REASONS FOR INCLUDING/EXCLUDING LEARNERS WITH PERMANENT MOBILITY IMPAIRMENTS IN MAINSTREAM HIGH SCHOOLS IN EAST LONDON

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ABSTRACT

Internationally, ensuring that all persons, in particular the vulnerable and marginalised, have access to their human rights is advocated now more than ever. Access to education is one of these rights. For persons with disabilities, which includes learners with permanent mobility impairments (PMIs), realising the right of access to education can be achieved through developing an inclusive education system. This study set out to understand what mainstream high schools in East London consider as challenges in enrolling and accommodating learners with PMIs, and how decisions are based to include or exclude these learners.

A cross-sectional, descriptive study, using a mixed methods design and which was exploratory in nature was used to address the study aim and objectives. The method of inquiry was achieved through survey research. The study setting was East London, in the Eastern Cape, South Africa. The study population comprised 21 mainstream high schools in the city, as represented through a member of the educational staff. Only 12 schools (57%) actually participated in the study. These schools were either public or independent, English-, Afrikaans-, isiXhosa- or bilingual-medium, single gender or co-educational schools, with or without learners with PMIs in the school in urban or peri-urban East London. No sampling was done. Data was collected via e-mail through a self-administered questionnaire.

It was found that four learners with PMIs were enrolled in the participating schools. The majority of participating schools did not receive applications from learners with PMIs. The greatest barrier to inclusion was related to infrastructure challenges. I had the impression that the participants' understanding of 'inclusion' and 'mainstreaming' was confused, and it appeared that the main idea was to mainstream.

Recommendations made for practice include completing access audits of mainstream high schools, developing human resources, developing consulting services, monitoring the implementation of the Education White Paper 6, and making global changes in line with inclusion of persons with mobility impairments. It is hoped that this study might serve as a pilot study for a provincial study in the Eastern Cape. Such a study should determine the prevalence of learners of high school age with PMIs,

and the percentage of these learners in mainstream high schools. Further, it could determine perspectives regarding inclusion of learners with mobility impairments in mainstream high schools from all involved stakeholders. A study could also be conducted to determine whether or not, and why, learners with PMIs apply for enrolment in mainstream high schools.

Key words: mobility impairment, physical disability, physical impairment, enrolment, admission, mainstream, high schools, inclusion and exclusion

ABSTRAK

Die internasionale neiging is om te probeer verseker dat alle individue, en spesifiek die wat deel vorm van marginale groepe, soos mense met gestremdhede, se regte beskerm word. Toegang tot onderwys is een van dié regte. `n Inklusiewe onderwysstelsel kan help om die reg tot onderwys te verseker vir persone met gestremdhede, insluitend leerders met permanente mobliteitsgestremdhede. Die doel van die studie was om vas te stel watter uitdagings hoofstroom hoërskole in Oos-Londen voorsien of ervaar met die toelating van leerders met permanente mobiliteitsgestremdhede in die skole. Verder wou die navorser ook vasstel op grond waarvan leerlinge met permanent mobiliteitsgestremdhede in die skool toegelaat word al dan nie.

`n Beskrywende, dwarssnitstudie was gedoen. Beide kwalitatiewe en kwantitatiewe navorsingsmetodes is gebruik om te verseker dat die doel van die studie ten volle aangespreek kon word. Die metode van ondersoek was deur opname-ondersoek behaal. Die studie was in Oos-Londen, in die Oos-Kaap Provinsie van Suid-Afrika gedoen. Die studiepopulasie het bestaan uit 21 hoofstroom, hoërskole in die stad. Geen steekproefneming was gedoen nie. Twaalf van die skole het toestemming verleen om aan die studie deel te neem. Data is ingesamel by die 12 skole (57%). Demografiese eienskappe van die skole het gewissel: daar was openbare en onafhanklike skole, Engels, Afrikaans, isiXhosa en tweetalige skole, enkelgeslag en gemengde skole, en skole met en skole sonder leerders met permanente mobiliteitsgestremdhede in stedelike of peri-stedelike Oos London. Data is ingesamel deur `n vraleys wat deur die deelnemers self voltooi was. Die vraelys is deur middel van e-pos of per hand by die skole afgelewer.

Die studie het bevind dat daar vier leerders met permanente mobiliteitsgestremdhede in die deelnemende skole ingeskryf was. Die meerderheid van die deelnemende skole het geen aansoeke van leerders met permanente mobiliteitsgestremdhede ontvang nie. Volgens die deelnemende skole sal ontoeganklike infrastruktuur die grootste struikelblok veroorsaak met die toelating van leerders met permanente mobiliteitsgestremdhede. Voorts wou dit voorkom asof die fokus van skole nie op inklusiewe onderring was nie, maar eerder op die aanpassing van indivudele leerlinge by die hoofstroom.

Die volgende aanbevelings uit die studie behoort te help om inklusiewe onderrigspraktyke te vestig in die studie skole: Toeganklikheidsoudits van die hoofstroom hoërskole, ontwikkeling van menslike hulpbronne, konsultasie met raadgewende dienste, die monitering van die implementering van die Onderwys-Witskrif 6, en globale veranderinge om persone met mobiliteitsgebreke te akkommodeer.

Verder kan hierdie studie dien as 'n loodsstudie vir 'n soortgelyke provinsiale studie in die Oos-Kaap. Dié studie kan poog om die prevalensie van leerders met permanente mobiliteistgestremdhede van hoërskool-ouderdom in die provinsie te bepaal asook watter persentasie van die leerders in hoofstroom hoërskole is. Voorts kan die studie die perspektiewe van al die betrokke belanghebbendes bepaal. 'n Studie kan ook gedoen word om te bepaal of leeders met permanente beperking in mobiliteit wel aansoek doen vir inskrywing in die hoofstroom hoërskole.

Sleutel woorde: beperkte mobiliteit, fisiese gestremdheid, toelating, hoofstroom, hoërskole, inklusiewe onderring

ACKNOWLEDGEMENTS

DEFINITIONS OF TERMS

Disability:

Is caused by the complex interactions between the effects of impairment (body structure or body function problems), activity limitation/s (the difficulty an individual encounters when performing a task), participation restrictions (difficulty an individual experiences in involvement in their life setting), and environmental and personal factors (WHO, 2011).

Education:

"Education is about all people being able to learn what they need and want throughout their lives, according to their potential" (WHO, 2010: 5).

High school:

In South Africa, these are educational institutions providing education for grades 8-12 (Department of Education (DOE), 2001).

Inclusion:

Responding to the variety of needs found amongst all learners with the aim of increasing participation in education and society and minimizing marginalisation (DOE, 2002).

Inclusive education:

Occurs when children are equally accommodated in a school, despite their impairment or disability, to receive an education by addressing barriers experienced in education and learning. It is focussed on ensuring the right of all learners to a quality education (DOE, 2002).

Independent school:

Is a learning institution which is not registered with the Department of Education as a public school or Adult Basic Education and Training centre (ABET) (DOE, 2011).

Learner/s:

Also known as pupil/s, is an individual who receives education from a learning institution (DOE, 2002).

Mainstreaming:

Where focus is placed on what changes are needed in the individual in order for him/her to fit into the existing education system (DOE 2001).

Mainstream school:

Is an educational institution which provides equal education to all learners (Archer, Green & Pooler, 1992).

Mobility impairment:

Difficulty and limitations with standing for long periods, walking or climbing stairs (Lezioni, McCarthy, Davis & Siebens, 2000) as a result of body structure or body function problems (WHO, 2011).

Public schools:

Are government funded educational institutions/schools (DOBE, 2011).

School principal:

Also known as the headmaster, is the educator who acts as the head of the school (DOE, 1996).

Secondary education

Is additional education provided by high schools, beyond the compulsory-primary level education as specified in the South Africans Schools Act of 1996, which for children with disabilities can mean a gateway to a fulfilled life (WHO, 2010).

Special schools:

Are schools that provide learners with disabilities with specialized services (WHO, 2011).

ABBREVIATIONS

ABET   Adult Basic Education and Training Centre

ACPF   African Child Policy Forum

DOE   Department of Education

DOBE   Department of Basic Education

ICF   International Classification of Functioning

PMI(s)   Permanent Mobility Impairment(s)

SABS   South African Bureau of Standards

TMI(s)   Temporary mobility impairment(s)

UN   United Nations

UNESCO   United Nations Education Scientific and Cultural Organization

UNESCAP   United Nations Economic and Social Commission of Asia and the Pacific

UNICEF   United Nations Children's Fund

WHO   World Health Organization

TABLE OF CONTENTS

LIST OF TABLES AND FIGURES

CHAPTER ONE

ORIENTATION TO STUDY

1.1   Background to the study and the study problem

Education is a fundamental aspect of development and is especially important for children who are disadvantaged or marginalised in society, including children with disabilities (Aron & Loprest, 2012). However, children with disabilities encounter challenges in accessing education (DOE, 2001), thus, leaving them vulnerable to a life of poverty (Singal, Jeffery, Jain & Sood, 2011; Statistics South Africa, 2012). Education can be considered as a means to alleviate poverty and to improve one's quality of life (Loeb, Eide, Jelsma, Ka Toni & Maart, 2008; Braathen & Loeb, 2011). Furthermore, education provides learners with a platform to acquire and develop the social and technical skills needed for adulthood (Hemmingson, Gustavsson & Townsend, 2007).

Having access to education has been acknowledged as a basic human right (South Africa. Parliament, 1996; Cole, 2005; Loeb *et al.,* 2008). In addition, the emergence of the social model of disability directed attention to inclusive education (Anthony, 2011; Chataika, McKenzie, Swart & Lyner-Clephas, 2012). Global trends rooted in the human rights ideology have advocated for a shift from segregated education of children with disabilities towards inclusive education systems (Peters, 2001; Curtin & Clarke, 2005; Abbott, McConkey & Dobbins, 2011; Forlin, 2011).

In the last few decades, many countries have focussed on integrating special education into mainstream education (Lomofsky & Lazarus, 2001; Peters, 2001) and afford learners with disabilities the opportunity to participate equally in mainstream schools (UNESCO, 1994; Peters, 2001; Pillay & Di Terlizzi, 2009; Walton, Nel, Hugo & Muller, 2009; Abbott *et al.,* 2011; Anthony, 2011; Forlin, 2011; Ngcobo & Muthukrishna, 2011). This is reflected in numerous international guidelines (Lomofsky & Lazarus, 2001) such as the United Nations Declaration of Human Rights 1948 (UN, 1948), the United Nations Convention on the Rights of the Child (UN, 1990), the World Conference on Education for All, 1990 (UNESCO, 1990), the Salamanca Statement, 1994 (UNESCO, 1994), the United Nations Convention on the Rights of Persons with Disabilities 2006 (UN, 2006), the Dakar

Framework for Action 2000 (World Education Forum, 2000), and the Millennium Development Goals 2000 (UN, 2000). A universal goal of these guidelines is for learners with disabilities to be able to participate equally in mainstream schools (Peters, 2001; Curtin & Clarke, 2005; Abbott *et al.,* 2011; Forlin, 2011).

International trends and developments have had a significant influence on the way education for children with disabilities is approached in South Africa (Lomofsky & Lazarus, 2001). South Africa has followed global trends to address issues of discrimination and exclusion of learners with disabilities (Walton *et al.,* 2009; Ngcobo & Muthukrishna, 2011; Pather, 2011). The South African Constitution enshrines the values of dignity, equality and freedom, and the right to education (South Africa. Parliament, 1996). The South African Schools Act, No. 84 of 1996 (DOE, 1996) was developed in support of the Constitution and mandated that education is compulsory for all learners aged between seven and fifteen (Lomofsky & Lazarus, 2001). The Education White Paper 6 was developed in 2001 to respond to the diverse range of learning needs found amongst South African learners and as a strategy to remove barriers to learning (DOE, 2001). It emphasizes that special learning needs arise from an inflexible education system and not from the learner (DOE, 2001). According to the Education White Paper 6, improved inclusion and participation of learners with disabilities should occur through identifying and addressing these needs (DOE, 2001). However, developing an inclusive education system as envisioned by the above policies has emerged as a huge challenge (Lomofsky & Lazarus, 2001). Learners with disabilities are still often denied the right to education and equal participation through exclusion from education systems, globally and in South Africa (Schur, 2002; Curtin & Clarke, 2005; Heung, 2006; Kearney & Kane, 2006; Lingard & Mills, 2007; Mitchell, Moletsane & de Lange, 2007; Loeb *et al.,* 2008; Anthony, 2011; Groce & Bakhshi, 2011; Kalyanpur, 2011; Miles, 2011; Pather, 2011; Singal *et al.,* 2011; Trani, Kett; Bakhshi & Bailey, 2011; Statistics South Africa, 2012).

Learners with disabilities may face a vast range of learning challenges as a result of physical, intellectual and or cognitive impairments, behavioural and psycho-social disturbances, and socio-economic deprivation (DOE, 2001). In addition, challenges to their learning arise as a result of an

education curriculum which is inflexible and inaccessible, as well as inappropriate building infrastructure, inappropriate and inadequate support services, stereotyping and negative attitudes, policies and legislation which are not supportive of inclusive education, and insufficiently-trained education staff (DOE, 2001).

It is important for the education system to respond to these challenges and to include learners with special needs in mainstream schools through accommodating the variety of needs of all learners (DOE, 2001). Not addressing individual needs can cause failure to learn effectively and inequality in the education system (DOE, 2001; Peters, 2001).

Developing an inclusive education system does not transpire without challenges (Pillay & Di Terlizzi, 2009). The quest of changing the educational environment into a more inclusive one requires the collective collaboration of all stakeholders (Ainscow, Farrell, Tweddle & Malki, 1999; Danso, Owusu-Ansah & Alorwu, 2012). These stakeholders have all, over time, developed different understandings of disability and inclusion of persons with disabilities in the education system (Carrington & Robinson, 2006). Research, specifically local research (Walton *et al.,* 2009), that aims to understand what challenges and barriers each involved stakeholder experiences and foresees, and exploring why exclusion of learners with disabilities occurs, is therefore essential for effectively implementing inclusive educational practices (Peters, 2001).

1.2   Motivation for the study

I developed an interest in inclusion of learners with disabilities in mainstream schools while I was working as a Physiotherapist in East London. Many of my clients were learners from the mainstream high schools in East London who sustained injuries that lead to temporary mobility impairments (TMIs). Clients and their families raised concerns about whether the client would be able to return to school while having impaired mobility. I began to reflect on the complexities and challenges which could arise. As this topic unfolded, I began to question how learners with permanent mobility impairments (PMIs) enter the education system and how they are integrated and included in the education system. I consulted literature on the issue and found there was paucity in the literature regarding this issue.

There are many learners with disabilities unaccounted for in South Africa's education system (DOE, 2001). In addition, many learners with disabilities who should ideally be enrolled in mainstream schools are enrolled in special schools (DOE, 2001). A common belief is that schools allow 'normal' learners to enrol in mainstream schools more easily than they do learners with disabilities (Jansen, 2008-2009). Research is needed to determine why mainstream high schools are able–or unable–to accommodate learners with disabilities. This study focused on a specific group i.e. learners with PMIs. No statistics could be found documenting the prevalence of PMIs amongst persons of high school age in the East London region. Similarly, no data could be found on the number of learners with PMIs enrolled in mainstream high schools in East London.

Morgan and Hogan (2005) reported that an unexplored field in inclusive education research is the perspective of school administrators who ultimately make the decisions regarding placement of learners. Similarly, research on inclusive education in South Africa focussed either on the individual learner or at a larger systems level (Walton *et al.,* 2009). According to Walton *et al.* (2009), research on the experience and opinion of various representatives from schools is also needed.

In this study, where reference is made to perspectives, experiences and opinions of mainstream high schools, mainstream high school collectively describes representatives of the mainstream high schools staff, i.e. either the headmaster, deputy headmaster, a teacher or administrative personnel who participated in the study.

Limited research has been done to determine what the perspectives are from mainstream high schools on what challenges and barriers they experience with enrolling and accommodating learners with PMIs. Research pointed out the importance of collaboration between all involved stakeholders in making inclusive education practices a reality. Hence, the current study evolved.

1.3   Study aim and objectives

1.3.1 Research question

What are the reasons for including or excluding learners with PMIs in mainstream high schools in East London?

1.3.2 Study aim

To determine the reasons for including and excluding learners with PMIs according to mainstream high schools in East London.

1.3.3 Study objectives

- To ascertain whether learners with PMIs are included or excluded from mainstream high schools in East London.

- To identify the reasons, from the mainstream high schools in East London, for including and excluding learners with PMIs.

- To identify and describe what challenges the mainstream high schools in East London experience/d or foresee in enrolling learners with PMIs in the school.

1.4   Significance of the study

The study provides us with an improved understanding of reasons why inclusion and exclusion of learners with PMIs in mainstream schools occurs in East London. This information can be used to address those reasons provided by the schools and to ensure greater levels of inclusion of these learners. The knowledge and information gained in the study will be shared with the Eastern Cape Department of Education, which can use the findings to enhance strategies to ensure inclusive education in East London. The findings can be used to motivate for funding and resources from the Department of Education to assist the mainstream high schools in accommodating learners with PMIs.

Enhanced inclusive educational practices are one of many ways society can gradually begin to breakdown walls and barriers persons with disability encounter. Through raising awareness, this study may help reduce discrimination experienced by learners with PMIs and enable them to have access to the same educational opportunities as other learners. Improving on inclusive education and increasing the number of learners with PMIs in mainstream high schools may also, over time, result in a change in attitudinal barriers experienced by these learners. The significance of this would be in creating a community mind shift from the medical model approach to disability, to an inclusive, rights-based approach. (See sections 2.4 and 2.7.1 below.) If change can be brought about on a small scale, such as

in East London mainstream high schools, it can set an example for the rest of the Eastern Cape and South African mainstream schools.

This study made use of a relatively modern data collection method using the internet and e-mail survey research as the method of inquiry. This method fits into the information age. "Future qualitative researchers will undoubtedly add the Internet and e-mail to the craftsmanship of interviewing" (Hamilton & Bowers, 2006: 834). Valuable lessons on using this medium for data collection are shared in Chapter Five.

1.5   Outline of the study

Chapter One provided the reader with an orientation to the study. In this chapter, the background of the study, its aim and objectives and the motivation and significance of the study were given.

Chapter Two comprises the literature review and elaborates on the importance of education, persons with disabilities as a marginalised group, and the development of inclusive education in developed and developing countries. It then discusses the course, progress and struggles in South Africa in developing an inclusive education system. Complexities encountered with inclusion, and what is required to develop an inclusive education system are also discussed.

Chapter Three discusses the research design and study methodology in detail. In this chapter, the researcher expands on the rationale for the choice of study design and data collection method.

Chapter Four displays the quantitative and qualitative results obtained.

Chapter Five discusses the results and findings of the study in an integrated manner against the backdrop of the study aim and objectives.

Chapter Six forms the concluding chapter and endeavours to provide answers to the study question by drawing conclusions from the study findings. This chapter concludes with the limitations of the study and recommendations for practice and further research.

CHAPTER TWO

LITERATURE REVIEW

2.1   Introduction

This chapter explores the significance of education as a fundamental right of every person and the meaning it can have for a child with a disability. It also distinguishes between inclusion and mainstreaming in education: understanding these concepts are key factors in relation to this study. Chapter Two further looks at the development of inclusive education at an international level in developed and developing countries, and then specifically in the South African context. The chapter concludes by highlighting barriers and challenges that are faced in making inclusive education a reality as identified by previous studies, stressing the importance of involving all stakeholders.

