

**A CASE STUDY OF A NEIGHBOURHOOD
SCHOOL THAT INCLUDED TWO LEARNERS
WHO ARE BLIND**

by

Nafisa Baboo

Thesis presented in fulfilment of the requirements for the degree

Master of Education (Psychology)

University of the Western Cape

UNIVERSITY *of the*

WESTERN CAPE

Supervisor: Lilian Lomofsky

December 2011

Keywords

Inclusive education, blind learners, Convention on the Rights of Persons with Disabilities, support, enabling, facilitator, environment, attitudes, social inclusion, academic inclusion



Abstract

Internationally, the rights of persons with disabilities to participate as full members of society through inclusive education has become a high priority with the adoption of the first legally binding treaty, the *Convention on the Rights of Persons with Disabilities* (2006). In keeping with our culture of acknowledging the rights of all, South Africa has already made great strides towards fulfilling these rights and is in the implementation phase of *Education White Paper 6: Building an Inclusive Education and Training System* (Department of Education, 2001).

In spite of this, the practicability of implementing inclusive education is questioned by many. The inclusion of learners who are blind in neighbourhood schools, as opposed to ‘special schools’, is a particularly daunting task. However, the more local cases we have from which to draw insights, the better our chances of making inclusive education both practicable and widely accessible across a range of local contexts.

A public, mainstream neighbourhood school that included two learners who are blind was therefore investigated to learn more about how the learners who are blind were physically, socially and academically included in the local school community. Qualitative data collection methods including semi-structured interviews and observations were used to uncover useful strategies, challenges and enabling factors that contributed to their successful inclusion.

The findings revealed that the participants in this study had very little knowledge or experience in building an inclusive educational setting at the outset, but engaged in the process with open minds, creativity and trust. By adopting a collaborative approach and an attitude of ‘failing forward’, the objective of social and academic inclusion was to a great extent achieved in the school.

Declaration

I the undersigned hereby declare that the work contained in this dissertation is my own original work and has not previously in its entirety or in part been submitted at any other university for a degree, and that all the sources I have used or have quoted have been indicated and acknowledged by complete references.



Nafisa Baboo

20 July 2011



Acknowledgements

I wish to acknowledge and express my deepest gratitude to the following people whose love, support and guidance has meant the world to me:

- To my parents, Aziza and Sulayman Baboo, who always believed in my abilities
- To my brother and sister for their encouragement
- To my friends especially Amy, Emma, Gino and Marjorie, for their words of encouragement and for being there for me whenever I needed a sympathetic ear and a helping hand with reading and editing
- To my mentors, Laetitia Brunner, Lynette Collair, Thabsile Levin, Ingrid Lewis, Harriet Loebenstein, Charlene Nissen and Caroline Taylor for sharing your wisdom and knowledge so unselfishly
- To the parents, teachers and school that participated in this study for their time, patience and enthusiasm
- To the parents of the two blind learners in this study, and the many other parents, children and teachers I encountered who have boldly set out to educate their children with disabilities in regular schools, for their tenacity and for allowing me and others to learn from their triumphs and their tribulations
- To the Ian Fraser Memorial Bursary Fund and National Research Fund (NRF) for their financial contributions
- Finally, to my supervisor, Lillian Lomofsky, for her patience, gentle encouragement and kindness. Thank you so much for your guidance and for standing by me through all this time. I am inspired by your knowledge and dedication to supporting children with barriers to learning and uplifting their teachers.

List of Acronyms

Abbreviation	Name
ADDP	The African Decade of Persons with Disabilities
CEMIS	Central Education Management Information System
CERB	Centre of Education and Rehabilitation for the Blind
CRC	Convention on the Rights of the Child
CRPD	Convention on the Rights of Persons with Disabilities
DBTs	District-based Support Teams
DiCaG	Disabled Children's Action Group
DPO's	Disabled People's Organisations
DSD	Department of Social Development
EENAT	Eastern European Network on Access Technologies for Blind & Impaired Persons
EFA	Education for All
EFA-VI	Education for All Visually Impaired Children
FSS	Full-Service School
ICE	International Conference on Education
ICEVI	International Council for People with Visual Impairment
IEP	Individual Education Plan
ILSTs	Institutional Level Support Team
ISP	Individual Support Plan
IWGDD	International Working Group on Disability and Development
JAWS	Job Access for Windows Software
KIEP	Kwa-Zulu Natal Inclusive Education Project
LEAs	Local Education Authorities
LOFOB	The League of Friends for the Blind
MDGs	Millennium Development Goals
NCS	National Curriculum Statement
NGOs	Non-governmental Organisations
OBE	Outcomes-based Education
OSDP	Office of the Status on Disabled Persons
SANCB	South African National Council for the Blind
SAQA	South African Qualifications Agency

SASA	South African Schools Act
SGB	School Governing Body
SIAS	Strategy on Screening, Identification, Assessment & Support
SNPP	Social Network Pilot Project
SOP	Standard Operating Procedure
TVI	Teacher of the Visually Impaired
UNESCO	United Nations Education Scientific and Cultural Organisation
WHO	The World Health Organisation



Contents

Chapter 1: Orientation and Relevance of the Study	1
1.1 Introduction	1
1.2 Background to the study.....	2
1.3 Problem Statement	5
1.4 Aim of the Research.....	5
1.5 The Research Question.....	6
1.6 Research Design	6
1.6.1 The case study.....	7
1.6.2 Subjects.....	7
1.6.3 Data collection	8
1.6.4 Literature review	8
1.6.5 Semi-structured interviews	8
1.6.6 Non-participant observations.....	8
1.6.7 Documentation.....	9
1.6.8 Data analysis	9
1.7 Ethical considerations	10
1.8 Definition of key terms	10
1.9 Outline of thesis	11

1.10	Summary	12
Chapter 2: Inclusive Education.....		13
2.1	Introduction	13
2.2	Origin of Inclusive Education	13
2.3	Definitions of Inclusive Education.....	15
2.4	Models and Approaches	16
2.5	Integration, Mainstreaming and Inclusive Education.....	19
2.6	Human Rights and Development Instruments Promoting Inclusive Education..	21
2.7	Advocacy in South Africa	28
2.7.1	History in South Africa.....	29
2.7.2	Related Legislation	35
2.7.3	Progress of implementation	37
2.7.4	National Strategy on Screening, Identification, Assessment and Support (SIAS)	41
2.7.5	Curriculum	44
2.7.6	Leadership, Roles and Responsibilities	45
2.8	Hierarchy of Support Structures.....	49
2.8.1	National Department of Education	49
2.8.2	Provincial Departments of Education	49
2.8.3	District-based Support Teams (DBSTs)	49



2.8.4	Institutional Level Support Teams (ILSTs)	50
2.8.5	Special Schools / Resource Centres	51
2.8.6	Full-service Schools	51
2.8.7	Teacher	52
2.8.8	Facilitator (para-educator) and Teaching Assistant	53
2.8.9	Parents/Caregivers	54
2.9	Factors necessary to promote inclusive schools	55
2.9.1	Description of an Inclusive School	55
2.9.2	Attitudes	59
2.10	Outcomes of Inclusive Education	62
2.11	Summary	65
Chapter 3:	Education for the Blind and Visually Impaired	67
3.1	Introduction	67
3.1.1	Defining Blindness	67
3.2	Visual Impairment Worldwide	68
3.2.1	Causes of Visual Impairment	69
3.2.2	Disability and Visual Impairment in South Africa	69
3.3	The Global Evolution of Education for the Visually Impaired	69
3.4	Educational Approaches	72

3.4.1	Placement Options and Preferences.....	73
3.4.2	Special schools as resource centres	74
3.4.3	Special units or resource rooms	75
3.4.4	Itinerant/co-teaching and para-educator in regular classrooms	75
3.4.5	Support provisioning.....	76
3.5	Education for the Blind in South Africa.....	77
3.5.1	Special Schools for the Visually Impaired: Past and Present	77
3.5.2	Proportion of Visually Impaired Children Educated in Special and Mainstream Schools.....	80
3.6	Teacher training in an international context.....	81
3.7	Role of Non-governmental Organisations.....	82
3.8	Early Childhood: Common Areas of Developmental Delay and the Need for Early Intervention.....	83
3.8.1	Cognitive development and intervention.....	85
3.8.2	Psychosocial Skills of Visually impaired Adolescents.....	86
3.9	School Aged Children: Educational Needs and Curriculum.....	88
3.9.1	Requirements of educational programmes for the Blind.....	89
3.9.2	Aligning the Outcomes of the National Curriculum with the goals of the disability-specific curriculum (Expanded Core Curriculum)	93
3.9.3	Preparing the Environment for Learning in the School and Classroom	94

3.9.4	Meeting the requirements of the classroom.....	95
3.9.5	Measures to facilitate participation.....	97
3.10	Teaching Resources.....	99
3.11	The Educational Team and Functions to enable Successful Inclusion	105
3.11.1	Composition of the educational team	105
3.11.2	Models of educational teams	105
3.11.3	Collaboration	106
3.11.4	Communication.....	107
3.12	Summary	107
Chapter 4: Research Design and Methodology		109
4.1	Introduction	109
4.2	Aims	111
4.3	The Research Question.....	111
4.4	Research Design	112
4.4.1	Qualitative Research.....	112
4.5	Research Methodology.....	112
4.5.1	Case Study	112
4.5.2	Sampling	114
4.5.3	Participants.....	114



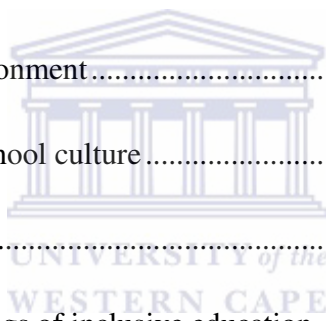
4.6	Data Collection Methods.....	116
4.6.1	Literature review.....	116
4.6.2	Instruments.....	116
4.7	Procedure.....	120
4.7.1	Initial Orientation.....	120
4.7.2	Administration of interviews.....	121
4.7.3	Observation time.....	121
4.7.4	Data collection.....	121
4.8	Data analysis.....	122
4.8.1	Inductive category development.....	128
4.8.2	Deductive category application.....	129
4.8.3	Computer-assisted qualitative data analysis software (CAQDAS).....	129
4.8.4	Drawing conclusions.....	131
4.8.5	Data presentation.....	131
4.9	Data Verification.....	131
4.9.1	Credibility.....	132
4.9.2	Transferability (external validity).....	135
4.9.3	Dependability (reliability).....	135
4.9.4	Confirmability.....	136



4.10	Limitations	136
4.11	Ethical Issues	137
4.11.1	Voluntary participation	137
4.11.2	Informed consent	138
4.11.3	Confidentiality and anonymity	138
4.11.4	Freedom from harm	138
4.11.5	Feedback	138
4.12	Summary	139
Chapter 5:	Findings	140
5.1	Introduction	140
5.2	Background	140
5.2.1	Bounty School.....	140
5.2.2	The visually impaired learners.....	141
5.2.3	The Facilitator.....	141
5.2.4	Participants.....	144
5.3	Findings	144
5.3.1	Educational environment	146
5.3.2	Preparation	151
5.3.3	Academic inclusion.....	155

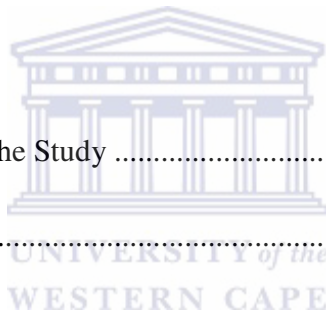


5.3.4	Social Inclusion.....	166
5.3.5	Support.....	174
5.3.6	Contributing interpersonal factors	187
5.3.7	Spin-Offs.....	194
5.3.8	Learnings and suggestions	198
5.4	Summary	198
Chapter 6: Discussion		200
6.1	Introduction	200
6.2	Educational Environment.....	201
6.2.1	Ethos and school culture.....	201
6.2.2	Leadership.....	201
6.2.3	Understandings of inclusive education	203
6.2.4	Political climate and public awareness	204
6.2.5	Attitudes to inclusive education.....	205
6.3	Preparation for Inclusion.....	206
6.3.1	Early childhood development	206
6.3.2	Preparation of the school community and environment	207
6.3.3	Human resources preparation	208
6.4	Academic Inclusion.....	208



6.4.1 Meeting the accessibility needs of the visually impaired learners in the classroom	209
6.4.2 Academic performance	211
6.4.3 Expanded core curriculum for the visually impaired.....	212
6.5 Social Inclusion	212
6.6 Collaboration	215
6.7 Blurring of roles and responsibilities	216
6.8 Educational Support Provisioning.....	216
6.9 Limitations	218
6.10 Recommendations	219
6.10.1 Micro-level (school)	219
6.10.2 Macro-level.....	220
6.11 Further Research	223
6.12 Conclusion.....	223
References	226
Appendices	243
Appendix I: WCED Permission Letter.....	243
Appendix II: List of Useful Organizations.....	245
Appendix III: Subject Table	263
Appendix IV: Observation Checklist	265

Appendix V: Sample Interview Guide	266
Appendix VI: Sample of coded transcript	271
Table 1: Key guiding documents issued by the DoE	34
Table 2: Cross cutting issues in OSDP Policy Guide	36
Table 3: Level of support indicators (adapted from DoE, 2008a)	43
Table 4: Example of coding agenda.....	129
Table 5: Description of categories and sub-categories	144
Figure 1: Overall Path of the Study	110
Figure 2: Data Analysis.....	127



Chapter 1: Orientation and Relevance of the Study

1.1 Introduction

As a visually impaired speech therapist and a product of inclusive education, inclusive education and disability are issues close to my heart. My father, who is blind and formerly a student and now a teacher at a special school for the Blind made a conscious decision to enrol me in our regular neighbourhood school. He understood that the inclusion of children with disabilities in their local school is the first step towards inclusion and acceptance in society. His dream for his own children and for other children with disabilities is that they are able to live fulfilling lives as equals in society and that their potential and abilities, and not just their disability, are seen and acknowledged. It is a dream I share and it is my belief that inclusive education is the means through which this dream can be realised.

In my work as a therapist and consultant on inclusive education, I have come across several parents who also share the dream and desire to have their child with a disability included in their local school, but they encounter many challenges. Despite the development of policies supporting inclusion, there is much controversial debate about the practical implementation and its benefits in South Africa. Schools are therefore reluctant to include children with intrinsic barriers to learning because they feel they do not have the capacity and tools to do so effectively and without disruption.

Inclusive Education Western Cape (IEWC), an NGO where I have worked, supports parents, schools and teachers in implementing inclusive education. One of the strategies used by IEWC is connecting parents, teachers and schools who are already on the journey with those who are contemplating it. Through this contact with schools and parents, I met the blind learners who were included in their local school. I first met Justin and his family and then I connected them with Noel and his family. Their stories were fascinating and inspired me to learn more about how the school, parents and other

role-players made inclusive education work for the two learners and their school community.

I undertook this study with the aim of documenting their experiences so that they could inform the implementation of inclusive education in a country where the concept is still in its infancy. I believe that the more local cases we have from which to draw insights, the better our chances of making inclusive education both practicable and widely accessible across a range of local contexts.

1.2 Background to the study

Inclusive Education is central to achieving the goals of social justice and development. The international community recently reinforced this belief at the 48th United Nations Education Science and Culture Organisation (UNESCO) International Conference on Education (ICE) in Geneva. The resulting document “Inclusive Education: The Way of the Future” states that an inclusive education approach would “further accelerate the attainment of Education for All (EFA) goals as well as contribute to building more inclusive societies.” (UNESCO, 2009:18)

Children with disabilities are arguably the most marginalised members of society with over 90% of children with disabilities in Africa being denied the right to education (UNESCO, 2006). Inclusive education aims to remedy this situation by developing an education system that supports the needs of all learners and welcomes those who were previously excluded from the education system (Booth & Dyssegaard, 2008). In addition, the successful inclusion of children with disabilities in neighbourhood schools should promote their integration and fuller participation in their communities by providing more opportunities to learn and interact with peers (McConkey, Benard da Costa, Holdsworth, Jonsson, Kanyanta, Lopez, ... Shaban, 2001). Interaction between learners with disabilities and their ‘typical’ peers will allow them to show their abilities and potential and diminish the stereotype of helplessness.

The benefits of inclusive education for children with disabilities are reinforced in Article 24 of the United Nations Convention on the Rights of Persons with Disabilities (CRPD) (UN, 2006), which obligates governments to implement inclusive education at all levels and to develop education systems that will ‘maximise their social and academic development in order to promote the inclusion and full participation in society in adult life’ (United Nations [UN], 2006). The same Convention also stresses that children with disabilities are entitled to quality, inclusive, free primary and secondary education on an ‘equal basis with others’ in the communities in which they reside. The Convention prohibits the exclusion of children from the general education system on the basis of disability and promotes inclusive education above segregated special education. To this end, governments are obligated to provide effective support and make reasonable accommodations.

In honouring the rights of ALL children to quality, equitable, non-discriminatory education, our education system is undergoing a process of transformation. The South African Schools Act (SASA) (1996) opens all schools to all learners and prohibits discrimination against children with disabilities. *Education White Paper 6: Towards an Inclusive Education and Training System* (Department of Education [DoE], 2001) and its guidelines outline government’s intention to address barriers to learning within the system and develop an education system that recognises and accommodates the diverse needs of all learners, including those with disabilities.

Although legislation and policy supports the transformation and inclusion of children with disabilities in regular, mainstream, neighbourhood schools, much uncertainty remains about how this can be implemented. Most mainstream school teachers are reportedly very cynical about including children with disabilities and believe it to be beyond their scope of practice (Swart, Engelbrecht, Eloff & Pettipher, 2002; Engelbrecht, Oswald, Swart, & Eloff (2003); Loebenstein, 2005).

District officials, school personnel and other stakeholders may thus find themselves in the transition stage of changing roles and support structures. They can learn from the

real-life accounts and experiences of those cases in which children with a disability have been included in their school environment.

The increased awareness of these rights, as well as the long-term social benefits of inclusive education, have encouraged many parents of children who are visually impaired to educate their children in local, mainstream schools, yet resistance is still encountered and may be attributed to a lack of understanding of the concept and how it can be implemented. This study aimed to document the process as it occurred in a local school.

Through documenting and analysing real-life cases of inclusive education we can learn more about how to build an inclusive education and training system, answering the questions:

- What structures, systems and methodologies will enable inclusive education?
- How should attitudes, behaviour, teaching methods, curricula and environments change to meet the needs of learners?
- How can barriers be overcome to maximize the participation of all learners in the culture and the curriculum of the school?

The inclusion of children with visual impairment is a controversial topic. In a paper delivered at the International Council on Education of Visually Impaired Persons (ICEVI), the South African National Council for the Blind (SANCB) voiced scepticism regarding the practicability of implementing inclusive education in a developing country such as South Africa. The organisation argues that meeting the complex educational needs of blind learners in under-equipped mainstream schools rife with social problems will result in these children not receiving quality education and will put their safety at risk (Sukhraj, 2006, Sukhraj-Ely, 2008).

Children who are blind undoubtedly have unique and complex educational needs. Not only do they require educational material and instruction that taps into their auditory and tactile modalities, but the lack of sight also poses developmental challenges that could

affect learning. The development and perception of self, movement, cognition and the development of communication are heavily reliant on sight and might affect the learners' self-esteem and the way concepts are understood (Barraga & Erin, 1992).

It is also essential that the curriculum followed by blind learners considers all the skills they require to function as adults, not only the acquisition of academic knowledge and skills. This means that they must receive the necessary, developmentally appropriate training in skills required for independent living and social inclusion, orientation and mobility (O & M), compensatory access skills such as Braille and sensory efficiency skills such as improving auditory memory, among others (Morrison, 1974, Hatlen, LeDue & Canter, 1975 cited in Curry & Hatlen, 1988; Hatlen, 1996; Wolffe, 2000).

For the aforementioned reasons, the study investigates both the social and academic inclusion of the learners in a mainstream, neighbourhood school, as well as how learners with visual impairment might acquire the requisite additional skills in such a setting.

Striking a balance between social and academic participation and inclusion requires good communication and planning among all role-players. The views of all role-players and stakeholders involved in the study were therefore considered, as well as aspects of their co-operation. Gathering information from a variety of role-players and stakeholders involved in the process will add to the body of knowledge in the field of inclusive education and promote the future inclusion of other learners who are blind.

1.3 Problem Statement

There is a shortage of empirical data on effectively including learners with disabilities (intrinsic barriers to learning) in general, and learners with visual impairment in particular, in local, regular school settings in the South African context.

1.4 Aim of the Research

This study aims to explore and understand how two blind learners were physically, socially and academically included in a mainstream, neighbourhood school. This entails

uncovering useful strategies, challenges and enabling factors to add to the body of knowledge of helpful and promising practices; as well as contribute to theory development in order to promote the implementation of inclusive education in South African contexts.

1.5 The Research Question

The research question, underpinned by the rationale for the study, is as follows:

How have two learners who are blind been included in their neighbourhood school?

The research question is the broad focus of the study, while the sub-questions below unpack the contributing elements and examine the effectiveness of the process.

- How, and to what extent, have the learners been included socially, physically and academically?
- What were the enabling factors that contributed to the inclusion of the learners who are blind (attitudes, skills, and support by role-players, interpersonal and intra-personal factors)?
- What have the learnings, challenges and successes been thus far?

1.6 Research Design

The research study is about inclusive education, and since inclusion is about experiences, human behaviour and interaction, the qualitative, interpretive paradigm and a case study approach were applied.

The qualitative interpretive paradigm chosen recognises that people's subjective experiences are valid, multiple and socially constructed and should be taken seriously as it reflects their reality (Mertens, 1998). It also acknowledges that understanding the experiences of others is best done by interacting and listening to the individuals involved. Qualitative methods are therefore ideally suited to the task.

The phenomenon under investigation, including learners who are blind in a mainstream school, is intricately related and reciprocally influenced by the school, its context and the individual characteristics and contexts of the learners themselves. The eco-systemic nature of the issue under investigation makes the case study approach an appropriate means of conducting the investigation. The case study definition of Yin (1994:13) frames it as, ‘an empirical enquiry that investigates a contemporary phenomenon within its real life context ...’ where ‘... the boundaries between the phenomenon and context are not clearly evident’; further supports the approach chosen.

The specificity of focus and depth of enquiry makes the case study approach an appropriate design to give insight into how to address practical challenges in education (Merriam, 1998). The approach therefore allows investigators to retain the holistic and meaningful characteristics of real-life events, in order to understand the complex social phenomena of including blind learners in a mainstream school.

This case study is primarily descriptive and intends to produce an intense, holistic account and analysis of the unit being investigated (Merriam, 1998).

1.6.1 The case study

The research was carried out in a co-educational, public, primary school in a mixed middle class community in the southern suburbs of Cape Town. The school was selected for the study because it is one of the few schools in the Western Cape which has included learners who are blind. In the interest of anonymity, the school will be referred to as Bounty Primary in this report.

1.6.2 Subjects

Purposeful sampling was used to select those interviewees who could provide valuable, rich information or played an important role in the process of including the learners (Patton, 2002). The 25 interviewees included two visually impaired learners, non-visually impaired learners, parents, teachers, the facilitator and other stakeholders in the school community.

1.6.3 Data collection

Multiple methods of data collection were used, namely literature review, semi-structured interviews, non-participant observation, document analysis and field notes. Multiple methods of data collection and multiple sources were used for the purpose of triangulation to strengthen the validity and rigour of the study (Merriam, 1998; Hartley, 2004; Yin, 2003). The information gained from these multiple methods (field notes, interviews, document analysis and video footage) and sources (learners, teachers, parents etc.) was synthesized and analysed, corroborating the findings that emerged. Throughout the study, the researcher served as the main research instrument, since all information gathered was mediated by the researcher.

1.6.4 Literature review

The literature review gives an overview of existing and current work in the field and outlines key issues to be mindful of throughout the research process. Denscombe (1998:159) defines the literature review as “the foundation to build new research”.

1.6.5 Semi-structured interviews

The opinions, experiences and elements related to the inclusion of the learners who are blind were gathered through tape-recorded, semi-structured interviews. A mixture of structured questions related to the aspects under investigation and unstructured questions, dependent on the responses of the participant being interviewed, were used. This type of interview was selected because of the flexibility it offered in obtaining additional information as it emerged.

1.6.6 Non-participant observations

The researcher observed the school in general, lessons in which the learners were included and the learners interacting in the playground. The observations provided a first-hand account of how the learners were included academically and socially, as well as the support provided by role-players.

1.6.7 Documentation

The documentation included report cards, field notes, and responses to questionnaires for analysis of the data.

The learners' report cards were used to gauge their academic progress in school. Documents published by organisations were scrutinised to add to the theoretical framework. In the field notes the researcher's reflections and observations were recorded and used to enrich the entire research process, particularly, the analysis and interpretation of the findings.

1.6.8 Data analysis

In this study the data analysis process was underway from the earliest stages of the study during the literature review and upon reflection during and immediately after data collection, during the transcription process, during analysis of transcriptions, presentation of data and discussion of findings.

The analysis of data in this study was based on the qualitative content analysis method explained by Mayring (2000) and is a slight variation to content analysis explained by Merriam (1998). Content analysis involves reducing the volume of raw data gathered, sorting trivia from significance, identifying significant patterns and constructing a framework for communicating the essence of what the data revealed.

The processes of reduction, data display and conclusion drawing and/or verification was employed to group similar themes and to understand the phenomenon better (Miles & Huberman, 1994). This process was made simpler using Atlas/ti, a software package that facilitated and sped up the coding and recoding of data, as well as the retrieval of quotes under allocated categories.

1.7 Ethical considerations

Consent for the study was granted by the Western Cape Education Department (see Appendix I) and all participants in the study including the guardians of minors. Confidentiality and the right of the participants to withdraw at any time were honoured. Pseudonyms are used throughout the report to protect the anonymity of the school and individuals who participated.

1.8 Definition of key terms

Terms commonly used in the field of visual impairment, disability and inclusive education are referred to frequently throughout the study. The following definitions clarify the terms found in the literature and used in this study.

Inclusion

The definition of *inclusion* used in Education White Paper 6 was applied in the study. According to the DoE (2001:18), *inclusion* is about:

- recognizing and respecting the differences among all learners and building on the similarities
- supporting all learners, educators and the system as a whole so that the full range of learning needs can be met
- placing emphasis on the development of good teaching strategies that would be of benefit to all learners.
- overcoming barriers in the system that prevent it from meeting the full range of learning needs with the focus on the adaptation of support systems available in the classroom.

Learner who is blind

Blindness in its strictest sense is defined as a total lack of vision in the better eye or only light perception with an inability to identify objects (World Health Organization (WHO), 1999). In this study the “learners who are blind” have no sight or light perception.

Visual impairment

Visual impairment is the umbrella term used to define vision loss that hinders one’s ability to function and can range from low vision to no vision (WHO, 1999). Hence, the ‘visually impaired learner’ is also used in the study, but it primarily refers to learners who are blind.

1.9 Outline of thesis

The intention of this chapter is to provide a brief overview of the study by explaining the motivation for the study, and the theoretical and situational context within which this study takes place. It also presents the research question, the research design used in the study and the outline of the report.

Chapter two is a literature review on inclusive education that explains its context and origin, the legal framework and systems in place in South Africa to support its implementation, as well as enabling factors which promote implementation in general.

Chapter three is a literature review on education for the Blind with a specific focus on inclusive education. It discusses the history of education for the Blind; the shift towards inclusive education and models used abroad; blindness, its causes and the challenges it poses to learning and development; and practical ways of including a learner who is blind.

Chapter four covers the research design and the research methodology.

Chapter five presents the results of the study by analysing and discussing the recurrent themes that emerged from all the data sources.

Chapter six is a critical reflection on the research findings in relation to the literature review and includes recommendations, limitations of the study and closing remarks.

1.10 Summary

In this introductory chapter the research question was contextualized within the international and national goal of achieving education for all. The research question and research design was also explained. Finally the key terms used throughout the report were clarified and the structure of the report was outlined. The subsequent chapters will flesh out the study in full.



Chapter 2: Inclusive Education

2.1 Introduction

In this chapter the conceptual understanding of inclusive education will be explained and discussed. This will include the context and origin; legislation, policies and support systems, as well as the factors that promote its implementation.

2.2 Origin of Inclusive Education

‘It is generally accepted that "Inclusion" means inviting those who have been historically locked out and marginalized to "come in". Inclusion embraces humanity and promotes the development of full, happy and healthy human beings’ (Forest, Pearpoint & O’Brien, 1996).

Inclusive education is a dynamic, multi-faceted concept that aptly meets the needs of our ever-changing world, including challenges of globalization, intolerance, inequity, poverty, HIV/AIDS and increasing diversity. It has evolved and gained support in several variations, (Stubbs, 2008) namely:

- i) Indigenous communities focusing on customary education involving family units, elders and other authorities, teaching in a variety of ways including stories, learning by doing and co-operatively, while using available resources creatively and teaching concepts that were relevant to the child and would help them to function as active, productive members of the community.
- ii) Community-based rehabilitation that focused on empowering people in the community to develop and care for persons with disabilities, whilst educating the community about their human rights and potential. This approach also involves collaborating with a range of community stakeholders.

- iii) Activists and advocates speaking out about exclusion and discriminatory practices that hinder the advancement of minority and stigmatised groups such as women, refugees and persons with disabilities; and demanding their right for equitable treatment, social justice and inclusion.
- iv) Special needs education asserting that the unique needs of individuals be met, and offering information on strategies and equipment that promote the development and participation of children with disabilities. The newer broad approach that regards any child as being vulnerable to experiencing difficulties in learning embraces the concept of inclusive education. The research and practices of special education are extremely useful, and allow us to respond appropriately to diversity and many other challenges. Sadly, the idea that only highly skilled specialists are able to teach children with special education needs has disadvantaged the inclusive education movement.
- v) The quality education and school improvement movement, promoting effective schools that deliver quality education, building the country's human capital and preparing individuals adequately for adult life. Drop-outs, violence, abuse, under-achievement or inadequately prepared learners point to failures in the school and system which need improvement to ensure quality education for all.
- vi) International government agencies' and civil society organizations' commitment to development and human rights has spurred on governments and other organizations to develop policies and practices in line with inclusive education, in order to achieve education for all. This is evident in campaigns and initiatives to develop resources and models of good practice and to create platforms for sharing, such as Education for All (EFA), the Global Campaign for Education, the Human Development Index (HDI) and the Fast Track Initiative.

The above-mentioned influences have led to different interpretations of inclusive education. For example, the strong call of persons with disabilities and their families for

accessible material, and the right to be educated in their local mainstream schools as opposed to special schools only, have led to people associating the movement more strongly with disability and special needs. Inclusive education is, in essence, more about promoting social cohesion, human rights and meaningful education.

2.3 Definitions of Inclusive Education

The definition of inclusive education has evolved with time as influences, research and practices have expanded. In the beginning, it was about educating children with disabilities alongside same-age cohorts in local, mainstream schools. It has since evolved to reflect new ideologies, values and practices which improve schools so that they are able to provide quality education to a diverse range of learners with varying educational needs (Booth & Dyssegaard, 2008; Haug, 2003; Lipsky & Gartner, 1999; Bunch, Dore, Dore, Finnegan & Humphries, 2005). Given that, the way in which stakeholders conceptualise inclusive education strongly influences the extent of measures taken by individuals to implement it (Kleefe & Davis, 1998). The United Nations' and South African definitions are broad, incorporating ideological and practical issues that impact on implementation.

