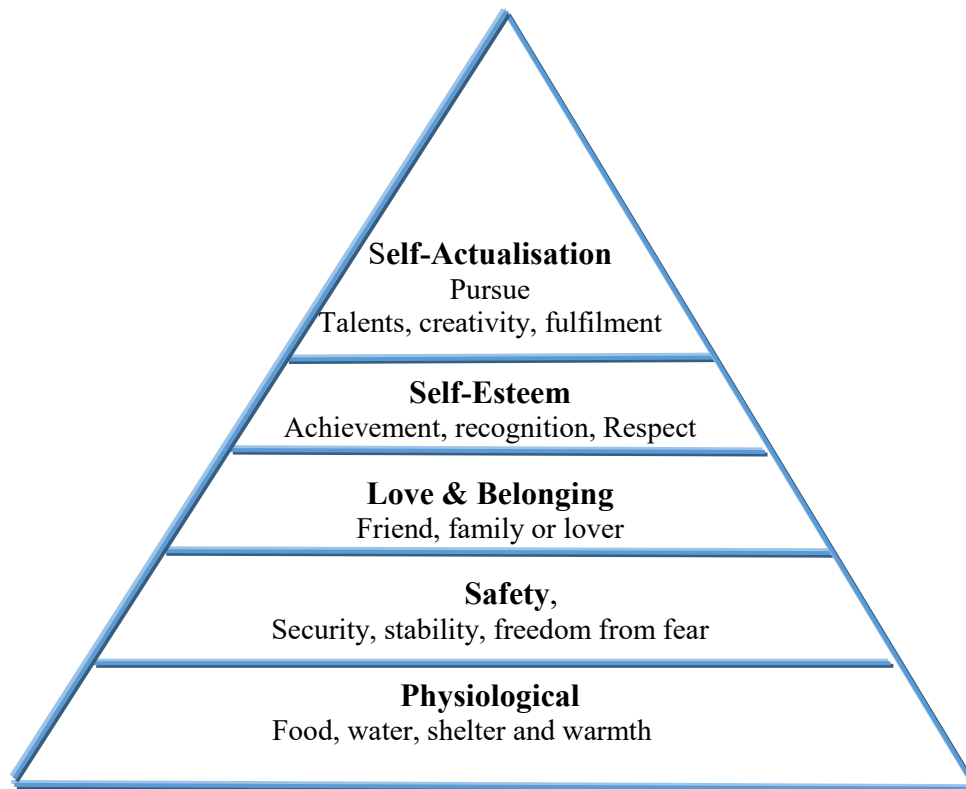
Figure 12: Abraham Maslow's Hierarchy of Needs (Jackson et al., 2014, p. 440)
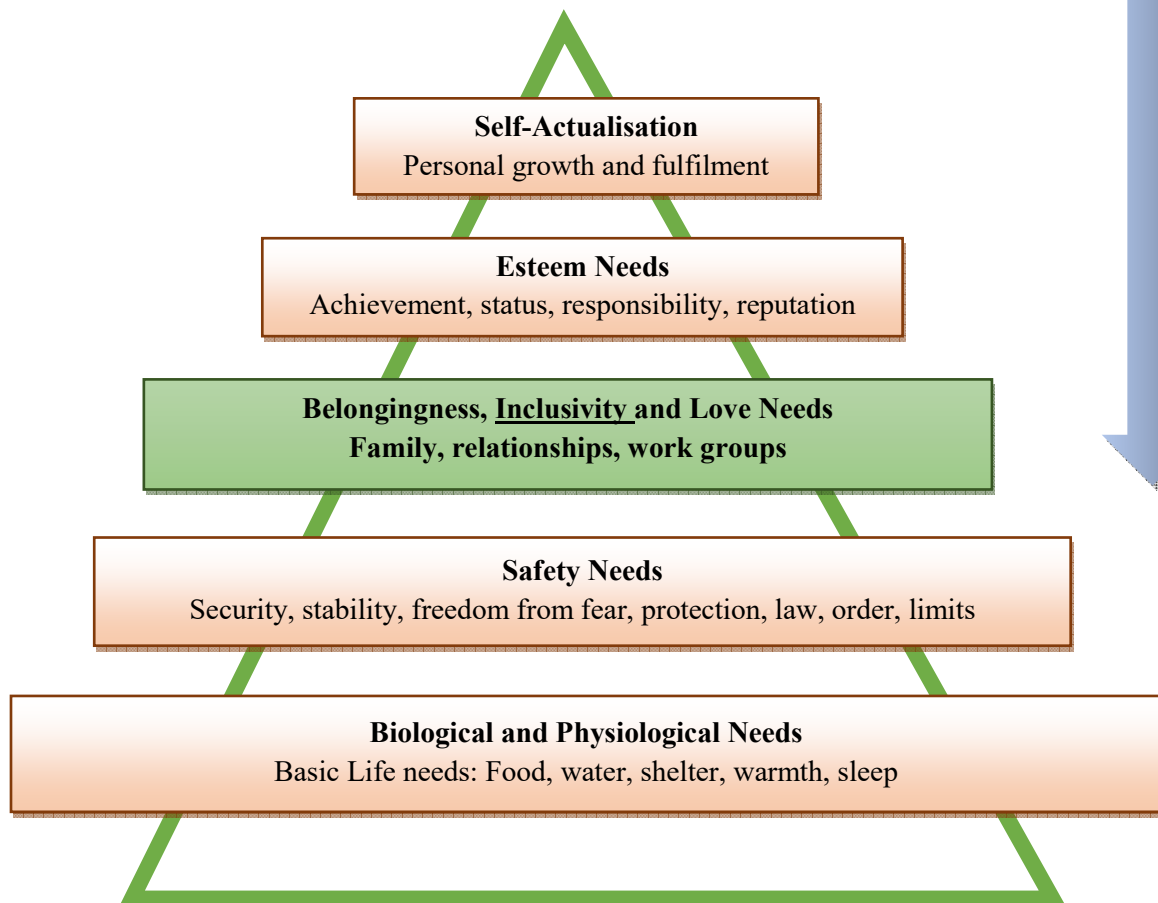
Figure 13: Proposed adaptation of Maslow's Hierarchy of Needs depicting "Inclusivity" (Psychlopedia, n.d.)