2.2   The significance of education

"The future of every community or country is determined by the level of education of its citizens of which persons with disabilities form part" (Danso *et al.,* 2012: 9). Education is the door which opens employment possibilities (Schur, 2002; Groce & Bakhshi, 2011; Aron & Loprest, 2012; Chataika, *et al.,* 2012; UNICEF, 2013) and one of the surest ways out of poverty (Braathen & Loeb, 2011). Amongst persons with disabilities, the prevalence of unemployment is higher and the level of income is lower than persons without disabilities (World Education Forum, 2000; Schur, 2002; Groce & Bakhshi, 2011; Statistics South Africa, 2012). Loeb *et al.* (2008) argue that alleviating poverty can be achieved through access to education, employment and health care services. Having access to education, employment and health care services are basic needs, and they are also basic human rights (South Africa. Parliament, 1996; Cole, 2005; Loeb *et al.,* 2008; UNICEF, 2013). Persons with disabilities encounter challenges in accessing these basic human rights, which makes them vulnerable to poverty (Singal *et al.,* 2011; WHO, 2011; Statistics South Africa, 2012; UNICEF, 2013).

In addition to education's positive impact on poverty, schooling is a vital aspect of a developing child's life (Aron & Loprest, 2012). It is critical in facilitating social and technical skills needed for adulthood and employment (Hemmingson *et al.,* 2007). This is particularly true for children who are

already experiencing challenges as a result of disability in terms of social and economic inclusion and opportunities (Peters, 2001; Aron & Loprest, 2012; Chataika *et al.,* 2012; UNICEF, 2013). For children with disabilities, access to education can bring the promise of living a life where they can be stimulated intellectually, socially satisfied, develop the aptitude to be economically productive, and have the ability to take control of their health while growing up and in their later years (Aron & Loprest, 2012; UNICEF, 2013). However, many learners with disabilities have difficulty in accessing even basic education (ACPF, 2011).

Recent studies have indicated that we need to move away from the preconceived idea that learners with disabilities should be protected from society in segregated institutions and move towards inclusion of such learners in mainstream schools (DOE, 2001; Lomofsky & Lazarus, 2001; Peters, 2001; Pereira, La Cour, Jonsson & Hemmingson, 2010; WHO, 2011). This implies that the education system needs to respond to unacceptable education experiences of learners with disabilities by including and appropriately accommodating learners with disabilities in mainstream schools (DOE, 2001).

2.3   Inclusion, integration, mainstreaming and special needs

The words 'mainstream' and 'inclusion' are often used interchangeably, even though there are clear differences between them (DOE, 2001; Lomofsky & Lazarus, 2001). 'Inclusion' can be understood as a value system that embraces diversity amongst learners, and the *education system, curriculum and environment are to be modified* to accommodate this diversity (Mittler, 2000: 10). By comparison, Mittler uses 'integration' as placing learners in mainstream schools *where the learner needs to be the one who adapts to the school (*Mittler, 2000: 10). Confusion arises because different authorities understand these concepts differently. This is apparent when comparing the definitions provided by Mittler (2000) and the South African Department of Education. The DOE's (2001) definition of 'mainstreaming' is similar to Mittler's (2000) definition of 'integration', i.e. it focusses on the *changes needed in the learner* for the learner to be fitted into a 'normal' classroom or existing system.

However, most authorities agree that 'inclusion' can be considered a moral and human rights concern (Mittler, 2000; DOE, 2001; Peters, 2001; Cole, 2005; Curtin & Clarke, 2005; Abbott *et al.,* 2011). In inclusive education, the focus is on addressing and overcoming *barriers in the education system* that pose challenges to the different learning needs of learners and the aim is directed towards addressing and adapting the available systems to support the needs of all learners (DOE, 2001; Peters, 2001). In this study, the definitions for 'inclusion' and 'mainstreaming' as offered by the DOE (2001) were adopted.

A close link exits between inclusion and exclusion in education and inclusion and exclusion in society (Macrae, Maguire & Milbourne, 2003). Therefore inclusive education can be regarded as serving a greater purpose: towards developing an inclusive society and upholding human rights (Mittler, 2000; DOE, 2001). 'Special needs' can be defined as challenges and difficulties which are encountered by an individual when they interact with their environment (Mittler, 2000; DOE, 2001; Lomofsky & Lazarus, 2001).

2.4   Persons with disabilities: a marginalised group

Persons with disabilities form part of a group which have been, and in some places, still are, marginalized in society (Schur, 2002; Curtin & Clarke, 2005; Heung, 2006; Kearney & Kane, 2006; Mitchell *et al.,* 2007; Loeb *et al.,* 2008; Anthony, 2011; Groce & Bakhshi, 2011; Kalyanpur, 2011; Miles, 2011; Pather, 2011; Singal *et al.,* 2011; Trani *et al.,* 2011; Statistics South Africa, 2012). Isolation of persons with disabilities has significant impact on their living conditions (UNESCO, 1990) as they encounter discrimination in most aspects of their lives (Danso *et al.,* 2012). Stigma is one of many forms of discrimination facing persons with disabilities (Curtin & Clarke, 2005; Trani *et al.,* 2011; Chataika *et al.,* 2012; Danso *et al.,* 2012).

A discontented perception of disability is that persons with disability are dependent and different and cannot have a part of 'normal' society (Shumba & Taukobong, 2011; Danso *et al.,* 2012). This perception is rooted in the medical model of disability, a welfare approach, which categorises persons with disabilities apart from 'normal' society and locates the 'deficit' in the individual; it therefore

aims to change the individual and find cures to 'fix' their differences (Lomofsky & Lazarus, 2001; Peters, 2001; Walton *et al.,* 2009; Anthony, 2011). This view of disability led to segregation and so-called special schools. It has been suggested by several authors that a paradigm shift is needed from the medical model (viewing disability as a burden and welfare issue) to a social model approach which holds firm on the principle that society needs to make changes to accommodate the diversity amongst all people (Lomofsky & Lazarus, 2001; Band, Lindsay, Neelands & Freakley, 2011). This would include a shift towards inclusive education (DOE, 2001).

Consequently many countries have begun to focus on integrating special education into mainstream education (Lomofsky & Lazarus, 2001; Peters, 2001) and affording learners with disabilities the opportunities to be equally included in mainstream schools (UNESCO, 1994; Peters, 2001; Pillay & Di Terlizzi, 2009; Walton *et al.,* 2009; Abbott *et al.,* 2011; Anthony, 2011; Forlin, 2011; Ngcobo & Muthukrishna, 2011). This is, too a large extent, due to the emergence of the social model of disability, and the need to provide education which is rooted in human rights (Anthony, 2011; Chataika *et al.,* 2012).

During the apartheid regime in South Africa, the education system was marked by segregation and discrimination (Eloff & Kgwete, 2007; Pillay & Di Terlizzi, 2009). Learners with disabilities did not only face racial segregation, but also marginalisation through placement in special schools instead of mainstream schools (Walton *et al.,* 2009) or no schooling at all (DOE, 2001). Segregated education was also characterised by inequality with regard to access to resources, services and stigmatisation of persons with disabilities (Curtin & Clarke, 2005). Residual effects of segregation still influence inclusive education in South Africa, despite almost two decades of democracy (Eloff & Kgwete, 2007). This is evident in exclusionary practices that relate to disability and language competence (Eloff & Kgwete, 2007). Furthermore, there has been a backlog in providing services, particularly for black South Africans, due to a huge influx of persons to provide services to (ACPF, 2011). In 2009, the South African Department of Education received the highest budgetary allocation (6.1% of GDP) of all areas of government investment. However, the results observed in educational developments are not reflective of the amount invested in this sector (ACPF, 2011).

A multifaceted challenge which surfaces for learners with disabilities is to be afforded the same opportunities as non-disabled learners to participate in all spheres of school life, and not just be given equal permission to enrol in mainstream schools (Peters, 2001; Hemmingson *et al.,* 2007). The potential opportunities children with disabilities can access become significantly limited by excluding and marginalizing them from education, rather than as a result of their impairment (Peters, 2001).

2.5   Disability prevalence in South Africa

To assess challenges persons with disabilities experience in their development and needs, accurate statistics on the prevalence of disability is needed (Statistics South Africa, 2012). Schneider, Dasappa, Khan and Khan (2009) reported that significant differences are observed internationally in statistics on disability due to the inconsistency in method of measurement. The African Child Policy Forum agrees with this sentiment that it is difficult to provide accurate numbers of persons with disabilities (ACPF, 2011). This leads to many countries not having adequate data on the prevalence of disability (UNICEF, 2013).

Similarly, in South Africa, inadequate disability prevalence data is available (Loeb *et al.,* 2008). "It has also been difficult to track the progress of implementation of the White Paper 6 due to a lack of disaggregated data on disabled learners in mainstream schools" (ACPF, 2011: vi). Census 2011 provided no provincial figures on the prevalence of disability or activity limitations (Statistics South Africa, 2012). Furthermore, no data could be found documenting the prevalence of persons with disabilities between the age groups of ten to nineteen, nor the number of persons with disabilities in mainstream schools.

Census 2001 did provide provincial disability figures (Statistics South Africa, 2001). It indicated that in the Eastern Cape 372 266 (5.7%) people out of the provincial population of 6 436 763 were persons with disabilities. From the total number of persons with disabilities in the Eastern Cape, 115 717 (31%) have physical disabilities (Statistics South Africa, 2001). There were 1 699 876 persons aged between 10 - 19 years of whom 45 896 (2.7%) were persons with disabilities in this age group (Statistics South Africa, 2001). From the total population of persons with disabilities, i.e. 372 266,

70 852 (19%) had some secondary schooling but only 15 249 (4.1%) had finished grade 12 (Statistics South Africa, 2001).

The Department of Basic Education (DOBE) conducted a general household survey on 30 000 households in South Africa in 2011 and found that disability accounted for 4.8% of learners who do not attend school (DOBE, 2013). Other reasons why learners do not attend school included pregnancy, violence at school, lack of transportation, too old/young for school, too busy, illness and previously failing school exams (DOBE, 2013). However the survey identified that 76% of children 16 - 18-years-old and 92% of children 7 - 15-years-old with disabilities attended some form of educational institution (DOBE, 2013). The nature and type of disability was not specified in this survey, and nor was the type of educational institution. The DOBE (2013) found that 98.5% of all children 7 - 15-years-old, and 83.3% of all children 16 - 18-years-old were attending some form of an educational institution in the Eastern Cape.

The Education White Paper 6 provides disability figures from Census 2001 (DOE. 2001). It was calculated from the South African Census 2001 that 0.52% (nationally) and 0.28% (Eastern Cape) of children with disabilities are represented in special schools.

2.6 International developments and policy affecting learners with disabilities

2.6.1 International policy developments on inclusive education

In Western society, it is broadly acknowledged that persons with disabilities are a deprived minority group (Llewellyn, 2000; DOE, 2001; Peters, 2001) and that factors such as poverty, discrimination and marginalization of persons with disabilities are main barriers to accessing education (WHO, 2010). This resulted in human rights ideology influencing the development of international policies to promote a shift towards inclusive education (Peters, 2001; Curtin & Clarke, 2005; Abbott *et al.,* 2011; Forlin, 2011). As a result of this, integrating 'special education' into mainstream school systems has become a major focus in many countries (Lomofsky & Lazarus, 2001; Forlin, 2011). This was done to overcome past injustices where learners with disabilities were marginalized and excluded from education (Butler, 1996; DOE, 2001; Forlin, 2011). Countries now endeavour to have policies and

laws which oblige educational institutions to take action to amend and prevent discrimination against learners with disabilities (DOE, 2001; Peters, 2001; Pitt & Curtin, 2010).

The universal principles of human rights have guided the development of international policies regarding disability and inclusive education (Lomofsky & Lazarus, 2001). Developing regulatory frameworks, policies and legislations along these lines have been particularly evident in the Western world (Danso *et al.,* 2012). The United Nations (UN) and other international organisations have directed a large amount of attention to the rights of persons with disabilities over the past decades, emphasizing that persons with disabilities should share the same opportunities as all other persons and be afforded equal opportunities for social and economic development (UNESCO, 1994; Anthony, 2011).

There have been numerous international guidelines which have provided a structure for the development of inclusive education policies (Lomofsky & Lazarus, 2001; Kalyanpur, 2011; Ngcobo & Muthukrishna, 2011). Table 2.1 provides a broad outline of these documents and developments.

Table 2.1: International policies and developments which have influenced inclusive education

The United Nations Declaration of Human Rights (UN, 1948)	This declaration stands for recognising the innate dignity of all human kind and that all persons have equal rights, thus forming the basis for world peace, justice and freedom (UN, 1948; Anthony, 2011). In terms education, this document asserts that every single person has a right to education and that higher education should be accessible to all (UN, 1948; Peters, 2001). This document has extensively influenced human rights ideology and formed the foundation for the development of other supportive policies (Curtin & Clarke, 2005).
The United Nations Convention on the Right of the Child (UN, 1990)	This convention signified an international treaty aiming to protect the rights of children around the world and it states that all children have the same rights (Blanchfield, 2009; Anthony, 2011). Amongst the list of right is the right to access education (UN, 1990) This treaty calls on governments to recognise the rights of children and to take action to ensure that they are protected (Blanchfield, 2009). This document is essential in upholding the principles that everyone has the right to education with particular focus on children with disabilities (Peters, 2001).

The World Conference on Education for All	**(UNESCO, 1990)**	This conference was concerned with meeting basic learning needs around the world (UNESCO, 1990; Peters, 2001; Anthony, 2011; Kalyanpur, 2011). Participants understood, recognised, and acknowledged that education is a right for all persons (UNESCO, 1990). It asserts that education can help create a more prosperous world and contribute to social and economic development. It further asserts that education is essential for the enhancement of society and, that there is a place for and value in traditional and cultural knowledge. According to participants, the level of education provision at that point in time had significant shortfalls (UNESCO, 1990). The intention of this World Conference was to emphasize the purpose of education for all (UNESCO, 1990). This included • Meeting basic learning needs • Shaping the vision of education for all • Making education universally accessible and equitable • To focus on learning achievements • To widen the means and extent of basic education • To improve the environment to facilitate learning • Develop stronger partnerships • Create a support structure with policies • To mobilise available and potential resources, and • To reinforce international fellowship (UNESCO, 1990; Peters, 2001).
The Salamanca Statement	**(UNESCO, 1994)**	Came about when 92 governments and 25 international organisations gathered to reaffirm their pledge to the goal of Education for All (UNESCO, 1994; Peters, 2001; Anthony, 2011). This statement formed an outline for action in terms of special needs education (UNESCO, 1994; Kalyanpur, 2011). The Salamanca Statement asserts that inclusive education in mainstream schools of learners with disabilities is based on educational, moral and social grounds (UNESCO, 1994; Chataika *et al.,* 2012). Literature supports the notion of the Salamanca Statement where inclusive education needs to be the norm for learners with disabilities (Peters, 2001; Walton *et al.,* 2009*;* Pitt & Curtin, 2010; Anthony, 2011; Ngcobo & Muthukrishna, 2011). This statement sees inclusion as part of the creation of an inclusive society (Clark *et al.,* 1997).

The United Nations Standard Rules on the Equalization of Opportunities for Persons with Disabilities	**(UN, 1994)**	This document lists 22 standard rules to ensure that all persons in society may exercise equal rights (UNESCO, 1994; Anthony, 2011). Although following these rules is not compulsory, they do represent a substantial moral and political dedication for governments to strive for the equalization of opportunities for persons with disabilities and to take responsibility to remove obstacles which impede equal participation (UNESCO, 1994). Rule Six focuses on education and highlights that governments should recognise that primary, secondary and tertiary education should be equally accessible to all, including to persons with disabilities, and that it needs to be an essential part of the country's education system and development (UNESCO, 1994; Peters, 2001). Furthermore, it states that mainstream schools must take appropriate measures to provide adequate support services to meet the varying needs of all learners (UNESCO, 1994; Martz, 2005). This document also states that special education should only be considered if the general school system cannot meet the needs of persons with disabilities appropriately, and in this instance, education provided must be of the same standard as the general education curriculum and the aim should remain to prepare the learner for mainstream education (UNESCO, 1994).
The Millennium Development Goals	**(UN, 2000)**	These goals were adopted in 2000 by 189 countries and 23 international bodies which agreed to work towards achieving eight Millennium Goals by the year 2015 (UN, 2000; Peters, 2001). The second of these eight goals is 'achieving universal primary education' (UN, 2000). The greater purpose of this project is to promote global advancement and to improve economic and social conditions around the world (UN, 2000).
The Dakar Framework for Action		This conference served the purpose of a joint intention of reaffirming adoption of the principles and goals of the World Conference on Education for All (World Education Forum, 2000; Peters, 2001). The primary core value of this framework is that everyone has the right to benefit from education (World Education Forum, 2000; Anthony, 2011).

The United Nations Convention on the Rights of Persons with Disabilities	**(UN, 2006)**	Article 24 specifically relates to education (UN, 2006). It states that persons with disabilities need to be included in the education system at all levels and that children with disabilities should be included from a young age. Education should be free from discrimination for children with disabilities to enjoy the same opportunities as their non-disabled peers and to be able to develop in terms of personality, creativity, mentally and physically to their optimum potential (UN, 2006). This document advocates the rights of persons with disabilities where they should be viewed as capable beings able to access their fundamental rights and freedoms and to be active members in society (UN, 2006; Anthony, 2011). The extent to which children with disabilities access educational opportunities and the extent to which educational services are implemented is currently unknown (Peters, 2001). The Flagship on Education for all and the Rights of Persons with Disabilities endeavours to breach this gap (Peters, 2001).
World Health Organisation Community Based Rehabilitation Guidelines for Education		The World Health Organization provides a document outlining community-based rehabilitation guidelines for education. The goal of this document is for persons with disabilities to access educational opportunities and lifelong learning for them to reach their full potential, live with dignity and self-worth, and to participate in mainstream society (WHO, 2010). It further calls for collaboration between community-based rehabilitation and the education sector to assist persons with disabilities in accessing education and for education to be inclusive at all possible levels (WHO, 2010).

2.6.2   Inclusive education in developed countries

Globally, there are still complex problems with enrolling learners with disabilities into mainstream high schools (Danso *et al.,* 2012). However progress with regard to inclusive education has been made in developed countries.

In the United Kingdom, the development of supportive policies regarding inclusion and the educational needs of learners with disabilities has been a central concern of government (Ainscow *et al.*, 1999; Band *et al.,* 2011; Abbott *et al.,* 2012). There has been a movement towards including learners with special education needs in mainstream schools and increasing the number of learner support staff to assist with their additional needs (Ainscow et al., 1999; Band *et al.,* 2011; Abbott

et al., 2012). In a study conducted to evaluate training opportunities in performing arts for learners with disabilities, it was found that many teachers voiced their support for addressing and removing learning barriers, but they felt it is not always feasible in the classroom owing to the lack of responsiveness to teacher needs and the need to respond to a range of learning requirements (Band *et al.,* 2011).

In Europe, two of the best practice inclinations that have emerged in recent years include converting special schools into resource centres where funding is focussed towards improving the quality of education provided (Peters, 2001). Teachers were identified as valuable resources in this regard and therefore, funding is focussed on teacher support (Peters, 2001). The second inclination includes developing education plans specific for individuals according to the learner's educational needs (Peters, 2001).