UNESCO defines inclusive education as: "A process of addressing and responding to the diversity of needs of all learners through inclusive practices in learning, cultures and communities and reducing exclusion within and from education. It involves changes and modifications in content, approaches, structures and strategies, with a common vision which covers all children of the appropriate age range and a conviction that it is the responsibility of the regular system to educate all children." (UNESCO, 2005)

The South African Department of Education, in 'Education White Paper 6: Building an Inclusive Education and Training system', defines an inclusive education and training system as one that (i) acknowledges that all learners can learn and need support, (ii) meets the needs of all learners through enabling education structures, systems and methodologies, (iii) acknowledges and respects differences in learners whether due to age, ethnicity, language, gender, class, disability, HIV and other infectious diseases,

(iv) acknowledges that learning is broad and occurs in the home and the community within formal and informal settings and structures, (v) changes attitudes, behaviour, teaching methods, curricula and environments to meet the needs of learners, (vi) maximizes the participation of all learners in the culture and the curriculum of educational institutions through uncovering and minimising barriers to learning (DoE, 2001:7). The White Paper continues by explaining that barriers to learning may be systemic and caused by negative attitudes and stereotyping, an inflexible curriculum, inappropriate language of learning and teaching, inappropriate communication, inaccessible and unsafe buildings, inappropriate and inadequate support services, inadequate policies and legislation, non-recognition and non-involvement of parents, and ineffective education managers and educators (DoE, 2001).

2.4 Models and Approaches

Beliefs, mainly negative, about disability have strongly influenced the education of children with disabilities and still plague our society today. In South Africa's past, and in many other cultures today, disability is associated with evil, witchcraft, demonic intervention or a curse from God for sinful behaviour. These medieval, tragic and dark portrayals of people with disabilities are supported by the media, and biblical and cultural stories, reinforcing negative stereotypes (Rieser, 2008).

The medical model of disability originated in the 18th century, when science and philosophy became prominent disciplines. The focus was on 'defectology', unravelling the scientific mysteries of disability, curing impairments and rehabilitating. The ordinary human needs of the person to be loved and form relationships with their families were put aside and the emphasis was put on their impairment or defect, so 'normalising' the 'defective' person became the key professional objective (Borsay, 2004; Malhotra, 2001, Rieser, 2008, Stiker, 1999). Children with disabilities would be removed from their families and placed in an institution where they would undergo treatment until they were assumed to be fit to function in society and released. Special education and special schools emerged, with medical professionals in authority and the views of the families

and people with disabilities ignored. The medical model of disability was further popularised in the industrial era, when a person's worth was judged by their productivity. The Eugenics Movement and Darwinism propagated that people with disabilities were a 'feeble-minded', lesser breed who should be weeded out to ensure racial purity; reinforcing negative beliefs (Borsay, 2004; Malhotra, 2001, Rieser, 2008, Stiker, 1999). The outward expression of this view in legislation was Nazism, which infuriated people with disabilities and gave rise to the disability movement (Malhotra, 2001, Rieser, 2008, Stiker, 1999). The fact that no families of people with disabilities who were persecuted were compensated after the Nuremberg trials further demonstrates the general prejudice towards people with disabilities in that era (Malhotra, 2001). The medical model of disability gave little weight to the strengths and abilities of people with disabilities, resulting in them being pitied and regarded as weak and in need of care and benevolence.

Religious and charity organizations then undertook to care for and educate people with disabilities, giving rise to the charity model of disability (Borsay, 2004; Malhotra, 2001, Rieser, 2008, Stiker, 1999). People caring for people with disabilities were revered and admired for their good nature. However, the charity perspective of disability was equally disempowering and oppressive, regarding people with disabilities as second class and defective citizens, in need of care from especially virtuous people, not common folk. The medical and charity models of disability deepened the social-emotional and physical chasms between people with disabilities and non-disabled people, further legitimised exclusion from mainstream education and exonerated governments from taking responsibility for the education of children with disabilities.

The social model of the disability rights movement offered a more authentic view of disability, supported by people with disabilities themselves. In simple terms, it asserts that the impairment itself is not disabling, but that disability and its social consequences, namely poverty, unemployment and isolation, are the result of the environmental and attitudinal barriers of society. These barriers (lack of transport, inaccessible material and ineffective modes of communication) hinder the prosperity and productivity of

people with disabilities (Borsay, 2004; Malhotra, 2001; Rieser, 2008, Stiker, 1999; Stubbs, 2008). For example, the medical model thinking would attribute a child's lack of progress in school to his impairment, and a lack of rehabilitation or remedial therapy, rather than looking at both intrinsic and extrinsic factors promoting and hindering the child's development. Social model thinking, on the other hand, values the child, his family and culture, and looks at ways to engage and improve the capacity of parents, professionals and regular institutions so that they can include the child (Rieser, 2008). It has, however, been criticised for implying that by changing society, any child with an impairment can be included and thrive, and ignoring the very real need of many persons with disabilities for medical treatment, therapy and assistive devices. A twin-track approach that fuses the positives of both the medical and social model, supporting Bronfenbrenner's Bio-ecological Systems Theory (acknowledging the role a child's biology plays in development, and responses to his or her immediate and greater environment) is therefore proposed by many scholars (Stubbs, 2008).

The changes, conflicts, norms and values in the child's environmental system may positively or negatively affect the child's cognitive, physical and emotional development (Paquette & Ryan, 2001). The five environmental systems that form the context of the child's development interact and reinforce one another. The environmental system closest to the child, and with the greatest influence, is the Micro-system, which includes the child's own genetic make-up, family, peers and neighbours. The Meso-system refers to the interaction between the parents, school peers, and teachers etc, which form part of the child's Microsystem. The Exo-system is the social context, and describes aspects related to the child's immediate environment that indirectly affect them, such as a parent having to work overtime, which may cause conflict in the marriage and interactions with the child. The prevailing cultural, political and economic climate constitute the Macrosystem, while the Chronosystem refers to the events, socio-historical situations and transitions that occur in the span of a human-being's life, such as adjusting to divorce or the death of a close relative (Paquette & Ryan, 2001).

Most recently, the rights-based approach to education programming has emerged as an overarching framework for achieving quality inclusive education and social development for all (Stubbs, 2008; Booth & Dyssegaard, 2008, World Vision, 2007). It provides a strong, legally-binding framework for the development of policies and practices that assert the rights of the child and spells out the responsibility of government and its institutions. The underlying principles advocated by the rights-based approach are:

- i) The right to accessible education that is free from discriminatory practices and easily available.
- ii) The right to quality education that is appropriate and child-centred, with a continuum of education across the lifespan that is effectively resourced and monitored.
- iii) The right to respect within the learning environment with regard to race, religion, language, and inherent dignity, and the rejection of violence

The rights-based approach is a culmination of the strengths of previous models and theories, and has the potential to be influential and progressive. If a child has a disability, the parents, professionals, civil society, and governments all believe the mantra that it is the child's right, and the government's duty to provide, quality, inclusive education for children with disabilities.

2.5 Integration, Mainstreaming and Inclusive Education

Integration and mainstreaming, which are associated with the medical model of disability, are part of the historical journey towards inclusive education. They describe ways of educating children with disabilities in local schools and are distinctly different. Unfortunately, the terms are often used interchangeably, resulting in much confusion. Those who label their efforts to include children with disabilities as 'inclusive education' are often in reality integrating or mainstreaming them (Stubbs, 2008; Bunch et al, 2005).

Mainstreaming and integration refers to placing a child with a disability into an existing ethos and environment, whereas inclusion entails changing it to accommodate the child (Stubbs, 2008, Thomas, 1997). Integration and mainstreaming can therefore be regarded as a geographical process, whilst inclusion is a philosophical process (Fisher, Sax & Pumpian, 1996). When inclusion is adopted, an internal shift in values and beliefs that govern our actions and interactions occur, because the child is recognised as a legitimate member of the school and the focus is on identifying and alleviating barriers to learning. In the case of integration and mainstreaming, the child is seen as the problem. This means there is no reflection on other influencing factors, such as flaws in the system, organization and ethos of the school, or approaches to teaching concepts, when the learner is underperforming academically and socially. The onus is, therefore, on the learner to 'fit in' or 'ship-out', not on the system to change and be more accommodating.

There are preconditions to mainstreaming and integration, meaning that the learner needs to cope with the demands of the curriculum with minimal assistance from others. In situations where support is provided, it is only to the benefit of the learner and to alleviate any imposition their presence may cause, not to the class as a whole (Stubbs, 2008). Integration differs from mainstreaming in that it occurs when learners spend a portion of their school day in classes with typical learners for socialization, or for lessons where they are academically on par; while the rest of their education takes place in special classes or special schools. Mainstreaming, on the other hand, entails the learner being educated at a mainstream school alongside typical learners for all or most of the time, and support and intervention, if any, are targeted at the learner.

A neighbourhood school welcoming children with disabilities to 'come in' is therefore only the first step towards inclusive education. More pertinent to inclusive education is increasing participation and learning of all learners to reach their full potential in a nurturing and supportive environment. Inclusion is not only about physical placement, but an ethos that guides all our practices and interactions. Hence, mainstreaming is often regarded as a precursor to inclusive education (Stubbs, 2008)

2.6 Human Rights and Development Instruments Promoting Inclusive Education

The move to include children with disabilities into neighbourhood schools was influenced by international consciousness regarding disability rights, inclusion, and research findings on the costs and benefits of segregated education in South Africa and elsewhere in the world. Disability research by the EFA Flagship (UNESCO, 2004), Rustemier (2004) for the Centre for the Studies on Inclusive Education (CSIE); Cook, Swain & French, 2001) and World Vision (2007), indicated that very few learners who have attended special schools continue to tertiary institutions or are gainfully employed and integrated into their communities. The following section discusses how these issues have shaped both international and national legislation.

An education is a fundamental human right of all people and is enshrined in Article 26 of the Universal Declaration of Human Rights of 1949:

“Everyone has the right to education. Education shall be free, at least in elementary and fundamental stages. Elementary education shall be compulsory.” (UN, 1948)

This fundamental human right to education has not always been extended to people with disabilities because of a combination of ‘ablest’ beliefs, which measure humanity along lines of health, productivity and beauty; and medical science, which focuses on impairment, and has perpetuated the notion that people with disabilities do not count as full humans (Hehir, 2003). People with disabilities and disability rights advocates have strongly opposed this notion and, through diligent lobbying, have ensured that all UN Human Rights instruments subsequent to the Universal Declaration of Human Rights that have focused on particular groups vulnerable to exclusion (e.g. children, women, indigenous people, refugees) make specific mention of people with disabilities and their right to education (Stubbs, 2008). Each international instrument built on the strengths, and improved on the shortcomings of the previous, culminating in a strong call for inclusive education. The World Programme of Action Concerning Disabled Persons,

established in 1981, the International Year of the Disabled Persons, marked the beginning of inclusive education for persons with disabilities by insisting that:

- legislation on compulsory education acknowledges that it applies to all children, including those with disabilities, equally
- the education authorities, as opposed to health or social welfare, take responsibility for education provision for children with disabilities
- children with disabilities should as far as possible be educated in the general school system
- comprehensive, individualised educational services must be made locally accessible to children with disabilities (Stubbs, 2008)

These demands are evident both in UN instruments and the initiatives that followed; both of which are discussed in more detail below:

The Convention on the Rights of the Child (CRC) (UN, 1989) legally binds countries to providing primary school education that is ‘compulsory and available free to all’, and makes specific reference to children with disabilities and marginalised groups. Article 28 recognises the special needs of children with disabilities and asserts that “the disabled child has access to and receives education, training, healthcare services, rehabilitation services, preparation for employment and recreation opportunities in a manner conducive to the child’s achieving the fullest possible social integration and individual development” (Article 28, UNCRC, 1989). The articles in the charter are all interrelated and interdependent, so that, for example, the articles affirming non-discrimination (Article 2), the best interest of the child (Article 3), the right to survival and development (Article 6), and respect for the views of the child (Article 12) are equally all related to education and upholding the principles of inclusive education. Furthermore, Stubbs (2008) argues that although segregated schooling gave children with disabilities access to education, it in effect violated their rights to non-discrimination, ignored their views and impinged on their right to feel accepted in their family and community; thus reinforcing support for inclusive education. The CRC

continues (Article 23) by stating that governments should provide financial support to parents and caregivers of children with disabilities for health and educational services. However, the power of this statement is diluted by the precondition ‘subject to available resources’, facilitating government neglect of their responsibilities.

At the Jomtien, World Conference on Education in 1990, Education for All (EFA) was agreed by the World Bank, UNESCO, UNICEF, UNDP and 155 countries. The Jomtien Declaration brought the rights of children with disabilities to the forefront when it made a landmark reference to universal accessibility and promotion of equity in education. Paragraph five of the Jomtien Declaration states that, “steps need to be taken to provide equal access to education to every category of disabled person as an integral part of the education system,” emphasising the importance of creating an education system that meets the needs of those who are marginalized and vulnerable to exclusion (UNESCO, 2001). Although the term ‘inclusive education’ was not explicitly stated, for many, Jomtien marked the inception of inclusive education as it made reference to facilitating access to mainstream education for marginalized groups, creating a system to accommodate all learners and calling for more involvement of family and communities in education. Disability specific documents following Jomtien expressed how disabled people’s right to education would be achieved in practice.

The rights in all aspects of a person with a disability’s life were addressed in the Standard Rules on the Equalisation of Opportunities for Persons with Disabilities (UN, 1993) which expressed the views of people with disabilities and was incorporated into the Salamanca Statement by professionals working in the field. These rules provided minimum guidelines to governments on developing policies that would create equal opportunities for people with disabilities. Rule 6 addressed matters on education, stating that ‘general education authorities are responsible for the education of persons with disability’. Too often, non-governmental agencies such as religious organizations, rather than governments, provided education to children with disabilities, perpetuating the notion that education of children with disabilities was a charity, not a civic right (Stubbs, 2008). The Standard Rules also favour inclusive education by emphasising that

education of persons with disabilities should form ‘an integral part of the education system.’ It was the view of all disability groups, including blind people, that children with disabilities should ideally be educated in the mainstream with appropriate support, with placement in a special school a secondary option. Special education was not dismissed entirely, given the acknowledgement of its value for learners who were deaf or blind or where the mainstream education system provided inadequate support. The Standard Rules also made demands on states to improve systems to support the integration of children with disabilities, and suggested that they developed clear policies on integration, and provided a flexible curriculum, quality material, teacher training and on-going support.

At the World Conference on Special Needs Education in Salamanca, Spain, in 1994, the commitment and plans to create an inclusive education system where all learners could learn together were more clearly articulated by governments. Governments also stepped up to their commitment to provide education to children with disabilities, where this was previously left to charitable organizations.

The Salamanca Statement and Framework for Action (UNESCO, 1994), acknowledges diversity and proclaims that every child has unique characteristics, interests, abilities and learning needs. It also asserts in Article two that educational systems that acknowledge and respond to diversity “are the most effective means of combating discriminatory attitudes, creating welcoming communities, building an inclusive society and achieving education for all; moreover, they provide an effective education for the majority of children and improve the efficiency and ultimately the cost effectiveness of the entire education system” (UNESCO, 1994). The Salamanca Statement defined the core principles of inclusive education and conditions that would promote the creation of an inclusive society, including that all children (with or without disabilities) should be accommodated at their local schools. The suggestions made in Salamanca to facilitate inclusion focused on the changes to the education system and schools, active community involvement, a child-centred pedagogy, flexible curriculum, and proper resources and support. It also acknowledged that all children are inherently different and have unique

needs that must be met in the general education system. This is a clear shift away from the prevailing special school and segregated education paradigm, instead incorporating the view that “child-centred schools are...the training ground for a people-oriented society that respects both the differences and dignity of all human beings” in Article four (UNESCO, 1994). Salamanca 5 Years (1999) lent further support to inclusive education when it cautioned that special schooling of children with disabilities often led to exclusion and isolation.

The World Education Forum met in Dakar, Senegal, in 2000 to evaluate the progress made since Jomtien to achieve 'Quality Education for All'. Given that the EFA goals had not been met by the majority of countries, and over 117 million children still did not have access to schools, they were extended to 2015 (UNESCO, 2000). The Dakar Framework for Action adopted a World Declaration of Quality Education for All, which identified inclusive education as a key strategy for achieving this goal and stated that “in order to attract and retain children from marginalized and excluded groups, education systems should respond flexibly...education systems must be inclusive, actively seeking out children who are not enrolled, and responding flexibly to the circumstances and the needs of all learners” (UNESCO, 2000). Although there is a strong focus on bringing in marginalised groups, the declaration failed to make specific mention of children with disabilities. Many countries reported that their education provision to this marginalised group was severely lacking, whilst others made no mention at all of children with disabilities in their reports, to the detriment and disheartenment of the disability community (UNESCO, 2004). In response, a flagship programme to move disability squarely onto the EFA agenda was launched in 2001. The Flagship on Education and Disability would act as a knowledge base, partner and 'watchdog' to insure that governments fulfilled their obligations and met their Millennium Development Goal (MDG) targets within the prescribed time-frame. The Flagship highlights issues such as assistive technology, and provides empirical evidence to evaluate country progress (UNESCO, 2004).

The World Blind Union, among other DPOs and NGOs working in disability, forms part of the disability flagship steering committee, ensuring that the quality of basic education for children with disabilities will ultimately be judged by people with disabilities, not governments or donor agencies. Since then, comprehensive global monitoring reports have been produced with specific themes such as literacy and early childhood development (UNESCO, 2004). Most reports note significant gains in gender equity and overall enrolment rates, but worrying issues persist including poor infrastructure, a shortage of qualified teachers and the disparity in quality of education to vulnerable groups (UNESCO, 2004).

The movement to achieve EFA was further endorsed at The UN Millennium Development Summit by 149 heads of state in 2000, at which the achievement of universal primary education was set as a primary goal.

The African Decade of Persons with Disabilities (ADDP) 1999-2009 (which has subsequently been extended for a second decade) is an initiative of the non-governmental community of Africa, in cooperation with Member States and Governments of the Organization of African Unity, to further the equalization of opportunities of persons with disabilities as set out in the Continental Plan of Action of the African Decade of Persons with Disabilities (African Union, 2002). Objective six of the Continental Plan of Action, for example, urges African states to promote inclusive education and provide training and learning material in accessible formats.

Strong global support for inclusive education by people with disabilities was most recently articulated in the comprehensive CRPD (2006), a legally binding treaty. It is the product of many years of advocacy by people with disabilities and is clearly rooted in the social model of disability. Article 24 of the CRPD is devoted to education and demands that, “State parties shall ensure an inclusive education system at all levels” (UN, 2006). Other important issues raised in Article 24 include:

- The entitlement of children with disabilities to quality, inclusive, free primary and secondary education on an “equal basis with others” within the communities

they reside in; prohibiting the exclusion of children from the general education system on the basis of disability, and promoting inclusive above segregated education.

- The provisioning of effective individualised support and “reasonable accommodations” within the general education system “that maximise academic and social development, consistent with the goal of full inclusion.”
- The obligation of states to ensure the learning of braille, augmentative and alternative forms of communication, orientation and mobility skills and Sign-language; as well as access to peer support and mentoring.
- The option of segregated schooling for blind, deaf and deaf-blind learners, stating that the “education must be delivered in environments that maximise academic and social development” for these groups of learners.
- The obligation of state parties to employ teachers with disabilities qualified in sign-language and Braille, as well as promoting awareness of disability among all educational staff and training them in teaching strategies and communication modes that would enable them to provide appropriate, quality education.
- Equitable access to tertiary, vocational education and life-long learning opportunities.

Systems are in place to monitor the implementation of UNCRPD at the national level. Countries that signed the optional protocol subject themselves to closer monitoring, since individuals from these countries can report violations to the monitoring committee, which undertakes a formal enquiry followed by a public report. South Africa’s signing of the Optional Protocol and the appointment of Shuaib Chalken, a South African, as the Special Rapporteur on Disability, means we have a great obligation to lead by example in ensuring the realization of inclusive education.

At the 48th UNESCO International Conference on Education (ICE) in Geneva, “Inclusive Education: The Way of the Future”, the 153 ministries of education, intergovernmental and civil society representatives called on member states to “adopt an

inclusive education approach in the design, implementation, monitoring and assessment of education policies, as a way to further accelerate the attainment of EFA goals as well as to contribute to building more inclusive societies.” (UNESCO, 2009:18) This firmly placed inclusive education in the mainstream as a social justice and development issue.

2.7 Advocacy in South Africa

In the following section, South Africa’s journey to inclusive education, including national legislation and policies that form the foundation, are outlined.

In the 1990s, pioneering groups of parents, such as Disabled Children’s Action Group (DiCag), began advocating for the rights of their children with disabilities to attend their neighbourhood schools, and for greater autonomy in decision-making regarding their children’s education. Disabled People Organizations (DPOs) also lobbied for policies and systems that would reflect and support their pursuit of full citizenship and greater inclusion in South Africa. They, and other non-governmental organizations working in education, human rights, and rehabilitation, were instrumental in shaping education policies in South Africa, and were involved in the drawing up of the South African Schools Act and Education White Paper 6 on Special Education: Building an Inclusive Education and Training System. Inclusive Education Western Cape (formerly known as Western Cape Forum for Inclusive Education), who also participated in this process, was the first non-profit organisation in South Africa solely dedicated to transforming our education system to one that is inclusive and values diversity. They offer support, knowledge and training to this end.

Today, many organizations, such as the Early Learning Resource Unit, The Children’s Institute, CBR Education and Training for Empowerment (CREATE) and the South African Association for Learning and Educational Difficulties (SAALED) have adopted inclusive education. Their awareness raising and capacity building efforts, combined with monitoring by the Human Rights Commission of South Africa and Institute for Democracy in Africa (IDASA) have given momentum to the inclusive education movement.

2.7.1 History in South Africa

The history of education for learners with disabilities in South Africa is closely linked to international and national consciousness of human rights.

South Africa has a fairly long history of Special Education for learners with disabilities that started in 1863 when the Roman Catholic Church established the first school for deaf children in Cape Town. Up until 1928, special schools were established and run by churches, non-profit organizations and private individuals. Thereafter, the government assumed responsibility for special education, placing it under the respective Departments of Education for different racial groupings (Naicker, 1999). In the 1960s the structure of special education in these departments, followed the medical model of categorisation, the dominant trend in America and elsewhere in the western world. Learners with disabilities were sorted into physical, sensory or cognitive disability and sent to an appropriate Special School that would rehabilitate them (Naicker, 1999, 2000). In essence, South Africa had a dual system of education, mainstream and special education, which was further segregated on racial and cultural lines, culminating into 17 different Education Departments that differed in resources, structure, curricula and policies (Naicker, 1999, 2000). This meant that there was great disparity in the quality of special education across races, cultures and disability, promoting further division and separateness among South Africans.

The special school model came under scrutiny in 1981, when the findings of the De Lange Commission on special education in South Africa, similar to that of the British Warnock Report, suggested a move away from strict labelling to focusing on 'special educational needs'; a more politically correct terminology (Lomofsky & Lazarus, 2001).

Government legislation prior to 1994 accentuated differences and separateness (Lomofsky & Lazarus, 2001; Naicker, 1999, 2000). Educational reform and transformation post-1994, in contrast, aims to promote equity, prosperity and common citizenship; democratic values which are enshrined in the South African Constitution, the protector of the rights of all South Africans. Our constitution states (Sections 29

and 9), that all pupils have the fundamental right to basic education; and that the education system should focus on issues of access, equity and redress. In the run-up to democracy, the African National Congress, commissioned an investigation into the status of education in South Africa to make recommendations on how to create a democratic, unitary, non-discriminatory education system that was cost-effective and redressed inequity (Muthukrishna & Schoeman, 2000). It provided a valuable framework for support services that involved integration and greater inter-sectoral collaboration among health, social work, specialized education and psychology services, which influenced later policy documents (Lomofsky & Lazarus, 2001).

The South African Schools Act (SASA) (RSA, 1996) enforces the South African Bill of Rights (RSA, 1994), in that it supports the rights of parents of children with disabilities to choose where they would like to send their child to school. In keeping with the South African Bill of Rights, schools are not allowed to refuse access to children with disabilities and are required to provide the necessary support to serve their educational needs. The South African Schools Act further stipulates that the school governing bodies (SGB) of all schools should have a representative for learners with special educational needs and requires that all stakeholders in a school be familiar with national education policies. This law promotes the development of autonomous, community schools that meet the needs of all in their catchment area and are partners in nation building. It has been fourteen years since the Act was passed and still children with disabilities are seldom included in their neighbourhood school. The existence of special schools, fears of disability, perceived incapacity and limited support are possible explanations. The parents of children with disabilities who have chosen to educate their child in their neighbourhood school receive little to no support from the Education Department and have had to pay themselves for resources such as a facilitator, assistive devices and additional therapies (Caroline Taylor, personal communication, March 12, 2006). Although the Act favours inclusion, it states that when the child's inclusion cannot be made practicable, then the mainstream school can use its discretion and reject the application. It also fails to place the onus on the school and government to take measures to support and make the inclusion of the learner practicable. The wording of

the Act is under review and the proposed wording reflects the need for assessing support and places more responsibility on the system to provide the support. The Act states that: “The Member of the Executive Council must, unless this cannot be made practicable, provide education for *all* learners at public schools, and provide relevant support services for learners experiencing barriers to learning as determined through an appropriate and equitable assessment procedure” (DoE, 2008a). Since then, the DoE has embarked on a process to ensure that subsequent education policies reflect the values of the constitution and SASA.

In 1996, the National Commission on Special Needs Education and Training (NCSNET) and National Committee on Education Support Services (NCESS), were established to investigate all aspects of special needs education and education services in South Africa. The commission carried out a large-scale consultation, engaging with all stakeholders in special education including Education Departments, tertiary institutions, non-governmental organisations such as Disabled Children’s Action Group and disabled people themselves. The commission combined international trends in inclusive education with local views in order to develop a strategy relevant to South Africa.

The findings of the White Paper on an Integrated National Disability Strategy (Office of the Deputy President, 1997) focused on the rights and plight of people with disabilities. Issues of environmental access, life skills to facilitate independent living, assistive technology and information access were also incorporated in the commission’s feedback. The final report of the commission, *Quality Education for All: Overcoming barriers to learning and development* (DoE, 1997), noted that only a few children with disabilities requiring special education were accommodated in special schools (approximately 64 200 out of a possible 400 000 children), leaving most of them out of the education system or being ‘mainstreamed by default’. In addition to this, it noted that the education system and curriculum were inadequate for meeting the diverse needs of learners in general. The report called for the repositioning of disability away from the medical model which viewed disability as a concern of welfare and charity, to a social model which views disability as a social construct. New terminology consistent with the

social model of disability was introduced and an eco-systemic approach to assessing learning breakdown was proposed. Children with disabilities, and special needs would be referred to as 'learners experiencing barriers to learning and development'. The barriers to learning and development are factors that are impacting on the learner's ability to learn. Barriers to learning, all of which were identified in the report, may be socio-economic, attitudinal, an inflexible curriculum, language, inaccessible or unsafe environment, inaccessible or inappropriate support services, lack of parent involvement, lack of human resource development (appropriate training), disability, and/or a lack of supportive legislation and policies in support of inclusive education. The government showed its strong commitment to integrating people with disabilities and ensuring that they take up their rights as full citizens by establishing the Office on the Status of Disabled People in office of the State President. The report by these commissions, Quality Education for All, informed the writing of Education White Paper 6 on Special Needs Education: Building an Inclusive Education and Training System.

Education White Paper 6 outlined a plan to redress the inequalities of the past and make education and support services accessible to all children with barriers to learning such as disability. Professor Kadar Asmal, Minister of Education in his introduction to Education White Paper 6 stated: "It is our great hope that through the measures that we put forward in this White Paper we will also be able to convince the thousands of mothers and fathers of some 280 000 children - who are younger than 18 years and are not in schools or colleges - that the place of these children is not one of isolation in dark backrooms and sheds. It is with their peers in schools, on the playground, on the streets and in places of worship where they can become part of the local community and cultural life, and part of the reconstruction and development of our country. For, it is only when these ones among us are a natural and ordinary part of us that we can truly lay claim to the status of cherishing all our children equally." (DoE, 2001:7)

The South African government has put in place a 20 year transformation plan outlined in White Paper 6 to facilitate the development of a single, inclusive, socially just and accessible education system that promotes the participation of all learners.

Transformation at all levels of the education system involves (i) the development of an integrated education system that infuses special needs and support services throughout the system, (ii) the holistic development of ‘barrier free’ schools and other centres of learning with accessible physical and psycho-social environments, (iii) the creation of a single, flexible and accessible curriculum for all learners, (iv) the promotion of the rights and responsibilities of parents, educators and learners, (v) the capacity building of human resources (educators and support personnel), (vi) collaboration across government and non-government sectors, (vii) the development of community-based support systems and (viii) the development of a funding strategy that will ensure redress and accessible education to all learners (DoE, 2001).

The strategies used to achieve this include:

- strengthening special schools to better support existing learners and become resource centres for schools in the locality;
- changing the purpose and procedure for identifying and assessing learners with special needs from determining placement to determining support needs using an eco-systemic approach enrolling all stakeholders in the process. Factors related to the learner and school are considered and the curriculum is used as a basis as opposed to psychometric tests only;
- converting 500 out of 20,000 mainstream primary schools to full-service schools i.e. model inclusive schools, first focussing on 30 schools in the ‘poorest of the poor’ areas of South Africa;
- orientating education officials including mainstream school managers, governing bodies, teachers, professionals and other staff in inclusive education policies and practices;
- establishing District-based Support Teams (DBSTs) that provide co-ordinated professional support services and oversight for the implementation and capacity building required for inclusive education in designated areas - to this end, special

schools and experts in the community will be co-opted onto the team and collaboration encouraged;

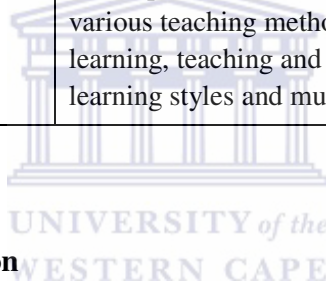
- embarking on a national advocacy and information campaign in support of inclusive education that explains the concept; the duties, functions and rights of learning institutions, parents and communities; and reports on progress made since its inception.