5.3.3 Social Model of disability

The university portrayed an image that reflected that it had transformed from the medical model to the social model of disability, however, such shifts require the university to move focus from the individual displaying the disability to the environment that forms barriers (Riddell et al., 2005). Barriers to SWDs within a university environment is illustrated in fig.14.

Figure 14. The Social Model of Disability (Accessible theatre, n.d.).

Based on the social model disability resulted from the social interaction between able-bodied people and PWDs as well as from the environment that posed barriers through structural, attitudinal and communication barriers (PWDA 2010-17). It, therefore, carries implications for change in order to enable PWDs to participate in society on an equal basis with others.

The application of the social model of disability is relevant to the study based on the following factors:

- The perspective of the social model does not deny the reality of impairment nor does it impact on the individual (PWDA 2010-17).

- Seeks to change society in order to accommodate PWDs and does not seek to change PWDs to accommodate society (Riddell, et al., 2005; Fuller et al., 2004).

- The focus is on transforming the environment to ensure barriers to students with disabilities are dealt with and removed (Riddell et al., 2005).

- The study embraced the understanding of Matshedisho (2007) who emphasised that disability could no longer be perceived as a tragic personal state requiring medical control. He acknowledged that the social model demands specifically that SWD had rights to support services and believed in the re-positioning of societies attitudes towards PWDs.

- The social model offers realistic opportunities for the empowerment and inclusion of PWDs (Shava, 2008).

- It is vital to listen to the experiences of SWDs and their recommendations and modifications to improve accessibility.

The study's relevance to the South African situation was pointed out by Subrayen (2011) who emphasised that the social model addressed challenges experienced because of disability, oppression and exclusion.

The study emphasised that the stairs in a building disabled the wheelchair user rather than the wheelchair (Integrated National Disability Strategy White Paper, 1997). As such, where one believed that problems resulted from interaction between SWDs and the environment, they

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were more able to meet students' needs when focus shifts from a person's disability/ies to individual specific needs (Office of Disability Employment Policy, 2015; Bradshaw & Mundia, 2006). Also applicable to the university context is that it is imperative that the needs of SWDs be considered in the planning and utilisation of all resources to ensure that every individual has equal opportunity for participation.

5.3.3.1 Findings in relation to the framework

The study outcome revealed that the social model interprets disability as a direct consequence of the failure of society to accept differing needs of PWDs and remove the barriers they encounter (Majinge, 2014). The university must provide what each learner requires to participate effectively within the process of teaching and learning and thus have access to the process of knowledge production within the institution. The study agrees with Subrayen (2011) that this may only be achieved through changes in the physical environment and paradigm shifts in the social construction of disability.

The study presented findings from Brandt (2011), Harbour, and Maudous (2011) where universal design instruction (UDI) aligns with the social model of disability in that it is an appropriate means to encourages creative and inclusive pedagogy. It also values learner differences by establishing universal methods of instruction and support required by SWDs and providing study materials and environments that enhance learning for all students as needed. The study revealed that universal design instruction is a much-needed instrument to foster inclusion in higher education settings in South Africa.

Based on Office of Disability Employment Policy (2015), of all the barriers PWDs face in their daily lives, the most difficult to overcome are attitudinal barriers. Negative attitudes of people such as misconceptions, misunderstanding, marginalisation, stereotyping and ignorance keep people from appreciating and experiencing the full potential of PWDs and what they can achieve (Office of Disability Employment Policy, 2015). This study concurred with Office of Disability Employment Policy (2015) and Bradshaw and Mundia (2006) in that an effective way of altering negative attitudes required exposure to and direct contact with SWDs through effective intervention strategies employed. One of these being the curriculum integration of Life Skill classes as discussed in section 4.4.3.1(c). The study revealed through its findings that a social barrier when interacting with SWDs, especially with students who are deaf or have hearing impairments, is to understand the importance of focusing ones attention directly on the SWDs and not the interpreter. This indicates social acceptance and aligned with Maslow's (1943) Hierarchy of needs theory given that with acceptance SWDs performed better (refer to section 4.4.4.2).
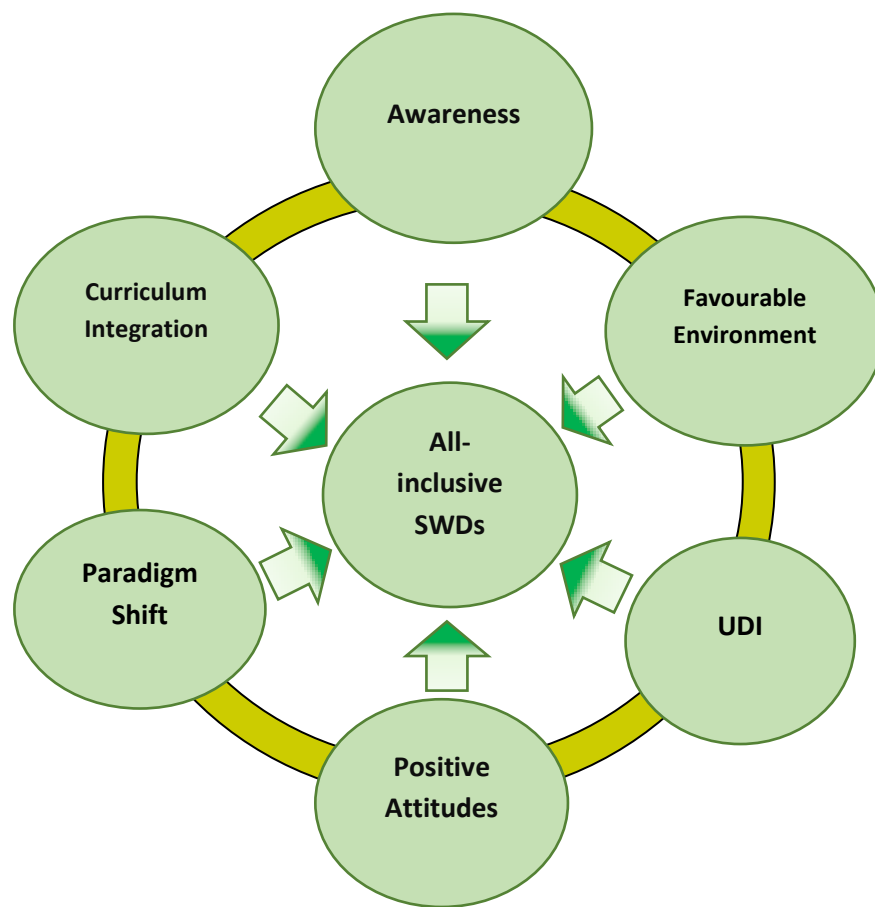
Figure 15. Implementation of the Social Model of Disability (Green, 2014)