Parts of Canada signify two decades of inclusive education practices (Peters, 2001) and several schools in Ontario have become model schools for inclusive education (Peters, 2001). In the United States, learners with special education needs have gained better access to the public education system as the education system evolved enabling these learners to have improved inclusion alongside learners without disabilities (Aron & Loprest, 2012). Inclusive education programmes can be found in every state in the United States (Peters, 2001). However, in spite of all the efforts made in the United States towards inclusive education, problems still exist (Aron & Loprest, 2012). These problems are associated with under and over identifying certain groups of learners which cause delays in assisting learners with special education needs, and financial and regulatory barriers (Aron & Loprest, 2012).

In New Zealand, over the past twenty years there has been acceptance of inclusive education and noteworthy improvement in inclusive educational practices (Kearney & Kane, 2006). Bevan-Brown (2006) conducted a study looking specifically at the situation for Maori learners with special needs against the background of inclusive education policies and found that although there have been significant efforts to improve inclusive educational practices, further efforts are needed to make

educational practices culturally appropriate for all learners. In Australia, debates still exist questioning the effectiveness of inclusive education in mainstream schools (Curtin & Clarke, 2005).

A trend towards inclusive education is evident in these countries (Peters, 2001); nevertheless, it appears it does not occur without challenges and difficulties. It is likely that developing countries face even bigger challenges.

2.7   Inclusive education in developing countries

2.7.1 Impact of poverty, disability and culture on education in developing countries

A powerful relationship exists between poverty and disability (Lomofsky & Lazarus, 2001; Peters, 2001; Woolard, 2002; Loeb *et al.,* 2008). A large number of persons with disabilities live in poverty stricken conditions (UN, 1994). Many impairments are actually caused by poverty-related factors, including famine, malnutrition, disease and lifestyle to name a few (Peters, 2001). Poverty also exposes persons to additional impairments as they lack access to even basic services (DOE, 1997; Lomofsky & Lazarus, 2001). On the other hand, disability may also result in poverty or thrust a person into deeper poverty (Loeb *et al.,* 2008).

Persons with disabilities encounter challenges due the influence of society's perception of disability which is exacerbated by the negative effects of poverty (UN, 1994; Peters, 2001). This may result in a delay in their personal and economical development (UN, 1994; Peters, 2001). Firstly, the medical model approach to disability which locates 'deficit' in the individual (Lomofsky & Lazarus, 2001) has greatly influenced stigmatization and discrimination against persons with disabilities, limiting their potential to develop (Walton *et al.,* 2009; Pather, 2011). Secondly, culture also has an influence on the perception of disability (Anthony, 2011). Communities adopt and inherit a culture which comprise of attitudes, values and knowledge which is used to define and understand the world around them (Anthony, 2011). Culture suffers under the tensions that arise between negotiation between traditional values and the ever-changing values of external worldly influences (Anthony, 2011). One of the reverberant effects experienced in developing countries as a result of the relationship between

poverty, disability and culture, is in accessing education, and in particular, secondary education which is greatly impeded for most children (WHO, 2010). The United Nations Children's Fund (2013) reported that children with disabilities between the ages of 6 - 17-years in developing countries are more likely to not be enrolled in schools. This might lead to children with disabilities lagging behind in their development beyond primary school level (Chataika *et al.,* 2012).

2.7.2   Inclusive education and implementation challenges in developing countries

In Africa, a major factor accounting for exclusion in education and schooling is disability (Peters, 2001; Chataika *et al.,* 2012). In spite of several African nations agreeing to the Millennium Development Goals as well as endorsing the United Nations Convention on the Right of Persons with Disabilities (Chataika *et al.,* 2012), many learners with disabilities are still unable to access mainstream education (DOE, 2001; Peters, 2001). A barrier to education for children with disabilities in developing countries is that it was previously assumed that a child with a disability may not require an education as they may not reach adulthood, and in the event that they did, belief structures may have decided that the child was unable to learn, or would learn with difficulty, and would therefore remain the lifelong responsibility of the person supporting them (Groce & Bakhshi, 2011). The authors reported that in impoverished countries, even if some of these barriers to learning could be overcome, the challenge of getting the child into a classroom remains as a result of access barriers (Groce & Bakhshi, 2011).

The African Network of Evidence to Action on Disability Symposium addressed the shortfalls between research into inclusion of persons with disabilities and actual practice in Africa (Chataika *et al.,* 2012). Findings and emerging themes from the Commission included progress in the African context (Chataika et al., 2012) namely;

- Botswana has made efforts to improve access to education and incorporate special education needs into teacher training courses (Chataika *et al.,* 2012).

- Lesotho has passed an education policy proclaiming that education should be accessible to all learners (Chataika *et al.,* 2012).

- Namibia, although it has a policy considering disability, has no specific policy considering inclusive education (Chataika *et al.,* 2012).

Chataika *et al.* (2012) identified challenges in policy implementation in Africa, including limited resources, lack of teacher training and poor accountability. In addition, the medical model view prevails and it might be thought irrational to educate persons with disability as it is thought that they will not be able to contribute to the nation's economy (Chataika *et al.,* 2012).

Miles (2011) used action-research to explore understandings of inclusive education in Zambia and Tanzania at school and community level. She reported that in Zambia and Tanzania, the introduction of 'free education for all' in 2002 lead to an increase in the enrolment rate of learners (Miles, 2011). The Tanzanian government has been committed to inclusive education since 1997, and the Zambian government boosted funding for educational resources and made efforts to lessen inequalities amongst all learners (Miles, 2011). Despite efforts made in Zambia to improve inclusion of all learners, many learners who live in extreme poverty and have special educational needs are still excluded from the education system (Miles, 2011). The findings from this study indicated that prejudice regarding disability still exists, which creates barriers to inclusion for learners with disabilities, and therefore, a starting point to produce relevant inclusive educational practices requires finding solutions to overcome attitudinal barriers (Miles, 2011).

The government in Ghana has in recent years reconfirmed its dedication to Education for All (Anthony, 2011) and to include marginalised learners through inclusive education (Danso *et al.,* 2012). Anthony (2011) conducted an exploratory study aimed at gaining in-depth understandings of the influence of culture, beliefs and values on understandings of autism in Ghana, which focussed on education systems and opportunities. She identified the existence of strain between local understandings of disability and the government's commitment to international declarations (Anthony, 2011). This conflict between international and local movements towards realising the rights

of persons with disabilities occurs due the various conceptualizations of disability resulting in uncertainty in definitions and policy development (Anthony, 2011). This may be due to the innuendo that the ideas and values of developed countries are superior to developing countries (Kalyanpur, 2011). Although international movements have good intentions, they may not be culturally relevant to different countries, especially developing countries (Anthony, 2011). Anthony (2011) suggests that international declarations should not only encourage adoption of the declaration principles, but also encourage local adaptation in the implementation thereof. A study surveying 264 public facilities and 705 building elements in Ghana using international guidelines, standards and building codes found that the construction and design of the majority of mainstream schools is still intended to accommodate non-disabled learners despite inclusive education being advocated for several years (Danso *et al.,* 2012).

Beyond Africa, Russia has passed federal laws to guarantee social security for persons with disabilities as well as access to free education, public transport, sports and access to government buildings (Martz, 2005). A study conducted in Russia exploring attitudes of teachers, parents of learners with and without disabilities and school administrators revealed that the participants held different perceptions as to who is responsible for implementing inclusive education (Martz, 2005). Additional barriers to inclusion were related to the school buildings and infrastructure being inaccessible and inappropriate, and lack of finance and government support (Martz, 2005).

In the recent years, India has made efforts to meet the Education for All goals, and the importance of education as a fundamental right has become more recognised (Singal *et al.,* 2011). The movement towards inclusive education has not been without resistance (Singal *et al.,* 2011), caused by negative societal beliefs concerning persons with disabilities resulting in these persons being excluded in society, as well as lack of teacher training in this field, and limited experience in inclusive education (Forlin, 2011).

In the Asia-Pacific region, the concept of inclusive education has gradually become accepted (Forlin, 2011). Kalyanpur (2011) conducted a study in Cambodia using situation analysis to examine efforts

towards inclusive education within the current socio-political developments in the country. The researcher used focus group discussions involving various stakeholders. From the findings, Kalyanpur (2011) argues that the Education for All approach may not be the most appropriate approach for learners with disabilities in developing countries, because, as a developing nation, the country already faces challenges with other priority issues (Kalyanpur, 2011). Other reasons include values and an entrenched social hierarchy (Kalyanpur, 2011). These challenges highlighted by Kalyanpur (2011) are consisted with challenges identified by Chataika *et al.,* (2012) and Miles (2011) in Zambia, Tanzania and Ghana.

2.8   Inclusive education in South Africa

2.8.1 Policy and legislative developments towards inclusive education

Before 1994, under the apartheid rule, South African learners with disabilities were placed in special schools where the medical model dictated and the primary aim was essentially focussed on curative interventions (Lomofsky & Lazarus, 2001). As international trends moved towards inclusive education, efforts were made to address problems of marginalisation and discrimination of learners with disabilities in South Africa as well (Walton *et al.,* 2009; Ngcobo & Muthukrishna, 2011; Pather, 2011). Since 1994, South Africa has become a democratic nation and many policies and laws to promote and facilitate inclusive education have been developed (Lomofsky & Lazarus, 2001; Pillay & Di Terlizzi, 2009; Ngcobo & Muthukrishna, 2011; Pather, 2011). The focus of many of these was on redressing racial injustices (Lomofsky & Lazarus, 2001). However, all marginalised groups received attention, including learners with special educational needs (Lomofsky & Lazarus, 2001; Walton *et al.,* 2009).

The following policies and legislation marked turning points for education in South Africa:

- **The South African Constitution** was adopted on 8 May 1996 and amended on 11 October 1996 by the Constitutional Assembly, to form a foundation for a democratic and united society (South Africa. Parliament, 1996). It endeavoured to restore past injustices caused by segregation, and to improve the quality of life of all its citizens (South Africa. Parliament, 1996). The Bill of Rights

safeguards the rights of all South Africans (South Africa. Parliament, 1996). Section 29 in the Bill of Rights states 'all learners have a right to basic education including adult basic education and further education' (South Africa. Parliament, 1996: 29).

- **The South African Schools Act** (1996) was developed in support of the Bill of Rights and states that it is compulsory for children aged 7 to 15 to receive an education (DOE, 1996). Further, that it is the right of all learners to receive quality education and for their individual needs to be met (DOE, 1996). The government shares the responsibility of providing quality education to all learners with the governing bodies of public schools, which are required to supplement the resources provided by the government to achieve this goal (DOE, 1996).

Compulsory education for 7 - 15-year-olds created challenges since a large number of learners who were not in the school system, including learners with disabilities, dropout learners and estranged youth, had to be integrated (Lomofsky & Lazarus, 2001). Integrating these groups required the education system to be exceptionally flexible and adaptable to meet equally the needs of all learners (Lomofsky & Lazarus, 2001). Educators also had to contend with a range of learning needs without adequate support (Lomofsky & Lazarus, 2001).

- **The Integrated National Disability Strategy (INDS)** was introduced in 1997. The purpose of the INDS was to provide a framework to guide the development of integrated and consistent policy with regard to persons with disability across all spheres of government (South Africa. Office of the Deputy President, 1997). The underpinning value of the INDS is to address inequalities experienced by persons with disabilities in South Africa which result in their marginalisation in society (South Africa. Office of the Deputy President, 1997). Key concepts outlined in the INDS include viewing disability as a human rights concern rather than within a medical model framework; making adjustments in society to respond to the needs of persons with disability; and integrating disability concerns into all government sectors (South Africa. Office of the Deputy President, 1997).

- **The Promotion of Equality and Prevention of Unfair Discrimination Act** (2000) encompassed the values of the INDS and embraced the core values of the South African Constitution (South

Africa. Parliament, 1996; South Africa. Office of the Deputy President, 1997; South Africa. Office of the Presidency, 2000). This is evident in Chapter Five of this Act which is concerned with the government's duty to promote equality and eliminate unfair discrimination (South Africa. Office of the Deputy President, 1997).

- **The Education White Paper 6** (2001) was also developed in support of the INDS (DOE, 2001) and in response to the needs for change in the provision of education and for sensitivity and responsiveness in the education system to a diverse scope of learning needs amongst learners (DOE, 2001). It presents a strategy endorsing improved support and access for all learners within the education system, especially learners with disabilities and emphasizes that "learning disabilities arise from the education system rather that the learner" (DOE, 2001: 15; Chataika *et al.,* 2012). Identifying and addressing these barriers should facilitate improved participation and inclusion of all learners (Pather, 2011).

The White Paper 6 further states that in an inclusive education system, educational support services will be shaped in a widespread manner to correspond with the requirements of learners with disabilities (DOE, 2001). Because of this, learners will be able to receive support in schools according to their needs, i.e. low intensive support needs will be provided for in mainstream schools, moderate support needs will be provided for in full-service schools and high-intensive support needs will be provided for in special schools (DOE, 2001). Consistent with the South African Schools Act and international policy and guidelines, the White Paper 6 is also concerned with the delivery of quality education, with a specific section within the Paper focusing on ensuring quality assurance (DOE, 2001). It outlines a strategy for approaching and removing barriers to learning by developing full-service schools, training teachers and education managers, adapting special schools and converting them into resource centres, developing support structures for the schools and finding funding strategies (DOE, 2001).

The National Education Policy Investigation found that between 40–50% of the learners in South Africa have special education needs and need additional learning support which is not available in the ordinary mainstream school (International Education Summit, 2000; Lomofsky & Lazarus,

2001). The Education White Paper 6 specifies that critical education services should be provided by special schools to learners with intense support needs (DOE, 2001). Despite the suggestion in the Education White Paper 6 that critical education services should be provided by special schools to learners with intense support needs, learners with low and moderate support needs are still found in special schools when ideally they should be enrolled in mainstream schools (DOE, 2001).

Implementation of all these policies to ensure an inclusive education system for South Africa remains problematic. Whether inclusive education is reflected in practice at the school level is questionable (Lomofsky & Lazarus, 2001; Walton *et al.,* 2009).

2.8.2   Barriers and challenges faced in creating an inclusive education system

When discussing the challenges to inclusive education in South Africa one cannot ignore South Africa's background of oppression and discrimination as well as the socio-economic position of the country (Pillay & Di Terlizzi, 2009). In addition, as a developing country it faces development challenges such as poverty and unemployment, which complicate access to education (Wikeley, Bullock, Muschamp & Ridge, 2009; ACPF, 2011; Ngcobo & Muthukrishna, 2011; Pather, 2011). Sustained poverty causes underdevelopment, overcrowding, an increase in violent crimes, unemployment and increased demands on government systems to provide support (DOE, 1997). These factors deny learners the opportunities to an education and "Many children experience a broken journey through school..." (UNICEF, 2009: 7). Poverty represents a constraint limiting persons with disabilities from accessing education and consequently thrusting them into deeper poverty (Chataika *et al.,* 2012). Thus, a continuous cycle of underdevelopment and poverty is created (DOE, 1997; Lomofsky & Lazarus, 2001). As the African Childs Policy Forum noted (2011), quoting UNICEF (2009) "to be a child in South Africa is to walk a fragile path to adulthood" (UNICEF, 2009: 5).

Another challenge experienced in South Africa is that of lack of human resource development (ACPF, 2011). Limited capabilities of education officials, auxiliary staff and educators, limited or lacking materials and funding constraints further impacts on accessing quality education by children with

disabilities (Pillay & Di Terlizzi, 2009). There are many resources that can be used in South Africa, but the challenge remains in realising the vision of an inclusive society for all children (ACPF, 2011).

Discriminatory attitudes found within the education system results in marginalisation and exclusion of learners with disabilities (DOE, 1997; DOE, 2001; Peters, 2001). Jansen supports this:

> *Schools, as is the case with the broader society, still grant access to able-bodied children more easily than they do to children with disabilities of various kinds.....Schools target "the normal child" and while there are some "special schools" for especially severely handicapped children, there is very little to show in practice for integrating children with special needs into mainstream public schools* (Jansen, 2008-2009: 7).

It has been suggested by Danso *et al.,*(2012) that a way of addressing the discrimination experienced by persons with disabilities is to provide a secondary schooling environment which is accessible to learners with disabilities.

In terms of the built environment, many school buildings are inaccessible to learners with disabilities, or have inappropriate and unsafe infrastructure causing barriers to accessing education for learners with disabilities (DOE, 1997; DOE, 2001). Several policies and legislation concerning built environment and accessibility are pertinent to learners with disabilities. These include the National Building Regulations and Building Standards Amendment Act (South Africa. Department of Trade and Industry, 1995) and the SABS 0400 Code of Practice for the Application of the National Building Regulation (South African Bureau of Standards, 1990). However the INDS stresses shortfalls in both these policies (South Africa. Office of the Deputy President, 1997). These are

- o Planning professionals being unaware of specific requirement to barrier-free environments;
- o Outdated regulations in need of review;
- o Shortage of specialists in South Africa in the sector of barrier-free access;
- o No 'norms' for barrier-free designs in the Public Sector Briefing Document, and, specifically concerning learners with disabilities,
- o Agencies responsible for development have no apparent policies regarding barrier-free access concerning the construction of schools, clinics and other public buildings and appear

oblivious to the requirements to make the building barrier free (South Africa. Office of the Deputy President, 1997).

Due to these shortfalls the development of new schools is not regulated to ensure that they are universally accessible to all learners (South Africa. Office of the Deputy President, 1997).

Challenges also arise in the curriculum (DOE, 1997; Peters, 2001). A vast range of learning needs is found amongst learners (DOE, 2001). An inclusive education system requires changes in mainstream education for learners who experience barriers to education to be identified and to be provided with the support they require (ACPF, 2011). Not addressing these needs, and not making the appropriate changes, can lead to learners failing to learn effectively and inequality to exist in the education system (DOE, 2001; Peters, 2001).

Older learners with disabilities face considerably more barriers than younger learners with disabilities due to a less favourable school organisation (Hemmingson & Borell, 2001). As learners move from primary to secondary school levels the demands from the curriculum increases, leading to learners with disabilities not only feeling limited by access barriers and resource barriers, but also by the increase in the rate of work (Pitt & Curtin, 2010). Because of this Hemmingson and Borell (2001) suggest that older learners with disabilities should be of main concern.

The challenges and barriers listed above not only limit inclusion in education, but also confine the quality of education provided (Peters, 2001).

2.8.3   Supplementary complexities experienced with inclusive education

There is contradictory evidence regarding the social interaction and psychological development of learners with disabilities in mainstream schools and specialised schools. Learners regard friendships as a significant part of school life, and naturally, this is no different for learners with disabilities (Swain & French, 2000). In mainstream schools, learners with disabilities have the opportunity to mix with a varied range of other learners and this environment mirrors the "real world" (Curtin & Clarke, 2005: 3). Opposing this notion, learners may feel socially isolated in mainstream schools and are

potentially at risk of being bullied and rejected resulting in isolation (Pitt and Curtin, 2010; UNICEF, 2013). This raises the predicament that acknowledging differences amongst learners can result in special care and treatment which can cause stigmatisation, while denying that there is a difference can result in failing to provide sufficiently for individuality (Band *et al.,* 2011).