Integral to creating an inclusive education system is the development of support structures for both teachers and learners from inclusive education directorates within national and provincial departments, to district-based support teams (DBSTs), to institutional level support teams (ILSTs) at schools. How this would be achieved was field-tested in the SCOPE, DANIDA and SISONKE (DoE, n.d.) action research projects that were funded by Denmark, Finland and Swedish aid. The support structures are charged with different functions, compositions, roles and responsibilities, which are fleshed out in the following documents:

Table 1: Key guiding documents issued by the DoE

Document	Summary
National Strategy on Screening, Identification, Assessment and Support (SIAS) (DoE, 2008a)	Outlines assessment procedures and indicators to determine the nature and level of support of both the learner and school.
Guidelines for Full Service and Inclusive Schools (DoE, 2009a)	The minimum standards (fundamental principles and characteristics) of what constitutes an inclusive learning institution are outlined, as well as the institutional development and support required by the school to fulfil its functions. A practical framework of the key aspects of a FSS is provided as a reference for other schools wanting to become a model inclusive school. Some of the aspects in the framework include: promoting a culture that welcomes; values and diversity; flexible teaching and inclusive classroom practices; and collaboration and teamwork.
Guidelines to Ensure Quality Education and Support in	Outlines what is expected in order to provide quality education to learners needing high levels of support and

Special Schools and Special Schools as Resource Centres (DoE, 2007)	requirements for fulfilling their role as a resource centre. This includes criteria for quality education relating to admission, provision of quality support, curriculum, learning and teaching support material, staff qualifications and provisioning.
Conceptual and Operational Guidelines for District-based Support Teams (DoE, 2005a)	Explains how DBSTs will provide integrated professional support services to promote effective learning and teaching drawing upon a range of expertise and resources. The support services range from guidance on the curriculum and classroom practices, institutional development (management and governance) to administrative support; and involve identifying and addressing barriers, capacity building, monitoring and networking.
Draft Guidelines for Inclusive Learning Programmes (ILP) (DoE, 2005b)	Expands on how the curriculum can be used to effectively respond to the diverse needs of learners through (i) differentiation of learning programmes, work schedules and lesson plans, (ii) differentiation of learning areas of NCS, (iii) various teaching methods, (iv) inclusive strategies for learning, teaching and assessment and (v) acknowledging learning styles and multiple intelligences.



2.7.2 Related Legislation

The intentions of the departments of Education, Health and Social Development to improve the lives of children with disabilities are evident in the many supporting laws and policies. The previous section reviewed those by the Education Department. In this section we will outline policies and guidelines from other government departments.

Following the ratification of the UNCRPD by the South African government in 2008, the Office of the Status on Disabled Persons (OSDP) published the National Disability Policy Framework (2008-2019), and accompanying Guidelines (OSDP, 2008). They aim to give a local interpretation of the CRPD, and to outline practical steps towards achieving an inclusive society. The Framework proposes that all disability programmes and objectives are mainstreamed into government line function planning, implementation and budget allocations, and to promote an inter-sectoral approach.

The Policy Guidelines (OSDP, 2008:20) identify a number of cross-cutting issues according to which all stakeholders will be monitored. Many of these are relevant to inclusive education. These are:

Table 2: Cross cutting issues in OSDP Policy Guide

1. Access to communication & information	6. Monitoring and evaluation
2. Prevention	7. Budgeting
3. Public education and awareness	8. HIV and AIDS
4. Reasonable accommodation	9. Mainstreaming
5. Universal access	10. Safety and security
	11. Human resource development

Furthermore, the guidelines stress the need to promote comprehensive rehabilitation, particularly in the areas of health, education and social services (OSDP, 2008).

The stimulation received in the early years is crucial for any child's development. The Guidelines on Implementation of the National Disability Policy Framework recognises this and states that "*ECD and stimulation within an inclusive environment is the cornerstone for the development of an integrated and equitable society*" (OSDP, 2008:36). The Children's Amendment Act (RSA, 2007) Clause 93 (4) (b) indicates that funding must be prioritized to make ECD programmes available to children with disabilities, with appropriate programmes to cater for their needs.

Provision of assistive devices is part of rehabilitation and constitutes a key mechanism to ensure that disabled people can participate as equals in society. In 2003, the Department of Health issued guidelines on standardization of provision of assistive devices and give directives in terms of assessing for, issuing and repairing of, various devices (Department of Health, 2003). Unfortunately, devices to the visually impaired are limited to refractive lenses, as other devices are regarded as the responsibility of Education.

In 2009, the Department of Social Development released the Integrated National Strategy on Support Services to Children with Disabilities (DSD, 2009), which is intended to improving the quality of life of all children with disabilities in South Africa. The focus is on creating an enabling environment within which they have equal and accessible services. Such services would allow children with disabilities to function independently and enjoy a full and decent quality of life in conditions that ensure dignity, promote self-reliance and actively participate in society. The five components of the strategy relate to international and national frameworks and areas of service delivery, viz.

- survival and well-being;
- childhood development;
- protection;
- participation; and
- mobilization of resources.



There are numerous policies that support the education of children with disabilities. The challenge is to bridge the gap between policy and practice.

2.7.3 Progress of implementation

Many gains have been made since the publication of Education White Paper 6, but the shortage of funding and other strategic issues have resulted in delays and scattered implementation. Wildeman and Nomdo's (2007) review of the progress made, concluded that besides the serious lack of funding, varying understandings of inclusive education among lead implementers at provincial departments; poorly skilled implementers at grassroots level; and lack of accessible material and infrastructure delayed the implementation of inclusive education. On the strategic front, Wildeman and Nomdo (2007) viewed the failure to elevate inclusive education to the same level of prominence as outcomes based education (OBE) and the decision to drive the process through a 'Cinderella' directorate, Special Needs Education, has reinforced the myth

that inclusive education is only about disability and has diminished its value as a vehicle through which our education system can be transformed to meet the demands of our evolving society. In their view, this strategy hindered the adoption of inclusive education by other divisions within the Education Departments and the retarded implementation. In addition to this, the true extent of the resource shortages and other problems only came to fore once the situational analysis of the field-testing schools was completed, meaning even more work and resourcing than anticipated was required, posing further delays (Wildeman & Nomdo, 2007; DoE, 2008c, 2009b). The motivation of many of the full-service schools selected was low, resulting in resistance and sluggishness because this new role was imposed on them and they did not see how inclusive education could help them overcome their present day challenges.

The implementation process was given a boost in 2007 and 2008, when the national treasury allocated funds towards the resourcing and strengthening of special and ordinary schools to enhance their capacity to provide quality education to learners with disabilities (DoE, 2008b). More than R9,000,000 was spent on supplying 10 schools (seven special schools and three designated full-service schools) with assistive devices for specific disabilities (DoE, 2008c, 2009b). A further eight ordinary schools (which are in addition to the original 30 designated to be upgraded to become inclusive schools), were made physically accessible. Thus far, over 5,000 education staff (including teachers, district officials, housemothers and auxiliary staff) have been trained in inclusive education practices and procedures as outlined in the SIAS documents and in developing ILPs (DoE, 2008b).

In addition to the advocacy and awareness raising about the requirements and benefits of an inclusive education system in the schools and districts participating in the piloting of inclusive education, the department undertook a large-scale public awareness campaign. This involved a joint initiative between the DoE and the government communication and information service, as a result of which a programme of 13 episodes on inclusive education was produced and broadcast on national television, reaching over one million viewers per episode (DoE 2009b). A DVD explaining inclusive education and

highlighting best practices was also produced and is presently being disseminated to schools (DoE, 2008b). Several seminars on inclusive education practices and the UNCRPD were organised countrywide (DoE, 2008b). Another great achievement in promoting awareness and encouraging the implementation of inclusive education was the launch of the national interactive website, Thutong (www.thutong.doe.gov.za), where information on inclusive education, policies and practices can be found and shared.

It is estimated that over 200 schools in the country have embraced inclusive education in their policies, cultures and practices, without any coercion from the Department of Education (DoE, 2009b). The increase in the number of children with barriers to learning in the education system is an achievement as it shows that there is a greater awareness and acceptance among parents and teachers about the right to education for all types of learners. A further indication of the increasing support for inclusive education is the inclusion of inclusive education modules in pre-service and in-service teaching training. Provinces across the country have implemented projects to promote inclusive education. Examples of these are: The Kwa-Zulu Natal Inclusive Education Project (KIEP) that involved the development and delivery of SAQA accredited courses for teachers, teaching assistants and district officials of all special schools in the province, and the Western Cape 'teacher assistant project' that involved the training and deployment of over 510 teaching assistants in 163 primary schools (DoE, 2009b)

Despite these gains, many children with disabilities remain excluded because of the limited capacities of special schools and mainstream schools, especially in rural areas (DSD, 2009). Issues related to advocacy and awareness raising and capacity are the most likely causes. In relation to advocacy and awareness raising Wildeman and Nomdo (2007) pointed out that the department's campaigns were insufficient because there was little agreement about what inclusive education entailed among key implementers at provincial level. Furthermore, there was little to no evidence of campaigns targeting parents of children with disabilities at the time.

Support, which is integral to the success of inclusive education, hinges on human capacity and culture. There are limitations in human capacity to meet support needs and offer leadership within the Inclusive Education/Special School Directorates at all levels caused by a general shortage of specialist staff such as therapists and low staff retention rates (Wildeman & Nomdo, 2007). The piloting of the Index for Inclusion in South Africa showed that this leadership vacuum persists at school level where principals, still set in their autocratic ways, are unable to create a culture of collegiality and sharing (Engelbrecht, Oswald & Forlin, 2006). The problem is compounded by the weak and often ineffective cascading model of skills transfer and support to teachers (Engelbrecht et al, 2003). Many provincial and district officials have limited knowledge and skills in either special education or the national curriculum. In most cases, those with a special school background have limited knowledge and skills in the National Curriculum Statement (NCS) and OBE, while those from a general education school background have limited knowledge and skills in areas of differentiation, curriculum and material adaptation for learners with special educational needs. Furthermore, the assumption that having either or all the skills will enable someone to train or mentor another or have the time to do so is risky and often results in teachers not receiving the support they require. The special schools reported that they desire more support from district officials in areas of the curriculum, while district officials lack the confidence to provide the support to them because of their lack in knowledge on special needs issues (DoE, 2009b). Although many of the factors hindering the progress of inclusive education point to gaps in skills and resources, the powerful influence of attitudes and beliefs within our context of redress should not be ignored. In my work as an inclusive education consultant I have encountered many parents who feel that inclusive education is denying children with disabilities from 'Black' and 'Coloured' communities the privilege of attending highly resourced special schools such as ones 'White' people had access to, where they can receive all the therapies and specialist teaching and equipment. It is therefore viewed as a cost-saving initiative under the banner of human rights and equity. In addition to these feelings, many schools are conflicted by the demands to deliver quality

education, attain high scores for learners, create better working conditions for teachers and honour the human rights of all learners, not just those with disabilities.

2.7.4 National Strategy on Screening, Identification, Assessment and Support (SIAS)

The National Strategy on Screening, Identification, Assessment and Support (SIAS) (DoE, 2008a) document embraces the social model of disability and provides the foundation of inclusive practices, school improvement and quality teaching. It requires the assessor to carefully consider all the eco-systemic factors that impact on the learner's learning including their own classroom practices. It illustrates a distinct shift away from psychometric norm reference testing which may label learners, be culturally biased and give little information on how to improve teaching and learning. In the SIAS a strong emphasis is placed on teacher-led assessments, self-reflection, evidence-based practices and collaboration. SIAS requires cooperation between health, education and social services. The learner's family, teacher, the school's Institutional Level Support Team (ILST) and the DBST are all involved in the assessment and intervention process that comprises four stages.

The first stage involves getting a general picture of the learner and identifying learners requiring intervention. The information obtained from the Learner Profile, to be completed for every child entering the education system, will alert the teacher to any exceptionality (e.g. disabilities, giftedness) that may impact on learning and teaching and would demand further investigation. The learner's parents/caregivers would be interviewed at this stage to gain insight and information about the learner's home circumstances, their personality at home, behaviour, strengths, weaknesses, interests etc. The insights will inform intervention, i.e. the teacher may decide to use content that interests the learner or use behaviour management strategies similar to that of the parent. In cases where the learner has a known disability or is identified later on as in need of additional support, the Diagnostic Profile needs to be completed by the relevant health professional and any reports from therapists, psychologists, social-workers etc. should be included in the learner pack. The Diagnostic Profile form is based on the

International Classification of Limitations and similar to the form used by the Department of Health. The limitation noted in the Diagnostic Profile is only one of many factors to consider when determining the nature and level of support and should never serve as a qualifier for special school placement.

Stage two, identifying barriers to learning and development, entails a more in-depth investigation of the learner's support needs and contextual barriers. This process focuses on curriculum challenges and involves gathering evidence and information from multiple sources including observation, consultation and analysis of work produced; as well as reflection to determine factors, both negative and positive, impacting the child's learning.

The learner's support needs and enablers are determined by considering the learner's ability in the areas of:

- learning;
- behaviour and social competencies;
- health, wellness and personal care;
- physical access.



Contextual factors are also considered:

- in the community and family (e.g. substance abuse, absent parenting, useful NGOs);
- in the classroom (e.g. attitude and knowledge of the teachers and peers, lack of material or a teacher skilled in differentiating the curriculum)
- in the school (e.g. unfavourable ethos and culture, infrastructure)

The information gathered up to this point will then be used to draw up an Individual Support Plan (ISP) which spells out the support to be provided at school level. This is similar to an Individual Education Plan (IEP) and is drawn up and implemented with the help of the ILST, parents and other relevant stakeholders. The targets set need to be

specific, measurable, achievable and realistic. This tool is used to steer and monitor the intervention process and it needs to be reviewed on a quarterly basis to gauge progress, and make adjustments as required. It will also be used to determine progression at the end of the year. The ILST, therefore, only refer cases to the DBST if all other avenues have been exhausted.

Only if a high level of support cannot be organised at the school in a practical, cost-effective way, will the learner be referred to a special school. A child will therefore not be excluded on the basis of his/her disability or psychometric test results.

Stage three, Assessment of Support Requirements: establishing level and nature of support, is led by the DBST and involves a formal evaluation of the information collected and subsequent interventions. From this, a decision about the level of support needed and a support package will be made in consultation with all the relevant stakeholders. The indicators for determining the intensity of support needed is as follows:

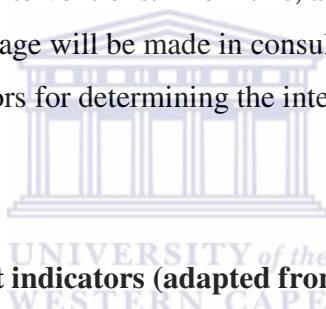


Table 3: Level of support indicators (adapted from DoE, 2008a)

Levels	Levels of Support required	Location where support would be provided (full / part-time)	Type and extent of support from District-based Support Teams (DBSTs) for individual cases
1– 2	Low levels	Ordinary and full-service schools	General, consultative once-off or short term support Focus on capacity building
3	Moderate	Ordinary and full-service schools	More specific short-medium term consultative support
4– 5	High	Full-service and special schools	Intense, frequent and specific support including consultation

Learners who require a low (level one) to moderate (level three) level of support would be able to access the support in an ordinary school or full-service school, while learners who require a high level of support (level five) could receive it in a special school.

Stage four, Action Planning for Support Provisioning and Monitoring, involves detailed mapping of what support will be provided, by whom, when and how. These details allow for careful tracking and monitoring of progress by the DBST.

According to SIAS (DoE, 2008a), the cycle of renewable support provisioning will ultimately develop an inclusive education system with support provisioning at all levels and enhance the quality of education as a whole. There are, however, some dangers. Even though the SIAS is meant to be a highly participatory, unbiased process where every effort must be made to bring in support to the learner's local school, the conditions in ordinary schools and districts (e.g. limited human and material resources, negative attitudes) may influence a bias towards selecting level four and five. This would divert the assessment process back to the old placement model. To avoid this, buy-in of education officials at all levels is required, the link between inclusive education and whole school improvement needs to be emphasised, as well as improving the working conditions of educators.

2.7.5 Curriculum

The commitment to inclusive education was reinforced with the adoption of the NCS, a single curriculum, in line with OBE that emphasised the principles of social justice, a healthy environment, human rights and inclusivity. The curriculum is flexible and culturally unbiased, since it does not prescribe content and material, leaving it to the educator to select content that is culturally relevant to the community and to use the resources that are accessible. The learning outcomes and assessment standards indicate the knowledge skills a learner should acquire; but the teaching methodologies used to facilitate learning may vary. "The outcomes and assessment standards emphasise

participatory, learner centred and activity-based education. It leaves considerable room for creativity and innovation on the part of the teachers in terms of interpreting what and how to teach” (DoE, 2003:14).

Other than the aforementioned, the national curriculum is flexible with regard to individual learners in that it allows for differentiation (DoE, 2003; 2005b), whereby:

- Ways of assessing may vary
- The activities designed to achieve a specific outcome may vary
- Extra time is allowed for completing tasks and assessments
- The communication modes used may vary e.g. Braille, South African Sign-language
- Expectation can be adjusted to ability
- Assessment standards can be broken down incrementally into more manageable and achievable steps
- The duration and weightings of learning areas of a learning programme can vary
- The amount and type of learning programmes assigned may vary
- In cases where learners cannot meet the requirements of the school exit exam, particular assessment standards that are relevant to the learner can be pursued.
- Grades and phases can be straddled i.e. Time for completing a learning programme is not limited to one year, so a learner in Grade 4 can be pursuing Grade 2 literacy.

All forms of differentiation must, however, be informed by a comprehensive assessment of the barriers to learning and the learner’s needs and should be recorded in the ISP (DoE, 2003, 2008a).

2.7.6 Leadership, Roles and Responsibilities

In order for inclusive education to thrive, the process needs to be driven through strong leadership, management and governance. Within the education system there are structures and individuals designated to fulfil these leadership, management and governance roles, outlined in the SASA (RSA, 1996). On the macro level these roles are carried out by the National and Provincial Department of Education and ministers, while on the micro level the DBST, Principal, School Management Team (SMT) and School Governing Body (SGB) carry out these functions. The DoE, however, distinguishes leadership as the guidance given to individuals to attain the school's objectives, whereas management is about ensuring that things happen to reach them (Kgothule, 2004). Management (principal and SGB), therefore, ensures that whatever objectives were set are achieved through planning, co-ordination and monitoring of day-to-day activities (Kgothule, 2004), while governance, in relation to the SGB, ensures that the policy regulations guiding how the school must be organised and operated are carried out judiciously and within budget. Some of the SGB functions include deciding school policies (e.g. code of conduct), the school development plan (e.g. partnerships in the community), and administration (e.g. upkeep and use of school property) and staffing.

Leadership, management and governance functions are extremely intertwined on the school level, especially since leadership is more about the roles and activities you take on when interacting with others than your designated title (Mayrowetz & Weinstein, 1999). This means that individuals who do not necessarily hold positions of authority are also capable of exercising leadership as they may have the highest level of skill required to perform the task at hand. Mayrowetz and Weinstein (1999) investigated to what extent individuals in an inclusive school fulfilled the six leadership functions of Heller and Firestone (1995 cited in Mayrowetz & Weinstein, 1999). They discovered that in schools where inclusive education was institutionalised, the principal and several other stakeholders including a parent and district head, regardless of whether or not they held a leadership role, were involved in:

- Vision: buying and selling a vision using empirical evidence, policy and sound rationale to compel others to make the paradigm shift and enrol in inclusive education,
- Encouragement/Recognition: motivate staff and acknowledge their efforts and strain
- Resources: mobilising the necessary resources such as time, material, knowledge
- Adapting Standard Operating Procedures (SOPs) to accommodate and support inclusive practices such as differentiated curriculum, budgeting for adapted assessments, timetabling and class allocations
- Monitoring: tracking the progress made towards being more inclusive for individual learners and the whole school
- Handling Disturbances: dealing with issues that may derail efforts towards inclusion such as oppositional parents or teachers

The involvement of several stakeholders in these leadership functions could at face value be seen as redundant, but instead ensured that the process of inclusion remained on track regardless of staff turnover (Mayrowetz & Weinstein, 1999).

In schools transforming to be inclusive, particular leadership styles are proposed. Skrtic (1991 cited in Mayrowetz & Weinstein, 1999) endorsed an adhoc leadership style characterised by a free, open and non-bureaucratic setting where staff are encouraged to use their expertise as situations arises. In this way, everyone is expected to problem-solve and be innovative, as the focus is on the outcome. Keyes, Hanley-Maxwell and Capper (1999) in their descriptions of an effective inclusive principal, also focus on creating an environment conducive of problem-solving and capitalising on people's expertise by allowing them autonomy, but emphasise the importance of support, reassurance and reflection on how to be more inclusive. Moreover, Keyes et al (1999) noted that an effective principal models social justice and inclusion in his/her day-to-day practices and the approach is underpinned by the following values: (i) appreciating personal struggle, (ii) acknowledging the dignity of all people, (iii) trusting that people

do their utmost, (iv) being humane and having good decorum (mix of personal and professional), (v) being attentive to what others say; and (vi) having an unwavering commitment to the vision. Riehl (2000) agrees that social justice and equity should form the basis of everyday practices and emphasises the use of non-offensive, diversity-embracing language to encourage school transformation towards inclusion. This kind of language and thought-provoking conversation is meant to foster new understandings about diversity and make people more mindful about their practices. According to Strully and Broderick (n.d.), principals of inclusive schools must actively be seeking out solutions for the challenges they encounter; recognise people's abilities, potential and talents; and be empathetic and trustworthy. These sentiments are shared by Engelbrecht et al (2006) who favour a democratic leadership style, since their experience in implementing the Index for Inclusion (Booth, Ainscow, Black-Hawkins, Shaw & Vaughan, 2000) in three Western Cape schools indicated that schools with autocratic principals hindered inclusive education, where parents felt unwelcome and uneasy. In South Africa, Kgothule (2004) uncovered the gaps in effective leadership for inclusive education and formulated a leadership programme to build the capacity of school principals.

On a more practical front, the key roles and responsibilities of principals and school administrators is summed up by Katsiyannis, Conderman and Franks (1996) and Keyes et al (1999) as:

- driving the implementation and monitoring of inclusive principles and practice
- addressing the training needs of educators and others within the school community
- managing and assessing staff
- facilitating the working together of teachers and special education professionals by clarifying roles, responsibilities and procedures

2.8 Hierarchy of Support Structures

2.8.1 National Department of Education

The National Department of Education (DoE) is responsible for policy development, setting strategic objectives, securing funding, capacity building and disseminating information and examples of good practice. To this end, they have undertaken several consultations and studies to inform the implementation of inclusive education, ensured the streamlining of all education policies, informing strategies undertaken within the Education Department and in other departments to ensure that vulnerable children are catered for. Initiatives carried out on the national level are filtered through to the provincial level and to the greater public.

2.8.2 Provincial Departments of Education

The Provincial Departments are responsible for ensuring the implementation of policies on a provincial level, and tailoring programmes to meet contextual needs, priorities and challenges. This entails building the capacity of districts officials, school managers and teachers; co-ordinating support between other provincial departments; and administering human and financial resources among other mandates.

2.8.3 District-based Support Teams (DBSTs)

The primary aim of district-based support teams is to enhance the inclusivity of the education system by broadening access to support (DoE, 2001; 2005a). The support provided will focus on developing enabling conditions that promote learning, teaching, institutional development, governance and management. This will be achieved through identifying barriers to learning in the system and then addressing them by designing, reviewing and implementing capacity building and curriculum support programmes, as well as providing the required resources such as assistive technology. An example of such a programme could be training the ILST on how to develop an ISP. They are also tasked with strengthening special schools and full-service schools, so that they can fulfil their roles as stipulated in Education White Paper 6. Recording, monitoring and

evaluating support provisioning progress towards an inclusive education system in the locality for individual learners is another responsibility. The core members of the DBST should come from the inclusive education, curriculum and institutional development divisions, but should also include experts from physical planning, teacher development, special schools, or ECD among others, depending on what the situation demands.

2.8.4 Institutional Level Support Teams (ILSTs)

It is envisaged that every institution of learning will have an active, fully functioning ILST, dedicated to organising support services for learners and teachers (DoE, 2001; 2005a, 2009a). The ILST is a group of teachers and other individuals (from institutions of higher learning, DBST and other departments) with expertise in any aspect of education that meets regularly to address barriers to learning. The group will serve as a 'think tank' to solve-problems around barriers to learning. A teacher who has tried everything to support a learner will consult with the ILST for further assistance. The ILST will lend support to the teacher by making recommendations on how to tailor the curriculum, make suggestions on how to improve the environment, or by co-opting another person for assistance. Evidence of strategies implemented over time and results need to be recorded. The ILST will also actively seek out ways to prevent barriers to learning and promote institutional development by co-ordinating screening and identifying areas in which staff needs further training.

The ILST should work collaboratively and problem-solve in order to address barriers to learning. It is therefore crucial for them to be:

- well-informed on policies and procedural guidelines;
- knowledgeable on barriers to learning and inclusive classroom practices;
- systematic in implementing the SIAS strategy;
- able to provide guidance on how to develop and implement an ISP;
- organised in tracking and record-keeping;

- able to meet regularly as a team and with caregivers in order to communicate interventions and progress (DoE, 2009a).

2.8.5 Special Schools / Resource Centres

In terms of White Paper 6 (DoE, 2001,2007) special schools will undergo two major changes, which acknowledge their wealth of expertise and experience in working with learners with special needs as well as the central role they can play in an inclusive education system. They will be incorporated into DBSTs and become hubs of specialised support services, providing support to learners requiring the highest level and offering support in assessment, curriculum and differentiated teaching strategies to schools in the surrounding area (DoE, 2001, 2007). A school for the visually impaired would therefore provide Braille and other adapted material and advice on how to improve classroom practices to an ordinary school in the neighbourhood that has included a learner who is blind (DoE, 2007). Due to disparities of the past, most of these schools do not possess the capacity to fulfil this new role, so an audit of the schools was conducted to establish what support they required in relation to human and material resources, staff development and infrastructure, with the view to strengthening them in the coming years.

2.8.6 Full-service Schools

Full-service schools are envisaged to be model inclusive schools and are defined as “schools and colleges that will be equipped and supported to provide for the full range of learning needs among all our learners” (DoE 2001:22). This means that, in a given community, full-service schools would reflect the diversity of the community, accommodating no more than three percent of learners with disabilities. Transforming ordinary schools into model inclusive schools will involve intense training in inclusive approaches such as multi-level teaching, co-operative learning and commitment towards developing a culture in the school that embraces the philosophy of inclusion by:

- infusing it in its Whole School Development and professional development plans

- welcoming and appreciating diversity,
- providing quality curriculum support through assessments, flexible teaching and inclusive classroom practices
- promoting collaboration at all levels - among, learners, staff, family, community and Education Department structures (DoE, 2001; 2009a)

2.8.7 Teacher

The primary role of the teacher is to facilitate learning by delivering and differentiating the curriculum so that it is accessible to all learners. This involves being learner-centred and using collaborative approaches such as group work for mixed ability groups (DoE, 2005b). As a facilitator of learning, the teacher largely influences the environment, culture, organization and co-operation within the class. Being learner-centred means making a holistic assessment of the learner, his past experiences, home circumstances, physical health, learning style and preference; and adapting learning programs, teaching strategies and material accordingly to meet the specific needs of the learner. Teachers are required to self-reflect on their practices and actively seek out ways to improve their teaching skills (DoE, 2000, 2003). The teacher needs to develop lessons that are aimed at different levels of ability in the class to enable all the learners to participate and develop. Teachers also need to adjust their expectations depending on the learner and learners should be evaluated on individual objectives and progress, not compared with one another. Hence, objectives and outcomes should be modified to suit the learner (DoE, 2000, 2005b). This entails giving learners the freedom to choose how to demonstrate their mastery or understanding of a skill or task. For example, some learners may choose to do a skit on the Truth and Reconciliation Commission, while another learner may write a poem.

In relation to having a learner with a disability accompanied by a facilitator (also referred to as a para-educator) in the classroom, Giangreco and Doyle (2007) emphasised that it is not the role of the facilitator, but the teacher, to gauge the level of competence of the learner, select curriculum goals and co-ordinate intervention. They

also stress that teachers must communicate directly with the learner as they would with any other pupil, and not via the facilitator.

2.8.8 Facilitator (para-educator) and Teaching Assistant

In South Africa facilitators are employed by the parents of the learners with a disability and this is usually a prerequisite to them being included in a mainstream school (Engelbrecht et al, 2003). Since they are employed by the parents, mainly children from more affluent communities are able to afford facilitators (Mackenzie, 2004 cited in Giangreco and Doyle, 2007). The use of teacher assistants is presently being piloted. In line with the broader definition of inclusive education, the teacher assistants are deployed to poorer schools where learners are experiencing barriers to numeracy and literacy. Giangreco and Doyle (2007) raised concerns about employing individuals with very limited educational background to support the learning of learners with the 'most complex' of educational needs. Large class sizes and the uneasiness and unpreparedness of general education teachers to work with learners with disabilities are plausible reasons for their deployment. In other countries the efficacy of the facilitators has been strongly debated and their roles and responsibilities vary from country to country. Some of the agreed roles are liaising with the parents and professionals involved with the learner, collaborating with the class teacher, aiding the participation of the learner with special needs, and one-on-one instruction when required. The literature agrees that facilitators should not be the primary instructor. The role of primary instructor is often wrongly shifted to the facilitator in cases where the disability of the learner is severe and the teacher feels inadequate working with the learner (Giangreco & Doyle, 2007). Instructional responsibility may be shared if the facilitator is trained and capable. Giangreco and Doyle (2007) caution that the close proximity of the facilitator might exacerbate difference, increase stigmatization, social isolation and behaviour difficulties. The facilitator must therefore actively seek out ways to promote the learner with disability's social inclusion.

Para-educators of the blind are meant to reinforce and practice the skills taught to the blind student by the teacher, mobility instructor or other certified professional, while under their supervision (Castellano, 2005; McKenzie & Lewis, 2008).

The duties of the para-educator for the blind include: procuring and keeping an inventory of material, adapted material into accessible formats, Braille transcription, facilitating independent participation in the classroom; and enhancing the child's understanding of the physical environment and social etiquette. Minondo, Meyer & Xin (2001, cited in McKenzie & Lewis, 2008) deemed serving as the family liaison, monitoring the student's progress and providing instruction in the community, as inappropriate roles. McKenzie and Lewis (2008) reported that paraprofessionals often worked beyond their scope of practice by engaging in more direct instruction of general and core curriculum.

The level of education of para-educators varies with the majority having no formal tertiary education. Since there are no certification programmes, they are usually trained on the job and participate in short courses and workshops. The key requirements for the position is usually someone who is innovative and creative with a positive, proactive attitude and willingness to learn Braille and ways of making the curriculum accessible (Castellano, 2005).

2.8.9 Parents/Caregivers

Parents/care-givers play the central role in the development of their child and they are crucial in uncovering barriers to learning (Schoeman, 2000; DoE, 2008a). Parents/care-givers should be valued as equal partners in the process of assessing and identifying barriers to learning. Parents play the most crucial role since they know certain aspects of the learner better than anyone else, have the greatest vested interest in their child's learning, will be supporting their child throughout his/her school career and are the people who will live with the consequences of all decisions. Parents and caregivers know their children best and are able to give a more authentic evaluation of how they function in the real world. They know the personality, developmental, medical and

social history of the child and should feel free to share this information and with the teachers. The teacher-parent relationship, teacher-child and child-parent relationship should be nurtured. All actions and activities should be conducted in a manner that honours and strengthens these relationships. The parents and teachers are partners in facilitating learning in children and parents/caregivers can monitor the learner's progress at home. Parents and teacher should work together to overcome barriers to learning. Engelbrecht, Oswald, Swart, Kitching & Eloff (2005) warn that a failure to form a trusting partnership between parents and professionals can seriously hinder the inclusion of a learner with barriers to learning. Parents should feel free to make suggestions on how to provide additional support. Decisions regarding extra support for learners with barriers to learning should be made together with the parents and the options should be given to parents so that they can make informed decisions.