This study is not meant to be the ultimate solution to barriers and challenges faced by SWDs but it attempts to highlight concerns surrounding the marginalisation of SWDs. The study suggests that embracing the social model of disability will benefit the university in creating an all-inclusive Higher Education environment with equal opportunities for all students (Shava, 2008). As such Figure 15 illustrates how the implementation of the social model of disability benefits SWDs. It was concluded in Scullion (2009) that being PWDs universally confers low social status. As such the implementation of the social model of disability at the university is essential due to its potential to challenge discriminatory thinking about SWDs.

Invariably, this makes the university a part of the solution to disability discriminatory thinking at both educational and societal levels (Scullion, 2009).

5.4 Chapter Summary

The chapter provided the key findings drawn from the analysis and discussion in the previous chapter. The study arrived at the following overriding aspects inherent in the research questions that depicted the essence of the studies outcome, that being, quality of advice and information, problems in teaching and learning, level of awareness, barriers to inclusion and the role of the university to applications and registration. An array of historical, attitudinal and structural barriers presented influenced the academic progress of SWDs. This chapter, shed light on the difficulties experienced by SWDs both current and prospective, promoting collective responsibility, awareness, acceptance and effective instruction for SWDs through the application of Systems Theory (Bevar & Becvar, 2014). This chapter extended to include Maslow's (1943) hierarchy of needs model where it introduced 'inclusivity', as an additional aspect of motivation at the 3rd level of the hierarchy. Finally this chapter embraced the Social Model of Disability (Riddell et al., 2005) illustrating the benefits of its implementation and its potential to challenge discriminatory thinking about SWDs. The manner in which the key findings were gathered and processed during the course of the study gave rise to recommendations and future research in the field of disability presented in the subsequent chapter that concludes the study.

Chapter Six

Conclusion, Recommendations and Limitations

6.1 Introduction

This chapter concludes the study and draws it to a close. It begins by briefly recapping the study's purpose and problem statement. It assesses if the research questions were answered with reference to the key findings in the preceding chapter (chapter 5) and if the objectives were fulfilled. Recommendations are provided within the context of disability in Higher Education in South Africa. Furthermore, it identifies a significant gap for the purposes of future research which will enable other researchers to build on and add value to a much needed area of study.

6.2 Problem statement, Research question and objectives of the study

6.2.1 Problem Statement overview

Whilst South Africa has made significant strides in terms of policy and legislation towards inclusive education for all, students with disabilities are still faced with many challenges in accessing Higher Education. A significant gap in the knowledge body was emphasised in this study (as shown in Chapter 1) which depicted a lack of research from a South African perspective into experiences and inter-personal relationships of SWDs within the context of a mainstream university community. The study was formulated around the academic inclusion of SWDs which involves their personal experiences, quality of advice, information and support provided at the University of KwaZulu-Natal. The study involved identifying the

primary academic-related factors in the teaching and learning process, as well as the attitudes, level of awareness and, assesses the barriers to inclusion. This included assessing student liaison, applications and the registration processes as proposed barriers within a mainstream university servicing SWDs. To achieve an in-depth understanding of the current status of SWDs, this research study was conducted in a two-part process which involved both the perspectives of SWDs and relevant staff members in a mainstream university setting. A qualitative inductive approached research was applied in the study to capture the essence of how disability is lived, experienced and approached from the perspective of relevant staff and SWDs at UKZN.

6.3 Discussion on the Research Questions

6.3.1   Part 1 and Part 2 : Research Question 1

The research question was properly answered. As shown in chapter 5 (section 5.2.1), the university did not fare well in terms of the quality of advice and information provided to SWDs. The university's lack of collaborative relationships with relevant stakeholders coupled with a lack of staff resources demonstrated that the university was not fully adapted to accommodate its growing number of SWDs. The university fosters a reactive approach to disability which emphasised discrimination as opposed to equity of access.