The abilities and attitudes of educators play an important role in the success of integrating learners with disabilities into mainstream schools (Martz, 2005; Pitt & Curtin, 2010; Groce & Bakhshi, 2011; Nel, Müller, Hugo, Helldin, Bäckmann, Dwyer & Skarlind, 2011). Teaching staff may be ill informed regarding the needs of the learners with disabilities and where teachers are well informed, this may not necessarily be due to school policy or additional training but because of the individual's own interest (Pitt & Curtin, 2010).

Considering the barriers, challenges and supplementary complexities experienced in inclusive education, it is evident that integrated solutions are required to break down barriers to successfully implement inclusive educational practices at the school level.

2.9   Addressing the challenges

Inclusive education requires understanding why exclusion occurs (Peters, 2001). This implies that it is necessary to understand policy and practice at various levels, i.e. school/community level (micro), educational system level (meso), and national/international level (macro) (Peters, 2001). A different belief set is needed to view inclusive education to make changes to practices in schools and this change would also imply a change in the way disability is understood and viewed (Carrington & Robinson, 2006).

Policies and programmes should be developed based on evidence-based research that includes the notions of inclusive education as understood in the relevant cultural context (Chataika *et al.,* 2012). It is necessary to consider alternative options which build on the strengths and principles found in a specific country to ensure that policy and guidelines are locally appropriate (Anthony, 2011; Kalyanpur, 2011).

Active, united involvement of all stakeholders is required to address the barriers experienced by persons with disabilities in accessing educational opportunities, in order for them to enjoy their human rights (Ainscow *et al.,* 1999; Chataika *et al.,* 2012). Stakeholders include and are not limited to teachers, parents, learners, health care professionals, social service personnel, community members, and education officers (Ainscow *et al.,* 1999; Lomofsky & Lazarus, 2001; Anthony, 2011). Government, non-governmental organisations, policy makers and disabled people groups all form part of the stakeholders as well (Danso *et al.,* 2012).

Because stakeholders have developed different understandings of disability from their own experiences, and developed expectations in terms of schooling, it is crucial that their viewpoints are considered (Carrington & Robinson, 2006). Thus it may be necessary to provide continuous support to enable certain stakeholders to develop a new understanding of disability which can then resonate into the implementation of inclusive education practices (Carrington & Robinson, 2006).

Last, improving special education in mainstream schools requires an understanding of what services and support learners with special education needs require and receive, and what outcomes they achieve (Aron & Loprest, 2012). One way to determine how to accommodate the needs of learners with disabilities in mainstream schools, and assist in developing inclusive practices in schools, is by listening to their opinions regarding their educational experiences (Corbett, 2001).

2.10   Conclusion

The process of developing an inclusive education system is something that will occur gradually, and will require partnerships between all stakeholders involved (Trani *et al.,* 2011). Including learners with disabilities in mainstream schools has become a human rights concern and countries have taken action by developing policies to prevent discrimination against learners with disabilities (UNESCO, 1994, Lomofsky & Lazarus, 2001, Chataika *et al.,* 2012). Education can be a means of poverty alleviation (Schur, 2002), which is particularly important for a developing country like South Africa.

Barriers to education are present when learners are included in mainstream schools, yet at the same time, participation restrictions are present if learners with disabilities are excluded from participating

in mainstream schools (Pitt & Curtin, 2010). Schools need to take action to accommodate learners with disabilities in the school appropriately, and respond to their needs in so that they reach their full potential (DOE, 2001). Including persons with disabilities into mainstream society requires the development of a society with better values, and acceptance of diversity (Swain & French, 2000). This necessitates a shift from the long-held medical model towards an inclusive, rights-based model (Trani *et al.,* 2011). It is also critical to recognise the differences between mainstreaming of learners with disabilities compared to inclusion of these learners.

2.11. Summary

Chapter Two provided an overview of literature available on persons with disabilities against the backdrop of inclusive education and how inclusive education policy and practices have developed at an international level in developed and developing countries. This chapter also specifically reviewed literature on inclusive education in South Africa and the challenges faced in making inclusive education a practical reality.

Chapter Three will discuss and motivate the study methodology used for this study.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1   Introduction

This chapter sets out to describe and explain the methodology of the study used to answer the research question. The study design, study population and sampling, the data collection instrument and the research procedure are explained, as well as the methods used for managing data and analysing the data. Ethical considerations applicable to this study are also discussed. The chapter concludes by outlining limitations to the study.

3.2   Study design

A cross-sectional, descriptive study, using a mixed method design which was exploratory in nature was chosen to address the study aim and objectives. The method of inquiry was achieved through survey research.

A cross-sectional study enables researchers to describe the occurrence of a particular situation and identify which factors are associated with the situation (Joubert & Ehrlich, 2007) through collecting data at a specific point in time (Dumholdt, Lubinsky & Carter, 2011). Data was collected once in the current study to create a "snap-shot" view of the situation under study. The cross-sectional design allowed me to identify the number of learners with PMIs enrolled in the mainstream high schools in East London, whether or not the mainstream high schools in East London received applications for enrolment from learners with PMIs, and possible reasons for inclusion or exclusion of these learners.

Cross-sectional studies are valuable in determining the relationship between fixed characteristics, and are important 'first steps' in describing potential relationships between variables (Joubert & Ehrlich, 2007). Relationships between independent variables (for example, the type of school – independent or public school – and location of the school – urban, peri-urban or rural) and whether or not learners with PMIs were enrolled in the school could be described.

A descriptive study design enabled me to describe the situation under study and convey information obtained in an explanatory way. Data such as the number of learners with PMIs currently enrolled in the study schools could be related to reasons provided by the schools for including and/or excluding learners with PMIs in the school at the point in time when the study was conducted.

Descriptive studies are useful to determine the need for intervention and can be particularly important when beginning to investigate unexplored areas in research (Joubert & Ehrlich, 2007). As pointed out in Chapter One, very little research of the nature of this study has been conducted. Therefore, this study can highlight shortfalls in implementing inclusive education practices and identify target areas for intervention and further monitoring. The findings from this study provided some baseline information on unexplored aspects of inclusive education in the Eastern Cape.

The study generated a mixture of quantitative and qualitative data. "Mixed methods research has come of age. To include only quantitative and qualitative methods falls short of the major approaches being used today in the social and human sciences" (Creswell, 1994: 4). In using mixed methods, combinations of elements from both the quantitative and qualitative paradigms are used (Lingard, Albert & Levinson, 2008), to obtain the most significant understanding of the issue under study (Creswell, 1994). I recognized that each method has limitations (Lingard *et al.,* 2008), and that it would not have been possible to answer the research question by using solely quantitative or qualitative methods. Inductive and deductive approaches were needed to answer the research question.

Mixed method studies use of strategies of inquisition that involve data collection to take place either simultaneously or sequentially to generate the best understanding of the research situation (Creswell, 1994). Quantitative and qualitative data was collected simultaneously. I had two reasons for selecting simultaneous data collection. First, it was congruent with conducting a cross-sectional study to create a "snap-shot" view of the issue under study. Second, the study sample was small and there was a danger of losing participants if they were asked to participate in various stages of data collection.

Quantitative data allowed me to obtain demographic details about the study participants (Dumholdt *et al.,* 2011) to determine the number of learners with PMIs currently enrolled in the participating

schools and the number of applications received by the schools from learners with PMIs. Qualitative data provided a deeper understanding of how the participating schools perceived the issue under study and what the general beliefs were on inclusion of learners with mobility impairments.

Survey research is a method researchers can employ to collect information about a particular study situation relying on self-reported information from the participants in the study (Dumholdt *et al.,* 2011). This information can be obtained through the participants completing a questionnaire or providing answers to interview questions (Dumholdt *et al.,* 2011).

Survey research enabled me to use an e-mail questionnaire to obtain information about what the perspectives were from the mainstream high schools regarding the research situation. This method of inquiry also offered the advantages of enabling me to collect data from overseas, effectively managing my time while completing the data collection process, having reduced costing involved, and offering anonymity to the study participants. Nonetheless, a disadvantage observed was that the depth of inquiry was limited to the participants' willingness to respond in depth as no prompting could be done.

3.3   Study setting

The study setting, East London, is a metropolitan town falling into the larger municipal area of Buffalo City in the Amathole district in the Eastern Cape, South Africa. The geographical layout of East London can be viewed in Figure 3.1. The red circle roughly indicates the perimeter of the study setting, which stretched from Sunnyridge, Buffalo Flats and Rosedal Park on the West to Gonubie in the East, Morningside, Cambridge, Ocean View, Dorchester Heights and Beacon Bay in the North to the Indian Ocean on the South.

The Eastern Cape and Limpopo are the poorest provinces in South Africa (Woolard, 2002). Three quarters of the children in the Eastern Cape live in poverty (Woolard, 2002). The Amathole district has the fifth worst matriculation pass rate out of 52 districts in the Eastern Cape, with an average of only 54% of learners passing grade 12 (DOE, 2011). The Amathole district is also the 19th poorest district out of 52 districts in the Eastern Cape (DOE, 2011). Poverty is linked to education levels and

disability; a higher incidence of poverty is observed where lower education levels are present and a higher incidence of disability is observed where poverty is more pronounced (Woolard, 2002).
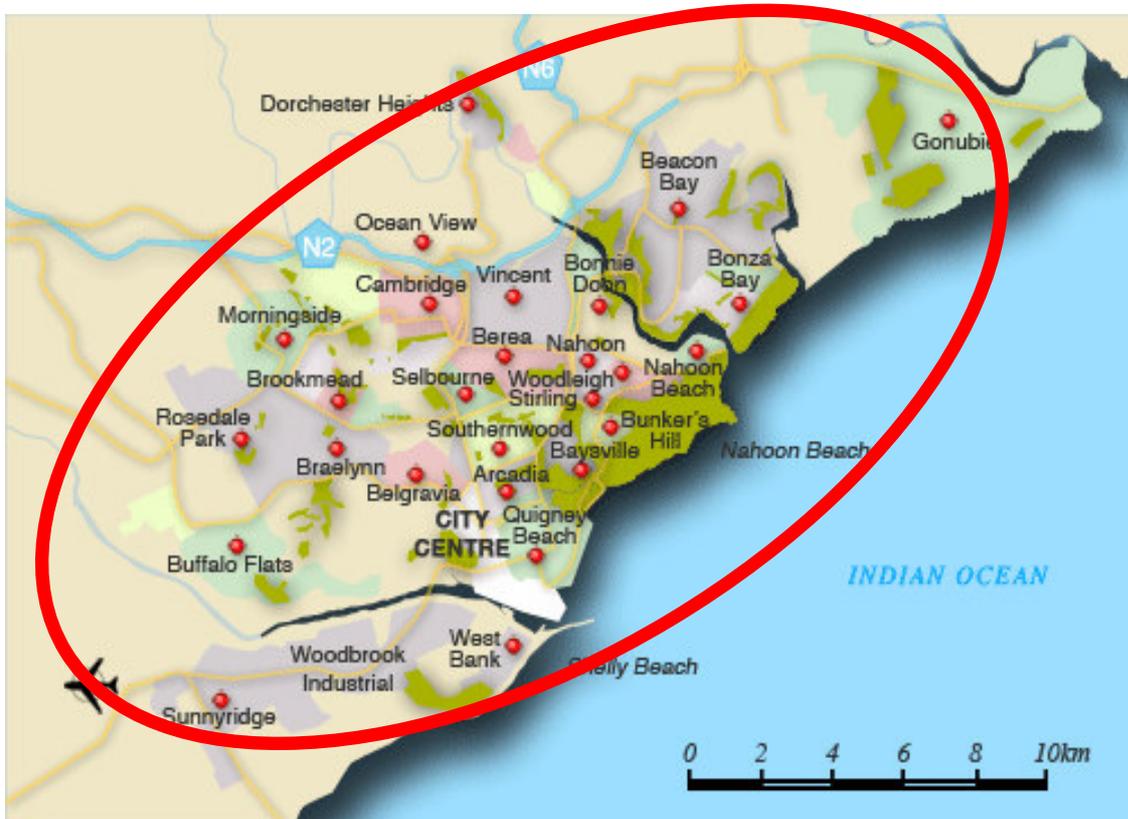
Figure 3.1: Geographical layout of East London

Source: Rooms for Africa, http://www.roomsforafrica.com/dest/south-africa/eastern-cape/east-london.jsp?tab=3

3.4   Study population and sampling

3.4.1   Study population

The study population consisted of the 21 public and independent mainstream high schools in the study setting.

3.4.2   Inclusion and exclusion criteria

3.4.2.1 Inclusion criteria

- Public and independent mainstream high schools that fall within the geographical layout of East London.

- Mainstream high schools:

- o   with or without remedial classes

- o   that are co-educational or single gender

- o   that are English, IsiXhosa, Afrikaans or bilingual schools

- o   with or without enrolled learners with PMIs.

3.4.2.2 Exclusion criteria

- Mainstream high schools whose contact details could not be obtained on the Eastern Cape Department of Education website, from the telephone directory or on the internet; and

- Mainstream high schools that did not consent to participate.

3.4.3   Sampling

As the study population was small, no sampling was done and I endeavoured to recruit all 21 schools to participate in the study.

3.4.4   Study participants

All 21 public and independent mainstream high schools in East London met the inclusion criteria of the study. These schools were either English, or Afrikaans, or IsiXhosa, or bilingual medium schools (English-Afrikaans, IsiXhosa-English or IsiXhosa-Afrikaans), and either co-educational or single gender schools. The schools were located in urban, peri-urban and rural areas of East London. Of the 21 schools, 12 participated in the study. The remaining 9 schools declined participation. Some reasons given by the schools for declining participation were:

- Never having had any learners with PMIs applying for enrolment;

- Never having had any learners with PMIs enrolled in the school; and

- Not having enough time to participate due to academic time pressures.

Four schools did not provide a reason for declining participation.

I telephoned all the schools to determine if they have access to e-mail. During the phone call I found that some schools were unable to receive e-mail due to poor internet connections or malfunction in the schools electronic mail system. Therefore, schools could participate in the study either via e-mail or

with the assistance of a messenger. As indicated in Figure 3.2, 12 could communicate using e-mail. Of these 12 schools, 6 schools consented and participated in the study and 6 schools declined participation. Nine schools could not communicate using e-mail. Six of these 9 schools participated in the study via messenger and 3 declined participation:
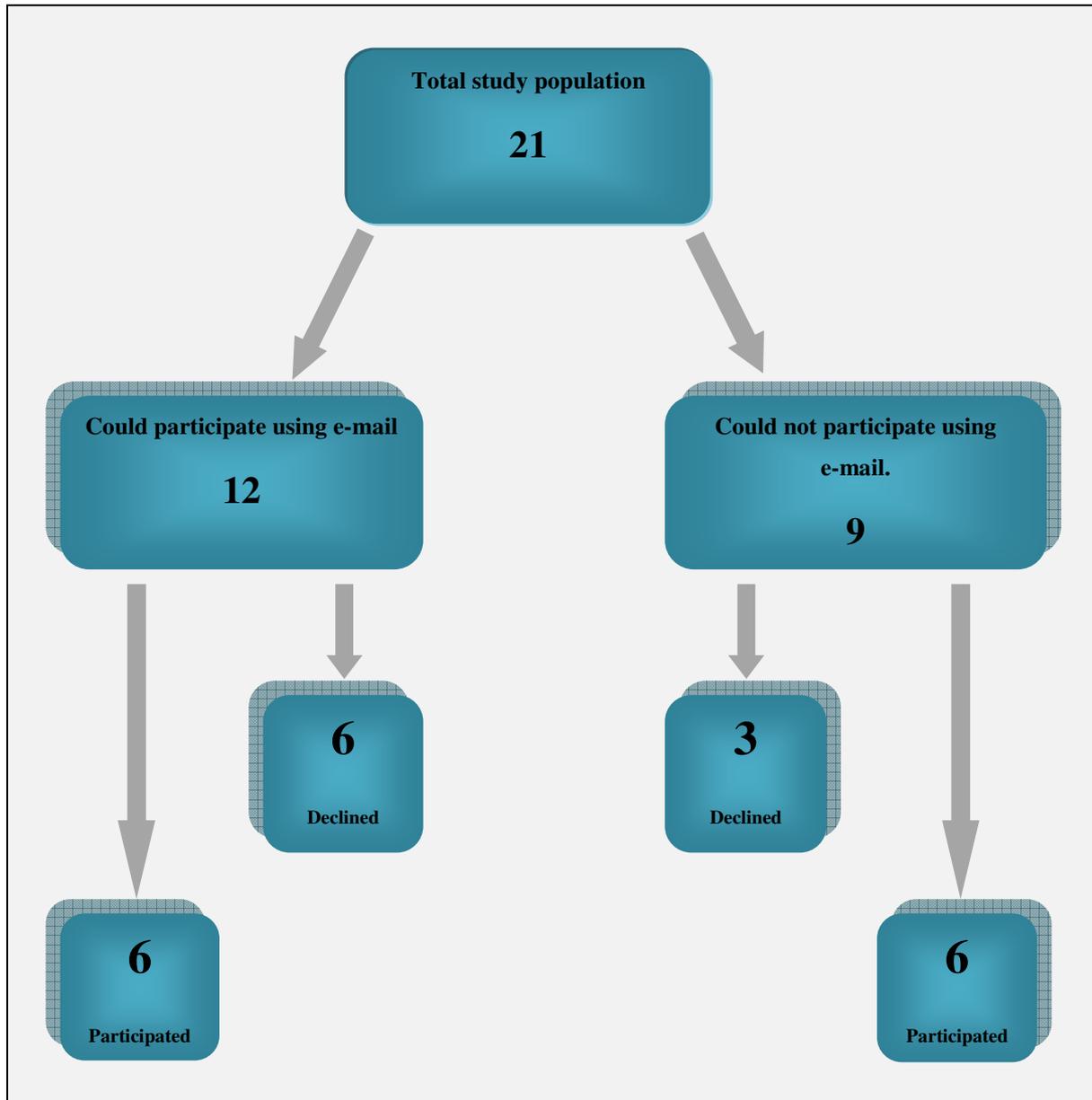
Figure 3.2: Diagrammatic representation of study participants

3.5   Data collection instrument

A self-administered questionnaire (Appendix 4) was used to collect quantitative and qualitative data for the study. I designed the questionnaire specifically for this study. I consulted two handbooks

(Joubert & Ehrlich, 2007, and Dumholdt *et al.,* 2011) for guidance on developing the survey questionnaire.

Categorical (binary and nominal) and numerical (discrete) quantitative data was obtained through short questions (closed format items) with multiple choice selection options. Qualitative data was obtained through five open-ended questions (open format items) allowing for flexibility where the participants could elaborate and express their views, perceptions and experiences.

The study was mainly an electronic-based study: where possible the research questionnaire was e-mailed to participants as a Microsoft Word document. They could work on the document, saving and editing their responses as they wished. The competed document was sent back to me via e-mail.

3.6   Pilot study

The data collection instrument and feasibility of the proposed methodology was tested during a pilot study of three mainstream high schools in King Williams Town, a town close to East London. The purpose of the pilot study was to determine if the collected data could be used to answer the study aim and objectives. Participants from the pilot study were asked to comment and provide feedback on the questionnaire and the method of administering the questionnaire. The pilot study showed that sufficient information was gathered by the questionnaire to answer the research aim and objectives.

Prior to using the questionnaire in the main study, the questionnaire was reviewed with a colleague and adjusted according to the feedback provided from the pilot study participants. Feedback indicated that the method of communication between the participant and me, i.e. using telephone calls and e-mail or messenger, was suitable and satisfactory for the participant. Furthermore, the format of the questionnaire, i.e. a Word document that could be edited, was user friendly.