2.9 Factors necessary to promote inclusive schools

2.9.1 Description of an Inclusive School

The general consensus from the literature (Booth et al, 2000; Lipsky & Gartner, 1997; Potterton, Utley, Potterton, 2005; Stubbs, 2008 among others) is that inclusive schools:

- are community based - not selective, exclusive or rejecting, but open, positive and value, embrace and celebrate diversity
- strive to meet the needs of the full spectrum of learners, from the most vulnerable to the most gifted, and strive to develop all their learners to their full potential
- are free of barriers and accessible to all in terms of the building and grounds, curricula, support systems and method of communication
- are hubs of the society we are striving towards
- meet individual needs, by tailoring learning

- encourage co-teaching and collaboration among general and special educators and other support staff as well as with families and community members
- are led by strong and positive leaders
- are progressive and think outside the box in terms of school structure and finance
- maintain high expectations of all students
- include learners in decision-making

The Guidelines for Full Service and Inclusive Schools (DoE, 2009) were informed by international literature and the findings of the field test of 2004 – 2009 (SCOPE, DANIDA and SISONKE). In it, an inclusive school is framed as being a natural progression towards honouring the human rights of all citizens as set out in both international and domestic laws. An inclusive school is subsequently defined as a school that (i) makes every effort to attain equity, access, quality and social justice in education, (ii) fosters a sense of belonging among learners, staff and families, so that they feel like valued members of a community promoting learning and prosperity, (iii) is equipped to respond appropriately to the diverse learning needs of individual learners who may experience barriers to learning related to disability, social circumstances etc. or who have different rates of learning and learning styles, (iv) employs strategies for institutional transformation and curriculum support that entail awareness raising about diversity and provide the necessary support to learners and teachers (DoE, 2009). Its policies, practices, pedagogy, culture and structure are therefore, underpinned by the philosophy of inclusive education, which should be reflected in the school ethos.

An inclusive school ethos:

- Embraces the “vision of a society for all”, and is committed to increasing participation of all learners by eliminating or reducing barriers including attitudinal one such as prejudice.
- Charges everyone with the responsibility of educating every learner regardless of their special needs and ensuring that that they receive the necessary support and that reasonable accommodations are made.

- Celebrates diversity by recognising and appreciating everyone's ability, gifts, aspirations and potential to learn. Learners with disabilities and other barriers to learning are, therefore, regarded and valued equally with all other learners in the classroom.
- Has an atmosphere that is indicative of a culture where everyone is respected. To this end, teachers and management should show zero tolerance for discrimination and prejudice through ongoing interventions and should actively deal with issues when they arise. Ongoing interventions should include awareness raising activities and programmes. For example, the Disabled People's Organization should be roped into activities countering discrimination against learners with disabilities.
- Encourages an "holistic, flexible and accommodative approach" to development
- Fosters "a spirit of collaboration among all" by drawing in and reaching out to those within the school community and beyond (DoE, 2009a:8).
- Promotes professional development and collegiality. Teachers should have the expertise and knowledge to promote successful learning and use it to support colleagues. (DoE, 2009: 17-18).

An inclusive school in practice

According to Lazarus, Daniels and Engelbrecht (1999) and the DoE (2009), the philosophy of inclusive education underpins the manner in which it is organised (structure, policies, practices, pedagogy and culture). The leadership, including the SGB, is aware of their role in developing a positive culture in the school that celebrates diversity and respect. A competent, knowledgeable and representative SGB is therefore essential.

The school must be committed to serving all children of school-going age in its catchment area and create an environment where they flourish and can reach their full potential. An inclusive school should, therefore, be capacitated and supported to

accommodate the ever-changing and diverse range of needs of their learner population. This entails actively seeking out ways to do so in cases where they do not yet have the capacity (DoE, 2009a). The responsiveness of the school must be undertaken in a positive, targeted and systematic way.

The school must be conscious that barriers to learning are not just intrinsic (such as a visual impairment), but also systemic and cultural (e.g. inappropriate language, negative attitudes) (Stubbs, 2008). Moreover, the school needs to be aware of exclusionary practices and have an unwavering commitment to address barriers to learning and participation at all levels. The leadership must therefore recognise and encourage innovation and problem-solving.

Additional support structures and programmes to facilitate the enhancement of teaching and learning must be in place; and all efforts for furthering the development of the learners, educators and institution must be continuous (Lazarus et al, 1999). Teachers and learners will then feel secure, motivated and supported in their work. The school will consequently be capable of dealing with day-to-day challenges effectively - making it an orderly, clean and safe environment.

The school takes a collaborative approach to service delivery and appreciates all involved (UNESCO, 2005). Parents, community volunteers and experts are drawn in to help; and the school serves as a resource to others (e.g. providing staff development to neighbouring schools).

The characteristics above illustrate how an inclusive school is an effective school. This emphasises the link between inclusive education and whole school improvement. A school that is not good for all its learners is inevitably bad for learners with disabilities, so when a school and community make a conscious effort to include a learner with a disability successfully, the process usually acts as a catalyst to promote school improvement as it reveals the barriers to inclusion and aspects of the school and systems that need improvement (Stubbs, 2008, Sapon-Shevin, 1996). Since the learner

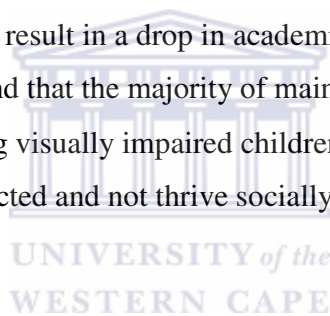
population and their needs change from time to time, inclusion is never a static outcome, but rather an objective that is constantly being worked towards by an inclusive school.

2.9.2 Attitudes

The interconnectedness of attitudes and behaviours make attitudes towards teaching children with disabilities and inclusive education, one of the greatest barriers to successful implementation. A teacher's attitude is the key determinant of success in any programme and is a critical variable in managing children with special needs successfully (Bacon & Schultz, 1991), which means that negative attitudes of teachers would in turn negatively impact on any programme. In the light of this, several studies have been conducted to determine teacher attitudes to the inclusion of children with disabilities/special needs in ordinary classrooms. In these studies on the attitudes of teachers, the terms integration and inclusion are used interchangeably (regardless of whether the principles of inclusive education highlighted earlier, were embraced). For this reason both were included in the literature review, but studies on inclusive education were preferred. The literature points to a range of factors related to the educational environment (e.g. large class sizes), the learner (e.g. behaviour) and teacher (e.g. competencies) that affect the attitudes of teachers, and are discussed below:

Many mainstream school teachers believe that teaching children with disabilities is beyond their scope of practice (Swart et al, 2002; Engelbrecht et al, 2003; Loebenstein, 2005). The reluctance of teachers to teach these children is justified by the existence of special schools and their lack of formal training or expertise in inclusive education. The latter view is supported by Engelbrecht et al (2003) and Hay, Smit and Paulsen (2001), who found that the unpreparedness of teachers to meet the needs of children with disabilities caused them the greatest anxiety and apprehension. Some of the other stresses identified by teachers in the studies were lack of support in teaching and administration, high learner-teacher ratio, a shortage of time, self-perceived lack of skills to teach the learner and manage their behaviour, as well as poor co-operation from parents.

This stance by teachers is not unusual for a country embarking on transforming its education system to be inclusive. In the beginning phase of inclusive education, teachers in both developing and developed countries have expressed the same sentiment (Scruggs & Mastropieri, 1996; Avramidis & Norwich, 2002, Avramidis, Bayless & Burden, 2000; Mushoriwa, 2001; Moberg & Savolainen, 2003; Chhabra, Srivastava & Srivastava, 2010). They felt ill-equipped to teach a child with special needs and therefore not 'ready' to accept students with special needs, neither were they convinced of the positive effects it would have on the disabled and non-disabled learners (Barton, 1992; Moberg & Savolainen, 2003). They also raised concerns about the time and effort involved in teaching a child with special needs and how much time it would take away from other learners. Concerns about the curriculum and support they would receive were also expressed. Teachers in Botswana raised the same concerns and feared that inclusive education would result in a drop in academic standards (Chhabra et al, 2010). A Zimbabwean study found that the majority of mainstream teachers had negative attitudes towards including visually impaired children in local schools and believed that the children would be rejected and not thrive socially or academically (Mushoriwa, 2000).



A UNESCO study (Bowman, 1986) of attitudes of teachers in 14 developed and developing countries yielded vastly different findings due to the vast differences in socio-economic and educational development of the countries. The countries considered were Egypt, Jordan, Columbia, Mexico, Venezuela, Botswana, Senegal, Zambia, Australia, Thailand, Czechoslovakia, Italy, Norway and Portugal. In countries where there were policies supporting integration, the teachers were more positive. However, only a quarter of the teachers were in favour of the integration of learners with sensory disability. A comparative study of the attitudes of teachers in Zambia and Finland towards including children with special educational needs by Moberg and Savolainen (2003) also illustrates how supportive policies and the socio-economic conditions of the country influence attitudes, as the majority of Zambian teachers were opposed to inclusion and preferred segregated schooling, while teachers in Finland were more in favour of it. Although the majority of respondents from both Zambia and

Finland identified schools as places where social justice should be fostered, honouring this concept through inclusive education depended on their setting.

The effort of including a learner with demanding characteristics was a deterrent. Ward, Center & Boschner (1994 cited in Avramidis et al, 2000) and Moberg & Savolainen (2003) found that disability and the nature of the problem associated, influenced attitudes more strongly. The findings of the Lanier and Lanier (1996) study where teachers rated 60 scenarios, and the Clough and Lindsay (1991) study of attitudes towards integration 10 years after it became policy, concurs that the nature of the problem strongly influenced attitudes, since teachers were found to be more positive about integration of learners with disabilities who did not interfere with their instructional style and required no additional management on their part. It was agreed that children with learning difficulties and behaviour/emotional difficulties were generally harder to manage (Clough & Lindsay, 1991). A study by Briggs, Johnson, Shepherd & Sedbrook (2002) supports this notion further, since teachers were more in favour of including children with sensory and orthopaedic disabilities because they posed little or no discipline and classroom management problems. Furthermore, Lanier and Lanier (1996) suggested that because visually impaired and hearing impaired learners are usually accompanied by itinerant teachers, teachers were comfortable with including learners with these impairments. The availability of additional support appears to lead to positive attitudes. The Avramidis et al (2000) study noted that in a climate where more support services were available, teachers on the whole were more positive about inclusion.

The Scruggs and Mastropieri (1996) study that analysed 28 attitudinal studies done in the US from 1958 to 1995, found that attitudes changed over time and that 65% of the teachers surveyed supported the concept of integration, but very few were willing to implement it. Furthermore, the majority of the teachers still felt ill-equipped to take on the task and felt that they did not have enough time or resources to implement integration.

The attitudes of teachers towards teaching a learner with a disability were more positive in teachers who had hands-on experience of including a learner with a disability. Villa, Thousand, Meyer & Nevin (1996); and Avramidis et al (2000) showed that the more experience mainstream teachers had in working with children with special needs, the more confident they became about their own abilities, which in turn led to more positive attitudes towards inclusive education.

Training significantly influenced positive attitudes towards inclusive education. The Avramidis et al (2000) study of factors that contributed to attitudes revealed that teachers who had university training in inclusive education were more confident about their skills to implement inclusion than teachers who received in-service training. Avramidis et al (2000) also found that demographic details such as age, phase taught and years of experience had no significant correlation with attitudes. In contrast, Tate and Purdy (2000) found no significant change in attitudes of student teachers in Australia towards disability and the inclusion of learners with disabilities after a one year training course. The lack of hands-on experience may, however, have influenced these findings. It can, therefore, be speculated that information courses do not change attitudes towards disability and the inclusion of learners with disabilities, but close continuous contact over time does (Tate & Purdy, 2000). The design of courses is therefore essential for changing attitudes and promoting successful implementation.

In summary, teachers are more positive about inclusive education when they feel competent, the educational environment is supportive and conducive and the learner being included does not pose any serious challenges. Since positive attitudes are crucial for successful implementation of inclusive education, these aspects need to be addressed as far as possible and we need to invest in quality training of teachers that incorporates hands-on experience.

2.10 Outcomes of Inclusive Education

Inclusive education, when properly implemented can have far-reaching positive effects on all and enhance the education system as a whole. For example, Loreman, McGhie-

Richmond, Barber & Lupart (2008) in a study of learner's perceptions of school in a district with a strong commitment to inclusive education, found that learners with special needs and typical learners had the same positive ratings on their educational experience, affirming that inclusive schools have benefits for all learners. The outcomes on family and socio-emotional wellbeing, life-skills, academic, support and teaching vary, and are elaborated on below.

Family and socio-emotional wellbeing

Inclusive education has positive effects on the family and socio-emotional wellbeing, Children with disabilities are no longer required to attend separate schools and be isolated from their families and friends. The family unit is preserved and the children can attend their neighbourhood school, alongside their peers and siblings and be part of their community. Being part of one's family and community asserts ones sense of belonging and improves self-esteem. Children with disabilities who have been included are shown to have improved self-esteem, merely because they are not attending a special school (Fitch, 2003). Special school learners have difficulty interacting socially and reported that they felt like outsiders, and were embarrassed about their school and therefore eager to leave (Fitch, 2003). Similarly, Thahane, Myburgh & Poggenpoel (2005) and French (2006) reported that special school learners experienced a great deal of isolation, stigmatization and depression. In contrast, there are several citations in the literature on inclusive education experiences where parents, teachers and learners report increased self-esteem, self-confidence and social interaction (Kochhar, West & Tayman, 2000; NCERI, 1994, Fitch 2003, Baker, Wang, & Walberg, 1994; Walter-Thomas, Bryant & Land, 1996). Improvements in behaviour was also noted and attributed to higher expectations in inclusive classrooms (Kochhar et al, 2000, Bunch & Valeo, 2004)

Life-skills

Attending a local neighbourhood school gives children with disabilities an opportunity to negotiate real life and improve their social skills. According to Engelbrecht, et al (2005) and Schoeman (2000); this is one of the main motivations behind parent's

decisions to send their child to a mainstream school. The struggle of parents to have their child included has also resulted in a greater commitment to be involved in the life of the school and working together with staff (Engelbrecht et al, 2005; Salend, Laurel & Duhaney, 2002).

There are also benefits to children without disabilities who will have more practice interacting with people who are different to themselves and are likely to focus on similarities rather than differences (Kochhar et al, 2000). According to Bunch and Valeo (2004); Kochhar et al (2000) and Ritter, Michel & Irby (1999), non-disabled learners display greater acceptance of disabilities and diversity in general resulting in more friendships forming and a tendency to advocate for the rights of others, in settings where inclusive education was practiced. Similarly, a study by Loebenstein (2002) that explored the perceptions of inclusive education of parents of children without disabilities at a school where learners with disabilities were included, in South Africa, concluded that children without disabilities and their parents also learn positive life-skills. Children were advantaged by exposure to difference, and parents constructed more realistic representations of disability through their experience. The above mentioned studies contrast with the findings of Allan (1999) of a school where learners with disabilities were mainstreamed and children without disabilities were regarded as 'gate-keepers' to inclusion whose perception of the learners with disabilities moved between the medical, charity and rights discourse, often resulting in patronising behaviours towards the learners with disabilities.

Academic Performance

A review of the literature on the impact on academic performance for both disabled and non-disabled learners dispels any concerns that academic performance will be compromised (Kochhar et al, 2000; Cole, Waldron, Majd, 2004; Baker et al, 1994). Salend and Duhaney (1999) reported that academic performance is equal to or better in inclusive settings for typical learners, including high achievers. Learners with disabilities are exposed to a much broader curriculum and are challenged to excel as expectations in mainstream schools are generally higher (Ritter et al, 1999).

Support

Learners with disabilities are able to access a wider circle of support as support is not only offered by the adults in the class but also by peers (Kochhar et al, 2000). In addition, the presence of another adult in the class is beneficial to the other learners in the class who gain academic and pastoral support. Learners with disabilities also reported that they received more support from their teachers in an inclusive school (Ritter et al, 1999). This support and curriculum adaptations was found to be beneficial to all learners (Hunt, 2000).

Teaching

Both teachers and learners become sensitive to the learning needs and styles of others. Teachers who have included learners with disabilities reported that the experience has forced them to consider different ways of teaching a concept and enhanced their teaching skills (Kochhar et al, 2000).

2.11 Summary

Chapter two described in detail the history and progression of inclusive education both in South Africa and in a global context. The conceptualization of inclusive education has been shown to have evolved substantially over the past century, in line with growing recognition of changing models and approaches to disability in general – from the charity model, to the medical and then social model – that challenged preconceived notions regarding disability and the place of persons with disabilities in society. The review has also underlined the benefit in recent years of the emergence and impact of several internationally binding conventions, notably the CRC and the CRPD, and international agreements such as the Salamanca Statement and Framework for Special Needs Education (UNESCO, 1994). The current, and encouraging, state of inclusive education in South Africa has been described in detail, including current definitions, enabling factors and attitudes to inclusive education.

However, the literature review on inclusive education also serves to highlight the significant gaps in knowledge and cohesiveness that remain in the education of children with disabilities in South Africa, including the perceived lack of capacity of teachers, and the lack of appropriate resources. Chapter three looks at education for the Blind and considers inclusive education more specifically for blind learners.



Chapter 3: Education for the Blind and Visually Impaired

3.1 Introduction

In this chapter the education of the blind learners and national and international developments is explained and discussed. I begin by defining blindness and its causes, which is followed by a description of the history of visual disabilities in South Africa and abroad, models of inclusive education, the distinct challenges blindness poses for learning and development and what can be done to mitigate these challenges to promote learning in the classroom.

3.1.1 Defining Blindness

Visual impairment is the umbrella term used to define vision loss that hinders one's ability to function and can range from low vision with varying degrees of clarity to no vision. The World Health Organization (WHO) organises visual impairment into categories depending on visual acuity (the clarity one sees in relation to distance), irreversibility or ability to be corrected, and visual field (perception of one's surroundings). The medical definitions by the WHO (1999), although useful, focus on visual limitations and say little about the impact on daily or classroom functioning.

Blindness in its strictest sense is defined as a total lack of vision in the better eye or only light perception with an inability to identify objects (WHO, 1999). Depending on the environmental conditions, a person who is visually impaired can be blind or have considerable visual function. Children with very little vision (low-vision) are commonly referred to as blind, as are those who are medically classified as legally blind (WHO, 1999).

Legally blind is a term used to describe a person with a best-corrected central visual acuity of 6/60 or less in the better eye or best corrected eye (WHO, 1999). This means

that the person sees objects with the same clarity and detail at 6 meters as a person with perfect vision would see at a distance of 60 meters. A person with better central visual acuity than 6/60 is considered legally blind if they have a visual field defect where the peripheral vision is contracted to 20 degrees or less in relation to a normal visual field of 160 to 180 degrees. The descriptor “legally blind” is used to gauge whether or not someone qualifies for special services or grants.

It is important to note that, just as every child is unique, so too is their visual impairment and its effects on their functioning. Factors such as the onset of vision loss, different intellectual abilities, developmental rates, social competencies and personalities, all influence the performance of a child with a visual impairment (Bishop, 1996). As a result, measures taken to maximise the uptake of information and learning must incorporate all these factors (Huebner, 2000). To illustrate, children who are congenitally blind (before or since birth) use their remaining senses to process and understand new concepts, while those who are adventitiously blind (after birth) may have developed some visual memory on which to draw when processing new information (Huebner, 2000).

In contrast to the medical definitions above, the definition of visual impairment offered by Castellano (2005:16) is rooted in the social paradigm, focusing on the enabling factors that improve learning and functioning. She states that, “[It] simply means using alternative skills and tools in place of, or in addition to, eyesight in order to gain information or perform tasks.” This approach is perhaps more useful for developing and implementing interventions because the focus is on the requisites to improve the child’s situation, rather than on the child’s visual deficit or medical condition.

3.2 Visual Impairment Worldwide

The WHO estimates that 314 million people around the globe are visually impaired, 5 million of whom are blind (WHO, 2009). The developing world is most affected, with 87 percent of the total population coming from Africa, Asia and South America. Since the 1990s, however, there has been a global decline in the rate and lead causes of visual

impairment. Today, more people are blind as a result of old age with the increase in life expectancy and fewer are blinded through infection, largely due to targeted public health campaigns. Despite global achievements, blindness in children remains a significant problem with an estimated 1.4 million children under the age of 15 living with blindness, and over 12 million children aged 5 to 15 years old remaining visually impaired due to lack of services to diagnose and treat visual anomalies (WHO, 2009).

3.2.1 Causes of Visual Impairment

The leading causes of visual impairment are cataracts, uncorrected refractive errors, glaucoma, age-related macular degeneration, corneal opacities (disease scarring the cornea), diabetic retinopathy and blinding trachoma (WHO, 2009). In children, the leading causes are cataracts, retinopathy in premature babies and vitamin A deficiency (WHO, 2009).

3.2.2 Disability and Visual Impairment in South Africa

According to the 2001 Census, visual disability was most the prevalent disability, accounting for approximately 32 % of the disabled population (Lehohla, 2005). As with the global trend, the population of people categorised as blind is also on the decline, from 2.7% in 1996 to 1.3% in 2001 (Lehohla, 2005).

3.3 The Global Evolution of Education for the Visually Impaired

Understanding the events and contributions of individuals that led to global education for the Blind and the shift from segregated education to inclusive education in the developed world is important, as it contextualizes our own development process. The quest of parents, educators and other service providers to develop suitable education for children who are blind, dates back more than 170 years (Hatlen, 2000). Their legacy has broadened the range of educational options available today and laid the founding principles on which these options are based.

According to Hatlen (2000), very little is known about education for the Blind prior to the 18th century, when education was reserved for privileged upper class families. Our knowledge of education at that time is limited to stories of remarkable individuals such as Thomas Blacklock (1721–1791), a Scottish poet and Doctor of Divinity; Nicholas Saunders (1682--1731) a professor of Mathematics from Cambridge University and the understudy of Sir Isaac Newton; and Maria Theresia von Paradis (1759–1824), a renowned pianist for whom Mozart composed. It is interesting to note that these scholars were most likely integrated into existing schools or tutored in private, since no separate educational institutions for the Blind existed at the time. All of them made extraordinary contributions to society in spite of their blindness and can be said to have planted the seed that led to the start of formal education for the Blind (Hatlen, 2000).

In 1749, the life of visually impaired achievers of that era inspired Denis Diderot, a French philosopher and physician to King Louis XV, to publish “Letter on the Blind for the Use of Those Who See”, in which he stressed the intellectual ability of blind people and their potential to live ‘normal’ lives (Hatlen, 2000). The first school for the Blind, the Royal Institute for Blind Youths, was established in Paris by Valentin Haüy, who devoted his life to teaching blind youth, in 1784. The education programme of the school focussed on literacy, music and everyday skills. The most famous alumnus of his establishment was Louis Braille, who invented the six dot coding system, Braille, used to notate written language for the Blind (Hatlen, 2000). Haüy’s commitment and actions were possibly influenced by the rhetoric of the time, elaborated by leaders such as Thomas Jefferson and Benjamin Franklin, which emphasised the obligations of individuals to society

In the years that followed, several special schools for the Blind were founded by charitable and faith-based organisations, but the majority of society still held negative views about disability. The names of the first schools for the Blind established in the US and Britain during the 1700s and early 1800s, New England Asylum for the Blind and The School for the Indigent Blind respectively reflected the contemporary attitudes and

beliefs of society towards blind and disabled people (Hatlen, 2000; French, Swain, Atkinson & Moore, 2006).

The passing of the Elementary Education (Blind and Deaf Children) Act of 1893 marked the beginning of compulsory education for visually impaired children in the United Kingdom (French et al, 2006). Prior to this, children from wealthy families were integrated in ordinary schools or tutored privately. Educating visually impaired learners alongside their sighted peers is, therefore, not a new practice and has in fact been taking place since the 1800s, long before terms such as 'inclusive education', 'mainstreaming', 'integration' and 'special education' were coined (Bishop, 1997). In 1879 twelve blind teachers were supervising 200 blind pupils in London schools (Bledsoe, 1993 in Bishop, 1997).

This practice spread to Germany and other European countries (Farrel, 1956 in Bishop 1997) as well as the United States. In the 1800s, the director of Perkins School for the Blind and founding father of education for the Blind in the US, Samuel Gridley Howe, made an audacious statement supporting the integration of blind children in local schools when he insisted that residential schools for the Blind "reject everyone who could be taught in the common schools" (Koestler, 1976, p.408 cited in Bishop, 1997). By 1920, special classes for the blind in local mainstream schools were established in Chicago district and six other urban areas after a group of parents advocated for the inclusion of their blind children in local schools close to their homes (Bishop, 1997; Hatlen, 2000).

The barriers and rationale that led to the passing of legislation ordering the return of children with visual impairment to special schools in the United States and United Kingdom are the same as those that hinder inclusive education today (Bishop, 1997; French et al, 2006; Hatlen, 2000). Inclusion was not deemed feasible because there were too few blind children to justify special programmes in ordinary schools, a shortage of skilled teachers and a lack of suitable material meant that the educational benefits to the visually impaired learners were questionable. According to Bishop (2003), the 'unspoken' reasons for supporting blind learner education in special schools were

society's uneasiness with disability at the time, insufficient knowledge of administrators on how children who are blind learned and the failure of the education system to adequately prepare blind youth to thrive socially and economically in the real world.

Despite unresponsive legislation, out of necessity, the United States had to tailor their education system to accommodate the increased number of children left blind after a medical epidemic of retinopathy of prematurity and Rubella broke out (Bishop, 1997; Hatlen, 2000). Parents reluctant to be separated from their children put pressure on local schools to include them or set up special units and provide adequate support. In the 1954 Pinebrook Report the support measures were outlined and included stepping up teacher training programmes, the production of materials and equipment and providing itinerant teachers to support local and rural schools (Bishop, 1997). In the United States, children with visual impairments effectively led the way for the inclusion of children with other disabilities more than 20 years before it became legislation with the passing of the 1975 PL 94-142 Education for All Handicapped Children's Act, now known as the Individuals with Disabilities Education Improvement Act. In recent years, inclusive education has progressed to such an extent that visually impaired learners on average spend over three-quarters of their day in general education classes (Wagner, Blackorby, Cameto & Newman, 1993).

3.4 Educational Approaches

Across the world, school-aged children with visual impairments are either excluded from the formal education system altogether in poor countries or they are educated for all or some of the time in: i) local regular schools with no or inadequate support, ii) special schools for the visually impaired or children with disabilities, iii) special units or resource classes within a mainstream school, or iv) local, regular school with the support of a para-educator and/or itinerant teacher for the visually impaired. The continuums of placement options available vary from country to country. More progressive countries in terms of inclusion leave the decision making to parents while in others the limited options, legislation and context dictate where a child will be educated. For some, a wide

continuum of options is deemed more appropriate since it offers flexibility and speaks to the diversity among the visually impaired population. For others, limiting the options to mainstream schooling only furthers the intention of inclusive education.

3.4.1 Placement Options and Preferences

In the US, UK, Poland, Hungary, New Zealand and Greece fewer than 11% of children with visual impairments are educated in special schools for the visually impaired. The majority are supported in regular education classes by para-educators and itinerant teachers or in classes specially equipped for children with sight impairments (Barraga & Erin, 1992; Bishop, 1997; Keils & Clunies-Ross, 2003). The proportions of placements reflect the education policy. For example, New Zealand has a national plan for children who are visually impaired and parents have the authority to choose where to educate their child.

Placement in the mainstream is preferred in progressive countries, but children with additional disabilities or with complex needs requiring considerable curriculum differentiation tend to be placed in special schools (Keils & Clunies-Ross, 2003). These children benefit from the individualised programmes and supportive learning environment, vocational training and recreational activities (Bina, 1999; Zebehazy & Whitten, 2003; Hatlen, 2000). In Japan, children who require Braille are automatically placed in special schools for the Blind, while other visually impaired children are in unit classes in mainstream schools (Kakizawa, Douglas, Kagawa & Mason, 2000).

In the US, the recommendation for a particular placement option is usually made by an educational team and is based on an assessment of developmental and learning needs and depends on the most suitable “least restrictive” programme options available (Curry & Hatlen, 1988).

According to Ajuwon and Oyinlade (2008) reasons for choosing one placement option over another, in order of importance, were the presence of supportive staff members, the school’s ability to meet the child’s unique needs, adequate classroom accommodation, a

nurturing social environment and suitably trained teachers. Unless education support in South Africa is stepped up significantly, it is unlikely that parents will choose to educate their children in average regular schools. Parents chose special schools because they feel the teachers are more suitably trained to educate their child and are more familiar with visual disability; on the other hand parents would chose local schools because of convenience, affordability and distance from home (Ajuwon & Oyinlade, 2008).

3.4.2 Special schools as resource centres

In many countries special schools were expanded into resource centres providing intense support in disability-specific areas through short-term placement, on-campus programmes, summer camps and outreach services via itinerant teachers (Bina, 1999). Services include assessment, staff development training, provision of accessible material, therapies, early intervention, parent education and career guidance (Bina, 1999; Zebehazy & Whitten, 2003; Hatlen, 2000). The expanded role of special schools for the Blind entails collaborating with various stakeholders, but this is rarely without challenges even in countries where this model has been in place for over two decades. A lack of staff, distance, poor monitoring capacity, poor understanding of the services offered by the special school, territorialism, insufficient face-to-face contact and limited financial resources make collaboration challenging (Zebehazy & Whitten, 2003). In Greece, the resource centre model yielded more positive outcomes, mainly due to special schools initiating the movement to include visually impaired children in mainstream schools (Argyropoulus & Stamouli, 2006). Special schools, in most other countries, were forced to change their services and were apprehensive towards inclusive education (Bina, 1999). In countries where there were few or no educational institutions for the visually impaired, resource centres were established in every region. For example in New Zealand, Vision and Sensory Resource Centres are regarded by parents as the agency responsible for their child's education and they turn to them to resolve issues.

3.4.3 Special units or resource rooms

In Japan, visually impaired learners receive instruction separate from their sighted peers in units attached to mainstream schools equipped with specialised staff, devices and material (Kakizawa et al, 2000). The cost–effectiveness of this approach is questionable, since the majority of units serve only one learner (Kakizawa et al, 2000).

3.4.4 Itinerant/co-teaching and para-educator in regular classrooms

The itinerant model is the most common approach to educating children in local schools. It involves teachers qualified as teachers of the visually impaired and orientation and mobility specialists, travelling from school to school. In the United States, teachers of children with visual impairment (TVIs) serve as itinerant teachers, while para-educators provide more constant support. TVIs/itinerant teachers provide direct instruction in new concepts and skills, primarily related to blindness; and contribute to the development of IEPs, provide advice to parents and teachers, participate in advocacy campaigns, train in-service teachers, co-ordinate services and provide referrals to other professionals and institutions (Nagel, 1998; Correa-Torres & Howell, 2004; Lynch & McCall, 2008). They usually lead the team that provides support to the learner because they have the most experience in critical areas related to the learner’s education. Their role, therefore, includes ensuring that all the relevant people are part of the collaborative team and nurturing a spirit of co-operation and shared decision-making (Topor, Holbrook & Koenig, 2000).