6.3.2   Part 1 and Part 2: Research Question 2

In addressing research question 2, on problems affecting teaching and learning in a Higher Education setting, it was found that SWDs held negative perceptions and feelings towards the

teaching and learning process at the university as they struggled to receive the necessary supports required to improve academically. As emphasised in chapter 5, (section 5.2.2), problem areas included communication, feedback and support structures for SWDs. The findings made reference to stigma and labelling caused by small classes equivalent to the noise factor in large venues that greatly disadvantaged students with hearing impairments or deafness. Furthermore, it was shown how access to lecture notes and learning material in inappropriate formats limited their ability to advance in the knowledge acquisition process. Students with disabilities were further disadvantaged because lecturers were unaware of them at lectures which resulted in poor accommodations. All of these impacted negatively on the teaching and learning process for students with disabilities.

6.3.3 Part 1 and Part 2: Research Question 3

In response to research question 3, this was seen as fulfilled. The study highlighted an urgent need to raise awareness of disability referred to in chapter 5 (section 5.2.3). Ignorance about reasonable accommodations, accessibility and alternative teaching strategies left SWDs to endure emotional and physical abuse. This resulted in disrespect and violation of a fundamental human right to education due to limited attention to legislation pertaining to disability. The research found that lack of awareness was shown to be a contributing factor to lower rates of retention, throughput and success amongst SWDs. The findings showed that although the university has made some progress with awareness initiatives it lacked definite platforms for SWDs to express their views. The university staff reflected little recognition and understanding of what disability entailed and therefore showed little awareness of the difficulties experienced by SWDs at the university. It emerged that the provision of adequate and appropriate accommodation for SWDs entailed understanding disability through

awareness and education. Awareness would ensure that lecturers were well informed and responded directly to the needs of SWDs.

6.3.4 Part 1 and Part 2: Research Question 4

In response to research question 4 concerning current barriers and challenges experienced by SWDs, a range of findings were elicited. With reference to chapter 5, section 5.2.4, barriers to accessing higher education in South Africa was rooted in its political and historical past and continues to limit the ability of SWDs. Attitudinal barriers reinforced discrimination as SWDs revealed that there remained racial matters in addition to arrogant and opinionated attitudes of the mainstream students. Physically apparent disabilities and associated stereotypical behaviour of staff and students challenged the inclusion of SWDs at the university. Such attitudes were found to be rooted in misinformation and misunderstandings about disability. English as a medium of instruction created language and communication barriers. Students with disabilities divulged that the university did not understand the structural needs from the perspective of SWDs. It was found that the structural environment had psychological implications for some SWDs. It exacerbated feelings of isolation, withdrawal and a reduced sense of belongingness.

6.3.5 Part 1 and Part 2: Research Question 5

The study's findings in response to research question 5 highlighted significant concerns regarding the applications and registration process in servicing SWDs. The key findings (as shown in chapter 5, section 5.2.5) revealed that to foster accessibility, a more collaborative approach was needed between high schools and university personnel to assist prospective SWDs. The study emphasised that knowledge and awareness of admission staff to the type

and extent of services available at the university was necessary to advise prospective SWDs and prepare them for the university. The study highlighted that disclosure of disability on enrolment ensured that appropriate support was made available to SWDs. Students with disabilities suggested that administrative aspects concerning registration should be done centrally at an accessible location. Aspects such as simplifying the applications process and providing more information in alternate formats were highlighted. Furthermore, SWDs expressed that website/web-based technology did not facilitate admissions, applications and registration for all students and requested that the university retain the manual application process. However, manual applications posed difficulties in terms of its accessibility and clarity of information. In addition, computer LANs were not ideally suited to SWDs and reflected various challenges as highlighted in chapter 5 (sections 5.2.5). In response to this research question, it was concluded that if SWDs voiced their dissatisfaction and negative experiences (as in the case of this study), it will shed some light on the difficulties experienced during the application and registration process and assist in creating a more disability-friendly university environment.

6.4 How the study fulfilled the intended Objectives

The study established a set of objectives.

6.4.1 Objective 1 (Part 1 and Part 2):

Objective 1 in relation to quality of advice and information was achieved in the study. The study provided evidence that the university does not meet the quality standards required and showed inadequacies in the ability of the university to service and sustain a growing number of SWDs in support of inclusivity. The findings indicated a desperate outcry from staff and SWDs to improve the available resources to better support SWDs.

6.4.2 Objective 2 (Part 1 and Part 2):

This objective was fulfilled. The study demonstrated that the teaching and learning process was severely compromised for students with disabilities. The university has not been proactive in providing appropriate means to assist SWDs. For instance, lecturers did not have the specialised training to adapt teaching strategies and skills to understand the diverse learning styles of SWDs (Refer to 6.3.2 above).

6.4.3 Objective 3 (Part 1 and Part 2)

This objective was met and it was shown that the university community showed little recognition and understanding about disability, therefore, showed lack of awareness. The study found limited adherence to policy and relevant legislature that promoted awareness of SWDs. Poor accommodation due to poor understanding and awareness indicated an urgent need to raise awareness of disability as it did not address access.

6.4.4 Objective 4 (Part 1 and Part 2)

The objective of the study was to understand the barriers to SWDs in relation to inherent, attitudinal and structural barriers experienced by SWDs. The study found that various critical barriers do exist and hinder access and inclusion for students with disabilities at the university (refer to Chapter 5, section 5.2.4)

6.4.5 Objective 5 (Part 1 and Part 2)

The study carried out its objective to assess the applications and registration process in terms of serving SWDs. The study indicated that SWDs were not well informed about the type and extensiveness of available support services at the university. In addition, the study emphasised a lack of knowledge and awareness of admission staff of the type and extent of services available at the university. Furthermore, whilst technology can be seen as an enabling tool, it was revealed that web-based technology did not facilitate admissions, applications and registration and was not always accessible to all SWDs (see above – section 6.3.5).