The pilot study showed that some of the questions created confusion, because there were several similar questions in the questionnaire. These questions were modified by eliminating some questions and rewording others to encompass the essence of 'similar' questions in one question.

During the pilot study it was found that not all schools were able to use e-mail as a method of correspondence. This was established through a telephone call with each school invited to participate

in the pilot study to determine a functioning e-mail address that could be used for correspondence. At this stage, an additional method for data collection was established which could perform the same role as sending and receiving e-mail. A messenger was recruited to hand deliver the letter of invitation, information leaflet, consent form, and questionnaire to schools that could not use e-mail. Where schools consented to participate, the messenger collected the documents after completion and forwarded them to me. As described above, I identified these schools through a telephone call to each school. In addition, it was found that frequent follow up telephone calls with the schools were essential to maintain contact with the schools, to address questions, and to determine participation status. Valuable knowledge was acquired during the pilot study.

3.7   Data collection procedure

I contacted every possible school participant in the study telephonically. This contact served to:

- Notify the school of the research and that they would receive an e-mail from me to invite the school to participate in the study.

- Identify schools that could not participate via e-mail.

- Obtain the school's current e-mail address.

- Determine who the school principal was.

After this telephone contact, three documents were e-mailed/hand delivered to each of the 21 schools. These documents were:

- A letter of invitation to participate in the study. This letter provided a brief introduction to the study and to me, why I was conducting the study, and what the study was about (Appendix 2).

- An information and consent leaflet that explained the study in greater detail, how and where ethical approval was obtained and that approval to conduct the study was obtained from the Eastern Cape Department of Education (Appendix 1). The information leaflet also explained what participation would entail, what the risks and benefits of participation would be, how the confidentiality of the schools would be protected, and that participation would be completely voluntary. It encouraged the school to ask as many questions as they needed to make an

informed decision as to whether to participate in the study or not. The consent form was part of the information leaflet and was already signed by me and a witness (Appendix 3).

- The research questionnaire (Appendix 4).

These documents were either delivered via e-mail, or in person as discussed in 3.7.1 and 3.7.2.

3.7.1 Schools that could communicate by means of electronic mail

A total of 12 schools were able to communicate using electronic mail. The three documents were e-mailed as attachments to these schools. Each school was e-mailed separately, i.e. not group e-mailed, to protect the confidentiality of each school. These e-mails were all sent on 13 August 2013 (the second week of the third academic term). All schools were given until 13 September 2013 to ask questions, raise concerns, decide to participate or not to participate, and to complete the questionnaire. A follow up telephone call was made on the same day that the e-mails were sent to confirm if the school had received the e-mail and if they were able to open and view all three attachments.

All schools indicated that they had received the e-mails and were able to open and view the attachments. Two schools indicated during the phone calls that they were not going to participate and provided brief reasons as to why not. The remaining schools indicated that they would either pass the request onto a person the school principal thought to be suitable to review it, or that they needed to raise this at the next governing body meeting. Schools were advised during these telephone calls that they would receive a telephone call weekly to follow up on progress, unless the school had responded and indicated that they would not participate, or a completed consent form and questionnaire was received from them. Schools were also once again encouraged to ask as many questions as needed to make an informed decision as to whether or not to participate. It was reinforced that the confidentiality of the school and person completing the questionnaire would be protected at all times. Over the four weeks that followed, schools asked questions regarding the study by sending e-mails to me to which I responded via e-mail. Six completed consent forms and questionnaires were received during this period. The remaining six schools declined participation.

Consent forms and questionnaires were reviewed by broadly scanning for any unanswered questions or missing information. In instances where this was found I contacted the school in question to request further information where needed. The schools where this was applicable, all promptly responded by providing the information needed.

3.7.2   Schools that could not communicate using electronic mail

Nine schools had indicated that they were unable to communicate using e-mail. A messenger was recruited to deliver and collect the documents from these schools. The messenger printed and compiled the three documents into one document for each of the nine schools. The messenger hand delivered these documents to the corresponding school on 13 August 2013. The messenger also told the school's representative that they could phone her to collect the questionnaire and consent form once they were completed. The messenger's contact number was written at the top of the letter of invitation. The messenger did not discuss the study with any school she visited, nor did she answer any questions. The messenger obtained a telephone number from the person requesting more information and relayed it to me. I phoned the person and answered the questions. I contacted all nine schools telephonically on 14 August to determine if they had received the three documents. All nine schools indicated that they had received the documents.

Over the four weeks that followed, each school was telephonically contacted by me to find out if they had more questions, and to determine their participation status. During these phone calls, schools indicated whether they would or would not participate. The schools that indicated that they would participate also set a date for the messenger to collect the completed consent forms and questionnaires. I advised the messenger when and from which school to collect the documents. Three schools declined to participate and two schools provided a brief reason for this decision. Six schools completed the consent forms and questionnaires. The messenger collected the documents from the participating schools, electronically scanned and e-mailed a copy of each to me. The documents were reviewed and visually scanned by me for any unanswered questions or missing information. Only one piece of missing information was identified (a consent form was not dated). The messenger returned to the school and the form was dated.

At this point, the messenger posted all the hard copies to me. After I received the hard copies I told the messenger to delete the copies of the information on her computer and in her e-mail sent box. The messenger notified me that she did do this. At this point, the role of the messenger was completed. Transport costs and payments for printing and posting documents accrued by the messenger were re-imbursed by me. The messenger was also given remuneration of R250.00 for her time and effort.

3.8   Data management and analysis

3.8.1   Managing hard copies of the questionnaires and consent forms

Once all documents were received from the schools that participated using e-mail, and the electronic copies were received from the messenger, all documents (signed consent forms and completed questionnaires) were printed. A corresponding number was written on each page of each document from the schools that participated using e-mail. The corresponding number of the schools that participated using the messenger was already written on the documents. The reason for numbering the participating schools' documents was that once data analysis commenced, I would not see the name of the school on the pages, and so could avoid bias. All printed documents were filed in a file used for the research study. All hard copies from schools that participated via the use of the messenger were received by me. These were filed with all the other hard copies in the same file.

3.8.2   Managing electronic copies of the questionnaires and consent forms

A separate file was created in my e-mail account in which I placed all electronic copies of consent forms and questionnaires received. My e-mail account is password protected. A copy of each document was also saved onto the hard drive of my personal computer in an organised folder containing all documents relating to this study. This folder was backed-up daily onto a universal serial bus (USB) drive which was used only for this study. The USB drive was kept separately from my personal computer. Therefore, three electronic copies of the data existed, i.e. two electronic copies and one virtual copy in e-mail. Once data analysis was completed, the virtual copy in my e-mail account was deleted.

3.8.3   Analysing quantitative data

Questions 1 - 11 and 14 and 16 provided quantitative data. Questions that required the participant to select option A, B, C etc. were converted where A = 1, B = 2, C = 3, and so forth to enter data into a spreadsheet.

A Microsoft Excel spreadsheet was created and I entered the quantitative data onto that. The column headings displayed the questionnaire question number and question, and the row titles displayed the number of the schools. I verified data three times. A colleague then also verified that data was entered accurately into the spreadsheet.

Descriptive measures were used to describe quantitative results, including percentages, means, sample maximums and sample minimums, totals and ratios. Excel functions AutoSum, Ave., Max., Min., Count Numbers and Percentage and Ratio were used to calculate the descriptive measures. Questions 1 (independent versus public schools), 2 (gender orientation of school), 3 (language medium of school) and 4 (location of school) were calculated as percentages. For questions 5 (number of learners in the school), 6 (number educators in the school), 7 (number of classes per grade) and 8 (average number of learners per class), total counts, totals, sample maximum and sample minimum, mean, and ratios were calculated. For questions 9 (are there learners with PMIs enrolled in the school), 10 (number of learners with PMIs), 11 (does the school receive applications), 14 (does the school experience or foresee to experience challenges) and 16 (has the school previously experienced challenges), the mean, total counts, totals, and ratios were calculated. A colleague verified the accuracy of statistical analysis.

Because the study sample was small, only basic statistical analysis was done. As data was analysed, charts, figures and tables were created to display the data. Comparisons were made between schools with and without learners with PMIs.

3.8.4   Analysing qualitative data

A content analysis framework was used to analyse qualitative results. The response from each participant to each qualitative question was transcribed into a Microsoft Word document. Data was

arranged into a table in the Word document where columns represented each participating school and the rows represented the answers obtained from each participating school. I spent several days reading and re-reading the text in its raw format, and in its transcribed format to familiarise myself with the information.

I then began to search for themes and patterns in the data. Each theme received a unique code with a description. For example, where a participant made reference to e.g. building/infrastructure/special facilities, a code BIS was allocated. Where a pattern was observed, a colour with a description would be assigned. For example, schools with and without learners with PMIs referring to buildings/infrastructure/special facilities (BIS), the colour blue would be assigned by highlighting BIS in blue.

Continuous reflection took place on interpretation of the data, the relationship between themes, and the implications of the answers. I endeavoured to synthesize the data and produce generalisations from the answers provided to explain the themes and relationship between themes discovered during data analysis. A colleague undertook the same process on the raw data to generate his own themes and categories. Where differences of opinions arose, often due to differences of depth in interpreting the data, these issues were resolved through discussion, deliberation and consulting articles used in the literature review until common ground was found. More often than not, one issue took several days to resolve before the next issue could be focussed on.

I acknowledge that qualitative research requires incessant reflection as well as identifying one's own role in the construction of meaning from the data being analysed (Pyett, 2003). In interpreting and analysing the qualitative data obtained during the study, I became an essential component of the study.

3.9   Ethical considerations

Ethical approval for the study was obtained from the Human Research Committee at Stellenbosch University (Reference number S12/11/294). Permission was then granted by the Eastern Cape Department of Education to approach the mainstream high schools in East London and King Williams

Town and to conduct the pilot study and main study (Appendix 1). One stipulation was made from the Eastern Cape Department of Education, which was that no data collection could take place during the fourth academic school term. I adhered to this stipulation and data collection was completed prior to the end of the third academic school term.

I followed four ethical principles as described by Joubert and Ehrlich (2007). These principles are; autonomy, beneficence, non-maleficence and justice. Every school in the study population was invited to participate in the study and was considered and treated as an autonomous entity. An information leaflet was provided to explain the purpose of the study, what participation would entail, what the risks and benefits would be, explaining that participation is absolutely voluntary, and that the confidentiality of the participating school and person completing the questionnaire would be protected and maintained at all times. Every school that was invited to participate had the choice to either participate or to not to participate in the study. If a school decided to participate, they could decide to withdraw from participating in the study at any stage without any consequences. Written informed consent was obtained from all schools that participated in the study. As questions and concerns were raised and revealed, I promptly and thoroughly addressed them to enable the person/school to make an informed decision as to whether or not to participate in the study. I communicated openly and honestly with all schools that were invited to participate in the study at all times and respected their opinions and choices regarding the study. I acted as a competent professional at all times during the study. No issues of beneficence or non-munificence developed or emerged while the study was conducted. The names of all schools invited to participate in the study will remain confidential and all schools will remain anonymous. Every school received the same information and were given the same amount of time to decide to participate or to not participate, and where they did consent to participate, the same amount of time was allocated to complete the research questionnaire. All schools were given the opportunity to raise questions and concerns. Communication was done using language and terminology which could be understood by all invited to participate in the study.

The results obtained from this research study will be distributed to the Eastern Cape Department of Education, and all participants will receive a summary leaflet of the main findings of the study.

3.10   Rigour of the study

The efficacy of mixed method studies is determined by an apparent and calculated relationship between the methods in order for data to come together to generate a deeper insight into a study situation (Lingard *et al.,* 2008). The relationship between qualitative and quantitative data was shown through triangulation. Triangulation can be understood as mixing data and or methods to generate diverse view points on a study problem or setting and are useful in validating claims made in a study (Olsen, 2004).

I endeavoured to avoid bias in the study in the following ways:

- I attempted to blind myself from knowing what data belonged to which school. This was done by assigning a predetermined number to each school which was written on the questionnaire and consent form of the respective participating school. The names of the schools were not visible during data analysis.

- I tried to avoid sampling bias by aiming to recruit the entire study population. However, the number of schools that declined to participate might have created bias in this respect.

- Information bias was avoided by providing each school with the same information, same amount of time to decide to participate or to not to participate, responding to each schools' questions, and allocating the same amount of time to complete the research questionnaire if they decided to participate.

Participants in the pilot study were asked to comment on the data collection instrument, the method of administering the questionnaire, and the actual questions. The feedback provided was used to address any ambiguous questions which were then reviewed with a colleague prior to using it in the main study. Schools that participated in the main study were also asked at the end of the questionnaire to provide feedback on the questions and questionnaire.

3.10.1 Quantitative data

Quantitative studies are assessed for reliability and validity to determine trustworthiness (Joubert & Ehrlich, 2007). Joubert and Ehrlich (2007) define reliability as the extent of resemblance of the results

when the same group or participants are measured again and if variation occurs, what the extent of this deviation is. I aimed at obtaining consistent, accurate responses. The questionnaire used in the study was designed specifically for this study and for obtaining the data required to answer the study aim and objectives. Similar questions were placed in the questionnaire as "checks" where consistency should be observed between the answers (for example, question 9 and question 11).

The validity of the measuring instrument refers to whether or not it measures what it is intended to measure (Joubert & Ehrlich, 2007). The quantitative data which was obtained using the questionnaire was basic, demographic details. All answers provided by the participants were relevant and consistent to the questions that were asked. There were no significant deviations or outlining values observed during quantitative data analysis.

3.10.2 Qualitative data

Qualitative studies show rigor through credibility and transferability (Joubert & Ehrlich, 2007). Credibility can be connected with "internal validity", whereas transferability can be related to "external validity" (Joubert & Ehrlich, 2007). Credibility needs to represent all the realities a participant revealed.

I aimed at obtaining as many demographic details from the participants as possible and described the study setting in order for readers to determine if the study recommendations could be applied to another setting i.e. be transferred.

Pyett (2003) discussed the importance of continuous reflection as well as recognising that the researcher plays an integral role in the construction of meaning while conducting qualitative data analysis. I continuously reflected on the data and my interpretation of it. A colleague was asked to evaluate the qualitative data in its raw format to establish whether or not he interpreted it in an analogous way to me.

A threat to the validity of e-mail questionnaires is that the participants may not be willing to elaborate when answering questions. In an attempt to eliminate this, when the questionnaire was e-mailed to the schools, I asked them to answer the open questions in essay style and to use as much space as needed.

It was also reinforced that I would be blinded during data analysis. They were also asked to set aside approximately 30 to 45 minutes to complete the questionnaire and not to rush through it. According to Hamilton and Bowers (2006) e-mail is just a written means of data collection where language is still used. Visual cues can still be present with the use of capital letters, exclamation marks, and underlying tone in the choice of words or the use animations (Hamilton & Bowers, 2006). This was seen in the current raw data as capital letters and exclamation marks were used in instances.

3.11   Summary

Chapter Three explained the methodology of the study. A cross-sectional, descriptive study which was exploratory in nature was used. Additionally, a mixed methods design was employed to answer the research question. This chapter also provided my rationale for the choice of study design. The study took place in East London, South Africa. No sampling was done out of the study population of 21 mainstream high schools. Twelve schools participated in the study by answering a self-administered questionnaire. This was done through e-mail or by using a messenger. Quantitative data was analysed using Excel functions and qualitative data was analysed using a content-analysis framework. These findings are presented in the subsequent chapter. Chapter Three also outlined the ethical considerations and rigour of the study. Chapter Four will proceed by discussing and displaying the quantitative and qualitative results that were obtained during the study.

48

CHAPTER FOUR

RESULTS

4.1   Introduction

Quantitative and qualitative results from the participating mainstream high schools are presented in this chapter. Figures and tables are used to display quantitative results and narrative examples support qualitative results. Quantitative results are presented first, followed by the presentation of qualitative results.

4.2   Demographic details of the participating schools

The majority of the participating schools were public (92%), co-educational schools (92%). Seventy-five percent (75%) of the participating schools were located in urban East London and twenty-five percent (25%) were located in peri-urban East London. None of the participating schools was located in a rural area. Figure 4.1 graphically presents this and other demographic details of the participating schools.
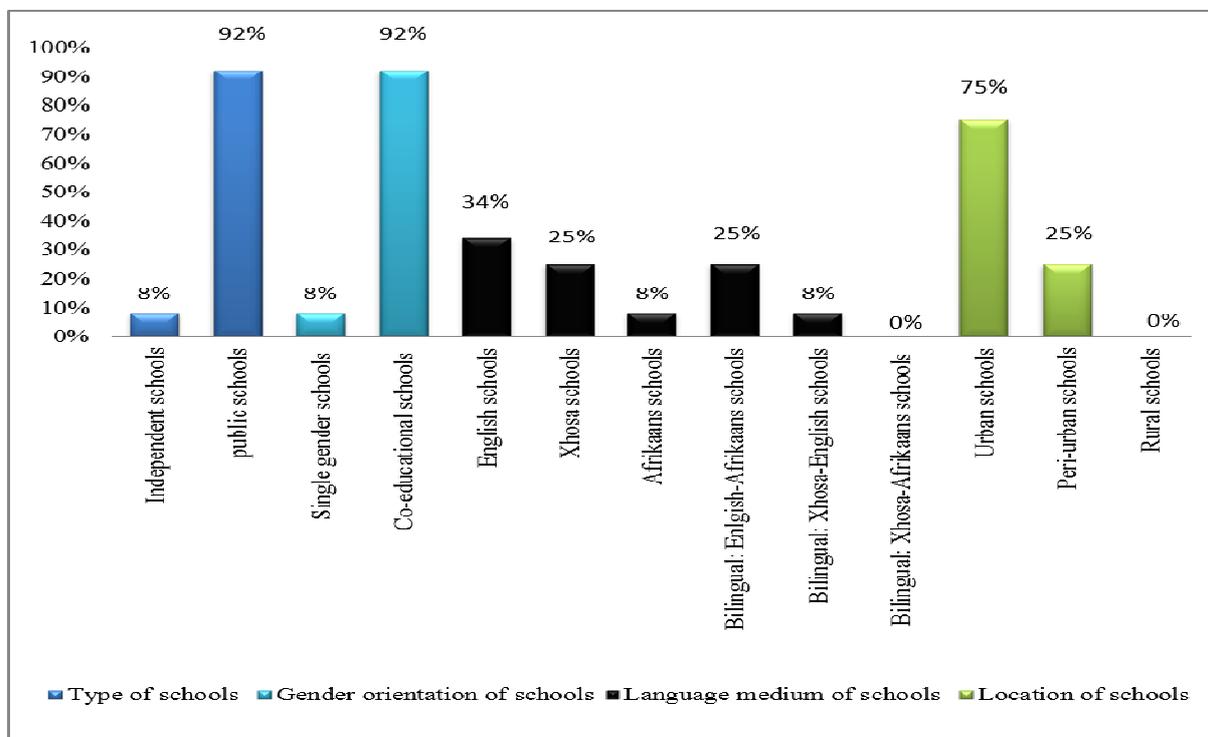
Figure 4.1: Schools according to type, gender orientation, language medium and location

4.3   Number of learners and educators, and distribution of learners in classes

The sample maximum and the sample minimum for the number of learners enrolled in the schools were 1 537 and 285 learners. The mean number of learners enrolled in the participating schools was 840 learners. In total 10 076 learners were enrolled amongst the twelve mainstream high schools.