The itinerant model was piloted in Uganda, Kenya and Malawi and several other African countries where attending a regular local school is the only option for many children with visual impairment (Lynch & McCall, 2008). Itinerant teachers generally have limited input in the class teacher’s daily lessons and are expected to make both the curriculum and social environment accessible to the blind learner (Zebehazy & Whitten, 2003; Correa-Torres & Howell, 2004). The model naturally has its shortcomings, including politics, excessive paperwork, time constraints and unfair caseloads, which combine to hamper teachers’ effectiveness and restrict their time for direct instruction

on disability-specific skills to the visually impaired learners (Correa-Torres & Howell, 2004).

In Greece, depending on the circumstances the government would either supply the regular classroom teacher with all the necessary equipment or employ a co-teacher with expertise in Braille to provide support to the visually impaired learner.

3.4.5 Support provisioning

In the UK, schools, rather than LEAs are primarily responsible for the education of children with visual impairments, which poses challenges for monitoring and planning of budgets for human resources and equipment (Directgov, n.d., Keils & Clunies-Ross, 2003). The responsibility is shifted to the LEAs when children are 'statemented', inferring that the differentiated teaching, equipment and personnel provided by the school is not enough. In 2003, over half of visually impaired children under the age of 16 were 'statemented' or in the process of being (Keils & Clunies-Ross, 2003). In New Zealand children with visual impairment are classified as having moderate support needs and receive ongoing support through the Ongoing Resource Scheme (ORS). Specialists determine the allocation of resources and grants by considering the nature and degree of the educational need, support required and safety (Nagel, 1998).

Schools in Poland wishing to become inclusive schools had to have 3-5 children with different disabilities and class sizes of 15 to 20 learners, accessible infrastructure, and specific personnel (Marek, 2000). In Hungary schools including children with visual impairments received additional funding, but it is insufficient to meet the costs of material, assistive devices and extra personnel. The inadequate support has resulted in much negativity among teachers (Kovacs, 2000). Similarly, in Eritrea the ineffectiveness of the education administration and lack of human and material resources hinder the inclusion of visually impaired learners in mainstream schools (Fitwi, 2003).

The Rehabilitation of People with Disabilities (PEFRON) was established by the Polish government to alleviate the resource problem (Marek, 2000). It is subsidized by penalty taxes paid by companies that do not adhere to disability employment quotas and the funds are used to make buildings accessible and provide assistive devices to institutions and individuals (Marek, 2000).

The experiences of the aforementioned countries affirm the importance of favourable legislation, drawing on the expertise of special schools, collaboration with stakeholders and the need for adequate support and resources to realise an inclusive education system where every child is supported to achieve their full potential.

3.5 Education for the Blind in South Africa

3.5.1 Special Schools for the Visually Impaired: Past and Present

Formal education for children who are blind in South Africa followed international trends. The first schools were segregated, residential institutions that focused mainly on activities of daily living and vocational training, followed by academics. They were started by religious and charitable organisations with the government later taking over responsibility. The prevailing human rights laws in the country influenced the way services were delivered.

Children from different racial groupings were educated separately during Apartheid and the quality of education varied. Schools catering for White learners were well resourced, while those for Coloured and Black learners were less fortunate. The two oldest schools for the Blind in South Africa are the Pioneer School for the Visually Impaired, established in 1881, and the Athlone School for the Blind, established in 1927, which originally catered for white and 'non-white' learners respectively. The Pioneer school was started by the Western Cape Synod of the Dutch Reformed church in Worcester. The languages of instruction at these schools were Afrikaans and dual-medium English-Afrikaans, so children who came from English- or Xhosa-speaking homes were often educated in their second language.

The education programmes of schools for the visually impaired included teaching activities of daily living such as self-care, Braille, orientation and mobility and the use of assistive devices.

Academically strong learners followed a curriculum similar to that of mainstream schools, while others learnt vocational skills including basket weaving and telephony. At present, schools for the Blind are being strengthened in order to better meet the needs of learners who require a high level of support and are being capacitated to serve as a resource centres for ordinary schools (DoE, 2001; 2007). This has resulted in an increase in admission of learners with multiple disabilities, including those with learning and physical disabilities. The change in student population, reduction in specialised staff, increased learner-teacher ratio, new curriculum and restructuring of the Education Department have added strain to teachers and schools (Sukhraj-Ely, 2008). The apprehension and negative feelings about inclusive education are very apparent and understandable since the schools' existence is based on exclusion and medical model thinking (Sukhraj-Ely, 2008).

An audit of special schools, by the Department of Education, indicated that many teachers at special schools were under-qualified, felt ill-equipped to deliver the curriculum and struggled to meet the needs of their learners (Sukhraj, 2006; Sukhraj-Ely, 2008). A report by the Human Rights Commission of South Africa (SAHRC) indicated that a significant number of teachers lacked the competence and confidence in dealing with specific barriers to learning and that the majority of teachers in schools for the Blind were not adequately skilled in Braille (SAHRC, 2007). In addition, schools did not have the necessary equipment and were not physically accessible. Overcrowding resulting from the disproportionate distribution of special schools in a province to the population of learners with disabilities exacerbated the situation (SAHRC, 2007).

The curriculum poses an additional problem. Special schools use an adapted, 'watered down' version of the mainstream curriculum, often excluding subject areas perceived to be too challenging for visually impaired students (Sukhraj-Ely, 2008). The adoption of OBE and a single national curriculum is challenging for schools that focus primarily on

vocational skills and activities of daily living. The South African National Council for the Blind (SANCB) raised concerns that the curriculum does not effectively address specific outcomes related to visual impairment, including Braille literacy and orientation and mobility (O&M) (SAHRC, 2007).

Visits to the Pioneer school for the Blind and Athlone School for the Blind corroborated the findings of the DoE and SAHRC. A teacher at the Pioneer School for the Blind expressed his frustration with learning areas such as technology, which required students to understand abstract concepts such as the structure of an electric circuit and construct models to demonstrate learning. At present, the majority of teachers at the schools for the Blind in the Western Cape are not proficient in Braille and only four teachers at the Athlone School for the Blind are competent in JAWS, a screen-reading software programme (S. Baboo, personal communication, June 15, 2006).

Problems in acquiring the necessary Braille reading materials brings into question the ability of special schools to provide adequate support and quality education to blind learners. Braille text books are printed across South Africa almost exclusively by Pioneer Printers, who are consequently inundated with work. The slow production of Braille material has encouraged schools like the Athlone School for the Blind to start their own printing press (S. Baboo, personal communication, June 15, 2006).

During the pilot phase of inclusive education, schools for the visually impaired outside the Western Cape were supplied with desktop computers, magnifiers and relevant access software. To address the significant shortage of literacy and learning material in accessible formats, the Ithuba Books Project supplied 25 schools for the visually impaired with enlarged print and Braille books. The Department of Education plans to increase the production of Braille and large print material by training personnel to do Braille translation and increase the provision of material and equipment for Braille production (DoE, 2008c). A consultant was also commissioned to develop a strategy to improve teaching and learning in schools for the visually impaired (DoE, 2008c). The audit of the 26 schools for the visually impaired will be used to map out the upgrading

process. Visually impaired teachers are also being trained to deliver the curriculum more effectively using technology.

There are at present no studies that evaluate the quality and effectiveness of the education received by visually impaired students in South Africa. Neither is there research on the retention rate, matriculation achievement, competitive employment or integration into society of blind learners who attended special schools for the visually impaired that would help ascertain the effectiveness of special education in South Africa.

The Pioneer School for the Blind, along with NGOs such as League of Friends for the Blind (LOFOB) and the Cape Town Society for the Blind, have created protective workshops in recognition of the fact that many visually impaired students were unsuccessful in gaining employment in the open labour market. Young, visually impaired people and blind adults earn an income by weaving baskets, making crafts and mattresses, and are transported to or live in accommodation attached to the institution. However, remuneration is very low and personal freedom is often restricted. A link may exist between the limited career opportunities available to learners with visual impairments, their restricted participation in life activities and segregated education. Considering that inclusive education promotes social inclusion and equity, it is necessary to explore how best to achieve this aim and mitigate the challenges faced by learners who are visually impaired.

3.5.2 Proportion of Visually Impaired Children Educated in Special and Mainstream Schools

According to the Central Education Management Information System (CEMIS), in 2007 there were 10 Blind learners and 305 partially-sighted learners in mainstream schools and 169 blind learners and 353 partially-sighted learners in special schools in the Western Cape (A. Pearce, Personal communication, 4 May 2007). This indicates that the large majority of blind learners are still being educated in special schools. Unfortunately data on whether the ten blind learners in mainstream schools used Braille, and the

number of visually impaired learners in private schools, were not recorded. In 2007 there were 876 blind children in regular schools, nationally, of which 581 were in regular classes opposed to separate units (DoE, 2008c). This indicates that there are many children who are blind who are quietly being included with the support of their families and teachers.

3.6 Teacher training in an international context

In the past, teachers received training in special education for the Blind, but the decline in rates of visual impairment has resulted in the discontinuation of these courses at universities and colleges (Sukhraj-Ely, 2008). Instead inclusive education training is incorporated in pre-service courses and a broad postgraduate course in inclusive education is offered. Teachers newly employed at special schools for the Blind must learn on the job and attend training courses offered by institutions.

This is regrettable, as it has long been recognized that teachers of the Blind and visually impaired require competencies in specific areas such as instruction, accessible communication modes (Braille and assistive technology) and the educational implications of various eye conditions. The competency guidelines for teachers of the visually impaired by the US Council of Exceptional Children, and its field-testing by Spungin 1977 (cited in Wolffe, Sacks, Corn, Erin, Huebner & Lewis, 2002) was used to develop pre-service and in-service teacher training programmes. The increase in distance learning training programmes is worrying considering that many of the competencies have a strong practical element.

The competencies of paraprofessionals who are increasingly being used to support the inclusion of children who are blind, is also under scrutiny. In the United States, paraprofessionals do not undergo a certified training programme and usually learn on the job and through short courses, yet they are expected to support blind learners in developing blindness-specific skills and mastering the general curriculum, all of which requires substantial theoretical knowledge and skills. Many paraprofessionals have recognised their own shortcomings and need for more training in areas such as

behaviour management, curricula adaptations, inclusion, assistive technology, instructional skills, Braille, O&M and eye conditions (Marks, Schrader & Levine, 1999; McKenzie & Lewis, 2008). In the United Kingdom, the Training and Support of Blind and Partially Sighted People (OPSIS), developed a certificate course in Higher Education, Care and Support of the Visually Impaired to bridge the skills gap of para-educators.

The strong correlation between teachers' competencies and students' skills means that lack of a stand-alone programme or training for paraprofessionals and teachers of the visually impaired greatly reduces the quality of education and chances of positive learning outcomes (Wolffe et al, 2002).

3.7 Role of Non-governmental Organisations

NGOs for the blind, such as Sight Savers and Light for the World, play an important role in advocating, lobbying and supporting the education of visually impaired children. On the African continent, these organisations, along with faith-based organisations, initiated educational services for children with visual impairments and continue to provide support for education, health and other relevant areas. The International Council for Education for People with Visual Impairment (ICEVI) is an alliance of such NGOs and individuals who are committed to promoting access to quality, equitable education for visually impaired people through information dissemination, capacity building and advocacy (ICEVI, n.d). In 2006, they launched an Education for All Visually Impaired Children (EFA-VI) campaign in partnership with the World Blind Union, to ensure that children with visual impairment were considered in interventions towards the attainment of the Millennium Development Goals (MDG) of universal primary education.

There are also several initiatives inspired by the life and work of Helen Keller, the famous 20th century deaf-blind author, social commentator and activist. For example, the Helen Keller Society in Cape Town provides an array of services including

individual assessment, support groups and low vision clinics at the two major provincial hospitals, Groote Schuur and Tygerberg (Helen Keller Society, n.d).

The South African National Council for the Blind (SANCB) has, since its establishment in 1929, advocated and lobbied for the improvement of education for blind learners (SANCB, n. d). They have organised an education forum comprising key staff from special schools who meet regularly to discuss pertinent issues of Braille provision and curricula adaptations. SANCB provides Brailers to the Education Department and have a parent support network focussing on education. The League of Friends for the Blind (LOFOB) has a centre promoting early childhood development, and offers training and does outreach work. Their members travel to mainstream schools with visually impaired learners to provide information on creating an accessible environment and facilitating learning. A full list of NGOs and other service providers working in the field of visual impairment is provided in Appendix II.

3.8 Early Childhood: Common Areas of Developmental Delay and the Need for Early Intervention

Vision is a constant source of information and serves as a motivator for children to explore their world, make mental judgments and take action (Barraga & Erin, 1992). Unlike, vision, the information obtained through the other senses is inconsistent (as things do not always make noise or produce an odour), fragmented, and not under the child's control. The absence of vision therefore results in limited opportunities for learning. When considering the importance of vision in child development, it is understandable that children with visual impairments will experience difficulties in (i) learning through observation and modelling others, (ii) interacting with the physical environment and (iii) interacting with other children and adults. These difficulties pose unique challenges for the development of social, motor, communication, self-perception, self-care and cognitive skills (Barraga & Erin, 1992). In addition, the limited way the visually impaired children perceive the environment also affects the development of spatial skills (Barraga & Erin, 1992). During the 1960s and 1970s Fraiberg (cited in

Ferrell, 2000) also noted the impact of visual impairment on auditory skills, tactile exploration and ego development.

The extent to which development is affected depends on the cause (aetiology), age of onset, and severity of the vision loss; as well as intelligence, the presence of additional disabilities, the environment and stimulation received (Koenig & Holbrook, 2000). According to Maxfield and Buchholz (1957) and Norris, Spaulding and Brodie (1957), cited in Ferrell (2000), blind children with no additional disabilities, generally developed the same skills in the same sequence as sighted children, but at a slower rate regardless of whether they received the best support from competent, educated parents and high quality early intervention or not. Wagner et al (1993) in contrast argued that development depends on their personal capabilities and traits which are shaped by the environment. The first large-scale study, by the visually impaired Infants Research Consortium (VIIRC), found that delays in fine motor skills were prevalent in visually impaired children, but more in those with additional disabilities (Ferrell & Mamer 1993 cited in Ferrell, 2000). The more rigorous Project PRISM study that followed, studied the development of 202 visually impaired children from birth to age five found that the type of visual disorder, length of pregnancy and the presence of additional disabilities impacted on the development of visually impaired infants (Ferrell, 2000). Differences in the rate and sequence of developmental milestones were also noted. For example, twelve milestones related to movement, self-care and play were achieved later than typical infants. Five milestones related to understanding and producing language were acquired within the age range for typical children. Two milestones (relating past experiences and copying a circle) were acquired earlier and six milestones were acquired in a different order to sighted children. The study also found that playing interactive games with adults was most affected when the child had a significant vision loss (Ferrell, 2000). Fortunately, the delays disappear over time – a possible consequence of the early intervention they received (Ferrell, 1998, cited in Ferrell, 2000).

The findings of the aforementioned studies and vulnerability to developmental delays make early intervention imperative. Physiotherapists can assist with motor functioning, while occupational therapists and speech-language therapists can assist with play, communication and social development. Practice and training over time can mitigate or alleviate the developmental effects of vision loss on a child's educational abilities in the school-age years (Ferrell, 2000).

In the UK, early childhood development is high priority with LEAs in partnership with parents offering early intervention (McCall, 2000).

3.8.1 Cognitive development and intervention

Without vision and visual memory it is difficult to build concepts, abstractions and mental representations because distinguishing features are mainly perceived through sight. Blind people still carry out the same cognitive processes (input, elaboration, and output) and cognitive actions (recognition, comparison, classification, analyses, etc) as sighted people when processing information, but the input varies (Gouzman & Kozulin, n.d.). Blind people gradually perceive an item through touch, slowly making sense of what is felt. Sighted people on the other hand, can see an item and perceives it in its entirety all at once, spontaneously and without much effort. Those born completely blind, base concepts on verbal description (the verbal modality) as opposed to what is seen (the graphic modality). Making sense therefore involves combining extremely abstract, detailed verbal descriptions of ideas with concrete tactile imaging. These principles are used in the tactile Instrument Enrichment Program and 'vision' for the Blind, an adaptation of Feuerstein's cognitive learning approach. The programme attempts to mitigate the problems in concept development experienced by blind people. The dotted material and mediation used has resulted in improvements in the learner's perception of items in their entirety and helped them construct more authentic images (including dimensions, size and directionality) in their minds' eye (Gouzman & Kozulin, n.d). This skill is very useful in conveying understanding in content subjects such as natural science. SANCB organised training by Prof. Gouzman, but the research is unaware of any research carried out to date.

3.8.2 Psychosocial Skills of Visually impaired Adolescents

Psychosocial skills (the way children interpret social interactions and how they respond to them) are highly dependent on vision because they are learnt incidentally through observation and interactions with others. Psychosocial skills include appropriate physical responses to a particular emotion, non-verbal communication and behaviour, and personality (Ferrel, 2000). In sighted children, these skills are usually learnt by or during adolescence.

Visual impairment tends to affect a child's social maturity, self-consciousness, social isolation and independence; all of which affect psychosocial development (Tuttle & Tuttle, 2000). Visually impaired children are inclined to be socially immature because they remain egocentric for longer, have difficulty seeing others' perspectives and have limited social experiences with same-aged peers from which to grow (Tuttle & Tuttle, 2000; Wolffe, 2000). The assistive devices that children who are visually impaired use and how people treat them in relation to others sets them apart and makes them feel self-conscious. This heightened self-consciousness causes anxiety in social situations and is a significant barrier to social inclusion. The practical aspects involved in social interactions, such as spotting a friend in a crowd and seeing non-verbal cues to initiate a conversation, make social interaction a taxing task, so children who are visually impaired often choose to isolate themselves (Tuttle & Tuttle, 2000; McConnell & Odom, 1999; Celeste, 2007).

The independence and autonomy of a child who is visually impaired is threatened by people's expectations and the way they are treated. They are often more passive and dependent because people reward their obedience and do things for them that they are in fact able to do themselves. They are not allowed to explore their environment and take risks because people fear that they may get hurt. The responses of others teach them to be 'helpless' and unless mitigated can become ingrained (Tuttle & Tuttle, 2000). Striking the balance between gracefully accepting help when needed, refusing help without hostility and not being submissive when help offered is unneeded, is a sign of a strong, well-developed self-concept (Lowenfeld, 1975 cited in Tuttle & Tuttle, 2000). Only

once the child accepts him or herself and uses the skills they have naturally, to compensate for their limitations, will they feel comfortable in social situations with children of their own age.

The earliest study on socio-emotional adjustment by Cowen, Underberg, Verrillo and Benham (1961 cited in Tuttle & Tuttle, 2000) found that visually impaired and sighted children were more alike than different and that there was a strong correlation between parental understanding and adjustment to adolescence. A Canadian study that re-evaluated the social-emotional functioning, mannerisms, health, vision and family of 69 legally blind adults who participated in a study conducted by Freeman et al in the mid-1970s, found that the participants were adjusting to adulthood better than expected despite the low employment figure of 39%, with the majority having been involved in romantic relationships and partaking in activities to stay fit (Wolffe, 2000).

Encouragingly, stereotypical mannerisms were no longer present in all the participants with the exception of some who had multiple disabilities. The persistent reminders from family and friends of how inappropriate these behaviours were made them stop. The Social Network Pilot Project (SNPP) conducted in the late 1990s, which compared the functioning of a demographically diverse range of visually impaired and sighted children in all major life areas, found that only 25% of adolescents with visual impairment socialised with friends after school, whereas their sighted counterparts spent the majority of their free time socialising with friends (Sacks & Wolffe, 1998, Sacks et al 1998, Wolffe & Sacks 1997 cited in Wolffe, 2000). The visually impaired adolescents also had fewer social interactions than their sighted peers and smaller friendship circles. The most recent study, by Bruce, Harrow & Obolenskyay (2007) reported very low levels of social support among visually impaired respondents, with men being most affected.

As discussed earlier, children with disabilities typically struggle to establish and engage in positive social relationships. They lack the required skills to initiate and maintain interaction and their interest in other children diminishes with time, so they are more susceptible to social isolation (McConnell & Odom, 1999; Celeste, 2007). Guralnick

&Groom (1987 cited in Celeste 2007) also noted that children with disabilities are seldom considered a resource or role model to peers and are the least preferred playmate by typical children. In light of the above, direct intervention to mitigate social isolation and promote participation in home, school and community life is justified. Visually impaired children require instruction on socially appropriate behaviour and feedback on what is happening around them to help them read the social situation (Cowen, Underberg, Verrillo & Benham, 1961, cited in Wolffe, 2000; Celeste, 2007).

3.9 School Aged Children: Educational Needs and Curriculum

“For students with visual disabilities to be meaningfully and successfully included in regular programs and to keep up with their classmates, they must have educational support services, reading and writing skills, and materials in accessible formats. To expect a child without skills to be successful in a regular education setting without supports would be as ill-advised as immersing a non-swimmer in the deep end of a pool with a sink-or-swim expectation. Although students might survive the experience, they certainly wouldn’t enjoy it or thrive to their full potential.” (Bina, 1999:78)

Studies in the 1970s revealed that many blind learners in integrated settings were not properly prepared for adult living because instruction in essential areas such as daily living skills, orientation and mobility and career/vocational training were often neglected (Morrison, 1974; Hatlen, LeDue, & Canter, 1975 cited in Curry & Hatlen, 1988). These blind adults lacked functional, social and emotional skills, such as initiating a conversation, following a recipe, dressing appropriately for various settings, or asking for and refusing help. Another worrying revelation was the discrepancy between the grades achieved in school and the learner’s true competence in areas such as literacy (Curry & Hatlen, 1988).

To address these issues, summer camps were offered by schools for the visually impaired and institutions such as the Living Skills Centre was established in the United States to teach visually impaired and blind youth (educated in local schools) activities of daily living (Bina, 1999; Wolffe et al, 2002). It is essential that the curriculum followed

by blind learners considers all the skills that they require to function as adults, including developmentally appropriate instruction in skills that promote independent living. Developmental appropriateness is imperative because some skills, such as compensatory access skills and sensory efficiency skills, can be mastered at an early age, while others such as independent living skills and career education need to be addressed throughout, given that demands and intervention will change as the child develops (Wolffe et al, 2002). The Centre for Quality Special Education, based in Michigan, compiled the 'Special Education Program Outcomes Guide: Visual Impairment', which outlines the disability-specific skills (also referred to as the expanded core curriculum) and when they should be taught and acquired that could serve as a helpful guide (Wolffe et al, 2002).

3.9.1 Requirements of educational programmes for the Blind

Educational programmes must include developing independence, compensatory or access skills, orientation and mobility, independent living, recreation and leisure, social skills, self-determination and socio-emotional skills, proficiency in assistive technology and technology in general; and career education, illustrating the necessity of input from parents and an array of professionals (Hatlen, 1996). The section below unpacks these aspects.

i) Independence and the expectation of achieving independence in academic, social and personal areas of a child's life needs to be ingrained early on and built into the child's educational plan (Hatlen, 1996). In order to develop independence, the child needs to be taught the skills and given enough practise time and opportunities to ensure that he/she is confident and proficient in them. This means, for example, that the child must be expected to go to the tuck-shop alone, taught how to move there and make the transaction, and practise the activity until it can be done independently. Adults must ensure that help offered to the child, and the environment, are conducive for fostering independence. This means that offering information that enables the blind learner to do something by himself is better than doing it for the learner, even if it is quicker and easier to do it for them (Castellano, 2005). This is especially important for learning to do

things that are part of the everyday routine of same-aged peers. Castellano (2005) warns against having the para-educator hovering over the blind learner or situating their work area next to the blind learner's desk as this may discourage independence.

In cases where those working with the blind learner are less experienced, such as in inclusive settings, Castellano (2005) suggests that teachers make a point of finding out how adept and successful blind adults are at accomplishing tasks, since this will help them understand what level of independence is achievable. The researcher, in her own experience, has encountered many individuals who are surprised that she is able to cook and work.

Beliefs and expectations inevitably affect the way one treats a blind learner, so acting on assumptions can be detrimental to a learner's independence, prosperity and employability in adulthood (Castellano, 2005). It is, however, important not to 'glorify' independence, because it is natural for blind individuals to need assistance at times, and a strong over-zealous independence could be dangerous or result in the blind person placing themselves in awkward and embarrassing situations (Tuttle & Tuttle, 2000). Striking a balance and moving towards interdependence whereby the individual knows his abilities and worth and the importance of both giving and receiving help, is essential (Tuttle & Tuttle, 2000).

ii) Compensatory or access skills enable the learner to participate in the sighted world and include concept development, communication modes such as Braille, organisational skills and other accommodations (Koenig & Holbrook, 2000; Hatlen, 1996). The child needs to be a competent user of the communication mode that gives him/her access to sighted material used in the classroom and beyond, including Braille, tactile notations for mathematics and tactile representations of graphic material etc. Solid organisational skills need to be developed so that the learner can effectively and efficiently manage day-to-day needs and plan for the future (Koenig & Holbrook, 2000). These skills need to be fostered early on and in the later years children should begin to learn technology that will help them access information in a more independent and effective way.

iii) Orientation and Mobility (O&M) training is aimed at promoting independent movement in children by enhancing their spatial awareness, mental mapping skills and ability to perceive the surroundings through the remaining senses (Castellano, 2005; Pavey, Douglas, McLinden & McCall, 2003; Koenig & Holbrook, 2000). This entails learning to locate things by sensing what direction a sound or smell comes from, such as hearing the computer fans and mouse clicks to determine the location of the computer room. Children also learn to develop their awareness of surface textures, obstacles, stairs and slopes using a cane or their feet to navigate safely. The instruction is provided by an O&M specialist who also provides training in how to travel safely and effectively around one's environment using a white cane, guide dog and/or other mobility aids.

Although competency in orientation and mobility is crucial for participation in community life and work, it is often neglected or not up to standard for children in mainstream settings (Lewis & Eselin, 2002 cited in Pavey et al 2003). Pavey et al (2003), therefore insisted that the Special Education Needs Code of Practice of the UK, reclassify O&M as an 'educational provision' instead of a 'non-educational provision' and proposed the adoption of a curriculum framework for mobility and independence.

iv) Independent living skills address hygiene, dressing, cooking, money and time management. Instruction in these skills should begin early on with personal management and in later years progress to tasks such as cleaning a house and cooking. It is very difficult to teach these skills within a mainstream school due to restrictions on time and lack of equipment, so sourcing the help of an independent blind adult or organisation, or training a parent in how to teach independent living skills to their child would allow for instruction at home or at an equipped centre (Curry & Hatlen, 1988). Occupational Therapists usually attend to the development of functional skills related to independent living (e.g. memory, tactile perception).

v) Sensory Efficiency Skills address ways to enhance auditory and tactile learning, contributing to concept development. This means that the residual senses are developed to perceive what is happening in the environment better and to better read personal and sensory attributes of individuals and objects.

vi) Recreation and leisure focuses on hobbies, sports, games and physical fitness which are generally learnt through observation. Additional time for explanation, demonstration and practice are required to help the visually impaired learner understand the rules and activities involved in sports and games (including those specifically designed for the visually impaired)

vii) Social skills involve promoting an understanding of social concepts (how things work, etiquette, pragmatics), encouraging physical gestures that are socially appropriate (facial expressions and body language), initiating a conversation and assertiveness training.

viii) Self-determination and social emotional needs include developing a strong sense of self, problem-solving, decision-making, goal setting, discipline/self-control, personal advocacy and assertiveness training. Addressing the social emotional needs of a blind child is an ongoing process. In the early years the intervention focuses on guiding parents and caregivers on how to promote a positive self-concept within the child. Later, in the school-aged years and with adolescents in particular, direct instruction to promote a balanced perspective on one's disability and dealing with the sighted world is needed (Curry & Hatlen, 1988).

ix) Assistive technology and technology skills involves learning about media literacy and the technical concepts that will help with the selection of appropriate assistive technology. In developed countries, schools and districts have assistive technology specialists who assess and advise on assistive technology options, systematically train children in how to use the devices effectively, monitor usage and support the teacher to include the devices in the curriculum.

x) Career education is essential for children who are blind since their career opportunities are complicated and their understanding of adult lifestyle, work and career avenues are often limited by what they hear (Curry & Hatlen, 1988). The planning and preparation towards a career entails determining the interests and strength early on and exposing the child to a broad range of possible jobs (Hatlen, 1996). Placement and work

ethic issues also need to be addressed. Work experience programmes are useful in this regard as they promote understanding of employee responsibilities and the joys and satisfaction of work, as well as increase opportunities for employment later on (Curry & Hatlen, 1988).

Proficiency in the aforementioned expanded core curriculum areas requires deliberate, structured and systematic inputs from visual impairment specialists, family and class teachers (Hatlen, 1996).

3.9.2 Aligning the Outcomes of the National Curriculum with the goals of the disability-specific curriculum (Expanded Core Curriculum)

Learners who are blind are required to meet the outcomes of the national curriculum and master the blindness-specific skills of the expanded core curriculum. Itinerant teachers of the visually impaired are often deployed to ensure that blindness-specific skills are taught to learners in mainstream schools, but the limited number of hours in the schooldays makes this a hefty challenge. A study by Wolffe et al (2002) found that itinerant teachers spent 41% of the time reinforcing academic work, 18% teaching accessible communication (e.g. Braille) and only an average of 8% teaching social-emotional skills, sensory motor skills, O & M and activities of daily living, respectively. Furthermore, most of the expanded core curriculum skills were taught ad hoc and were not purposefully structured and only 8% of their time was spent consulting with others on the educational team and virtually no time was spent on career education. Similarly, Correa-Torres & Howell (2004) found that itinerant teachers are forced to focus on aspects of academia rather than disability-specific skills because they feel obligated to ensure that learners meet all academic demands.

Developing an IEP that aligns and integrates the goals of the National Curriculum and Expanded Core Curriculum is a solution to this challenge. Lohmeier (2009) proposes a step-by-step process of aligning the academic standard curricula with the expanded core curriculum. In step one, the specialist teacher or orientation and mobility specialist selects a learning outcome and assessment standard from the NCS to be addressed. Step

two involves identifying key words that convey the main intent behind the learning outcome and assessment standard. Step three entails analysing the learning outcome and assessment standard to identify the blindness-specific skills and concepts that the learner requires for mastery. In step four, the relevant expanded core curriculum areas and concepts are translated into an outcome that is consistent with the intent of the general curriculum's goal. Finally, a more meaningful and accessible integrated goal is produced which capitalises on the child's current educational experiences.

This process can be applied to all the learning areas and the integrated approach allows for more practice opportunities of the blindness-specific skills during the school day. Lohmeier (2009) suggests that the integrated goals, which are referenced back to the general curriculum, should be recorded and monitored in the learner's ISP or IEP. Better planning and closer collaboration among all stakeholders, in particular between the specialist teacher of visually impaired learners, the orientation and mobility specialist and subject teachers will yield greater success..

3.9.3 Preparing the Environment for Learning in the School and Classroom

Both the psychosocial and physical environment need to be prepared to some degree to promote learning and social integration.

i) Blind awareness raising

A blind awareness presentation by a blind adult, organisation for the blind or teacher of the blind will promote understanding around visual impairment, foster respect and acceptance for the blind learner in the school and counter apprehension (Castellano, 2005). The presentation will introduce the learners and staff to the tools and strategies used by the blind and ways to include blind learners in everyday activities.

Simulation activities are commonly used in inclusive schools to create awareness about blindness, but this approach could yield undesirable results (Castellano, 2005).