6.5 Recommendations made by this study

Recommendations applicable from the context of the study included the following:

6.5.1 Recommendation 1 -Revising the UKZN Policy (2004)

The study emphasised that the university consider revising the UKZN Policy for students and staff with disability (2004). A key policy priority should, therefore, be to mandate an action plan that can be used to develop interventions. There are a number of important changes which need to be made:

- Modification to the model of support at the university to enhance inclusivity

- Factor in disability within universities transformation plans

- An action plan for SWDs amidst student protest action at the university

- Providing platforms to give voice to SWDs in overcoming difficulties experienced and to support equity of access through various avenues to improve awareness, communication and understanding.

6.5.2   Recommendation 2 -Actively involve SWDs in decision making

It was revealed in the study that SWDs lacked platforms to express their problems and experiences regarding disability-related issues, and as such, they did not have a reliable means to provide information to assist policy-making and decision-making. A reasonable approach to tackle this issue that was touched on in chapter 5 (5.3.1), could be to actively involve SWDs to understand aspects about the type of adjustments required guided by what SWDs have proposed through various avenues including this study. In relation to psychological issues discussed in Chapter 5 (5.2.4), the university must focus on creating a culture of care and understanding to ensure all students felt a sense of inclusion and belongingness aligning with the values of the institution.

6.5.3 Recommendation 3–Simplifying the applications process

Another important practical recommendation emphasised in chapter 5 (5.3.4), would be to simplify the applications process and provide more information in alternate formats about the various admission and application processes. In addition, student respondents recommended that the application and registration process be more centralised for SWDs. The official signing of documentation concerning registration should be done centrally at an accessible location such as at the DSU and this should involve all stakeholders.

6.5.4 Recommendation 4– To improve understanding of disability

It became apparent from the study that in order to understand disability, one can accomplish this through direct interaction and exposure to SWDs. The study, therefore, encouraged dialogues between the Colleges, DSU staff and SWDs. These are highly essential in meeting disability-related needs, providing optimum level of support and effectively meeting the needs of specific academic programmes. Furthermore, improving the definition and scope of disability will help to define the range of responsibility that each staff member is tasked with to assist with role clarity.

6.5.5 Recommendation 5- Training and awareness staff and Academics

The study recommended that to facilitating the teaching and learning process a reasonable approach would include creating awareness of academics and lecturers through communication interaction and exposure to SWDs. In addition, the study placed emphasis on educating staff and academics by providing specialised training such as pre-service or in-service training, to enhance teaching strategies that align with the diverse learning styles of SWDS.

6.5.6 Recommendation 6- Implementation of Universal Design Instruction

The findings of this study had a number of important implications for future practice and recommended that further research is undertaken with regards to the implementation of Universal Design Instruction (UDI) discussed in chapter 2 and chapter 4. The implementation of Universal Design Instruction vests with the university's executive management. To encourage the implementation of UDI a pilot study can be conducted to gain knowledge, skills, and enthusiasm for its implementation. To efficiently and effectively assess it viability,

universal design can be implemented in stages to provide outcomes that have a maximum impact on inclusion. Furthermore UDI can be benchmarked against other international institutions that have successfully integrated UDI. It will also be beneficial to seek the expertise of Disability Specialist and discover how Universal Design Instruction can be effectively implemented to reveal maximum benefits in terms of curriculum design and inclusivity.

6.5.7 Recommendation 7- The proposed adaptation of Maslow's (1943) Hierarchy of needs theory

From a theoretical perspective, the study proposed an adaptation of Maslow's (1943) hierarchy of needs model to incorporate inclusivity as an additional aspects of motivation at the 3rd level of the hierarchy subject to further experimental investigations and rigorous testing (refer to chapter 5, section 5.3.2).

6.6 Limitations

6.6.1 Limitation 1–Sample size

The scope of this study was limited in terms of the sample set that was restricted to the College of Humanities (Howard College Campus) as this was where most of the SWDs were based (as noted in chapter 3 section 3.5 Table 4). However, future research could employ a sample set from all 5 campuses. As noted in chapter 3, section 3.5, it is important to ensure that the sample is representative of the population under investigation.

6.6.2   Limitation 2- Student protest action

Although the study has successfully demonstrated personal perceptions of SWDs, the research was not specifically designed to evaluate factors related to the outbreak of the 2016 student protest action. Data collection took place during a time of prolonged strike/protest action. This limitation, therefore, means that findings need to be interpreted with due consideration to such factors that may have influenced the responses and emotional states of the participants interviewed at the time. The impact extraneous variables, such as strikes or protest action, have on the research outcomes are important to qualitative researchers because credibility is established by giving due consideration to extraneous factors throughout the study. If they go unnoticed, the study could have misleading conclusions due to an oversight of extraneous factors that may significantly affect the interpretation of the studies outcome.

6.6.3 Limitation 3- Limited Studies from a South African perspective

The reader should bear in mind that the study draws on minimal local studies to support or contrast its findings. The study highlighted a gap presented in section (6.2.1) that there are not many studies of this nature in South Africa. As a result, it serves as a limitation to this study whereby few studies have been consulted to investigate and compare differences on the impact of non-inclusive university environments for South African Students with disabilities.

6.7 Directions for future researchers

It is recommended that further research is undertaken in the following areas:

- This research has generated many questions in need of further investigation. What is now needed is a cross-national, comparative study with a developed country that

applies Universal Design Instruction (UDI) and a South African university (such as UKZN) to improve the integrated and inclusive focus that the university tries to market.