The sample maximum and the sample minimum for the number of educators in the schools were 80 and 15 respectively. The mean number of educators was 37. On average, the participating schools had 5 classes per grade and 36 learners in each class. The average ratio between educators and learners in the schools was one educator to twenty-two learners (1:22). In the classroom setting, the average ratio between educators and learners was one educator to thirty-six learners (1:36).

4.4   Number of learners with permanent mobility impairments in participating schools

Three (25%) out of the twelve participating schools indicated that there was a learner or learners with PMIs enrolled in the school (Figure 4.2).
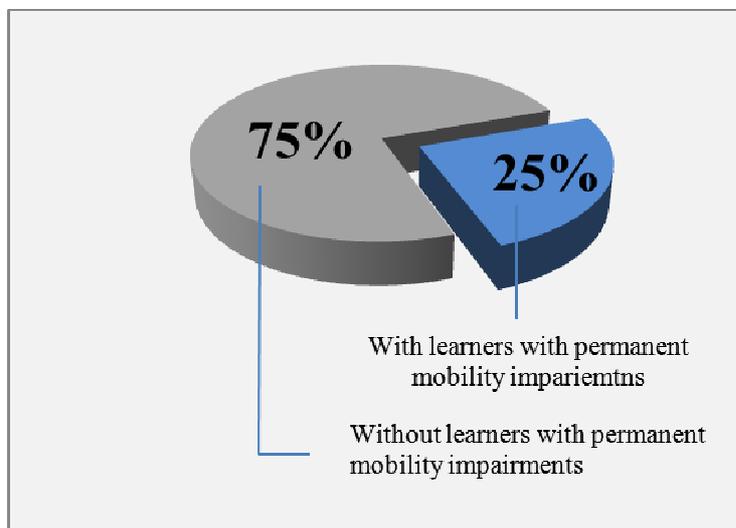
Figure 4.2: Schools with learners with PMIs enrolled

A total of four learners with PMIs were enrolled amongst these three schools. These four learners represent 0.04% of the total number of learners (10 076) enrolled in the twelve participating schools.

Sixty-seven percent (67%) of the schools reported that they had never received applications for enrolment from learners with PMIs, while four schools (33%) specified that they had. From these four

schools, three had a learner or learners with PMIs enrolled in the school. Five schools (42%) indicated that they experienced or foresee challenges with enrolling learners with PMIs. Twenty-five percent (25%) of the schools indicated that they had previously encountered challenges with enrolling learners with PMIs in the school. Figure 4.3 depicts the percentage of schools which received applications for enrolment from learners with PMIs, the percentage of those schools which enrolled learners, and the percentage of the total sample which experienced, or foresee challenges with enrolling learners with PMIs.
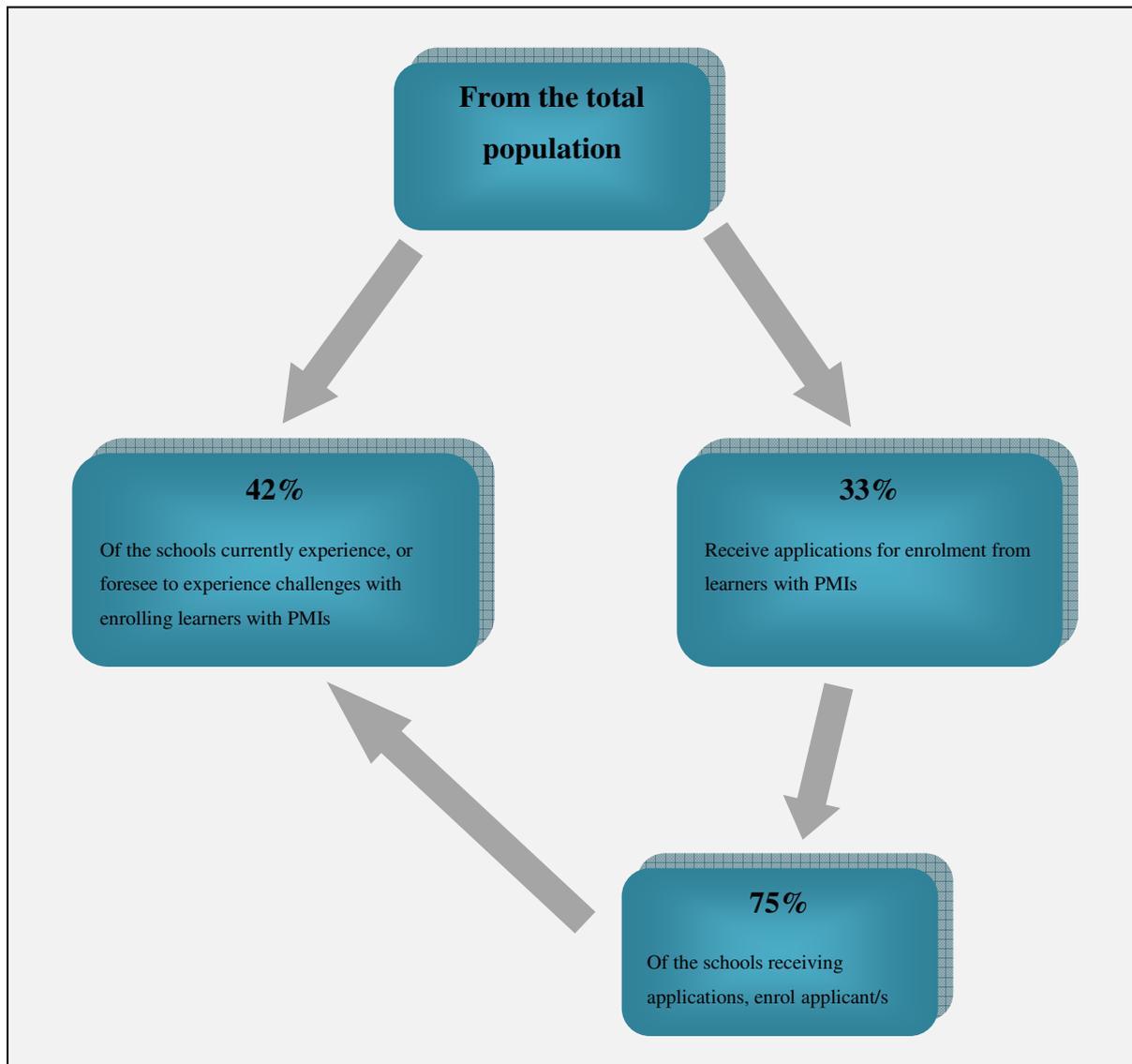
Figure 4.3: Applications, enrolment and challenges experienced with enrolling learners with PMIs

4.5   Demographics of schools with learners with permanent mobility impairments

All schools that had learners with PMIs enrolled were public schools and were located in urban East London. Learners with PMIs were enrolled in single gender and co-educational schools and the language medium of education was either English or bilingual (English-Afrikaans). Amongst the schools who had learners with PMIs enrolled, the mean number of learners enrolled in the school were 1 083. The mean (average) number of educators at the schools was 43. These schools had a mean number of 38 learners per class and a mean of five classes per grade. The mean number of educators to learner's ratio in the schools and the ratio of educator to learners in the classroom was the same, i.e. one educator to thirty-eight learners (1:38). Table 4.1 shows the differences between the schools that did have learners with PMIs enrolled in the schools (the total study sample) and the schools that did not have learners with PMIs enrolled in the schools.

Table 4.1: Observation differences between study population and study sample schools

	Schools with learners with permanent mobility impairments n = 3	Total study sample n = 12	Schools without learners with permanent mobility impairments n = 9
Mean number of learners in the schools	1 083	840	758
Mean number of educators in the schools	43	37	36
Mean number of classes per grades in the schools	5	5	5
Mean number of learners per class	38	36	35
Educator to learner ratio in the school	1:38	1:22	1:21
Educator to learner ratio in the classroom	1:38	1:36	1:35

4.6   Themes identified from qualitative data

Several themes where identified from the qualitative data. These themes were:

- Building infrastructure, special facilities and accessibility

- No applications from learners with PMIs

- Admission policy, merit and attributes of applicant

- How to address issues / challenges that arise

- Attitudes of parent and learners

- Educator training.

4.6.1   Building, infrastructure, special facilities and accessibility

The predominant theme which emerged was that practical considerations in terms of the school's building, design, layout of the school, infrastructure, special facilities (e.g. disabled toilets, railings, ramps), and accessibility would impact negatively on including learners with PMIs. All schools made some or other reference to the current state of the school building and facilities. The building was regarded as being exclusionary.

Eight schools (68%) indicated that the school building was laid out across several levels, which may prove problematic, particularly if the learner is a wheelchair user. Due to the layout of these eight schools, very few areas were not connected to each other by stairs. Schools felt that the current state of the school design was not wheelchair friendly, and therefore, the learner's ability to freely move around in the school would be significantly limited.

The following narrative examples explain the point:

> *"There might be some practical considerations as well, as the school building is on many levels. Our wheelchair access is limited", and "Access to various classrooms could be a challenge; however, arrangements could be made to accommodate such learners in easily accessible classrooms",* (School 1: An urban school without learners with PMI).

> *"The school is in a two-storey building without lift facilities",* (School 5: An urban school without learners with PMI).

> *"Classes and school as a whole are not wheelchair friendly",* (School 8: An urban school with a learner with PMI).

> *"INFRASTRUCTURE CHALLENGES!!",* (School 12: An urban school without learners with PMI).

Certain classrooms are fixed as the classroom for a particular subject, such as science or computer laboratories, because the subject might require specific infrastructure. In five schools (42%), these classrooms were located on the top levels of the school. There were also limited numbers of these types of classrooms and they were to be used by many classes across different grades.

> *"...the science and computer laboratories are on the top floor*", (School 3: An urban school with a learner with a PMI).

> *"...all laboratories are upstairs",* (School 9: An urban school without learners with PMI).

None of the schools had elevators to access different levels of the school building, and therefore, this would pose a great challenge in accommodating learners with mobility impairments as they would not be able to gain access to upper levels, or levels that have stairway access only.

> *"The school does not have a lift facility so the timetable has to be structured in such a way as to accommodate all the disabled learners",* (School 3: An urban school with a learner with a PMI).

> *"The school has no facilities such as ramps or lifts",* (School 4: An urban school without learners with PMI).

It was indicated that school buildings would need to undergo significant structural changes and that numerous additions such as ramps, railings, elevators and disabled toilets would be needed to be accommodating. Schools also felt that to make structural changes to the building would not be a quick and straightforward process. The design and layout of the schools may be space confined; therefore, building ramps to access all levels may not always be possible. In these instances, elevators may be required, but they are exceptionally costly. Eight schools (68%) mentioned that the school does not have the facilities to be accommodating or that the facilities that they currently have were inadequate. The predominant 'special' facility which schools referred to was disabled toilets.

> *"The school has to undergo massive re-alignments",* (School 6: A peri-urban school without learners with PMI).

> *"Toilet facilities are not suitable for them*", (School 11: A peri-urban school without learners with PMI).

> *"...the school infrastructure does not make provision for learners with permanent mobility impairments, (no ramps, special toilets etc)",* (School 9: An urban school without learners with PMI).

Furthermore, two schools (17%) indicated that access to the premises and the grounds might also pose challenges:

"From the gate of the school, it's difficult for cars to enter as the road and gate need maintenance", *"School grounds are not up to standard for such learners."* (School 10: A peri-urban school without learners with PMI).

"Entrance to the school and classrooms not suitable", (School 11: A peri-urban school without any learners with PMI).

Perceived challenges in accommodating learners with PMIs extended beyond only the school buildings, and the classroom. Accommodating the learners in terms of school transport, boarding facilities and extra-curricular activities would pose additional challenges.

"There is no scholar transport catered for our learners", (School 10: A peri-urban school without learners with PMI).

In summary, schools felt that the current state of the school building is exclusionary. Schools thought that prior to enrolling learners with mobility impairments changes will need to be made in the school.

4.6.2   No applications from learners with permanent mobility impairments

Five schools (42%) indicated that their answers were based on theory and not practical experience because they had never received an application from a learner with a mobility impairment.

"Should we have applications from permanently mobility impaired learners...", (School 1: An urban school without learners with PMIs).

"Should learners apply who have mobility impairments...", (School 5: An urban school without learners with PMIs).).

"no specific applications have ever been received", (School 9: An urban school without learners with PMIs).

Schools reporting that they did not receive applications from learners with PMIs emerged as a theme on its own. This theme was consistent with the quantitative data, where the majority of schools indicated that they did not receive applications from learners with PMIs.

The most challenging question to obtain answers for was that aimed at determining the grounds for decisions to exclude learners with PMIs in enrolling in the school. Three schools (25%) simply indicated that they do not receive applications from learners with PMIs, therefore the decision to exclude is never made and they would not elaborate any further. In that instance, because the schools do not receive applications from learners with PMIs, the decision to consider inclusion falls beyond the scope of their admission procedure.

4.6.3 Admission policy, merit and attributes of the applicant

A less prevalent theme emerged with reference to the school's admission policy. Schools with learners with PMIs noted that their admission policy is 'all inclusive', or the school attempts to be 'all inclusive'. Schools that did not have learners with PMIs in the school, stated that all applicants had to follow the school's admission policy and the same admission criteria and procedure was followed for all applicants.

> *"We are an inclusive school and have as such made structural changes where we can to accommodate learners with physical disabilities",* (School 3: An urban school with a learner with PMI).
>
> *"Aim to be an all inclusive school",* (School 12: An urban school without learners with PMI).
>
> *"They will be accepted if they comply with the admission policy",* (School 2: An urban school without learners with PMI, but previously had such learners).
>
> *"...we would consider them on the same merits as other learners",* (School 1: An urban school without learners with PMI).

There was consensus amongst the majority (68%) of the schools that admission would be based on merit, just as it does for any other applicant. This was found amongst schools that did and did not have learners with PMIs enrolled. This theme emerged hand in hand with aspects referring to the attributes of the applicant, such as the level of mobility or immobility of the applicant, whether or not they were a wheelchair user or ambulant with crutches, whether co-existing impairments exist, for example cognitive impairments, and the academic abilities of the applicant to cope with the curriculum. Owing to this, some schools (33%) indicated that a generalised answer could not be provided as each application will be considered individually. The degree of the learner's mobility would affect the changes that would be needed. Four schools (33%) indicated that the presence of additional impairments, particularly cognitive impairments, would have a negative impact on their ability to be inclusive.

> *"Obviously, should there be an application, the degree of the mobility would have to be discussed and challenges dealt with",* (School 1: An urban school without learners with PMI).
>
> *"Learners must have the cognitive ability to cope scholastically",* (School 7: An urban school without learners with PMI).
>
> *"Depending on the degree of immobility...",* (School 5: An urban school without learners with PMI).

4.6.4   The complex nature of challenges

Each participating school indicated that they foresee some challenge/s if they had to enrol a learner with permanent mobility impairment in the school. This was once again consistent with findings with quantitative results where schools indicated that they currently experience, or foresee, challenges with enrolling learners with PMIs. However, this was more pronounced in qualitative data. Schools reported that finding solutions and ways to address these challenges could be problematic as challenges could be continuously changing, comprehensive and inter-related. Together with this theme, more often than not, reference was made to aspects of the school building, design, layout, infrastructure, special facilities and accessibility. This once again reinforced infrastructure challenges as the major perceived barrier in the study.

> *"Access to various classrooms could be a challenge. However, arrangements could be made to accommodate such learners in easily accessible classrooms",* (School 1: An urban school without learners with PMI).

> *"...going up and down stairs and how this would be dealt with...*", (School 5: An urban school without learners with PMI).

From the schools that had enrolled learners with PMIs enrolled previously, or currently have such learners enrolled in the school, the consensus was that the building, layout and infrastructure and the accessibility of the schools created the most significant challenges with accommodating the learner/s. Regardless of how hard the school works towards being all inclusive, continuous challenges emerged, such as adapting the time table, which remains problematic irrespective of previously or currently having learners with PMIs enrolled in the school. Some changes have not been possible before, for example moving the science and computer laboratories; therefore, the challenges with accessing those classrooms remained a barrier.

Three schools (25%) made some reference that all the changes needed to be fully inclusive of learners with PMIs may not be feasible. The design and layout may not support the construction changes needed to be accommodating of all needs. Space also becomes a limiting factor as structural changes would require a great deal of space. Changing the timetable would require the that the location of certain classes would have to change because, for example, a learner with PMI was unable to access classrooms on the second level of the building as the schools did not have elevators. These changes

would then need to be synchronized with all possible classrooms, the needs of all learners, the availability of educators, all academic subjects and time. Arranging the time table to accommodate all learners becomes exceptionally challenging if the school has learners with other impairments who also need to be accommodated.

The general perception that I received from the answers was that the schools felt overwhelmed by the possible challenges and problems they might experience when enrolling learners with PMIs and finding solutions to accommodate them.

4.6.5   Attitudes of parents and learners

An uncommon theme emerged from responses obtained from one school that made reference to attitudes. This theme referred to the success of including the learner. The attitudes of the parent/guardian and their involvement with the learner with PMI will play a role in accommodating learners with PMIs. In addition the attitudes of other learners will play a role in whether or not inclusion is successful. For instance, a positive attitude exuded by other learners and could be used as a facilitator in inclusion of learners with PMIs:

> *"Learners who are not impaired, assist learners with wheelchairs",* (School 8: An urban school with a learner with PMI).

4.6.6   Training of educators

Educators find it challenging to assist learners with PMIs as they are not trained or experienced in providing the support the learner needs.

> *"Teachers are not trained..." "Teachers are not experienced in teaching learners who are challenged."* (School 8: An urban school with a learner with a PMI).

4.7   Summary

The information obtained from the research questionnaire showed that four learners with PMIs were included in mainstream high schools. The widely-held attitude was that enrolment of any learner is based upon merit. Schools indicated that structural and practical factors influenced consideration of enrolment of an applicant and the success of their inclusion. The majority (67%) of the schools indicated that they actually don't receive applications from learners with PMIs, and therefore the

decision to include or exclude the learner in the school is not necessary. All schools indicated that they either experienced or foresee challenges with enrolling learners with PMIs. The greatest challenges would arise due to the design and layout of the school buildings.

Chapter Four presented the quantitative and qualitative data obtained during the study. Chapter Five will synthesize and discuss this information in relation to the research question and aim.

CHAPTER FIVE

DISCUSSION

5.1   Introduction

Quantitative and qualitative results are discussed in an integrated manner in this chapter. The study findings are related to the research question as explained in Chapter One and the literature review in Chapter Two. The data collection method and response rate and the possible implications of both are also discussed.

5.2   Response rate and data collection method

As indicated in Chapter Four, the study had a response rate of 57% (or 12 schools). The qualitative aspect of the study dominated. Since the aim of qualitative research was not to generalise findings to larger populations the small number of participants is not problematic per se. However it did prevent statistical analysis of findings.

The findings from this study are representative of the time, location and population in which the study was conducted and are not generalisable to other settings. Data was meant to provide a picture of the situation in a specific context to make recommendations for change if needed in that context. Information on the context has been provided for comparison should anyone wish to apply recommendations in another context.