Blindfolding sighted learners while they carry out day-to-day tasks could evoke fear or pity and reinforce negative stereotypes of dependence and helplessness, especially when

the compensatory skills are not taught at the same time. The messages conveyed through simulation activities need, therefore to be carefully thought through to ensure that respect, acceptance and understanding are promoted, so as to create conditions where genuine friendships and inclusion at all levels can be fostered. Castellano (2005) suggested discussions, brainstorming and research on how blind people do everyday tasks; what work blind people do; the tools, skills and techniques they use to do school work, move about independently or play sport; how Braille works; how to include a blind classmate in games and make learning and teaching material accessible etc.

ii) Preparing the physical environment is minimal, especially if the blind learner has the necessary O & M skills. It is, however, necessary to make sure the building and grounds are safe and there are no open drains or broken steps etc. An organised and clutter-free environment makes it easier to locate things or places and preserves the material used by the blind learner. Fostering sound organizational skills is essential for every blind learner. Placing Braille labels for classroom numbers and places such as the library at a suitable height will assist the learner in navigating about the school (Castellano, 2005). Giving the new learner time to explore the classroom and school beforehand in order to make a mental map of the physical environment should then be sufficient. If the school layout is very complex, a tactile map can be made to help the blind learner navigate from place to place.

3.9.4 Meeting the requirements of the classroom

i) The workings of the classroom

In the early years, it is essential that the learner learns the routine, etiquette and procedure of the classroom (Castellano, 2005). Inappropriate etiquette could hinder social inclusion. For example, the learner must be orientated on how to respond appropriately to the teacher's questions and comments, e.g. when to raise and lower one's hand, when to answer in unison or only answer when one's name is called out by the teacher (Castellano,2005).

ii) Behaviour

Misbehaviour in the classroom is usually a symptom of an underlying issue. Uncovering and addressing the cause of the behaviour will diminish it. Some underlying causes are additional disabilities (e.g. ADHD, language delay) and expectation being far above or below the child's abilities (Castellano, 2005). The blind learner, regardless of the underlying behaviour issue, must be held to the same standards of behaviour as their sighted peers (Holbrook & Koenig, 2000). Frank discussions and role-modelling can be used to address the undesirable behaviour.

iii) School work and pace

The knowledge and skills imparted to the blind learner in the early years aim to empower them to do their school work more independently. A blind learner who is independent can make decisions about how to best tackle a task using a variety of methods and tools. Holbrook and Koenig (2000) argue that if the work allocated serves as stepping stones to mastery and is not merely given to keep the learner busy, then it is essential that the same number of exercises be given. The time allocated and support provided to complete the task may, however, vary, so the need for additional time should be assessed looking at the core skills needed to perform the task and what aspects warrant more time. Proficiency in Braille or in using assistive technology must also be considered as this will impact on their ability to complete tasks. For example, the cumbersome nature of Braille mathematical equations or the large amount of reading work may be a problem, so a way to alleviate this problem may be to get a reader or allow the use of a scientific talking calculator.

Holbrook and Koenig (2000) also warn that adjusting the workload may hinder social interaction, as the sighted learners may resent the blind learner because of preferential treatment they receive, or regard them as inferior and less capable. Furthermore, in a job situation, slowness and inability to meet deadlines will deter an employer from hiring a person who is blind. Castellano (2005) insists that even though extra time or reducing the number of questions to answer is warranted at times, every effort should be made to

ensure that the blind learner works at a reasonable pace to prepare them for the world of work. An organised workspace, alerting the learner to auditory cues in the surroundings, such as pages turning to gauge their classmates' progress, and promoting time keeping skills can help the learner work at a suitable pace. In cases where the blind student works too slowly despite intervention, it is possible that the medium of reading or technology being used is not appropriate, e.g. a child who struggles with Braille may need to use voice output software instead (Castellano, 2005).

vi) Participation and interaction

Research has shown that learners, who are more engaged in classroom activities, perform better academically (Brophy & Good, 1986, Cancelli, Harris, Friedman, & Yoshida, 1993, Fredrick, 1977 cited in Bardin & Lewis, 2008).

The academic success of a blind learner in mainstream settings and their overall experience primarily influenced by the teacher, includes adapting teaching techniques and general teaching style, having high expectations, being knowledgeable about visual impairment, communicating positively about the learner's efforts and abilities; as well as having a student-teacher relationship that is nurturing (Barraga & Erin, 1992; Smith & Levack, 1996, Tuttle, 1984, Tuttle & Tuttle, 2000, Hatlen, 1990, Horn & Swan 2001, Ladson-Billing, 1994 cited in Chang & Schaller, 2002; Castellano, 2005). A study by Chang and Schaller (2002) that asked visually impaired children for their perspectives confirmed the importance of the aforementioned factors and added that emotional support such as being listened to and cared for, encouragement to achieve and being regarded as capable as typical children, as well as the willingness of a teacher to help them solve problems; greatly contributed to a positive educational experience (Chang & Schaller, 2002).

3.9.5 Measures to facilitate participation

Verbalising more, using multiple modalities, adapting activities and facilitating social interactions are expanded on in the following section.

i) Verbalising more and using rich descriptive language makes sighted information essential for learning and social interaction, accessible to the blind learner (Castellano, 2005). Describing what is on the board, in illustrations or an item using all its characteristics such as colour, shape, texture, weight, size, use and comparisons helps conceptualisation. The use of exact descriptions instead of inferences and demonstrations, for example ‘turn left’, instead of ‘turn that way’ helps with following directions. Simple strategies such as calling a child’s name instead of pointing and insisting that speakers identify themselves before talking can help the learner who is blind to link voices to names and locate where a classmate is seated. Informing the child about what is happening in the classroom helps them respond appropriately and participate better socially. For example an outburst of laughter in response to someone dressed in a funny costume must be explained to the blind learner so that he/she can join in.



ii) Using multiple modalities

Teaching techniques and strategies that appeal to all the modalities of touch, smell, sight and hearing are generally considered more effective than those which do not. Teachers of learners with visual impairments can include the learners in demonstrations by allowing them to lightly ‘touch tour’ while doing an activity and by using models with multisensory appeal; bringing attention to the multisensory aspects of an object (it’s feel, smell, sound and appearance), encouraging questions and partnering the blind learner with a sighted learner who can provide verbal descriptions.

iii) Adapting activities, so that the blind learner is able to take part with all the other learners in an equally enjoyable and meaningful way, is crucial. Making these adaptations may require extra thought, material and time and should therefore be prepared in advance. The method of instruction needs to be adapted for activities that require the child to learn a movement, for example in sport, dancing and action songs, as these are usually learnt through observation. Instead, another person could show the blind learner how to do the movement by physically moving their body through the motions.

The classroom should be arranged in a way that conveys that the blind learner is an integrated member of the class. This can be done by shelving Braille leisure books among the sighted books in the reading corner and using Braille captions on posters and other labels. The teacher should allow the blind learner to fully explore objects referred to in lessons, through touch using both hands, even if the object is not ordinarily handled (providing that it is not too dangerous). The tactile exploration accompanied by verbal description will make this experience more meaningful.

iv) Facilitating social interaction

As discussed earlier, children with disabilities typically struggle to establish and engage in positive social relationships. Social skills intervention programmes must address age-appropriate behaviour such as ‘eye contact’ during conversations and good posture, and discourage socially inappropriate behaviour (such as eye poking) (Castellano, 2005). Castellano (2005) provides several useful strategies to alleviate barriers to social interaction that can easily be implemented in the classroom. For example, to mitigate any differences accentuated by the use of assistive devices, the teacher should speak positively about the devices and material used by the learner who is blind. The learner who is blind must also be seated among the classmates, regardless of the need for extra space and a power supply.

3.10 Teaching Resources

Resources used to make the curriculum accessible, range from making visual, tactile or auditory modifications to learning and teaching support materials (LTSM) to commercially available material and assistive technology. Teaching resources are chosen in collaboration with relevant individuals with the visual impairment specialist usually taking the lead.

The best teaching tools are ones that are durable and convey the concept well. They do not necessarily have to look appealing to the eye, but must be able to withstand the learner manipulating it with his hands. Many items are manufactured for the classroom

while others can be made. Examples of commercially produced teaching tools specific to subject areas include a tactile globe and landform to show the shape, area and relation of countries for Natural Science and a talking calculator for mathematics. Everyday items can be used creatively to produce LTSM e.g. a glue gun can be used to make raised drawings quickly, while sandpaper, grains and fabric can be used to texturise graphic representations.

Adapting instructional material ensures that the blind learner has full and equal access to the learning opportunities created. The decision to adapt material is based on a thorough functional vision assessment and learning media assessment which takes into account the blind learner's learning style and other relevant information related to how the individual learner learns best (Holbrook & Koenig, 2000). Other relevant information includes how well the learner is able to use adaptive skills such as listening and comprehension, their personal preferences and the primary and secondary objectives of the task.

It is important that the modifications made are easy to implement, unobtrusive, within reason and do not encourage an over-reliance on adaptation (Holbrook & Koenig, 2000). Stratton (1995 cited in Holbrook & Koenig, 2000) stresses the importance of finding a balance, since over adapting separates the child from the environment, while under adapting impedes learning. They also recommend that a 'toolbox' with a variety of means to modify a task, be available (Koenig & Holbrook, 1998 cited in Holbrook & Koenig, 2000).

In the section that follows, tactile and auditory modifications of material are discussed.

i) Tactile modifications -Braille is definitely the most common tactile adaptation for learning and teaching material. Textbooks, tests, notes and other written media need to be transcribed into Braille. Other graphically conveyed information such as pictures, diagrams, graphs and maps must be represented in tactile form so that the blind learner can perceive them through touch. Examples of essential tactile items include a Brailled

Dolch list of most frequently used words and a phonics list for literacy; and raised line graph paper and tactile clock and geometry kit for mathematics.

Producing Braille textbooks is a complicated matter and should be done by a professional, certified Braille-scribe or nationally recognised Braille transcription service such as Pioneer Printers. Pioneer Printers produce nearly all the Braille material used in schools across the country. Textbooks therefore need to be submitted months in advance to ensure that they are delivered on time to learners. In the United States and other countries, co-operatives providing Braille transcription services also supply Braille printed material such as worksheets and tests on a more ad hoc basis. In developing countries, disabled people's organisations for the visually impaired generally provide Braille material.

Braille textbooks have unique features and there is a standard format for Braille production. Braille takes up more space, so a typical inked textbook will comprise several volumes. To facilitate the use of Braille in the classroom, Holbrook and Koenig (2000) suggest that the teacher learns how to read Braille numbers and understand the Braille textbook format in order to help the blind learner find the correct page. The blind learner should also be given a print copy of any Brailled material, so that he or she can get help from non-Braille users when needed.

ii) Graphic Material

The purpose of graphic material in a text will dictate how or if it is represented to the blind learner. If the text is given meaning by the illustration, such as in early literacy material and material covering topics such as art, architecture or physiology then it must be represented in an accessible form. Although this can be done using raised line drawings, models or real objects; the child requires an extensive experience base from which to draw upon in order to interpret what is being represented (Holbrook & Koenig, 2000).

iii) Auditory modifications

Providing material in auditory format is particularly useful for coping with large amounts of written material in a limited time as it speeds up the intake and output of information. The use of auditory modifications needs to be balanced so as not to hinder the development of Braille literacy skills. Holbrook and Koenig (2000) pointed out that auditory modifications are appropriate when the main goal of the task is not to develop literacy, but to see if the learner is able to collect large amounts of information effectively. This modification must not be used when interpreting the mood of the piece, a quick review or retrieving and referencing data from specific parts of the text or pages are required.

Learners who are blind should preferably use an audio-output device with speed variation and audio-indexing such as the Victor Reader Wave MP3 player and Daisy. iPods and MP3 players are more affordable, universally accessible alternatives. Fortunately, the increase in popularity of audiobooks among sighted people, means that leisure and educational books are more readily available. It is important to emphasise that auditory modifications should never be used in place of Braille simply because resources are limited (Holbrook & Koenig, 2000).

iv) Video

In recent years, using video material as a teaching resource has become more popular and SABC Education programmes are often used in classrooms because they are novel and stimulating. The benefits to blind children are, however, limited because visual information displayed on the screen, essential for interpreting the narrative, is mostly inaccessible, unless they have audio captions. Audio captioning is a verbal description of the visual actions. Described and Captioned Media Program (www.dcmp.org) is an organisation funded by the US Department of Education that provides audio captioned media. They are spearheading a movement to ensure that all DVDs have the audio caption option in their menu selection.

The use of computers connected to data projectors or interactive electronic whiteboards is becoming more common in the classroom, so electronic versions of information are more readily available. The information displayed during a lesson can easily be transferred to the personal laptop of a visually impaired learner using a USB mass storage device or CD, or be downloaded from the internet.

v) Assistive devices/technology

We live in the information age, so success in school and life is directly affected by one's ability to independently access the vast amounts of information out there. Assistive technology enables children with visual impairment to gain access to information and participate in learning and teaching activities. It provides access to visual images and print both in hard copy format and on a computer screen by enhancing the image, speaking the information or converting the text into Braille. The types of assistive technology include hardware and software devices used with computers, or stand-alone devices. They range from high tech to low tech devices that vary in sophistication, function and price. The effectiveness of an assistive device is judged on its usability, functionality, durability, reliability and acceptance by the user.

It is considerably less expensive and more environmentally-friendly to make printed material accessible through computer technology rather than Braille or enlarged print. The increased availability of electronic books is evidence of this universal trend. Computer technology is more versatile as it allows one to convert material into different accessible formats, data can be easily transferred and saved and using a keyboard and word processing software makes producing written material simple. Accessing information on the internet, databases or CD-Rom, as well as communicating via email or chat is possible with computers.

Screen reading software using Optical Character Recognition Software (OCR) can convert scanned in print or words on a page into Braille via a printer or a device with a refreshable Braille display or voice output, using a speech-synthesizer (Kapperman &

Sticken, (2000). Examples of screen readers with speech synthesisers are JAWS, OpenBook, Windows Eyes and Orca.

There is a growing trend to produce smaller, portable devices that can simply be plugged in to universally used equipment. The Dolphin pen is an example of such a device and works like a memory stick which can be inserted into any computer and provide speech output and magnification.

Children need to get accustomed to using assistive devices so the earlier they begin to use them the better (Kapperman, & Sticken, 2000). The SIAS strategy of the Department of Education makes provision for the supply of assistive technology for children who need it. The process demands a rigorous assessment so that the most appropriate device is selected and that the necessary training and support is offered in conjunction with the device to ensure proper usage and care. A checklist of individual sub-skills that indicate mastery can be developed for every assistive device and can be included in the ISP (Abner & Lahm, 2002).

Abner and Lahm (2002) and Mack, Koenig and Ashcroft (1990) stress that high quality service provisioning hinges on the knowledge and competence of the teacher of the visually impaired (TVI) because teachers play a vital role in the assessment, selection and training process. A study by Abner and Lahm (2002) found that the inability of teachers of the visually impaired to transfer skills on how to use assistive devices proficiently, resulted in many students not using them to access the curriculum. This highlights the importance of effective training and support for teachers of the visually impaired in computer-based technology and assistive devices. These teachers also need to be technologically savvy, abreast of the latest technology and know suppliers. Information on assistive devices for the visually impaired is available from Sensory Solutions, a leading South African supplier at www.sensorysolutions.co.za.

3.11 The Educational Team and Functions to enable Successful Inclusion

3.11.1 Composition of the educational team

The education of a blind learner should involve a team. This team usually comprises the parents/caregivers, teacher and other professionals such as an orientation and mobility specialist, speech-language therapist, occupational therapist, para-educator/teaching assistant/facilitator and the case manager (Topor, Holbrook & Koenig, 2000; Castellano, 2005). The roles of several of the educational team members were discussed in Chapter two and throughout this chapter. Topor, Holbrook & Koenig, 2000 recommend the appointment of a case manager to co-ordinate and monitor interventions of the educational team. The case manager's duties would include liaising between team members, scheduling meetings and collating all the data relevant to the learner's educational programme (case history, reports, record of interventions etc).

3.11.2 Models of educational teams

In educational settings there are three types of teams namely: (i) multi-disciplinary, (ii) interdisciplinary and (iii) trans-disciplinary teams (Campbell, 1987 cited in Topor, Holbrook & Koenig, 2000). The resources available, principles of collaboration and structure of support offered within the education system usually dictate what kind of team is used, even though what is best for the learner to develop should be the deciding factor.

- i. **A *multi-disciplinary team*** comprises professionals with a variety of expertise who assess the child in the area of their scope of practice and provide advice and intervention in isolation.
- ii. **An *inter-disciplinary team*** consists of professionals from various disciplines who assess the child, share the findings with the other team members and contribute their expertise to the development of an appropriate educational plan, but still provide their own intervention in isolation. This is a more collaborative form of team.

- iii. ***A trans-disciplinary team*** is the ultimate form of team and considered most beneficial for blind learners. Every team member is jointly accountable for helping the child achieve the goals decided upon in the educational plan. The ‘implementer’ need not be a professional or can be someone who is doing an intervention that is beyond their scope of practice. The ‘implementer’ carries out assessments and activities designed by the specialists with their support, so there is a transfer of skills.

3.11.3 Collaboration

The members of the team need to work collaboratively, exchanging information and transferring skills across professional boundaries, for the benefit of the learner (Topor, Holbrook & Koenig, 2000). This collaborative consultative approach is emphasised in the SIAS process described in the previous chapter. The SIAS process encourages collaboration throughout the assessment and design of interventions related to the learner and his/her environment. The role and level of involvement of each team member depends of the needs of the learner. How this collaboration occurs is vital for success, so understanding that it is more than just working together on the same case and adhering to the principles of collaboration is crucial.

Thousand & Villa (1992:76, cited in Topor, Holbrook & Koenig, 2000) explained that collaboration involves team members:

- co-ordinating their work to realise a common, agreed upon objective
- upholding a common belief system that everyone is valued for their distinct contribution and needed expertise
- switching roles from leader to learner, consultant to consulted depending on who is providing advice
- interacting with one another in a positive manner
- encouraging interdependence and accountability as a team and as individuals
- monitoring the progress of the team and individuals

Castellano (2005) stresses that teamwork and flexibility is essential, especially when the majority of the team members have not previously dealt with a blind learner. The team will have to pull together and adjust their plans when great ideas do not yield the results they anticipated (Castellano, 2005). Unrealistic and incompatible expectations of the roles and responsibilities of the educational team and individual members, work overload and limited resources threaten the outcomes of collaboration (Topor, Holbrook & Koenig, 2000). Insufficient time for interacting and learning from each other make team members feel less confident to experiment and extend themselves beyond their comfort zones and traditional roles (Wood, 1998 in Topor, Holbrook & Koenig, 2005). Conflict can be prevented or dealt with through effective communication.

3.11.4 Communication

Managing the inputs of a variety of team members who are not necessarily based in the same school and preventing conflict requires effective communication. Effective communication acknowledges everyone's contribution and reinforces the role they play (Topor, Holbrook & Koenig, 2000). It is accessible and respectful of people's preferred modes of communication. It also addresses the concerns of all involved in a constructive manner (Pugach & Johnson, 1995, cited in Topor, Holbrook & Koenig, 2000). Scheduling and attending regular meetings and observations and communicating frequently with those involved with the learner helps to maintain continuity, prevent misunderstandings and monitor progress. Setting up systems that make communication easier (e.g. email groups, home-school notebook) and keeping good records of all interventions including a log of interactions with other adults are examples of strategies to promote effective communication.

3.12 Summary

Chapter three defined blindness, before going on to examine the understanding of blindness and visual disabilities worldwide. It then scrutinized the current situation of education for visually impaired learners in South Africa, numerous countries in the

developed world and across Africa, providing a critical overview of the quality of education received by the world's visually impaired learners.

The chapter continued by describing the role of vision in a child's development, and the impact of visual impairment on that process, underlining the complexities of visual impairment that must be overcome by the child with a disability and his or her caregivers and educators to ensure their full development. Ways in which educational facilities can support children with visual disabilities through adapting their learning environments, curricula, teaching techniques, teacher training and interaction and general advocacy and inclusionary techniques, were detailed.

The chapter concluded by underlining the fact that ensuring the best and most conducive teaching environment for children with visual impairments is contingent on the best forms of collaboration involving multiple stakeholders.



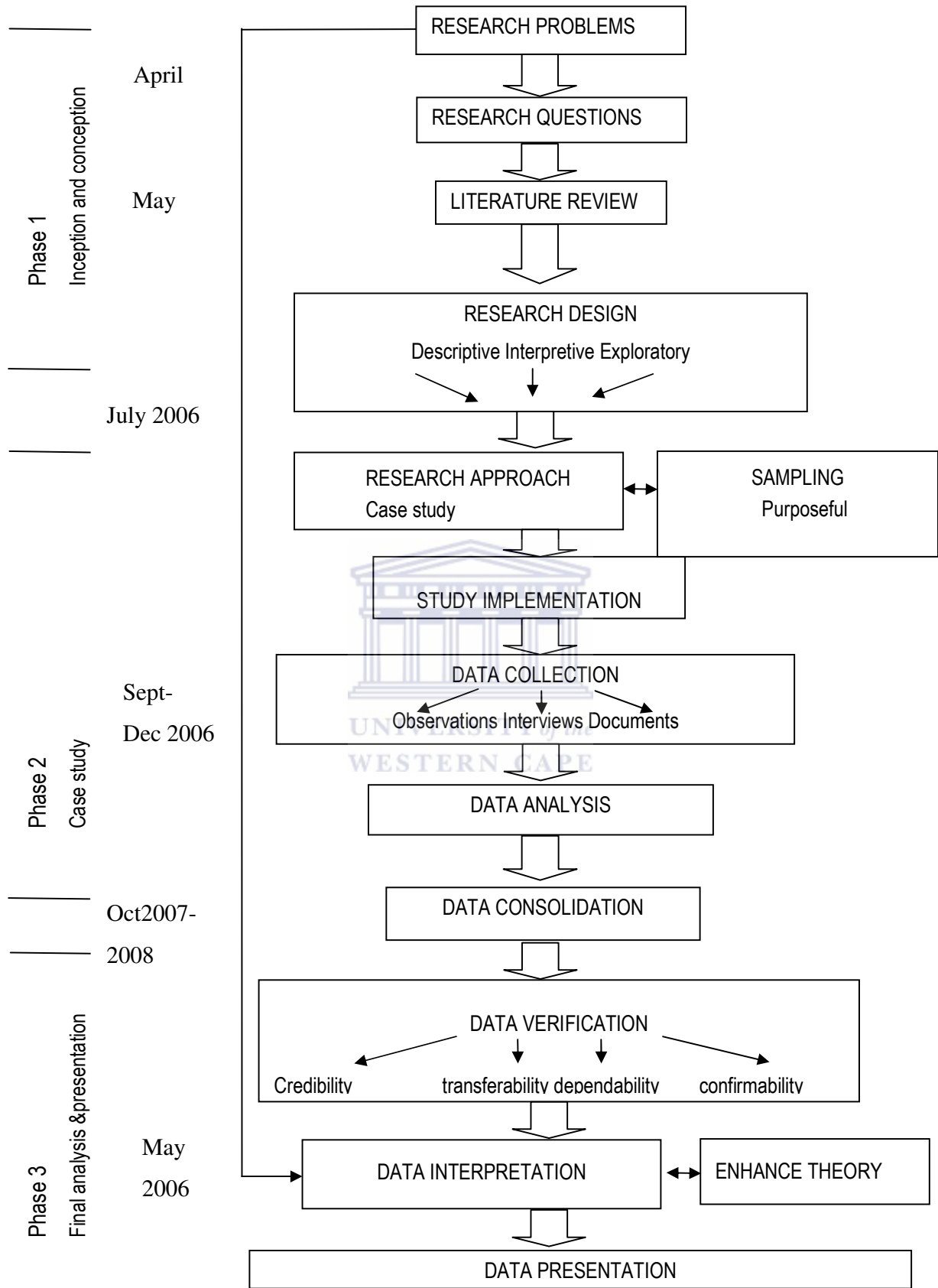
Chapter 4: Research Design and Methodology

4.1 Introduction

In this chapter, the research design and methodology of the study are outlined and discussed. The processes followed in conducting and interpreting the research, are described, with emphasis on the sampling, data collection and analysis applied to the study. Issues pertaining to data verification and ethics are also explained in this chapter. Figure 1 illustrates the path of the study from phase one, the inception and conception of the research project when the research problem, research question and theoretical framework was conceived, through phase two of the case study where the research design, data collection and analysis occurred, to phase three, the final interpretation and presentation of the findings.



Figure 1: Overall Path of the Study



4.2 Aims

As discussed in Chapter one, this study aims to explore and understand how two blind learners were physically, socially and academically included in a mainstream, neighbourhood school by investigating and describing the experiences and learnings of an urban school in Cape Town. Useful practices, challenges and enabling factors in the school would be examined in relation to literature discussed in chapters two and three. This in-depth investigation considered both the tangible elements in delivering the curriculum and the intangible elements such as attitudes and collaboration. The study aims to build on the body of knowledge of helpful and promising practices, contribute to theory development in the field and promote the implementation of inclusive education. The research study gives a wide perspective and offers a myriad of lessons to educationists, policy-makers, proponents and opponents of inclusive education.

4.3 The Research Question

The purpose of the study is to investigate how the two learners with visual impairment were included socially, academically and physically in their neighbourhood school. The research question stems from the rationale for the study and is as follows:

- How have two learners who are blind been included in their neighbourhood school?

The research question is the broad focus of the study while the sub-questions below unpack the contributing elements and examines the effectiveness of the process.

- How and to what extent have the learners been included socially, physically and academically?
- What were the enabling factors that contributed to the inclusion of the visually impaired learners (attitudes, skills, support by role-players, interpersonal and intra-personal factors)?
- What have been the learnings, challenges and successes thus far?

4.4 Research Design

The research design refers to the general plan of the research study that dictates how information was collected, analysed and interpreted. The type of design selected was influenced by the researcher's world view, which subsequently formed the theoretical basis for the methodology chosen.

4.4.1 Qualitative Research

The research is conducted in the qualitative, interpretive paradigm and a case study approach was applied.

Researchers working in the interpretive paradigm, recognize that people's subjective experiences are valid, multiple and socially constructed and should be taken seriously, as it reflects their reality. Researchers who work in this paradigm believe that they can best understand the experiences of others in interacting and listening to the individuals involved. Qualitative methods are therefore ideally suited to the task, since the real life experiences of people carry far more weight than any theoretical assumptions (Mertens, 1998).

The nature of the subject under investigation further supports the paradigm chosen. The research study is about inclusive education. Inclusion is about human behaviour and interaction which can best be described not quantified.

4.5 Research Methodology

4.5.1 Case Study

The researcher has chosen the case study approach to conduct the investigation because the topic of the research, inclusive education, is eco-systemic in nature. The phenomenon under investigation, including learners who are blind in a mainstream school, is intricately related to, and reciprocally influenced by, the school, its context and the individual characteristics and contexts of the learners themselves. Yin's (1994), definition of a case study supports the approach chosen and defines a case study as an 'empirical enquiry that investigates a

contemporary phenomenon within its real life context..., where “the boundaries between the phenomenon and context are not clearly evident, ” (Yin, 1994:13).

The case study approach aims to develop a comprehensive understanding of the phenomena and all the elements involved in including learners who are blind in a mainstream school.

Understanding the phenomena and elements involved in a case will assist in developing general theoretical statements (Patton, 2002). The specificity of focus and depth of enquiry makes the case study approach an especially good design to give insight into how to address practical challenges in education (Merriam 1998). The case study method allows investigators to retain the holistic and meaningful characteristics of real-life events,“ allowing the researcher to understand the complex social phenomena of including learners who are blind in a mainstream school” (Yin, 2003:2).

This case study was primarily descriptive. It provides valuable information about an area in education where little is known. The purpose of building theory with regard to unknown phenomena is stressed in Hartley’s (2004) definition of case study research, where he states that it "consists of a detailed investigation, often with data collected over a period of time, of phenomena, within their context," with the aim being "to provide an analysis of the context and processes which illuminate the theoretical issues being studied" (Hartley 2004:323).

The end product of this study, like any typical case study, as suggested by Merriam (1998), is to yield an intense, holistic description and analysis of a social unit. This makes it a powerful tool for drawing out learning from any experience.

The Case

The study was conducted at Bounty Primary School in, an urban residential area in the southern suburbs of Cape Town. The school was selected for the study, because it is one of the few schools in the Western Cape which has included learners who are blind.

The School is a progressive, public school with deep roots in the community and it is located in a mixed, middle-class community. It is a co-educational school and provides education from Reception Grade to Grade Seven. The school is managed by The School Governing Body elected by the parents. The language of instruction is English and the teacher: learner ratio is 1: 35. The school will be discussed in more detail in chapter five.

4.5.2 Sampling

Purposeful sampling, a sampling method esoteric to case study research, was used to select the school and participants. Patton (2002) stresses that the best way to ensure that rich information on the topic is uncovered would be to purposefully select the context and participants from which one can learn a great deal about the issues being studied. The selection of interviewees was guided by the facilitator and information yielded from interviews with other participants.

The sample was limited to 25, which made data collection manageable. The limited time and finances did not allow for a larger sample. The sample is justified since in a qualitative case study research, the quality of responses is more important than quantity. Thus the potential contributions by a small number of interviewees is far more significant than the number of people interviewed (Merriam, 1998).

4.5.3 Participants

The participants and interviewees were selected because they could provide valuable information or played an important role in the process of including the learners. The participants selected were individuals who have all interacted, directly or indirectly with the learners in the bounded context of the school. The visually impaired learners, non-visually impaired learners and other stakeholders including the school community and Education Department were interviewed. The learner (named Noel) who was recently included identified the parents of the learner who was included first as a resource person. As stated above, 25 participants were interviewed. Purposeful sampling was applied to obtain good quality informants. This included volunteer parents of learners without disabilities and learners who do not have direct contact with the learners who

are blind to determine their attitudes and perceptions. The following participants were interviewed:

- The two learners with visual impairment
- Two learners with no visual impairment who are not particularly close to the learners with visual impairment, one from their class, the other from another class in the grade
- Two learners with no visual impairments who are close friends of the two visually impaired learners selected by the visually impaired learners
- The class teacher
- Two teachers who do not have regular contact with the learners
- A previous class teacher
- The class facilitator
- Learning support teacher
- A WCED district official working with the school
- The school principal
- The parents of each learner with a visual impairment
- Two parents of learners with no visual impairment, one from the class, the other from another class in the grade
- A parent member of the school governing body
- The school social worker
- A resource/support person selected by the parents



Details of the participants are in the appendices (Appendix III: Subject Table).

4.6 Data Collection Methods

Multiple methods of data collection were used, namely literature-review, semi-structured interviews, non-participant observations, document analysis and field-notes. The use of multiple methods of gathering evidence is synonymous with case study research “Case study research is a heterogeneous activity covering a range of methods and techniques...” (Hartley 2004:332)

The case study approach allows one to employ a range of methods to get the complete picture and uncover the elements within the case. A case study’s “ability to deal with a full variety of evidence...documents, artefact, interviews and observations” is a key strength and allows it to achieve its purpose of providing a comprehensive account of the phenomenon (Yin, 2003:8).

To strengthen the validity and rigour of the case study, multiple methods of data collection from multiple sources were used for the purpose of triangulation (Merriam, 1998). The information gathered from these multiple methods (field notes, interviews, document analysis and video footage) and sources (learners, teachers, parents etc.), would be synthesised and analysed, thereby substantiating any findings that arose.