- More research is required to determine the efficacy of curriculum integration for all university students with a focus on education and awareness of the diversity of its student population.

- A countrywide study utilizing mixed methods in incorporating a plan of action and guidelines for future protest action with a focus on safety and security concerns of SWDs in Higher Education Institutions in South Africa.

6.8 Chapter Summary

This chapter concluded the study and summarised the findings in relation to the research questions and objectives. This qualitative study explored and heard the voices of students with disabilities reveal their personal experiences and relationships with relevant stakeholders at the university. The data analysed in this study was derived from interviews with 20 participants from the University of KwaZulu-Natal. The study addressed critical questions in a two-part process focusing on staff and students with disabilities to understand perspectives from both sides.The researcher applied an inductive theoretical thematic analysis to examine the data from the interviews in contrast with existing literature to explain and support the results. Amidst significant strides made within a South African legislative context, the study found limited adherence or attention to legislation pertaining to disability.The study emphasised a gap in this field of study as more research needs to be undertaken within a South African context to promote positive perceptions, greater social awareness and address attitudinal and structural barriers to students with disabilities at Higher Education Institutions.

The University of KwaZulu-Natal provided a suitable environment to explore conceptions of normality, social dynamics of stereotyping, discrimination and exclusion. It also provided an avenue to assess the objectives of the study related to quality of advice and information, the applications and registration process in relation to students with disabilities. Despite a number of challenges and shortcomings that the university faces, the environment provides opportunities that the university can benefit from to bring about much-needed change. Through the study's aim, the researcher attempted to generate research-based knowledge that can help students with disabilities realise their full potential. The study was motivated by students with disabilities in relation to improving the conditions within the university supported by their personal experiences as well as the attitudes of all stakeholders.

To add value, this study created awareness by revealing the lived realities of students with disabilities within Higher Education Institutions and presented new avenues towards awareness, changing attitudes and effective instruction. In so doing it contributed to the body of knowledge and held potential for application in enhancing the eco-systemic and social environment of Higher Education Institutions in South African. The study found the social model of disability to be most applicable owing to the paradigmatic shift from SWDs to societal and structural barriers to inclusion. Systems Theory another framework applied in the study showed relevance by emphasising the importance of a collaborate/integrated approach to servicing students with disabilities. The study found Maslow's Hierarchy of needs theory applicable however an extension depicting 'inclusivity' at the 3rd level in the Hierarchy of Needs was proposed. The new information obtained from the research conducted at the University of KwaZulu-Natal aims to influence decision-making, policy formulation and collective responsibility within teaching and learning.

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APPENDIX A1

<h2 style="text-align:center"><u>Interview Schedule</u></h2>

<div style="text-align:center">

Questionnaire Part 1:

Participants interacting with Students with disabilities-

Academics and Support Staff

<u>Students with Disabilities at the University of Kwazulu-Natal (UKZN) - An integrated approach towards awareness and changing attitudes</u>

</div>

Participant's Name/Anonymous: _____

Title/Postheld at the University: _____

Campus   : _____

Division / Faculty   : _____

Department /School: _____

---

6. To access quality of advice, information and support given to academics and support staff involved with students with disabilities.

---

1. Do you consider your division to be adequately equipped to supports students with disabilities?
2. **Possible follow-up questions on answers to the primary question**:
   2.1 How are students with disabilities made aware of the services available to them by the division/University?
   2.2 Can you discuss some of your personal experiences/challenges with disabled students studying at the University of KwaZulu-Natal?
   2.3 What are the support systems, technical resources, devices, equipment/resources essential to facilitate the learning of students with disabilities at the University of KwaZulu-Natal?

---

2. To identify the main academically related problems in the teaching and learning process that affects students with disabilities.

---

1. How do lecturers and other staff members accommodate individual needs of students with disabilities within their programmes?
2. **Possible follow-up questions on answers to the primary question:**
   2.1 Explain the key challenges you faced and how you coped with these challenges?
   2.2 Why are students experiencing difficulties in communicating special needs to lecturers/staff?
   2.3 What are the problems that are affecting students with disabilities in the teaching and learning environment

1. Are the level of awareness of students with disabilities by staff and relevant/significant others affecting/influencing how students with disabilities are accepted in a mainstream University environment?
2. **Possible follow-up questions on answers to the primary question:**
   2.1 How do you deal with perceptions, stereotypes and other social attitudes of the lecturers or staff members at the University towards students with disabilities?
   2.2 What special considerations are implemented during exams or tests?
   2.3 What are your suggestions to improve awareness and understanding of the University populations on the various aspects of disabilities?

1. What are the barriers within your division that influence students with disabilities?
2. **Possible follow-up questions on answers to the primary question:**
   2.1 How has the University facilitated access to resources and essential services to help students with disabilities overcome existing barriers?
   2.2 How can the accessibility of resources be improved to facilitate access?

1. What services are provided by the Disability Services Unit/ to assist students with disabilities in the :
   1.1 Applications and registration process
   1.2 Corporate Relations Division/student liaison and recruitment
2. **Possible follow-up questions on answers to the primary question:**
   2.1 What has been put in place to make the web accessible to students with disabilities?
   2.2 What are your suggestions to the University to improve web accessibility for students with disabilities?

Do you have any other comments or suggestions?

THE END

APPENDIX A2

Interview Schedule

Questionnaire Part 2:

Students with Disabilities

Students with Disabilities at the University of KwaZulu-Natal (UKZN) - An integrated approach towards awareness and changing attitudes

Details of Participant

Did you attended a special or mainstream Secondary School?

What is the nature of your Disability (for the researcher's knowledge)?

What is your current year of Registration?