Rich, valuable data was obtained from the 12 participating schools and there was consistency amongst the answers provided by the schools. Some of the reasons obtained from schools for declining participation were indicative of potentially obtaining similar answers and perspectives as obtained from the participating schools. For instance, both the participating and non-participating schools indicated that they seldom or never received applications from learners with PMIs.

The method of data collection might have influenced the participation rate. When data is collected electronically, as in this study, one loses the personal connection with the study population and potential participants might have found it easier to refuse consent. However, it is my perception that

the choice of study design was not the primary reason that led participants to refuse consent. Through my telephonic contact with the study population, I became aware of a sense of apprehension to participate. In my opinion possible explanations for this include an apprehension that the schools would be shown in a bad light for not adhering to DOE policy, or that there is a general atmosphere around the topic of inclusive education which might make it 'taboo' for open discussion. Therefore, the use of electronic means of data collection - where schools participated anonymously - might actually have facilitated participation.

One cannot ignore the evolution of the information age which requires us to integrate modern electronic aspects into research designs and data collection (Hamilton and Bowers, 2006). I reached the opinion that embracing these changes compels researchers to explore, understand and discover suitable ways to best use modern electronic means in research.

While non-verbal ways of communicating, such as facial expressions were lost, emotions were conveyed in other ways. Uncertainty and confusion could be identified through the selection of words and sentence construction. Through the use of capital letters, exclamation marks and changing font to bold, certain issues were highlighted; for instance, when School 12 referred to infrastructure challenges.

5.3.   Number of learners with permanent mobility impairments in mainstream high schools

I am of the opinion that the number of learners with PMIs enrolled in the study schools was low. However, no similar South African studies could be identified. Thus, the study findings could not be compared to findings from other settings.

The low number of learners (4) with PMIs who were included in the mainstream high schools in East London and who apply for admission in these schools could suggest one of two things. Either there are very few learners with PMIs in the East London community, or a large gap exists in including learners with PMIs in the schools. Unfortunately, the latest Census data (South African Statistics, 2012) does not provide information on activity limitations according to age group or province. Thus,

Census data could not be used to draw any conclusion on which of the above two reasons might be the most plausible.

Schneider *et al.,* (2009), found a disability prevalence figure of 14.7% amongst persons 15 - 24 in South Africa. They found problems with walking to be the third most common problem after problems with seeing and remembering. Unfortunately, they did not provide a breakdown of prevalence figures per province or activity limitation per age group. However, from the 14.7% figure, one can postulate that there should be more than four persons with mobility limitations of high school age in the East London area. There are no special schools specifically for learners with PMIs in East London. This raises the questions of where do learners with PMIs receive education in this area and do they even receive an education at all?

The International Classification of Functioning (ICF) conceptualizes disability as a health experience which occurs within a particular context (Allan, Campbell, Guptill, Stephenson & Campbell, 2006; WHO/UNESCAP, 2008). Therefore, there is an interaction between the health condition and the contextual factors which are either environmental or personal (Allan *et al.,* 2006; WHO/UNESCAP, 2008). Environmental factors consist of all physical, attitudinal and social aspects which form the environment in which the individual lives (Allan *et al.,* 2006; WHO/UNESCAP, 2008). Personal factors include age, gender, race, individual character, education levels, life experiences and behavioral patterns (Allan *et al.,* 2006; WHO/UNESCAP, 2008). If the number of learners with PMIs of high school age in East London is indeed higher than the number enrolled in the schools, then it would surely signify several things in terms of participation restrictions. Environmental factors might result in participation restrictions because:

• The education system is not making adequate provision to include learners with impairments (Pillay & Di Terlizzi, 2009),

• Inappropriate or unavailable transport; therefore the child is unable to reach the school (Groce & Bakhshi, 2011),

• Poor accessibility to the built school environment (Danso *et al.,* 2012), a challenge that was found in this study. This might paint the school as uninviting and unaccommodating for

learners with mobility impairments. Learners with mobility impairments may not be able to visit the schools open days to view and tour the school because they are unable to access the school. This may discourage them from applying to the school to avoid facing these challenges.

- Negative attitudes and stigmatization against persons with disabilities (Curtin & Clarke, 2005; Pitt & Curtin, 2010; Miles, 2011; Trani *et al.,* 2011; Chataika *et al.,* 2012; UNICEF, 2013),

- Cultural beliefs surrounding disability resulting in exclusion from educational opportunities (Anthony, 2011; UNICEF, 2013),

- Character and behaviors of the family, and

- Socio-economic conditions of the town for example poverty (Loeb *et al.,* 2008; ACPF, 2011; Miles, 2011).

Personal factors resulting in participation restriction may be related to:

- Age of the child where they may not be able to comprehend the significance of education in their life and possibly not strive towards attaining an education.

- Socio-economic background of the child where the family may not be able to afford all the costs involved with education and schooling (ACPF, 2011).

- Personal beliefs, character and goals of the individual which may be related to a finding from this study, that most schools don't receive applications from learners with PMIs for enrolment. Personal feelings of fear, anxiety and social isolation may be associated with an application and therefore the individual and their family do not apply to the schools for enrolment.

- The individual's own understanding of disability within the context of socio-economic conditions, culture and South Africa's background of segregation. Learners with PMIs may feel as though they will be excluded even before applying for enrolment.

An additional concern is that if low numbers of learners with PMIs enrol or apply for enrolment in the mainstream high schools, accommodating and including these learners might be deemed less important and other pressing issues might take precedence.

The Education White Paper 6 indicates that support must be provided to various learners according to their needs (DOE, 2001). In addition, it stipulates that mainstream schools should provide support to learners with low-intensive support needs (DOE, 2001). However, the Education White Paper 6 does not clearly describe the role of mainstream schools in including learners with disabilities (Walton *et al.,* 2009), nor does it provide clear definitions of what can be classified as low-, moderate- or high-support needs. Thus it is difficult to determine which learners with disabilities should be included in mainstream schools as it is unclear what level their support needs are. For instance, some learners with mobility impairments cannot walk and use wheelchairs, while others can walk, but do so slowly or require crutches. The White Paper does not clarify whether this would mean that some of them have higher support needs than others.

No literature could be identified that reported on mainstream high schools receiving applications from learners with PMIs. This study found, in consistent answers provided to both quantitative and qualitative questions, that schools did not receive many applications for enrolment from learners with PMIs. Triangulation of these answers strengthened the rigour of the study and made this observation a pertinent finding. A large number of schools reasoned that because they don't receive applications from these learners, they are not placed in a position to decide to include or exclude these learners.

5.4   Barriers to inclusion

Results from the study indicated that the greatest barriers schools foresee with regard to enrolling learners with PMIs were related to physical access caused by the infrastructure. This finding was consistent with findings from an exploratory study conducted by Danso *et al.,* (2012) who investigated accessibility in high schools in Ghana. They reported that the built environment of the majority of high schools was exclusionary and not disability friendly.

If these challenges are obvious to the schools, even those who do not have learners with PMIs enrolled, one can surmise it will be even more apparent to persons with mobility impairments who possibly encounter such challenges on a daily basis (WHO, 2011), and might be a deterrent to application.

Every participating school made reference to how the building, infrastructure, special facilities and accessibility may create challenges in accommodating learners with PMIs. These findings support the insufficiencies identified by the INDS (1997) in the Building Standards Act of 1995, and the SABS 0400 Code of Practice for the Application of the National Building Regulation 1990 (South Africa. Office of the Deputy President, 1997). The Department of Education acknowledges that appropriate buildings, infrastructure and accessibility is essential for learners with disabilities in accessing education and that supportive policy is imperative in facilitating inclusion (DOE, 1997; DOE, 2001), yet, study findings indicate that in the East London area at least, these policies had not been implemented.

According to the literature review, problems related to the built environment were more pronounced in developing countries. Previous research has indicated that South Africa experiences challenges in implementing inclusive education practices because of the lack of resources (Pillay & Di Terlizzi, 2009). This includes material and human resources (DOE, 2001). To render school buildings inclusive of learners with disabilities would require a great deal of material and human resources and funding. I believe that this funding should come from the Department of Education and the governing bodies of public schools. The DOE and governing bodies invest money to build sporting facilities such as swimming pools or tennis courts to enable learners to participate in these sports. If funding can be generated to make changes such as these, funding can be allocated and generated to make the changes to accommodate learners with mobility impairments in the school buildings.

The schools felt that the design, layout and infrastructure would prevent inclusion of learners with PMIs, particularly for those learners who are wheelchair users. Access limitations would result in the learner not being able to freely move around in the school building and cause exclusion to certain parts of the school, and in some cases, prevent them from entering the schools grounds. However, if this is true for learners with PMIs, it is also true for educators, parents and visitors with PMIs. Thus the inaccessible infrastructure caused exclusion and infringement of the human rights of all persons with mobility impairments. Understandably planning, funding and implementing the structural changes to make school buildings completely inclusive would require substantial amounts of time and

could cause disruptions to the academic programme. Therefore these concerns have some legitimacy. But if the overall aim is to be inclusive, at some point schools will need to allocate finance for structural changes and plan to accomplish this with the least disruption to academia. As with any goal, the goal needs to be specific, measurable, attainable and reasonable, and have a time limit. I argue that very little has been done to accommodate learners with mobility impairments in general because the goal "to be inclusive" is very vague and it has no specification, outcome measures or a timeframe, and therefore, it can be postponed and focus can be geared towards other issues.

If learners with PMIs are included in the schools without the necessary changes made to the school building to accommodate them, participation exclusion may result. This may infringe on learners with PMIs rights to dignity, equality and freedom. Teenage learners with mobility impairments may feel humiliated and degraded (Pitt & Curtin, 2010). Pitt and Curtin (2010) found that learners with disabilities felt isolated from and different to their peers. The finding is supported by the United Nations Children's Fund (2013) which states that children with disabilities are vulnerable to feeling isolated and developing low self-esteem due to their peers' perceptions of disability. An important factor influencing the psychological development and self-esteem of adolescence is the development of friendship and experiences during teenage years (Pitt & Curtin, 2010). Taking these factors into account, if changes are not made in the schools to accommodate enrolled learners with PMIs in the schools, facing continuous access barriers and isolation from their peers may lead to these learners developing low self-esteem and lagging behind in their psychological and emotional development. These consequences may then be carried into their adult lives and create personal barriers in their participation in society.

From the schools that did receive applications for enrolment from learners with PMIs, seventy-five percent enrolled the applicant in the school. This indicates that some schools do consider enrolling and accommodating learners with PMIs. If this is the case, it would be imperative to address the issues that the schools perceived as possible challenges and barriers to inclusion to promote application for enrolment from these learners. As outlined above, structural changes and accessibility

issues must be addressed to promote applications from learners with PMIs as well as to successfully accommodate them in the school.

Further challenges which were identified by the schools included adapting the academic timetable to accommodate the learner/s; educators' feelings of anxiety about their skills and capacity to assist learners with PMIs; parental involvement; and attitudes of other learners in the school. These thoughts and feelings might be an unintentional implicit barrier to inclusion.

As it is possible to rearrange the timetable to accommodate all learners in a school, the challenge is making the effort to do it. Over time, it should become easier to do, and it may require a "teething" period of trial and error to find the best way of adapting the time table.

The Education White Paper 6 outlines a strategy for removing barriers to learning (DOE, 2001). Within this strategy, developing resource centres, appropriate support structures and providing teacher training is discussed to support the mainstream schools. Once again, this is seemingly not being implemented in the study setting. I believe the schools might feel as though they are alone in making inclusive education practices a reality which may indicate that the schools lack the required support.

If the schooling environment is accessible for learners with PMIs, they may possibly require little to no assistance in preventing injury and harm. Suitable educator training may then be required on relating to learners with PMIs and dealing with them as they do with any other learner.

I perceived an underlying tone of fear and apprehension that the task would be daunting. This might indicate that the schools lack the support they need to be fully inclusive schools. Extra support could be in the form of educator training to relate to learners with PMIs; auxiliary staff who are trained to assist learners with PMIs if needed; encouraging parental involvement; re-modelling building plans to meet at least a basic standard of disability-friendliness and access to support people whom the schools can contact regarding inclusion challenges they foresee or experience.

5.5   Enrolment of learners with permanent mobility impairments

Schools that enrolled learners with PMIs had a higher average number of learners, teachers and learners per classroom when compared to the overall sample and those schools that did not enrol

learners with PMIs. I postulate that 'larger' schools are more likely to receive applications for enrolment from learners with PMIs and are more likely to enrol the applicant. However, the numbers were too small to allow conclusions to be drawn. All participating schools were located in urban and peri-urban East London; therefore, geographical location could impact on this observation. The attitudes towards inclusion of persons with impairments in these areas may differ from attitudes in rural areas. Urban areas are more developed than rural areas; therefore, it may be possible that there are potentially more facilitating factors which can be used to improve inclusion. For instance transport might be more available or roads and kerbs might be paved easing wheelchair propulsion or walking with crutches.

5.6   Conceptualizing inclusive education

5.6.1 Approach to disability

Participants indicated that consideration for enrolment in the school would be based upon merit of the applicant and whether or not they could cope academically with the curriculum. Any applicant would need to meet these standards to be considered for enrolment. But for learners with PMIs it was indicated that individual/personal attributes would also play a role. These attributes may be their physical capabilities i.e. level of mobility and immobility, or the existence of co-morbid impairments such as cognitive impairments. In view of the social model approach to disability, which argues that disability results from the barriers society and the social environment poses (Lomofsky & Lazarus, 2001; Anthony, 2011; Band *et al.,* 2011; Chataika *et al.,* 2012), personal attributes should not influence consideration for enrolment. Consciously or unconsciously, by implying that inclusion would be considered based on personal abilities sets unfair supplementary criteria for learners with PMIs to be considered for enrolment. Therefore, the school "society" poses attitudinal barriers to learning and education. This can be regarded as discriminatory. In doing this, discrepancy is located in the learner and not the environment and society (Lomofsky & Lazarus, 2001; Peters, 2001; Walton *et al.,* 2009; Anthony, 2011).

A distinction is made by the Education White Paper 6 between mainstreaming and inclusion (DOE, 2001). Mainstreaming requires changes in the learner which will enable them to fit into a particular

system, whereas inclusion requires barriers in the education system to be addressed to accommodate the diversity in learning needs found amongst learners (DOE, 2001). Participants had seemingly sound reasons to include or exclude learners with PMIs. However, when considering the words used to explain this, what filtered through was that reasons were based on the overall perception and understanding of disability according to the medical approach. Despite an awareness of inclusive education, the medical approach seemingly still dictated and influenced reasoning resulting in mainstreaming. For example:

> *"Depending on the degree of immobility…"*, (School no. 5 – Urban school with no learners with PMI).
>
> *"The school was not designed for such learners",* (School no. 6 - Urban school with no learners with PMI).
>
> *"…as long as the learner is not cognitively challenged",* (School no 8 – Peri-urban school with learners with PMI).

The choice of words such as 'depending' and 'degree of immobility' and 'as long as' implies that the choice would depend on whether or not the learner could fit into the school and the learner's level of mobility, and not the infrastructure potential of the school.

5.6.2 Mainstreaming or inclusion?

It seems that general perceptions focused on mainstreaming rather than inclusion, yet it would appear as though this point of view was not deliberate, but rather due to a lack of fully understanding the difference between mainstreaming (changes needed in the *learner*) and inclusion (changes required in the *education system, curriculum and environment*). Confusion about the difference between the two terms seemed to exist. This confusion could be caused by the approaches we have adopted to understand disability. Society was for years, and to a large extent, still is, dominated by the medical model's approach to disability (Chataika *et al.,* 2012). At a policy level, the inclusion model approach to disability are propagated (DOE, 2001), but at the ground and implementation level, a different understanding still exists.

For instance, schools indicated that the physical access barriers would influence inclusion and exclusion of learners with PMIs. In these cases exclusion of learners with PMI would occur because

they would be unable to fit into the current infrastructure and design of the school Thus, a mindset or a purely practical response to a reality that seems to focus on mainstreaming.

A further theme indicated that admission was based on personal attributes such as level of mobility or the presence of cognitive impairments. A practical response to the reality of the unaccommodating school environment was that the individual would not fit into the system, which is once again rooted in the focus to mainstream.

In recognizing their role to find solutions, one can consider this as wanting to include, rather than mainstream. In identifying suitable solutions as a challenge, schools perhaps unknowingly realize that there is a difference between inclusion and mainstreaming. Similarly, by identifying factors which may facilitate inclusion, one can once again regard this as working towards inclusion rather than mainstreaming. Identifying the involvement of parents and attitudes of other learners as factors which can influence the success of including a learner would be taking a step towards being inclusive.

5.7   Summary

The challenges the schools experience or foresee are real challenges, and they should be supported in solving them. The lack of applications from learners with PMIs masks the possible causal aspect that the current state of mainstream schools may not be inclusionary and inviting for learners with PMIs. This might result in a cause-effect relationship where the schools don't receive applications, and therefore, changes required to accommodate potential learners with PMIs are pushed down the list of priorities. Principles of inclusive education need to filter through the education system and not just from a top-down approach. At the level of implementation (the school) the primary source of support for implementation to take place would be from the provincial Department of Education, which needs to provide the bulk of the financial, planning, material and human resources required to enable schools to be fully inclusive.

CHAPTER SIX

CONCLUSION, LIMITATIONS AND RECOMMENDATIONS

6.1.   Conclusion

This study has put inclusive education in the spotlight from the point of view of the mainstream schools. From the findings it appeared that a shared understanding of the concept of inclusive education and inclusion were lacking in participating schools. I formed the opinion that in general participants focused on mainstreaming learners with PMIs rather than on including them. It seems as if these views were formed out of ignorance and lack of understanding, rather than predetermined discriminatory judgments. In addition, it seems as if children with PMIs and their parents did not see enrolment in mainstream school as an option since so few of them applied for enrolment in mainstream schools.

Learners with PMIs should be empowered and encouraged to apply to mainstream high schools. Mainstream schools need to consider applications from these learners according to the same criteria as any other learner. The consideration to enrol them needs to be genuine and unbiased. Their level of mobility should not play a role in this decision. Excluding learners with disabilities from education leads to exclusion for potential development opportunities, which consequently impacts on their future (Peters, 2001) and denies their human rights.

However, as long as the infrastructure at the school is exclusionary, it will discourage potential applications, impede full participation and might impact negatively on the learner's emotional development and self-esteem. Therefore, it is imperative to understand why exclusion occurs (Peters, 2001) to unravel this conundrum. Having definitions in policies that are sound on paper is a good starting framework. Successfully implementing what is defined in policies requires all stakeholders to internalize these definitions, to reconstruct their understanding about disability and believe that inclusion it is the right thing to do. This involves having the will to acquire the needed resources to apply changes, and the will to implement these changes in the face of competing pressures from other "right things".

Schools experienced challenges and required support. One cannot simply say that the schools need to apply inclusive education principles when they are facing massive challenges. They require support to break these challenges down into manageable components and to address them. Only then can learners with PMIs be included in mainstream high schools and be afforded the same opportunities as their peers. In doing so they are afforded the choice and opportunities to open doors to a prosperous future, and thereby to enjoy their human rights of dignity, equality and freedom.

If the schools and the Department of Education encourage inclusion of these learners and commit to working towards including them in the mainstream schools, an attitudinal shift will occur over time to viewing disability within an inclusive model. The values and views schools stand for are key features that are instilled in and adopted by the learners. If a school stands for good sportsmanship, this attribute is encouraged and practices are implemented to ensure that this attribute comes through in educators and learners. Similarly, if a school stands for inclusive education, practices which discourage discrimination, stigmatization and exclusion, and inclusion and acceptance will be promoted.