4.6.1 Literature review

The literature review, as explained in chapter one, formed the basis of the study and served a crucial role throughout the research process. It provided an overview of the existing work in the field, and identified key issues and gaps in the body of knowledge. Denscombe (1998:159), poignantly defines it as ‘the foundation to build new research’. It also served as a departure point for the research, since the underpinning theories and principles shaped the research approach undertaken (Denscombe, 1998, Merriam, 1998).

4.6.2 Instruments

Data is mediated through the researcher. The researcher is therefore the main research instrument and has the freedom to be flexible as the situation and context requires (Lincoln & Guba, 1985). Other research instruments employed by the researcher namely: interviews, non-participant interviews, documentation and field notes are expanded on below.

Semi-structured interviews

The opinions, experiences and elements related to the inclusion of the learners who are blind were gathered through tape-recorded, semi-structured interviews.

The interview questions were a mixture of structured questions and unstructured questions that depended on the responses of the participant being interviewed. This type of interview was selected because of the flexibility it offered. The researcher could change the order of questioning, probe more deeply into responses that were relevant to the study and exclude questions that were made redundant by a previous response. Although the interview guide provided to the interviewee in preparation for the interview pre-empted the order of questions, the researcher was guided by the interviewee. In answering questions about preparation, many respondents naturally went on to describe the support they received. The interview was seen by both the interviewer and interviewee as a conversation with a purpose. The interviewer allowed the participants to describe events that were related to the question and indulged these personal stories to build rapport and facilitate the flow of the interview.

Designing interview questions

One questionnaire consisted of closed-ended questions related to personal information and the other questionnaire consisted of examples of open-ended questions to be asked in the semi-structured interview.

Multiple variables of potential importance in understanding the phenomenon were identified from the theoretical framework outlined in the literature review. The multiple variables for inclusiveness guided the formulation of categories of questions. Booth et al (2000) suggested that one needs to consider all the elements of inclusiveness when investigating how a learner is being included. This study therefore investigated the means by which the learners had been included physically, socially and academically within the school environment. The questions tapped into the following elements of inclusive education which were extracted from the literature:

- i. Attitudes

- ii. Preparation
- iii. Social inclusion (participation, acceptance, belonging)
- iv. Accessing the curriculum (content in learning areas, workload, instructional style of teacher)
- v. Adapted assessment
- vi. Support systems that help learners access the curriculum.
- vii. Co-operation and collaboration
- viii. Physical inclusion

The researcher, with the help of her supervisor, refined and shortened the interview questions. The questions were piloted with colleagues to identify which questions were confusing and needed to be reworded. The researcher aimed to develop unambiguous questions that would elicit the desired responses. This process aimed to reduce the redundancy in the questions and streamline the flow of the interview.

The questions for the semi-structured interviews varied from subject to subject, but the elements to be probed remained the same. Developing the questions for the learners was particularly challenging. The language had to be easily understood and familiar to the learners. The questions were piloted on male and female Grade 6 learners of the school.

The questions in the interview schedule included interpretive questions, such as the examples below.

Hypothetical questions asked what the respondent would do if they were in a particular situation such as:

1. If you suddenly went blind...
 - a. How would you like people to treat you? What would you need to be able to learn at your present school? (to ascertain support available)

- b. If you were given the choice of attending a mainstream school or a special school, which would you choose and why? (to tap into perceived challenges and benefits)

(extracted from learner with no visual impairment interview schedule)

Ideal position questions such as ...

1. How can we build the capacity and skills of mainstream teachers who support visually impaired learners?

(extracted from teacher interview schedule)

Asking the interviewees to give recommendations in hindsight alludes to areas requiring improvement. The probes to get more elaborate responses were planned. Please refer to questionnaire (Appendix V).

Non-participant observations

The researcher observed the school in general. Lessons in mathematics, Afrikaans and physical Education were observed to investigate how the learners were included academically. The learners were also observed on the playground and moving about the school to ascertain how they were included socially and physically. An observation checklist, field-notes and video footage was used to record observations. The observations provided a fresh perspective and increased the validity of the study. Observing the classroom also gave the researcher firsthand experience of how the learners who are blind were included academically.

The observation checklist also considered how the learners were interacting, participating in lessons and being supported by other role-players. The researcher consulted the literature on social inclusion and other pertinent literature to develop the observation checklist. The Index for Inclusion and the Quality of Inclusion Checklist and Participation Rating Form developed by Project Participate (n.d.) under the auspices of The University of Colorado influenced the development of the observation schedule.

The video footage was taken by a research assistant. The video recording allowed the researcher, who is visually impaired to verify observations and alerted the researcher to events that may

otherwise have gone unnoticed. The observation checklist was analysed qualitatively by grouping similar behaviours.

Documentation

Documents published by the DoE, UN and organizations for the blind were studied and used in the research process to lay the theoretical foundation of inclusive education and the academic and social inclusion of learners who are visually impaired.

The learners' report cards were used to gauge their academic progress in school. The documents inspected used the 1-4 criterion reference assessment scale.

Field notes

The researcher took field notes to record general observations of the school. The notes included observations, interpretations and possible assumptions that could explain the interactions, behaviours and contextual aspects encountered.

The field notes included verbal descriptions of the setting, people's behaviours and activities within the school. The substance of what was said in interviews was recorded on a digital recorder (Anderson & Arsenault, 1998).

4.7 Procedure

4.7.1 Initial Orientation

The researcher had an initial meeting with the school to discuss the aims and purpose of the study and what it would involve. The researcher was introduced to the staff and gave a brief presentation explaining the research study. This was well received and they were very positive and enthusiastic. The principal explained that the facilitator would be the researcher's main source of information and suggested that she be a guide in the selection of participants to interview. In the initial interview with the facilitator, the researcher explained the research process and the need to get a true, holistic picture. The facilitator knew the learners' previous teachers and introduced the researcher to the ones that were still working at the school.

The initial orientation helped build rapport between the interviewees and the researcher. The participants were given an opportunity to ask questions about the research and expectations for the interviews were clarified. The class teacher was very concerned and apprehensive about being video recorded. The researcher assured the teacher that the footage would only be viewed by the researcher and researcher's aid. All interviewees were assured about confidentiality and anonymity. They were told what to expect in the interviews and were given an interview guide with examples of questions that would be asked.

The researcher and researcher's aid (assistant) were introduced to the class of the learners who are blind. The researcher was introduced to the class as an observer and no details regarding the research were formally discussed with the class to prevent contamination of the observations. The researcher feared that this might affect the learners interactions and behaviour towards the blind learners.

4.7.2 Administration of interviews

The interviews were conducted in a quiet room in the school or at the homes of participants. The interview questions were shown to the participants prior to conducting the interviews. This allowed the participants to prepare themselves to respond in a way that represented accurately and thoroughly their point of view. The interviews were recorded on audio tape and then transcribed and analysed. Notes were taken to corroborate recorded information. The researcher also jotted down impressions which assisted in providing clarity where the recordings were unclear.

4.7.3 Observation time

The researcher observed 30 minute lessons in mathematics, Afrikaans and physical education as well as one interval. The total observation time was approximately 105minutes and all the footage was analysed.

4.7.4 Data collection

The data from the participants at the school was collected between 20 September 2006 and 6 October 2006. The parent interviews were done during November 2006.

The interviews were conducted in a quiet room in the school. All interviews were recorded and transcribed thereafter. The duration of the interviews ranged from 15 minutes to 75 minutes. The interviewees attempted to answer most of the questions posed to them and were allowed to pass over questions that they were unable to answer. After each interview the researcher drew up a brief synopsis of the interview.

The learners who are blind were first interviewed individually and then together. One of them was shy and not very forthcoming with answers. The researcher thought that they might be more comfortable and responsive if they were interviewed together. The parents of one of the learners who are blind were interviewed together as this was most convenient for them. The researcher took field notes and recorded general observations.

The researcher observed a lesson each in mathematics, Afrikaans and physical education, as well as an interval.

The learner's school reports were collected from the parents' home during the December vacation. These documents were only released to the parents at the end of the school year.

4.8 Data analysis

In simple terms, "data analysis means a search for patterns in data" (Neuman, 1997:426). The simplicity of this definition fails to convey the complexity of the process. Data analysis is a complex, iterative process that allows us to make sense of large volumes of data through selecting, sharpening, sorting, discarding, synthesising and organising bits of information in order to draw conclusions and verify the data. It is the process of constructing meaning (Merriam, 1988; Mertens, 1998; Patton, 2002). Data analysis in qualitative research is essentially an ongoing process that starts once the researcher begins engaging and reflecting emergent data (Miles & Huberman, 1994, Patton, 2002). In this study the data analysis process was underway from the earliest stages of the study during the literature review, which was reflected on during and immediately after the data collection, during the transcription process, during analysis of the

transcriptions, presentation of data and the discussion of findings. The researcher recorded the reflections and there was a constant awareness of the variables at play during the sifting, sorting and reporting process. The researcher's thoughts travelled back and forth between the emerging themes and evidence within and across transcripts of participant interviews, observations, video, field notes and documents throughout the data gathering and writing of this dissertation. This constant comparison of themes across data sources for accuracy and refining forms part of the triangulation process and adds to the trustworthiness of the findings,

Miles and Huberman (1994) define qualitative data analysis as a process consisting of three phases namely: (i) data reduction, (ii) data display and (iii) conclusion drawing / verification. These three processes are in constant interaction and are interconnected throughout the research process. The processes are employed to “understand the phenomenon better by grouping and the conceptualizing of objects that have similar patterns and characteristics” (Miles & Huberman, 1994: 249). This process was made easy using Atlas/ti, a software package that facilitated and sped up the coding and recoding of data, as well as the retrieval of quotes under allocated categories.

The transcribed interviews formed the basis of the data analysis, while the researcher's field notes complemented and verified the subsequent interpretations, thereby triangulating the findings.

The analysis of data in this study was based on the qualitative content analysis method explained by Mayring (2000) and is a slight variation to content analysis explained by Merriam (1998). Content analysis involves reducing the volume of raw data gathered, sorting trivia from significance, identifying significant patterns, and constructing a framework for communicating the essence of what the data revealed. In effect the researcher will be drawing out substantive statements that “really say something significant. The occurrences of these statements are counted with the assumption that there is a relationship between the frequency of content and meaning” (Kohlbacher, 2006).

The researcher recognised that using this approach exclusively could result in a very shallow analysis and the authenticity of the information would be in jeopardy. Hidden meanings,

significant irregular accounts and the context and background of the respondent, needed acknowledgement. This approach embraces qualitative research principles as a more holistic picture is given. Furthermore, the frequencies of occurrences may overshadow the truth that could only be known to a few respondents. The researcher felt that this factor impacted on the study, where the proportion of peer interviewee (4 out of 25) perspectives on social behaviour would be lost, if frequency was a determining factor for significance. Dey (1993) supports the notion of taking into account the background and contextual information before drawing conclusions about meaning and states that, “ the meaning of a communication often depends therefore on knowing the relevant context(s) in which it is made” (Dey, 1993: 33). Kohlbacher (2006) cites several other researchers (e.g. Altheide, 1996; Mayring, 2000; Mostyn, 1985; Ritsert, 1972; Rust, 1980; Wittkowski, 1994) who support this argument and founded the qualitative approach to data analysis.

The researcher therefore married the traditional approach of content analysis with Mayring’s qualitative content analysis that addresses the shortcomings of traditional content analysis ‘by applying a systematic, theory-guided approach to text analysis using a category system (Kohlbacher, 2006). In this approach, the frequency of occurrences in a given category is counted, if need be, but the emphasis remains on the quality and meaning of the responses. The data was, therefore, analysed for both overt and covert messages. This meant that both messages physically present in the transcripts and the researcher’s understanding of the underlying meanings were analysed.

Mayring (2000:5) offers the following definition of qualitative content analysis: “an approach of empirical, methodological, controlled analysis of texts within their context of communication, following content analytical rules and step by step models, without rash quantification”.

Qualitative content analysis is a set of techniques from which the researcher can choose and then adapt to his or her research question (Kohlbacher, 2006). The basic principle of content analysis is preserved, but the techniques are applied to ensure that the quality aspect of the data is brought to the fore (Mayring, 2003 cited in Kohlbacher, 2006). Some distinguishing features of qualitative content analysis are that:

- The aspect of the communication in both transcripts and observation notes from which inferences are drawn are made explicit. This means that whether the research is focussing on the experience, opinion or emotions expressed is clarified.
- The rules of analysis are stated, so the procedures that were followed are available and can be reproduced.
- The categories derived are influenced by the research question, theoretical framework and interpretation of the data. The category system is flexible, so revisions can be made during the process of self-questioning and teasing out of the data (the analysis feedback loops).



The set of techniques used to analyse data according to Mayring's approach of content analysis is illustrated in figure 2 that follows. A brief overview of the intricate, interconnected components of this process, namely inductive category development and deductive category application, are provided.



4.8.1 Inductive category development

In qualitative content analysis the inductive category development is key in the data analysis procedure. According to Mayring (2000:12), “the main idea of the procedure is to formulate a criterion of definition, derived from theoretical background and research question, which determines the aspects of the textual material taken into account”. The criterion serves as a departure point and provisional category system that helped the researcher to work through the raw data. In this study, the initial categories were (i) social inclusion, (ii) academic inclusion, (iii) physical inclusion, (iv) support and (v) attitudes.

These categories were refined and deduced as the researcher systematically worked through the data. Self-questioning aided the formulation of main categories and sub-categories. Questions such as ‘what does this mean?’ and ‘Does it answer the research question?’ helped the researcher decide on what was relevant and tells us more about how the learners with visual impairment were included in their neighbourhood school. Frequencies of occurrences were provided from time to time to emphasise the importance of a particular variable.

The three distinct analytical procedures that are inter-related and work concurrently and independently from time to time (Mayring, 2000 [12]) are described as follows:

Summary: The essential bits of information are reduced by paraphrasing. This process is generally referred to as coding explication: Extraction of the relevant information from the text by the means of using a category system and scrutinizing the extraction in relation to the complete context structuring: A structure or category system is lifted from explicated data and material. In structuring the category system the research question and theoretical basis are considered alongside the explicated data. Criteria for inclusion or exclusion to a category are decided upon. Rules for establishing new categories for information that does not fall in a particular category are formulated. The system of categories is revisited and revised as data is being analysed and prior material is reappraised. The system is flexible and can be adjusted at any point of the analysis.

4.8.2 Deductive category application

In deductive category application, the category system formulated in inductive category development is applied to the raw data. Categories were assigned to the relevant passage of text. The process is methodologically controlled by the ‘coding agenda’. Mayring (2000:13) explains that the “main idea here is to give explicit definitions, examples and coding rules for each deductive category, determining exactly under what circumstances a text passage can be allocated to a category.” Table 4 below contains an example of the coding agenda.

Table 4: Example of coding agenda

Category	Definition	Example	Coding Rule
Great awareness of inclusive education	There is an awareness of policies and practices as well as the definition of inclusive education.	Respondent P1/15 Facilitator (doc - 15:1) [M]y understanding of inclusive education is that every child should be given the opportunity to have access to the curriculum in an area where they wish to be. And as far as I'm concerned the best place is in the school down the road. And so I really feel that children should be allowed to go to school whether they deaf, blind, cerebral palsy, they need to be able to go to a school with their peers and not to be shoved somewhere away, out of the real world.	One or more aspects of the definition should be apparent

4.8.3 Computer-assisted qualitative data analysis software (CAQDAS)

Atlas/ti, a type of computer-assisted qualitative data analysis software (CAQDAS), was used to sort and manage the data in an orderly fashion. Atlas/ti is essentially data management and text coding software, but the inferences drawn and decisions about coding are made by the researcher (Merriam, 1998; Mayring, 2000). The software assisted the visually impaired researcher to easily access the transcripts, store and retrieve data and systematically analyse the data. The usefulness of CAQDAS in managing large volumes of data is more apparent with the advent of technology (Roberts & Wilson 2002, Richards & Richards, 1994). Miles and Huberman, (1994 cited in

Payze,1997) state that “It is also fair to say that a qualitative researcher who does not use software beyond a word processor will be hampered in comparison to those who do”. Richards and Richards (1994) also point out that a computerised method is faster, cleaner and much more thorough than manual systems and takes much less space (Richards & Richards,1994: 457). According to Payze (1997) a further advantage of Atlas/ti and other CAQDAS is that the procedures of the data analysis process are more explicit. The flexibility of the software made it easier for the researcher to refine codes and categories. Codes were assigned to the text and categories and themes were generated from the careful examination of the data. Codes and categories assigned earlier on could be reworked as patterns emerged in the inductive category development phase of the data analysis. The Atlas/ti programme graphically illustrates the thought processes and displays links of codes across participants. The on-screen display and simultaneous view of all relevant information assisted the researcher in working through the data (Mayring, 2000). During the inductive category development process, the researcher highlighted relevant bits of information, paraphrased it or coded it in the margins. Memos with the researcher’s reflections and interpretations could be assigned to passages, so the feedback loop was recorded to an extent. Category definitions and coding rules were stored and revised as the process continued.

The researcher could easily move between respondent interviews that were previously coded and make changes as required. This facility facilitated inter-coder reliability checks. Frequency counts of codes are automatically done by the programme, reducing the human error that may occur when data is handled manually (Mayring, 2000).

The network editor and graphic mode allowed the researcher to view and create linkages between interviews that were coded. Relationships between concepts and the concepts themselves were more visible and a virtual mind map could be created. The graphics and text mode could be used interchangeably and are dynamic so changes in one of the two modes will automatically appear in the other mode as well (Payze, 1997).

4.8.4 Drawing conclusions

Regularities, variations and single occurrences that emerged in the coding allowed one to make connections and develop a logical chain of evidence. The patterns that emerged were compared and contrasted with the variables of inclusive education that were identified from the theoretical framework (Mayring 2000; Kohlbacher, 2006). Although the researcher strived to be unbiased, her personal perspective on inclusive education might have influenced what conclusions were drawn.

4.8.5 Data presentation

The categories and sub-categories are displayed in a table and serve as a brief overview or snapshot of significant findings. The findings are thereafter described and explained in detail in a lengthy narrative. This kind of reporting, according to Merriam (1998:258), allows the reader to ‘vicariously experience the setting’. Descriptions and interpretations of variables were supported with extracts of the participants’ own words.

4.9 Data Verification

Verification of data is important to ensure a quality research study. The question, ‘How true are the insights and conclusions of the study?’ is at the heart of data verification and can be addressed by establishing reliability and validity throughout the study. The manner in which the research is conducted contributes to reliability and validity.

... regardless of the type of research, validity and reliability are concerns that can be approached through careful attention to a study’s conceptualisation and the way the data were collected, analysed and interpreted ... (Merriam 1998:199)

In qualitative research, validity and reliability are fairly vague and rely heavily on the researcher’s and participants’ interpretations of information. Data analysis in qualitative research therefore involves establishing the trustworthiness of the data in terms of credibility, transferability, dependability and confirmability (Lincoln & Guba, 1985; Mertens 1998).

4.9.1 Credibility

Credibility (validity) is concerned with how alike the findings of the research are to reality. The extent to which there is a correspondence between the way participants view the social constructs being studied and the accuracy with which the researcher captures and portrays these perceptions are key (Mertens, 1998; Merriam, 1998). In this study the credibility of the research findings was established by using: triangulation, peer examination, acknowledging researcher biases, member checks, mechanically recorded data and participants' own words (Lincoln & Guba, 1985; Mertens, 1998; Merriam, 1998).

Triangulation

Triangulation was employed to neutralise any inherent biases that might arise from individual participants. "Triangulation involves checking information that has been collected from different sources or methods for consistency across sources" (Merten 1998:18). In this study, triangulation or cross-checking of data was achieved through multiple methods of data collection, multiple data sources and multiple data analysis. These multiple approaches yielded multiple sets of data, against which the findings could be corroborated and substantiated as it provided multiple perspectives on the issue being studied. For example, the same finding from a different source will substantiate a particular theme or analogy, while contradictory findings would alert the researcher to incongruence and might result in the researcher disregarding the finding as its likeliness of being true would be diminished.

The multiple approaches employed were:

- multiple methods of data collection namely interviews, observation and document analysis
- multiple data sources namely the literature review, a broad range of interviews from the school community (parents, teachers, principal, district official, facilitator etc)

- In multiple data analysis, colleagues who work in the field of research and inclusive education acted as a 'sounding board' throughout the data analysis. The researcher first transcribed the interviews verbatim, then identified meaningful bits of data. Patterns in the data collected emerged using the procedures of qualitative content analysis. The researcher's colleagues, Laetitia Brummer and Lynette Collair, helped with thinking through the development of the coding agenda and drawing up of rules for inclusion to a category. The analysis was then checked by an independent analyst to corroborate the messages perceived by the researcher. The rules of data analysis in qualitative content analysis are made explicit thereby strengthening reliability and validity. Subjectivity is reduced and inter-coder reliability is increased, since checks for reliability are made easier.

Peer examination

The findings were discussed with a friend who is an educational psychologist and colleagues from IEWC who were involved with the inclusion of the visually impaired learners. They were asked to comment on the findings as they emerged ensuring inter-rater reliability.

Researcher biases

The researcher declared her motivation for undertaking the study, stance on inclusive education and world view that underpin the design of the study. Furthermore, the rationale for the particular unit of analysis and sampling was discussed earlier in this chapter.

Member checks

The participants were asked to verify, clarify and confirm the researcher's understanding of their comments, throughout and after the interviews. The researcher contacted the participants after transcribing the interviews to check responses where the tape recording was unclear.

Mechanically recorded data

The use of technology such as a digital tape recorder for interviews, digital video camera for observations and qualitative data analysis software (Atlas/ti) for data management and

interpretation made the raw data more accessible for analysis and checks. The researcher could retrieve and review data as needed. This also mitigated any human error.



Own words of participants

The researcher used the words of the participants to substantiate information and interpretations of the results.

4.9.2 Transferability (external validity)

Transferability in qualitative case study research is the extent to which the research design is adequately described so that the findings can be extended to other similar contexts and situations (Merriam 1998; Mertens, 1998).

The researcher, therefore, provided a thick, detailed description of the school and community context, socio-economic conditions and backgrounds of the key participants to the extent where anonymity was still preserved. The information on context and culture provided would aid the reader in making judgements on the transferability of the study. In other words, the reader could, to a degree learn from the findings if his / her contexts are similar to the conditions described.

4.9.3 Dependability (reliability)

Dependability refers to the extent to which the process of the research can be formally tracked and scrutinized (Mertens, 1998). This is achieved by providing an audit trail with a detailed account of the protocols followed in the research process. The steps undertaken to conduct the research needs to be traceable. Qualitative case study research recognises that human behaviour is dynamic so, in testing reliability, the aim is not to enable researchers to replicate the study, but allows others to judge whether the results are consistent with the study (Merriam, 1998). Dey (1993:251) concurs with this approach and states that “We cannot expect others to replicate our account, the best we can do is explain how we arrived at our results.”

In this study the audit trail was established by providing a detailed account of the research process. Furthermore, the data collected on audiotapes, verbatim transcripts, written responses, field notes and evidence from data analysis has been preserved in its original form. The researcher’s supervisor was provided with the details of the study and was kept informed on progress made throughout the study, further strengthening its authenticity.

4.9.4 Confirmability

In qualitative research, confirmability, refers to objectivity and is regarded as the extent to which the data has been accurately portrayed and the interference of the researcher's personal judgement curtailed. The criteria discussed earlier enhanced the trustworthiness, and also the confirmability of the study. Mertens (1998: 194) describes confirmability as "the ability of a researcher to explain the logic which informed the data analysis and an explanation of how the data can be traced to its sources." In this study the theoretical framework which has informed the data interpretation and analysis has been made explicit together with the linkages between the interpreted data, discussions and conclusions drawn. The stating of the rationale and thinking behind every step of the research encouraged the researcher to be more objective.

4.10 Limitations

Qualitative case study research in itself comes with limitations. The researcher recognised these limitations and tried to minimize them in the research design and by attending to issues of validity and reliability as explained earlier. Some typical limitations of case study research applied to this study. The study is mainly descriptive, so explanations about cause-and-effect could not be assumed. Since the descriptions depend on the memories and truthfulness of the people participating, the study's own authenticity is vulnerable. During the video recording of observations the participants may have behaved in a more desirable way to satisfy the researcher. The findings could not be generalised to the larger population and are specific to the case under investigation, the school that had included visually impaired learners. The reader can, however, learn from the experiences of others. The phenomena may, however, be over simplified and lead the reader to make incorrect conclusions about the state of affairs. Furthermore, the investigation relies on the instinct and abilities of the researcher, so the researcher's own biases may have an influence on the reporting of the data. These were, however, stated at the beginning of the dissertation.

4.11 Ethical Issues

The main ethical issues in qualitative research which needed to be addressed by the researcher were informed consent, confidentiality and anonymity, voluntary participation, freedom from harm and feedback (Merriam, 1998; Mertens, 1998). Researchers who undertake qualitative research are privileged to be let into the private lives of people. According to Stake (1994 cited in Merriam 1998:214), “Qualitative researchers are guests in the private spaces of the world. Their manners should be good and their code of ethics strict”. The researcher needs to honour this privilege in the processes of data collection and dissemination of information. In this study the following measures were applied:

4.11.1 Voluntary participation

The researcher first approached the parents of the learners who are blind and asked them to volunteer for the study. A colleague of the researcher who had supported the parents of one of the blind learners during the initial stages of including their child revealed that the parents preferred to keep the inclusion of their child a private matter. Fortunately, by the time the parents were approached, they were ready to share their story voluntarily and without being persuaded. They felt that the research might help pave a smoother path for visually impaired learners and their families who wish to include their child in a neighbourhood school. The parent of the other learner who was most recently included agreed to participate in the study on condition that the researcher did not interview her child’s previous teachers from the special school for the blind. Her wishes were honoured. The researcher recognizes that the information from the learner’s previous teacher might have provided good comparative data on academic progress and social-emotional wellbeing in a segregated and included setting. But, since the main focus of the study was on the inclusion of the learners at their neighbourhood school and other informants were available, this interview was not crucial to the study. The school was excited about participating in the study. All teachers, parents and learners participated voluntarily and freely. A letter requesting interviewees were sent out and parents and teachers could choose whether or not to participate.

4.11.2 Informed consent

The researcher carefully explained the purpose of the study and how it would be conducted to the parents of the learners in order to gain their consent. A form requesting permission from the Western Cape Education Department to conduct the research was completed by the researcher. The letter was emailed to the researcher and presented to the school on the first visit. The school was happy to accommodate the researcher, when the parents and Western Cape Education Department had granted consent.

Consent forms explaining the purpose of the research and requesting permission to take video footage of the learners was completed by two grade 6 classes. On the consent forms parents and learners could volunteer to be interviewed.

4.11.3 Confidentiality and anonymity

In order to assure the anonymity and confidentiality of the participants, the interviews were conducted in a private, quiet room in the school. The video footage taken was not included in the research report, to protect the anonymity of the participants. Pseudonyms were used to protect the identity of the participants and the school. Protecting the anonymity of the school was problematic since at this stage many are aware of the school's initiative and only a handful of schools have included blind learners.

4.11.4 Freedom from harm

An in-depth investigation could be potentially harmful to some or all of the participants as unflattering issues may be exposed. The participants were aware of this, but welcomed an outsider's perspective as this would serve as a learning opportunity.

4.11.5 Feedback

The researcher consulted with the parents about the emerging themes and general outcomes from the interviews and observations, without revealing the sources, as part of the process of member checks. Subsequent communication between the parents, facilitator and principal allowed for

some preliminary feedback. An opportunity to give more formal feedback after the completion of the dissertation was offered to the school.

4.12 Summary

In summary, this chapter explained the research process by unpacking how information was elicited and analysed in response to the research question. Specific attention was given to the research methodology, sampling, data collection and analysis procedures. Steps undertaken in this study to ensure the trustworthiness of the findings and ethical considerations were elaborated on. In chapter five, the findings of the study are presented.



Chapter 5: Findings

5.1 Introduction

In the previous chapter the research design, data analysis and strategies to ensure the rigour of the data were discussed. In this chapter the researcher will present the findings that emerged from interviews, observations and documents of the study. The background of the school and learners with visual impairment is provided in the beginning to contextualise the data presented. Thereafter the findings will be elaborated on in a lengthy narrative.

5.2 Background

5.2.1 Bounty School

Bounty Primary School is a co-educational, public school, situated in an urban, middle class community in the Southern Suburbs of Cape Town. It was established in 1950 and was previously a Model C school. The school's population is diverse in terms of race and culture. Both the principal and deputy principal are female, which is an indicator of the progressive nature of the school. The principal is also the only participant with a special education/remedial teaching qualification. The school had a unit class for learners with learning difficulties, but this class was closed and the learners were integrated into the 'normal' classes. The school first admitted learners with disabilities in 2000.

The school is child-centred and strives "to provide an educational programme in which each individual child is encouraged to develop their potential in both body and mind through independent work habits and sound self-discipline...", and aims "to develop well-balanced, happy individuals capable of meeting the challenges which lie ahead" (Bounty Primary School, 2007). The curriculum and the cultural and extra-mural programmes of the school are focussed on developing well-rounded, responsible citizens. The school makes it clear that the ideals they wish to achieve depend on "maintaining a harmonious relationship with... parents and the local community and by maintaining the high morale of the staff," (Bounty Primary School, 2007). The school values all positive contributions from the school community.

5.2.2 The visually impaired learners

The two learners who are the subjects of this study are called Justin and Noel for the purposes of the study. Their background information is given below:

Justin

Justin was 12 years old at the time of the study. He has been blind from birth. He attended a mainstream pre-school, accompanied by the facilitator, Jane, and started his primary school education at Bounty Primary. The seed to pursue alternative options to special school education was first planted by friends of the family who could identify with the strong desire of the parents to raise their young child at home, as opposed to sending him to boarding school. They did not wish to be separated from him. Justin's abilities encouraged them to place him in a mainstream school. His mother stated that once they saw what he was capable of doing, they decided to mainstream him.

Justin is a fairly confident boy, who enjoys the outdoors and sports. He has never repeated a grade and performs well in all learning areas. He is the eldest of three brothers and lives with his parents, whose home is within walking distance of the school.

Noel

Noel has also been blind from birth and was 13 years old at the time of the study. He attended a special school for the Blind in Worcester from the age of 3. He left that school at the end of Grade 6 to enter Bounty Primary School. The school and his mother suggested that he repeats Grade 6. At the time of the research he had only been attending a mainstream school for nine months. Noel is very talkative and dislikes sport, but enjoys mending and cleaning around the house. His mother is a single parent. (Field notes, December 2006).

5.2.3 The Facilitator

The facilitator, Jane, is in her early fifties and was originally employed as an au pair by Justin's parents. When the need for a facilitator arose, her experience with the family made her their first choice. Her devotion to her work stems from her strong Christian beliefs. The qualities of the

facilitator greatly contributed to the inclusion of the visually impaired learners. She did not have any formal qualifications in education, but her dedication, enthusiasm and will to succeed made the difference and helped create enabling conditions where the learners could thrive.

Respondent P 3: Justin's mother (doc - 3:37):

[S]he had no dealings or training or education with children, let alone in the educational area but I just knew she had that special quality and she was excited... [T]here's that natural intuitive ability that she just has, that knack.