1. To assess the available quality of advice, information and support given to students with disabilities

1. Can you explain how you feel about current attitudes, in relation towards you as a learner/student with disabilities, of:
   1.1 Academics*(that you have had contact with)*
   1.2 Disability co-coordinators*(that you have had contact with)*
   1.3 Support staff*(that you have had contact with)*
2. **Possible follow-up questions on answers to the primary question**:
   2.1 How has this impacted on you?
   2.2 What other services should be provided that would help you with your studies?
   2.3 What are the problems/limitations/difficulties you encounter in your learning activities?

2. To get an in-depth understanding of feelings and perceptions of students with disabilities.

1. What are your personal challenges with regards to the services provided by:
   1.1 Academics
   1.2 Disability co-coordinators
   1.3 Support staff
2. **Possible follow-up questions on answers to the primary question:**
   2.1 What was your worst experience studying at the University of KwaZulu-Natal?
   2.2 What was the most positive experience at the University of KwaZulu-Natal?
   2.3 Do you have any comments or suggest about the services provided?
   2.4

3. To investigate current realities surrounding attitudes of students with disabilities towards the attitudes of academics, support staff and non-disabled students.

1. How do lecturers and other staff members accommodate your individual needs within their programmes?
2. **Possible follow-up questions on answers to the primary question**:
   2.1 How do you feel academics, support staff and non-disabled students affect/influence your attitude towards learning at the University?
   2.2 Do you experience difficulties in communicating your special needs to lecturers/staff?If yes, please explain why.
   2.3 How can this be improved?

---

3. To identify barriers and challenges faced by students with disabilities within a mainstream university environment

---

1. What were the challenges you faced within theUniversity environmentas a students with disabilities?
2. **Possible follow-up questions on answers to the primary question**:
   2.1 How did you cope with these challenges?
   2.2 What are your suggestions to improve understanding of members of the university community of your disability?
   2.3 What are your suggestions to the university to improve their services to help students with disabilities overcome existing barriers?
   2.4 How accessible are resources?(When can you use them, how do you get to or access venues/equipment)? How can this be improved?

---

5. To assess available services regarding the Applications and Registration process and Corporate Relations Division (student liaison and student recruitment) in servicing students with disabilities.

---

1. How well in your opinion was the University marketed to you as a scholar with disabilities with regards to the Application and Registration process.
2. **Possible follow-up questions on answers to the primary question**
   2.1 What in your opinion are the limitations that exist with regards to the Application and Registration process?
   2.2 How can this be improved?

Elect a representative to be interviewed

---

6. Which academic or support staff, in your opinion, will best represent you in a research interview with regards to your experiences within the mainstream University environment?
   Do you have any other comments or suggestions?

THE END

APPENDIX B

UKZN HUMANITIES AND SOCIAL SCIENCES RESEARCH ETHICS

COMMITTEE (HSSREC)

APPLICATION FOR ETHICS APPROVAL
For research with human participants

INFORMED CONSENT

Information Sheet and Consent to Participate in Research

Date: 11 September 2016

Dear Respondent,

My name is Jayshree Singh a Masters' student, in the School of Applied Human Sciences at the College of Humanities, at the UKZN. (031 260 7877/0828987223; singhj11@ukzn.ac.za)

Supervisor: Prof Buitendach (031 260 2407; Buitendach@ukzn.ac.za)
Co-Supervisor: Dr Sachin Suknunan (031 260 7057; suknunan@ukzn.ac.za)

I am conducting a research project for my Master's Degree. The title of my work is:

"Students with Disabilities at the University of KwaZulu-Natal (UKZN)-An integrated approach towards awareness and changing attitudes"

You are being invited to consider participating in a study that involves research formulated largely around enhancing the academic inclusion of students with disabilities which involves enhancing quality of advice, information and support given to students with disabilities by academics and support staff within a mainstream University environment. The research study focuses on the ability to make reasonable adjustments to teaching and learning, service provision and an understanding of the attitudes and awareness of students with disabilities to overcome barriers within an institutional environment. The study aims to motivate awareness and acceptance of diverse populations in a mainstream University environment. The study is expected to enroll, Academics, support staff and students with disabilities who will be interviewed in a two-part process. Approximately 15 students and 6 staff members will be interviewed at the College of Humanities on the Howard College Campus. It will involve the following procedure: interview schedules used as data collection instruments. Appointments will be made for each interview. The duration of your participation if you choose to enroll and remain in the study is expected to be approximately thirty minutes to an hour long.

Pre or post interview survey, should you require any further psychosocial support you may contact:

1. Primary: Disability Support Unit on your respective Campus
2. Secondary: College based Student support Centers related to your College"

This study has been ethically reviewed and approved by the UKZN Humanities and Social Sciences Research Ethics Committee (approval number: **HSS/1214/016M**).

In the event of any problems or concerns/questions you may contact the researcher at (using above stated contact details) or the UKZN Humanities & Social Sciences Research Ethics Committee, contact details as follows:

HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS ADMINISTRATION
Research Office, Westville Campus
Govan Mbeki Building
Private Bag X 54001
Durban
4000
KwaZulu-Natal, SOUTH AFRICA
Tel: 27 31 2604557- Fax: 27 31 2604609
Email: HSSREC@ukzn.ac.za

Participation in this research is voluntary and you may refuse to participate or withdraw from the project at any time with no negative consequence. Should you wish to withdraw from participation you will not incur penalty or loss of the benefit of psychosocial interventions available as treatment or other benefit to which you are normally entitled.

Your anonymity will be maintained by not identifying you in the thesis or in the dissemination of the research findings. Confidentiality of records identifying you as a participant will be maintained and securely stored by the School for a period of five years, after which such documents will be disposed of in accordance with supervisors/School/Ethics Committee.