The following recommendations are made to start to address the challenges found in the study.

6.2   Recommendations

6.2.1 Recommendations for practice

6.2.1.1 Access audits
The findings from this study suggest that accessibility audits should be done of all mainstream high school buildings and grounds to determine what barriers and facilitators to inclusion exist in the schools. These audits should be initiated and managed by the Department of Education and conducted by each school on its own premises, as a collaborative, provincial-wide effort. This will provide the Department of Education with information to plan resource allocation over successive years to address these barriers in schools and provide appropriate support to each school instead of using an 'umbrella' approach.

6.2.1.2 Human resources development

Allocating funding towards developing human resources would be particularly useful. This can be done by providing educator training and support to develop an understanding of disability and mobility impairments and an aptitude to relate to learners with mobility impairments.

In addition, it is necessary to broaden educators' and communities' perspectives of disability and create awareness of the role of the environment in disability. Interactive workshops at schools where persons with disabilities act as tutors are recommended.

6.2.1.3 Consulting services

Collaborating and calling upon rehabilitation consultants and/or allied healthcare workers to provide outreach services to the schools, as described in the National Rehabilitation Policy (Department of Health, 2000). These professionals can visit and consult to the schools regarding inclusion of learners with PMIs and provide learners and educators with support in line with inclusive practices as the needs arise.

6.2.1.4 Monitoring of the implementation of the Education White Paper 6

Review and monitoring the implementation of the Education White Paper 6 is required by the Department of Education. Each factor identified as a strategy towards removing barriers to learning and education needs to be evaluated. For example, if the strategy indicates that full service schools need to be converted into resource support centres, it needs to be assessed if this has been done, and if these centres actually provide the support needed by the mainstream schools.

6.2.1.5 Global changes to include all learners

Currently schools acted reactively i.e. changes were made after application to accommodate the specific needs of one learner with mobility impairments. Global changes should be made especially to school infrastructure. Certain schools could be targeted in each area for re-modelling in various phases, i.e. schools with greater potential for re-modelling and a greater catchment area of learners with mobility impairments could be targeted first in phase one followed by schools with lesser potential for remodelling and a smaller catchment area of learners with mobility impairments. This

process can be continued until all schools that have potential for re-modelling have been transformed. In doing it this way, resources can be sensibly and efficiently allocated and used.

This might encourage learners with impairments to apply for enrolment and will take pressure off the schools if and when a learner with a mobility impairment applies in future. In this way, the buildings in general, would have some standard of universal access for persons with physical disabilities. Specific alterations could then be considered and made once the learner/s is enrolled in the school according to the specific needs of the learner/s.

6.2.2   Recommendation for further study

The nature of this study makes it ideal to serve, in part, as a pilot study for a provincial study on inclusion of learners with disabilities in mainstream high schools in the Eastern Cape, and such a study is recommended.

The provincial study should include the following objectives:

- Determine the prevalence of persons with disabilities between the ages of 13 - 19 in the Eastern Cape.

- Determine the percentage of these persons who are in school, who are in mainstream schools, and where they attend school.

- Determine the perspectives from all stakeholders on inclusive education i.e. representatives from mainstream high schools, learners with disabilities, parents of learners with disabilities, other learners enrolled in the mainstream high schools, Department of Education representatives, Disabled Peoples Organisations, Non-Government Organisations, and personnel from the rehabilitation sector. It would be appropriate during this study for time to be spent on identifying all relevant stakeholders.

- Determine and prioritize barriers to inclusive education that must be addressed.

6.3   Dissemination of study findings

The study findings will be shared with the Eastern Cape Department of Education by sending a summary of the findings and recommendations of the study to them via e-mail.

Each participating school will be given a copy of a summary of the study findings and recommendations. This will be sent either by e-mail or by using the messenger to hand-deliver it.

I may write an article and submit for publication in journals such as the *South African Journal of Education*, the *African Journal of Disability*, the *International Journal of Inclusive Education*, or the *International Journal of Disability Development and Education.*

6.4   Limitations of the study

Collecting data via e-mail and written questionnaires as opposed to interviews might be a limitation since I could not probe for explanations or observe non-verbal communication during data collection as is recommended in qualitative studies. However, while writing the research proposal, I emigrated which necessitated the use of an e-mail method of data collection or the use of a messenger. The decision to perform the study via e-mail data collection was not made lightly. Continuous reflection took place throughout the study to grasp the implications of this, the feasibility of the study, as well as to understand what the ethical implications were. It is possible that a greater response rate or richer qualitative data might have been obtained if I conducted the interviews in person instead of using electronic means.

A further limitation to the study was also encountered by not having adequate census statistics available to compare results from this study with the number of children with mobility impairments of high school age in the setting. I was unable to draw any conclusive remarks from the number of learners with PMIs enrolled in the study sample and the total of learners with PMIs of high school age that should be enrolled in high schools.

The low response rate was another limitation; implications of this were discussed in Chapter 5.

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APPENDIX 1: APPROVAL FROM EASTERN CAPE DEPARTMENT OF EDUCATION

Province of the
EASTERN CAPE
EDUCATION

STRATEGIC PLANNING POLICY RESEARCH AND SECRETARIAT SERVICES
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14 March 2013

Ms. Madelein Roux

Private Bag X1

Saldanha

7395

Dear Ms. Roux

PERMISSION TO UNDERTAKE A MASTERS THESIS: AN EXPLORATORY STUDY OF THE REASONS FOR NCLUDING/ EXCLUDING LEARNERS WITH PERMANENT MOBILITY IMPAIRMENTS IN MAINSTREAM HIGH SCHOOLS IN EAST LONDON

1. Thank you for your application to conduct research.

2. Your application to conduct the above mentioned research 28 Secondary Schools under the jurisdiction of East London and King William's Districts of the Eastern Cape Department of Basic Education (ECDBE) is hereby approved on condition that:
    a. there will be no financial implications for the Department;

    b. institutions and respondents must not be identifiable in any way from the results of the investigation;

    c. you present a copy of the written approval letter of the Eastern Cape Department of Basic Education (ECDBE) to the Chief Directors and Directors before any research is undertaken at any institutions within that particular district;

    d. you will make all the arrangements concerning your research;

building blocks for growth   Page 1 of 2   Ikamva eliqaqambileyo!

e. the research may not be conducted during official contact time, as educator's programmes should not be interrupted;

f. should you wish to extend the period of research after approval has been granted, an application to do this must be directed to the Director: Strategic Planning Policy Research and Secretarial Services;

g. the research may not be conducted during the fourth school term, except in cases where a special well motivated request is received;

h. your research will be limited to those schools or institutions for which approval has been granted, should changes be effected written permission must be obtained from the Director – Strategic Planning Policy Research and Secretariat Services;

i. you present the Department with a copy of your final paper/report/dissertation/thesis free of charge in hard copy and electronic format. This must be accompanied by a separate synopsis (maximum 2 – 3 typed pages) of the most important findings and recommendations if it does not already contain a synopsis. This must also be in an electronic format.

j. you are requested to provide the above to the Director: The Strategic Planning Policy Research and Secretarial Services upon completion of your research.

k. you comply to all the requirements as completed in the Terms and Conditions to conduct Research in the ECDBE document duly completed by you.

l. you comply with your ethical undertaking (commitment form).

m. You submit on a six monthly basis, from the date of permission of the research, concise reports to the Director: Strategic Planning Policy Research and Secretariat Services.

3. The Department reserves a right to withdraw the permission should there not be compliance to the approval letter and contract signed in the Terms and Conditions to conduct Research in the ECDBE.

4. The Department will publish the completed Research on its website.

5. The Department wishes you well in your undertaking. You can contact the Director, Dr. Annetia Heckroodt on 040 608 4773 or mobile number 083 275 0715 and email: annetia.heckroodt@edu.ecprov.gov.za should you need any assistance.

DR AS HECKROODT

DIRECTOR: STRATEGIC PLANNING POLICY RESEARCH AND SECRETARIAT SERVICES

APPENDIX 2: LETTER OF INVITATION TO PARTICIPATE IN THE STUDY

Miss Madelein Roux
E-mail: madeleinroux@yahoo.com
Tel: +61 49 7646 710
Address: 44 Rosella Avenue, Glenalta
Adelaide, Australia, 5052
Date: 13 August 2013

To the School Principal

RE: This letter serves to ask you to participate in a study aiming to determine the reasons from mainstream high schools for including/excluding learners with permanent mobility impairments in enrolling in the school.

Thank you for taking the time to consider this research study. I am currently completing my Masters degree in disability and rehabilitation through the University of Stellenbosch. As mandatory to complete the degree, I need to complete a research study. My research study aims to determine what the reasons are from mainstream high schools in East London for including or excluding learners with permanent mobility impairments in the school.

Since July 2001 with the release of the Education White Paper 6, the bulk of research studies have looked at the challenges learners with disabilities face in mainstream schools, but very few studies have actually looked at inclusive education from the perspectives of mainstream schools who at the end of it, may possibly experience a completely different set of challenges. Without hearing what schools experience in terms of inclusive education, one cannot address this problem in the appropriate manner, as not all stakeholders have voiced their opinions and challenges.

I would therefore like to ask if you would agree to participate in this study. Data will be obtained by the participant completing a questionnaire (with 13 short questions and 5 descriptive questions), which should be completed by the School Principal (or any other representative the School Principal may see fit to do so). The time to complete the questionnaire should take approximately 30 – 45 minutes. The school will remain anonymous throughout the study and for that reason; the name of the school will never feature or be mentioned. The confidentiality of the school will be protected at the highest possible level throughout the entire study and once the study has been completed. Data analysis will only take place once all completed questionnaires and consent forms have been received from participants. All participants in the study have the right to choose to participate or not, as well as the right to decide at a later stage to withdraw from participating in the study without any effect or consequence.

If the school decides to participate, the school can read and complete the attached consent form, and then proceed to completing the attached questionnaire which should then be completed within four weeks (13 September 2013).

This study has received approval from the Ethics board of the University of Stellenbosch as well as approval from the Eastern Cape Department of Education. If you would like to view a copy of this approval, I am happy to forward it onto you.

Your participation will be greatly appreciated. I welcome questions so please feel free to raise any queries or concerns.

Sincerely

Madelein Roux

APPENDIX 3: INFORMATION LEAFLET AND CONSENT FORM

CONSENT FORM

TITLE OF THE RESEARCH PROJECT:

Reasons for including/excluding learners with permanent mobility impairments in mainstream high schools in East London

REFERENCE NUMBER: S12/11/294
PRINCIPAL INVESTIGATOR:
Madelein Roux
ADDRESS:
Centre for Rehabilitation Studies, University of Stellenbosch
CONTACT NUMBER:
Cell: +61 49 7646 710
E-mail: madeleinroux@yahoo.com

You are being invited to take part in a research project. Please take some time to read the information presented here, which will explain the details of this project. Please ask the researcher any questions about any part of this project that you do not fully understand. It is very important that you are fully satisfied that you clearly understand what this research entails and how you could be involved. Also, your participation is **entirely voluntary** and you are free to decline to participate. If you say no, this will not affect you negatively in any way whatsoever. You are also free to withdraw from the study at any point, even if you do agree to take part.

This study has been approved by the Health Research Ethics Committee at Stellenbosch University **and will be conducted according to the ethical guidelines and principles of the international Declaration of Helsinki, South African Guidelines for Good Clinical Practice and the Medical Research Council (MRC) Ethical Guidelines for Research.**

What is this research study all about?

The aim of the study is to determine the reasons from the various mainstream High Schools in East London for including or excluding learners with permanent mobility impairments for enrolment in the school. More specifically, the objectives of the study include determining whether learners with permanent mobility impairments are enrolled in the mainstream high schools in East London, to identify the reasons from the mainstream high schools in East London for including or excluding learners with permanent mobility impairments in enrolling in the school, and to find out what factors or barriers the mainstream high schools encounter or previously encountered and foresee with enrolling learners with permanent mobility impairments in the school. The reason for the study is that the researcher believes that mainstream high schools have various reasons for including or excluding learners with permanent mobility impairments in enrolling the schools, but these reasons need to be determined. The majority of research studies have taken the angle of determining challenges learners with impairments experience in mainstream schools, but very few studies have actually looked at this issue from the perspective of the mainstream schools. The study will set out to recruit 21 schools to participate in the study and data will be gathered from the various schools by e-mailing a questionnaire to each school or delivering a questionnaire via a messenger. The questionnaire will then need to be completed by either the School Principal or any person the School Principal sees fit to do so. Once the researcher has received the answered questionnaires, they will be printed out and/or

forwarded onto the researcher by the messenger for data analysis. There will be no mention of the schools' names on the questionnaire.

Why have you been invited to participate?

You have been invited to participate in this study as the study aim is to look at mainstream high schools in East London and your school meets all the inclusion criteria of the study. The inclusion criteria of the study includes all mainstream high schools in East London; public and independent schools, co-educational and single gender schools, English, Afrikaans, IsiXhosa and bilingual schools and schools that do and don't have learners with permanent mobility impairments enrolled in the school.

What will your responsibilities be?

Participation in the study will involve either the School Principal or any person the School Principal sees fit to complete a questionnaire which will be e-mailed or hand delivered to the schools, which can then be completed electronically or where delivered by the messenger, in hand writing, and then returned to the researcher via e-mail or collected by the messenger. There will be questions with predetermined answering options as well as questions requiring elaboration from the school. The person completing the questionnaire will have to set aside some time to complete the questionnaire (approximately 30 – 45 minutes). As the name of the school as well as the person completing the questionnaire will be hidden from the researcher, it is asked that the questionnaire is filled out truthfully and honestly. I would like to reiterate that if you agree to participate in the study and would like to withdraw from the study at a later stage; you are free to do so without any consequence.

Will you benefit from taking part in this research?

The schools or the individual completing the questionnaire will not directly benefit from participating in the study, but the knowledge and information gained from the study may potentially assist in addressing challenges in enrolling learners with permanent mobility impairments into our mainstream high schools. Furthermore, the reasons given by the schools can bring to light the reasons as to why enrolling learners with permanent mobility impairments in mainstream high schools is or has been problematic and steps can then be taken to start addressing these problems.

Are there any risks involved in your taking part in this research?

There are no risks for the school to participate in the study as the name of the schools as well as the person completing the questionnaire will remain anonymous throughout the study. The contact details of the schools will also be protected and kept confidential. Participating schools will participate as anonymous entities. As the research study is a small scale study, participants will not be paid to participate in the study.

Will you be paid to take part in this study and are there any costs involved?

No you will not be paid to take part in the study. There will be no costs involved for you, if you do take part.

Is there anything else that you should know or do?

Inform the school governing body that the school is participating in the study.
You can contact the Health Research Ethics Committee at 021-938 9207 if you have any concerns or complaints that have not been adequately addressed by the researcher.
You will receive a copy of this information and consent form for your own records.

Declaration by participant

By signing below, I ……………………………..…………. agree to take part in a research study entitled: **Reasons for including/excluding learners with permanent mobility impairments in mainstream high schools in East London**

I declare that:

- I have read or had read to me this information and consent form and it is written in a language with which I am fluent and comfortable.
- I have had a chance to ask questions and all my questions have been adequately answered.
- I understand that taking part in this study is **voluntary** and I have not been pressurised to take part.
- I may choose to leave the study at any time and will not be penalised or prejudiced in any way.
- I may be asked to leave the study before it has finished, if the study doctor or researcher feels it is in my best interests, or if I do not follow the study plan, as agreed to.

Signed at (*place*) ....…......……………….. on (*date*) …………....……….. 20….

....
Signature of participant   Signature of witness

Declaration by investigator

I (*name*) ....Madelein Roux...… declare that:

- I provided adequate information to each participant regarding the nature of the study and what participation will entail in the format of an information leaflet,
- I encouraged him/her to ask questions via e-mail and took sufficient time to answer them via e-mail,
- I am satisfied that he/she adequately understands all aspects of the research, as discussed above,
- I did/did not use an interpreter.

Signed at (*place*) ......Adelaide.................on (*date*) ………9 April 2013.....................

....
Signature of investigator   Signature of witness

APPENDIX 4: STUDY QUESTIONNAIRE

<u>LEARNERS WITH PERMANENT MOBILITY IMPAIRMENTS IN MAINSTREAM HIGH SCHOOLS RESEARCH STUDY</u>

<u>CLARIFICATION OF TERMINOLOGY</u>

<u>Independent school</u>: Is a learning institution which is not registered with the Department of Education as a public school or as an Adult Basic Education and Training centre (ABET) (DOE, 2011).

<u>Permanent mobility impairment</u>: Learners who have difficulty walking, standing for long periods, climbing stairs etc with or without an assistive device e.g.; crutches, walking stick, walking frame, and wheelchair (Lezioni, McCarthy, Davis & Siebens, 2000) and will remain challenged in this way for an indefinite period of time.

- **It should take approximately 30 – 45 minutes to complete the questionnaire**

- **There are 18 questions, (13 short questions and 5 descriptive questions)**

- **Yes/No and multiple choice questions – Please write answer in right hand shaded block**

- **Open ended questions – Please answer below question in shaded block**

QUESTIONNAIRE		
	Date:	

1	**Is this a/an:**
	
	  A) Independent school
	  B) Public school
		(A or B)

2	**Is this a:**
	
	  A) Single gender school
	  B) Co-educational school
		(A or B)

3	**Is this a/an:**
	
	  A) English school
	  B) IsiXhosa school
	  C) Afrikaans school
	  D) Bilingual school: English-Afrikaans
	  E) Bilingual school: IsiXhosa-English
	  F) Bilingual school: IsiXhosa-Afrikaans
		(A,B,C,D,E or F)

4	**Is this a/an:**
	
	  A) Urban school
	  B) Peri-Urban school
	  C) Rural school
		(A,B or C)

5	**How many learners are in the school?**	Please provide number:
6	**How many teachers are in the school?**	Please provide number:
7	**How many classes are there per grade?**	Please provide number:

8	What is the average number of learners per class?	Please provide number:
9	Are there learners with permanent mobility impairments enrolled in the school: **A)** Yes **B)** No	(A or B)
10	If the answer to question 9 was YES, what is the number of learners with permanent mobility impairments rolled in the school:	Please provide number:
11	Does the school receive applications for enrolment of learners with permanent mobility impairments: A) Yes B) No	(A or B)
12	On what grounds are decisions based to <u>include</u> learners with permanent mobility impairments in enrolling in the school? Please describe below (Use as much space as needed)	

13	**On what grounds are decisions based to <u>exclude</u> learners with permanent mobility impairments in enrolling in the school?**	
	Please describe below (use as much space as needed)	
14	**If the school has learners with permanent mobility impairments enrolled in the school, does the school experience challenges with accommodating these learners?** **A)** Yes **B)** No	(A or B)
15	**If the answer to question 15 was YES, please explain what these challenges are:**	
	Please describe below (use as much space as needed)	

16	**Has the school previously encountered challenges with enrolling learners with permanent mobility impairments in the school?** **A)** Yes **B)** No	(A or B)
17	**If the answer to question 17 was YES, please explain what challenges were previously encountered in enrolling learners with permanent mobility impairments:** Please describe below (use as much space as needed)	
18	**What barriers and challenges does the school foresee to encounter in enrolling learners with permanent mobility impairments in the school?** Please describe below (use as much space as needed)	