CONSENT

I, _____have been informed about the study entitled "Students with Disabilities at the University of KwaZulu-Natal (UKZN)-An integrated approach towards awareness and changing attitudes" by Jayshree Singh.

I understand the purpose and procedures of the study.

I have been given an opportunity to answer questions about the study and have had answers to my satisfaction.

I declare that my participation in this study is entirely voluntary and that I may withdraw at any time without affecting any of the benefits that I usually am entitled to.

I have been informed about any available compensation or medical treatment if injury occurs to me as a result of study-related procedures.

If I have any further questions/concerns or queries related to the study I understand that I may contact the researcher at (031 2607877/0828987223 or singhj11@ukzn.ac.za).

If I have any questions or concerns about my rights as a study participant, or if I am concerned about an aspect of the study or the researchers then I may contact:

HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS ADMINISTRATION
Research Office, Westville Campus
Govan Mbeki Building
Private Bag X 54001
Durban
4000
KwaZulu-Natal, SOUTH AFRICA
Tel: 27 31 2604557 - Fax: 27 31 2604609
Email: HSSREC@ukzn.ac.za

Additional consent, where applicable

I hereby provide consent to:

Audio-record my interview / focus group discussion	YES / NO
Video-record my interview / focus group discussion	YES / NO
Use of my photographs for research purposes	YES / NO

_____   _____
Signature of Participant   **Date**

_____   _____
Signature of Witness   **Date**
(Where applicable)

_____   _____
Signature of Translator   **Date**
(Where applicable)

APPENDIX C

Sentences drawn from word tree concerning attitudes:

Words	Sentences
Attitude	Requires change and adjustment on the part of both staff and students.
Optimistic	An optimistic approach to diversity depends on how people understand disability.
Positive	The University environment must promote learning, through positive attitudes towards disability.
Motivate	The university requires shifting attitudes to motivate change in incorporating students with disabilities.
Learning	The university needs to enhance the achievement of a positive learning environment for students with disabilities.
Influence	Understanding influences learning.

Noteworthy sentences drawn from the above word tree:

Words	Sentences
Attitudes	Disability coordinator's attitudes affected performance tremendously.
Responsible	Disability coordinator and the operation of the DSU are fundamentally responsible for meeting disability-related needs.
Challenges	Disability coordinator accepts differing needs of PWDs and removes the challenges they encounter.
Support	Disability coordinator confirms the university could do better with more disability related support.
Understanding	Disability Coordinator asserted that lack of understanding lead to negative attitudes.
Resources	Disability Coordinator felt incapacitated due to resource constraints.

Word tree of particular interest concerning physical aspects:

Words	Sentences
Wheelchair	Venues with ramp accesses is required for students on wheel chair.
Students with Physical Disabilities	Students with physical disabilities fit the stereotypical definition of disability.
Impairment	
Physically apparent	People usually think of disability when they are able to physically detect it.
Psychological	Obstacles in the structural environment at the university that displaces into the psychological domain.
Structural environment	The university's structural environment caused SWDs to avoid certain routes around the university.
Ramps	Ramps were inaccurately constructed.

APPENDIX D

UNIVERSITY OF
KWAZULU-NATAL

INYUVESI
YAKWAZULU-NATALI

16 September 2016

Mrs Jayshree Singh 209538421
School of Applied Human Sciences
Howard College Campus

Dear Mrs Singh

Protocol reference number: HSS/1214/016M
Project title: Students with Disabilities at the University of KwaZulu Natal (UKZN) – An integrated approach towards awareness and changing attitudes.

Full Approval – Committee Reviewed Protocol
With regards to your response to received 13 September 2016 to our letter of 05 September 2016, the Humanities & Social Sciences Research Ethics Committee has considered the above mentioned application and the protocol has been granted Full **Approval**.

Any alterations to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach/Methods must be reviewed and approved through an amendment /modification prior to its implementation.   Please quote the above reference number for all queries relating to this study. Please note: Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter Recertification must be applied for on an annual basis.

Best wishes for the successful completion of your research protocol.

Yours faithfully

Dr Shenuka Singh (Chair)

/px

cc Supervisor: Prof JH Buitendach
cc Academic Leader Research: Dr TS Magojo
cc School Administrators: Ms Ayanda Ntuli

APPENDIX E

UNIVERSITY OF ™
KWAZULU-NATAL

INYUVESI
YAKWAZULU-NATALI

23 May 2016

Mrs Jayshree Singh (SN 209538421)
School of Social Sciences
College of Humanities
Howard College Campus
UKZN
Email: singhj11@ukzn.ac.za

Dear Mrs Singh

RE: PERMISSION TO CONDUCT RESEARCH

Gatekeeper's permission is hereby granted for you to conduct research at the University of KwaZulu-Natal (UKZN), towards your postgraduate studies, provided Ethical clearance has been obtained. We note the title of your research project is:

"Disabled students at the University of KwaZulu-Natal (UKZN) – An integrated approach towards awareness and changing attitudes".

It is noted that you will be constituting your sample by conducting interviews with staff members as well as disabled students from the College of Humanities on the Howard College Campus.

Please ensure that the following appears on your questionnaire/attached to your notice:
* Ethical clearance number;
* Research title and details of the research, the researcher and the supervisor;
* Consent form is attached to the notice/questionnaire and to be signed by user before he/she fills in questionnaire;
* gatekeepers approval by the Registrar.

Data collected must be treated with due confidentiality and anonymity.

Yours sincerely

**MR SS MOKOENA
REGISTRAR**

APPENDIX F

Students with Disabilities at the University Of KwaZulu-Natal –
An Integrated Approach towards Awareness and Changing
Attitudes