The facilitator's personal experience and background helped prepare her for the job. She grew up in the town of Worcester where the Pioneer School for the Blind is situated; interacting with blind people was therefore a familiar experience. Supporting her own son with learning difficulties skilled her with the patience, perseverance and ingenuity needed to tackle the task of making the curriculum accessible to the visually impaired learners and overcoming obstacles.

Jane's broadly stated role was to support the visually impaired learners and their teacher by facilitating access to the curriculum in the classroom. For this reason, she learnt a number of specialised skills. The facilitator learnt Braille and passed the national exam with high levels of competence. She learnt how to operate the assistive technology they used and how to develop children who are blind 'on the job'.

The facilitator prepared herself through reading, discussing and observing others. Justin's mother gave her some books on educating and preparing blind children by the Royal National Institute for the Blind. The facilitator reported that the concepts in the book were familiar to her, as she knew what needed to be done instinctively.

In preparation for primary school, the facilitator visited the Special School Resource Centre (SSRC) in Worcester about three times before Justin started school to observe and learn more about how to develop blind children, what activities to do and how to use tactile aids.

The facilitator also attended meetings organised by Inclusive Education Western Cape (IEWC) previously known as the Western Cape Forum for Inclusive Education, where she had the

opportunity to learn from other facilitators and familiarise herself with the philosophy of inclusive education. She linked up with a number of key people who assisted her in acquiring the more specific skills such as Braille, computer literacy, Braille conversion of text and mediating basic concepts for learners who are blind. The resource person, a blind physiotherapist who worked at the University of Cape Town's Disability Unit, played a mentorship role throughout. The resource person taught her Braille and how to operate JAWS. The facilitator would call on her for advice on how to develop visually impaired learners' cognitive skills and making the curriculum accessible. The staff at the Disability Unit taught Jane how to raise pictures so that they could be perceived tactilely using a thermoform machine, and how to convert text into Braille using the Braille printer and special software they donated.

Respondent P 1: Facilitator (doc - 1:72)

[Renee] has supported me right from the beginning, she's my mentor

The facilitator constantly strives to improve herself. She has very basic computer knowledge and is therefore taking extra lessons to enhance her skills. The facilitator fitted in well with the staff and classroom teacher. The teachers appreciated her friendly nature and eagerness to assist where ever. Parents and school staff reported that she would go above the call of duty to help the visually impaired learners and others.

Respondent P 11: Principal (doc - 11:54)

Personality wise and just fitting in, being flexible, being so open to suggestion, you know, coming up with her own suggestions. Real go ahead go getter; ... we are lucky that we got this particular personality in our school who's fitted in so well into the school.

The facilitator had a good relationship with all the learners in the class. They respected her and saw her as an endearing adult with whom they could confide. All the learners fondly refer to her as 'Aunty [Jane]'

5.2.4 Participants

To preserve anonymity, the respondent code is provided with a description. Besides the aforementioned pseudonyms, the following was also used:

- Ms. Lynne, referring to the school principal

5.3 Findings

The findings have been organized according to the patterns and themes that surfaced and have been grouped into seven categories. The categories were guided by themes that emerged from the data and the theoretical framework in chapter 2 that discussed factors that contribute to the successful inclusion of learners who are visually impaired, in a mainstream school. The categories: (1) educational environment, (2) preparation, (3) academic inclusion, (4) social inclusion, (5) support, (6) contributing interpersonal factors and (7) spin-offs, are displayed in the table below. The categories comprise sub-categories and themes.

Table 5: Description of categories and sub-categories

Category	Sub-categories
<p>Educational Environment</p> <p>Refers to psychosocial factors that contributed to the educational environment at the school, which includes awareness of inclusive education, positive attitudes and beliefs about inclusive education and the nurturing school ethos and environment. These contributing factors created enabling conditions that promoted the inclusion of the visually impaired learners.</p>	<p>Awareness of inclusive education</p> <p>Positive attitudes and beliefs</p> <p>Nurturing school ethos and environment</p>
<p>Preparation</p> <p>The preparation by all the role-players to include the visually impaired learners included the preparation of learners with visual impairment through early intervention, preparation of the school including learners and staff, accommodations made to the physical environment and the preparation of the facilitator.</p>	<p>Early intervention prepared the learners with visual impairment</p> <p>The school, including teachers, investigated the learners' support needs through observation and discussion in preparation.</p> <p>Disability awareness prepared the psycho-social environment of the school</p> <p>Minimal accommodations to the physical environment were made.</p>

<p>Academic inclusion</p> <p>This includes factors related to the learning and teaching of the visually impaired learners. Among these factors are: the perceived flexibility of the curriculum to those delivering it, accommodation to facilitate the learning process, teaching strategies employed, interventions to increase independence and self-reliance, assistive technology utilised, how assessments were adapted and academic performance.</p>	<p>Perceived flexibility of the curriculum Accommodations to facilitate the learning process Teaching strategies Intervention to increase independence and self-reliance Technology used Assessments adapted Academic performance</p>
<p>Social inclusion</p> <p>This category refers to not only the interaction and participation of the visual impaired learners in the school setting and beyond, but also considers the factors that impact on their social inclusion. The clustered theme includes participation in school, socialization and integration, bullying and discipline.</p>	<p>Participation in school Socialization and integration Bullying Discipline</p>
<p>Support</p> <p>Refers to the support received and offered by the role-players within the learners' ecosystem and includes parent support, support from school, support to teacher, support offered by facilitator, EMDC support, community support and financial support.</p>	<p>Parent support Support from school Support to teacher Support offered by facilitator Peer support SSRC support EMDC support Community support Financial support</p>
<p>Contributing interpersonal factors</p> <p>Refers to the personal and interpersonal factors among the role-players that contribute to the educational environment, academic and social inclusion and provisioning of support, which include leadership, relationships, communication, collaboration and roles and responsibilities.</p>	<p>Leadership Relationships between role-players Communication Collaboration Roles and responsibilities</p>
<p>Spin-offs</p> <p>Refers to the by-products of including the visually impaired learners and learning, which include benefits and suggestions for improvements.</p>	<p>Benefits Lessons learned and Suggestions</p>

5.3.1 Educational environment

The awareness of inclusive education, positive attitudes and beliefs of the role-players and the nurturing school ethos and environment contributed to an educational environment where the visually impaired learners were accepted and accommodated. These aspects are elaborated on below.

Awareness of inclusive education

An awareness of the inclusive education policies, as well as the real life examples of learners who are being included in mainstream schools have contributed to an educational climate that is more open to diversity and the inclusion of learners who are blind in local mainstream schools. Education White Paper 6 was published in 2001. In the years that followed, The Education Department embarked on an advocacy and awareness campaign to promote understanding of inclusive education among district officials, principals, teachers and the public.

The educators, including the principal, became aware of inclusive education through meetings and correspondence with the WCED or in college (P11, P14, P16, P12, P8, P32, and P2). The first-hand experience at Bounty Primary enhanced their awareness of inclusive education for those who had heard the theory, but also fostered awareness among those who had not heard about it before (P18, P13).

P 2: Class teacher (doc - 2:2):

The first time I learnt about it was during my studies at college. All theory, the practical firsthand experience came here.

The parents and facilitator learnt more about inclusive education through the advocacy and advocacy-support work of civil society organisations working in the field (P3, P15 and P10). The training co-ordinator of IEWC, a non-profit organisation, informed the parents about their rights, Education White Paper 6 and what steps to take to include their son in a mainstream school. This awareness gave them the confidence to proceed with inclusive education.

Noel's mother, on the other hand, had contemplated moving her son from the special school for the Blind in Worcester for a number of years. She heard about Justin and other blind learners who had been included in mainstream schools and was keen to pursue this option. A radio talk on the topic of inclusive education by the researcher for IEWC and a workshop explaining inclusive education and the rights of parents held in 2005 encouraged her to finally make the decision.

Local newspapers had also reported on other learners with disabilities who were included in the local schools in her area. It is interesting to note that the parents' main source of information was not from the Education Department, but the non-government sector.

The great awareness of inclusive education is evident in the broader, more comprehensive definitions provided by the participants. The definitions shared common themes of all being welcome, accepting differences, and supporting learners to reach their full potential by meeting individual needs. Those who initiated the inclusion of the learners at the school or who offered support had a broader understanding of inclusive education (P19, P31, P11, P1/15).

Respondent P11: Principal (doc - 11:2):

[I]t's a case of all learners having a right to learn with support... And that no learner should be excluded from the education system or the school community or even the wider community...it also means that all learners are different and they all need different support obviously, different needs and that an inclusive school recognises those different needs and I think employs different strategies to try to accommodate the learners.

The definitions by the majority of the participants focussed on equity, disability and special needs (P3/F, P3/M, P2, P8, P10, P12, P13, P14, P16 and P18). This limited perspective on inclusive education has affected the attitudes of the participants and how it was implemented.

Positive attitudes and beliefs

All but one of the participants' responses were positive and cited reasons for favouring inclusion over segregated education. They emphasised the right of parents to choose where to educate their children. The positive feelings towards inclusion were strongly related to how it promotes

integration, human rights and appreciation of diversity (P1/15, P2, P25, P6, P12). Participants expressed a sense of pride because the whole school was very supportive of the blind learners attending Bounty school.

Respondent P19: SGB Chairperson (doc – I9:35):

I was very excited, very happy to see, very emotionally taken up by the fact that we had visually impaired kids at the school ... And then when I landed up on the Governing Body I actually felt a sense of pride in that the school had taken on this.

Respondent P25 Classmate and friend who has learning difficulties (doc - 25:24):

Well, no matter what child is different, no matter how they look or what they do, I think there should always be a part of like a normal child, like anyone. Like if someone couldn't walk and is a bit mentally challenged, they should still come to a normal school and do normal things. The only problem is that, they'll probably be a little bit behind even but that's okay.

The common misperception that inclusive education is about placing children with disabilities and special needs in mainstream schools as opposed to special schools were expressed by several participants (P3/F, P3/M, P2, P8, P10, P12, P13, P14, P16, P18). This placement would depend on their ability to cope and the severity of the disability (P3/F, P3/M, P2, P8, P9 and P32). The narrow understanding has, however, to an extent influenced how the learners have been included and the roles and responsibilities assumed by the role-players, in particular their parents and class teachers. The responses were nevertheless positive and enabled the inclusion of the visually impaired learners.

The positive attitude of the school was also evident in the actions they took to learn more about how they could adequately support the learners with visual impairment. They were very proactive and arranged to observe Justin at his pre-school and consulted with the special school. The school's commitment to include the visually impaired learners made them more flexible. This flexibility allowed Justin's parents and facilitator to use the time the learner spent in school in a way that was meaningful to him and allowed him time out of class to learn Braille in the early years and JAWS, a computer programme with speech, later on.

Respondent P1: Facilitator (doc - 15:17):

Everybody you know, it was amazing, they were very, very pleased to have this child and all wanting to know how can they make it work. ...

This positive approach can be attributed to the nurturing school ethos and environment.

Nurturing school ethos and psycho-social environment

The ethos of the school is based on the principles of honesty, fairness and respect for the culture, beliefs and feelings of others. The school has a long standing reputation for being a happy school with a relaxed, safe atmosphere. Benevolence and care for ones fellows is strongly emphasised at the school and is captured in the following statement from the school prospectus:

We encourage our children to have respect and support for one another and to develop a strong sense of consideration for others. Children are also encouraged to be mindful of the less advantaged.

A school that has a nurturing school ethos and environment is one that is welcoming, caring and supportive and has a strong sense of community. Bounty school is described as a welcoming school that has embraced the learners with visual impairment and the facilitator (P1/15, P11, P10 and P19). The school entrance is inviting; and the front deskstaff were warm, friendly and eager to help the researcher during the data collection period.

The school welcomed the facilitator as a member of staff and afforded her the same prestige, privileges and respect. The learners with visual impairment were accepted and welcomed, in spite of the challenges and hard work the staff would face.

About the facilitator

Respondent P 1/15: Facilitator (doc - 1:192):

They have just, I don't know, they are just marvellous. They have accepted me from the very first day.

About the learners

Respondent P19: SGB Chairperson (doc - 19:24):

[W]e don't have any policy ... They are welcome and they are included in every single facet of the school that they can be involved in.

The school is a true community school (P11, P3/M, P3/F, P19) that welcomes the active involvement of parents and the community to improve the school's facilities and services. The school aspires to serve the entire community and the SGB plans to create a centre where educational specialists and other services would be offered to learners with diverse learning needs. The school's facilities, such as a badminton court are shared with the community.

Respondent P11: Principal (doc -11:4):

[W]e very much have an open door policy,... the community are welcomed into the school and we are always open and willing to hear advice and ideas, in order to get the best out of the children.

The school environment is generally warm, supportive, encouraging and accommodating to all. (P19, P13, P11, P14, P17). It aims to create a nurturing learning environment where every learner feels accepted and has an opportunity to develop their strengths. The culture and ethos is one that fosters unity, equity and serving others, making it easy for the learners with visual impairment to be accommodated. The chairperson of the SGB who is a past pupil of the school spoke fondly about the atmosphere and culture that prevails in the school.

Respondent P19: SGB Chairperson (doc 19: 24):

[I]t is a family school; it is a school that is considerate towards the parents, towards its learners, very caring, very accommodating....

Respondent P13: Teacher (doc - 13:13):

I think the school does everything to accommodate them – for any learner to be quite honest.

The school leadership, in particular the principal, has been instrumental in creating a warm and supportive school environment where learners can thrive. She stresses the importance of being

flexible and open to learn and change. This aspect will be explored further in the section on leadership.

Respondent P 2: Class teacher (doc - 2:15):

[T]he principal was very supportive and in general everyone is very supportive, everyone who I come in contact with.

The learners are kind and live up to the school's motto, 'To serve others'. While on site, to conduct the interviews, the learners would offer to guide the researcher around the school. A response from a learner portrays how kindness towards all is common among them.

Respondent P 6: Learner (doc - 6:10):

We're kind to them, just like we're kind to everybody else in the school.

The school utilises all available resources and welcomes all positive contributions. They encourage parental involvement at all levels and have innovative systems in place to facilitate the process. At the beginning of the year the parents meet with the class teacher to discuss curriculum-related issues and expectations for the year, so they are immediately drawn in. Furthermore, each class has a class representative, a parent that supports the class teacher with administrative duties such as collecting monies for fundraisers and communicating with other parents. The class representative also organises a surprise party for the class teacher on behalf of the learners. There is a Parent Teacher Association, where parents volunteer to help in the library, tuck shop and fundraisers. The researcher witnessed a 'Thank-you'tea held on 2 November 2006 in honour of the loyal parents and community members who had devoted time and energy to support the school and staff.

The strong sense of mutual appreciation and respect has sustained the nurturing school ethos that has enabled the inclusion of the blind learners.

5.3.2 Preparation

The preparations made by all the role-players to include the visually impaired learners, namely the preparation of learners with visual impairment, preparation of school including learners and

staff, accommodations made to the physical environment and the preparation of the facilitator, were considered.

Early intervention prepared the learners with visual impairment

The efforts to further the physical and cognitive development of Justin in the early years, prepared him for inclusion into a mainstream school. His father, being a health professional, contributed by being particularly vigilant about his son's development. Justin's mother was aware of her crucial role as mother and did all she could to ensure he got the support he needed. He received intense physiotherapy and occupational therapy from a very early age to keep him abreast of his milestones. Justin's parents also allowed him to develop his confidence in orientating himself by allowing him to explore his environment freely.

Respondent P 3/M: Justin's mother (doc - 3:51):

We've never brought him up packed in cotton wool, we've always allowed him his freedom to explore his world and I think that that also helped with his very good spatial and orientation awareness.

The parents from an early stage were conscious of the importance of developing Braille and literacy in the learner's early years. They began exploring ways to develop his literacy when Justin was only one- and-a-half years old. Subsequently arrangements were made with the school to allow Justin time away from school to learn Braille.

Noel's mother felt that that the SSRC gave her son a good grounding to manage his disability. She assumed he acquired the necessary skills that aided his cognitive and physical development.

The school investigated the learners' needs

The school investigated what support the learners require through observations, interviews and discussions. The principal, prospective Grade 1 teacher and learning support teacher observed Justin in his preschool class (P3/M, P3/F, P11, P1/15 and P32) to determine what support he needed; the role of the teacher and what equipment would be required. The staff and key role-players also consulted with the pre-school principal, the specialist staff of the SSRC, facilitator and EMDC (a.k.a DBST) for information and advice to dispel fears, set minds at ease and

prepare the school to receive the visually impaired learners (P11, P12, P15, P2). The pre-school principal also addressed the staff about her experience of including Justin and other children with disabilities.

The school staff had little or no experience with children who are blind. They learnt on the job.

The facilitator and other professionals were the main source of information and support. None of the teaching staff did extensive literature research, because they could not find any relevant reading material on including visually impaired learners in regular schools.

Respondent P15: Facilitator (doc - 15:48):

So there was never like a plan ahead, we just took every day as it came and every obstacle that came across my path, I found a way to move pass it....And I've learnt and I've made silly mistakes.

Given the limited information on what protocol to follow at the time, the school did as much preparation as possible. All the role-players adopted a positive attitude of 'failing forward' and made every mistake a learning experience.

Disability awareness prepared the psycho-social environment of the school

Preparation of the psycho-social environment of the school was undertaken by the principal and facilitator. The principal addressed the fears of her staff by inviting individuals to speak about their experiences of disability. A blind man from the community brought along his guide dog and other items blind people use and spoke to the whole school, in assembly, about his life. The facilitator also used strategies appropriate to the level of the learners to sensitize them to disability. She explained disability as an individual attribute, such as hair colour, and directed a role-play portraying how to assist a visually impaired person for assembly. Other child-to-child strategies included allowing the learners to experience being blind, so that they could have empathy and understand how Justin is able to 'see'. These awareness raising initiatives made the environment more welcoming for the visually impaired learners and helped to mitigate the fears of some younger children and the tendency of older learners to over assist. The school did not inform the parents of the sighted learners before the time or send out a special circular. The

orientation and first parent-teacher meeting was used to inform them and their permission to admit Justin was never requested. The principal merely made herself available to answer questions from concerned parents to put them at ease [P15, P17, P3]. This approach emphasised that Justin and Noel are learners like every other pupil of the school.

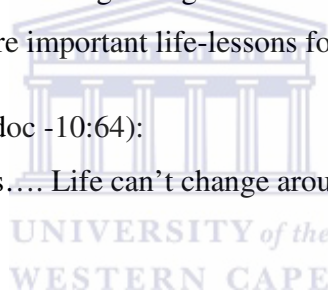
The preparations of the psycho-social environment made the school more conducive for the visually impaired learners.

Minimal accommodations had to be made to the physical environment

No significant accommodations were made to the physical environment. There were concerns from school staff around safety such as managing the stairs, but the learners managed quite well. The parents of the visually impaired learners felt that changes to the physical environment were not essential [P11, P15, P10], since learning to negotiate the real world with its obstacles and infrastructural challenges were more important life-lessons for their children.

Respondent P 10: Noel's Mother (doc -10:64):

I wouldn't recommend any changes.... Life can't change around you, you've got to change around life.



The mezzanine under the staircase that was previously a store room was cleared out to serve as the facilitator's office and house the Braille equipment (P1/15, P11). An additional space was created for the learning support teacher.

In the classroom, extra shelves were made available to store the learners' bulky Braille books because one text book would consist of several volumes of Braille books. Each blind learner had to have their own desk instead of sharing a desk to make room for the Braille (P12, P11, P3/f, P1/15). Easy, common-sense strategies were employed to make the environment safe and accessible, such as keeping the through-way clear of bags, so no significant changes were made to the environment.

The visually impaired learners were included through trial and error; applying common sense; and with the support of ordinary people and a range of professionals in special needs education, child development and inclusive education.

5.3.3 Academic inclusion

This includes factors related to the learning and teaching of the visually impaired learners. Among these factors are: the perceived flexibility of the curriculum by those delivering it, accommodations to facilitate the learning process, teaching strategies employed, interventions to increase independence and self-reliance, assistive technology utilised, how assessments are adapted and academic performance.

Perceived flexibility of the curriculum and learning material

How the curriculum was viewed by the key role-players was investigated. Those who held the view that the curriculum was flexible held the broader and more correct view of inclusive education and were able to be flexible and creative in their practices. The principal who held the broader view of inclusive education whereby 'all learners having a right to learn with support', is convinced of the NCS's flexibility and suitability for learners with special needs. She asserts that the assessment standard and activities can be varied to one that is appropriate for the learners and the progress of a learner can be measured against their previous performance.

Those who were negative about the curriculum and doubted its flexibility appeared to be less responsive to the needs of the visually impaired learners and placed the responsibility of making the curriculum accessible mainly with the facilitator. The class teacher saw inclusive education as, 'the mainstreaming of LSEN learners' and was less convinced about the curriculum's flexibility. He, like several other participants, judged it to be too visual and pointed out that there were no specific guidelines on how to adapt it for a particular disability and placed responsibility for adapting the curriculum and making it accessible on the facilitator (P2, P1/15, P3/M, P3/F, P10, P16, P8).

Respondent P 2: Class teacher (doc - 2:62):

[W]e can adapt it, certain parts with making it accessible, via a facilitator for the kids.

The participants commonly referred to the logistical problems and the visual nature of the curriculum, but this challenge is exaggerated by the limited view held by teachers, parents and the facilitator who regard the textbook as the curriculum and are less aware of the learning outcomes and assessment standards for the grade. This limited view hindered their creativity and ability to problem-solve or to tailor the curriculum and learning material for the visually impaired learners beyond Braille conversion. Probing revealed that the facilitator and parents had never seen the NCS, therefore the textbooks and the teacher were their only references.

The purpose of the curriculum – to develop well-rounded citizens - was not fully considered. Some of the learning outcomes of the curriculum were perceived to be too ambitious for the visually impaired learners, so learning areas were excluded as opposed to tailoring the curriculum. Learning areas and classes such as technology (construction / wood work class), art and media studies, were perceived as more challenging than others, due to their visual nature and were therefore excluded. The additional time, effort and creativity needed to include the visually impaired learners and ensure their participation, safety and enjoyment also deterred the teacher from including these learning areas. Technology was excluded because it involved working with 'hazardous' equipment such as saws and drills. The learners did technology up to grade four, but since the facilitator would build the models, the increased workload and limited benefits to them, resulted in the subject being dropped.

The more 'essential' learning areas such as maths, languages and natural science were prioritized. The abstract nature of the content in these learning areas demanded one-on-one instruction and extra time for reinforcing concepts covered in class. The limited number of hours in a school week meant that other subjects had to be dropped to free up time for this. Furthermore, the Braille transcription and reading the content was time consuming for the learners and facilitator [P15/1, P2, P11, P12, P8, P14, P3/M, P3/F, P10]. One text book would consist of several volumes of Braille books. So besides reading the Braille, finding the book, volume and then the page takes a great deal of time.

Respondent P14: Learning Support Teacher (doc - 14:45):

[W]ithin a school week there isn't enough time to cover everything. So you have to decide so what subjects are you going to satisfy so that they can cope with the core subjects.

It became apparent from further probing that the teachers and the facilitator had a limited understanding of the importance of the cognitive and knowledge aspects of the excluded learning areas.

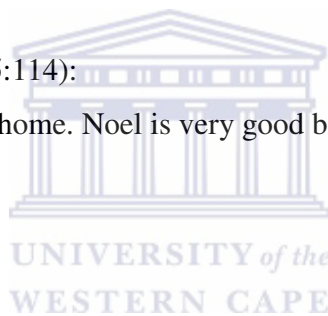
Respondent P15: Facilitator (doc - 15:101):

Media is library, they go to the library, they choose a book and I do think that the library teacher does talk about stuff that I'm not quite sure what she does.

The curriculum at the mainstream school did not include activities of daily living (personal and home care), as it was not a need for the majority of learners. These activities would form part of Life Orientation, but the time limitations made it particularly difficult to include. It was accepted that the learners acquired these skills at home and that Noel had received it at the special school he had attended.

Response P15: Facilitator (doc - 15:114):

[M]aking stuff should be taught at home. Noel is very good because he's been to Worcester, so he'll wash cars and mow lawns ...



Accommodations

The learners who are blind have no ISP. The policy documents of the national Education Department advise that an ISP be drawn up for learners who require additional support to document accommodations and plan interventions. The interviewees were aware of the practice, but revealed that this was not considered [P2, P10, P11, P1/15, P3/M, P3/F, P14, P8, P18]. The interviewees knew little about ISPs and had not prepared plans for the learners.

Reducing the workload of the visually impaired learners is an accommodation that was not well implemented. Justin's workload was not reduced even though it impacted on his social life by depriving him of the enjoyments and activities that boys his age are accustomed to. He worked diligently and till late at night to complete his homework. This gave the impression that he was 'coping' and no special measures needed to be taken. Noel's workload was, however, reduced and made more manageable. His additional barriers to learning related to language, educational background and home circumstances served as justification for reducing his workload. Noel's

mother seldom had the opportunity of engaging with her son's school work, while he boarded at his previous school. The quantity of homework was therefore excessive for her, since she had not experienced the gradual increase in homework with progression through the grades like other parents whose children stayed home and attended local schools.

Respondent P15: Facilitator (doc - 15:111):

But [Noel] definitely doesn't take home the same homework, mainly because his mother freaks out and then she confuses him even more.

The most apparent accommodation was converting text into Braille. Textbooks were converted into Braille by Pioneer Printers. However, worksheets, handouts and tests were converted into Braille by the Facilitator [P1/15, P2, P3/M, P3/F, P8, P11, P7, P6, P10, P28, P29, P14, P12]. This involved careful planning and timeous action by the teacher. The teacher had to give the material to be converted by the facilitator to her at least a week in advance. The facilitator also had to convert the notes written on the board into Braille and convert tests into a readable format for the learner and teacher. The Braille versions of the textbooks were not available on time [P15/1, P3/F, P3/M, P10, P11, P14, P31, P28, P29, P32 and P18]. The books were ordered in June of the previous year and only arrived in April the following year, resulting in the learners being without a textbook for nearly two terms. The facilitator had to compensate by Brailleing the necessary text.

The tedious nature of Braille justifies the allocation of extra time to complete tasks or reduce the workload. For example, a one-page comprehension converted into Braille could translate into four pages of print. So, in answering a question the learner would have to search through several pages for an answer whereas a sighted learner could simply scan the page for a key word and proceed to answer.

As discussed, very few concrete accommodations were made to enable learners to cope with the pace and content of the curriculum. The success of the learners in the mainstream school therefore hinged on their resilience, and the dedication and support of their parents and facilitator.

Teaching Strategies

Teaching strategies had to be modified to ensure that the learners with visual impairment could participate and benefit from the learning experience. More words had to be used to contextualise a topic or explain a concept that was represented visually. Diagrams, maps and geometric shapes were explained verbally either by the facilitator or teacher to aid their understanding and participation in the lesson [P2, P1/15, P8, P11, P12, P14, P16, P18, P28, P29].

Respondent P16: Music teacher (doc - 16:6):

[W]hen I was explaining something to the class, I had to remember to actually state exactly what it was, what it looked like and what was happening

The impairment of the learners made the teachers more aware of their difference in learning modalities. The teachers all remarked that they became more reflective in their practice. This enhanced their teaching skills and benefited the other learners in the class because they used more creative techniques.

They addressed tactile modality with the use of teaching tools such as string to demonstrate the length of a meter and a puzzle to illustrate the shape of a country and its provinces in geography. The facilitator raised images such as maps and diagrams of organs of the body using a thermoform machine so that they could be perceived through the sense of touch.

Respondent P12: Past Teacher (doc - 12:5):

I could give them an opportunity to touch or feel something...for example let them hold a piece of string that's a metre long or a metre stick or something rather than just saying a metre is this big and waving my arms ...

In the observed Maths lesson, the facilitator used three-dimensional geometric shapes, which she made, to illustrate surface area. These shapes were also used by the class teacher to explain to the learners who needed a concrete example to facilitate their understanding.

The accommodations described allowed the learners to participate in the learning and teaching activities of the class. Participating in these activities contributed to the cognitive and holistic development of the visually impaired learners.

Interventions to increase independence

The parents, facilitator and the school employed strategies to encourage independence. Strategies used at school focused on reducing the learners' dependence on the facilitator and others for learning and moving around the school independently to improve their self-reliance [P1/15, P2, P3/M, P3/F, P11, P18, P16, P12, P8, P29, P28, P8, P21, P25, P10]. The facilitator insisted that the visually impaired learners go out to break on their own or with friends.

The facilitator used modelling to demonstrate to other learners how to treat the visually impaired learners and foster their independence. The older learners and teachers tended to help excessively and to 'mother' Justin. The facilitator explained to them that 'mothering' him was detrimental to his development and demonstrated this in a role-play during assembly. She also gave the visually impaired learners space to tackle tasks on their own, which made them more independent.

In the initial stages when the facilitator started withdrawing her support to Justin in the classroom, she encountered some problems which were dealt with in a constructive manner. He was disturbed by her abrupt absence, so a more gradual approach was taken and the reason for her distancing herself was explained to him. The visually impaired learners now know that the facilitator will only assist them when they truly need her and at other times they should manage on their own. The option to request or decline assistance was always made available to the visually impaired learners. In the Maths lesson observed, Justin proved his ability to work independently when he politely declined Jane's help to figure out a particularly difficult 3-D shape.

Justin worked well independently, while Noel required more support, which meant that the facilitator spent additional time in the classroom. Noel's presence hindered Justin's independence to an extent, since in the years prior to Noel's arrival the facilitator made a conscious effort to step back. She would set up the material required for the lesson for Justin and then leave him to manage on his own or with the assistance of his peers. The transition to this

was difficult for Justin, but by the time Noel arrived he was happy and managed well with minimal support from Jane. When Noel arrived, the hard work towards achieving Justin's independence was undone to an extent, by Jane spending more time in the classroom again.

Respondent P 1: Facilitator (doc - 1:187):

So then I had to go back again and sit with [Justin] and wean myself off him and explain to him. And once he knew what the situation was, he was very happy not to have me in the classroom.

Justin and Noel's response to learning independently varied because of their backgrounds and academic competence. Justin felt more comfortable being alone than Noel, possibly because he was more academically competent and was included in a regular school from the start. In terms of activities promoting independent living such as household chores and self-care, Noel was far more capable because he was trained in daily living skills at the special school.

The school arranged mobility and orientation training for Justin and Noel to aid their independent movement around the school. Noel's great difficulty navigating his way around and moving from class to class alerted the school to this need – which for Justin came rather late in his school career. Noel relied heavily on Justin and the sighted learners to help him get around. Both learners were taught how to use a white cane effectively, so they are better able to move independently around unfamiliar territory. Justin, who is very familiar with the school, does not need the cane and is reluctant to use it because it slows him down. In the video footage the learners were assisted by peers, who dragged the cane. An interesting observation is that Justin lives within walking distance from Bounty school, but gets a lift to and from school. Not allowing him to walk home like other learners living nearby, restricts his independence to a degree.

The use of technology greatly contributed to the independence of the visually impaired learners and is discussed in greater depth in the following section.

Technology

Technology and computer literacy makes the learning and teaching material accessible to both the learner and teacher and is a means of achieving greater academic and social independence.

The role-players decided to acquire laptops for the learners that would improve their ability to cope with the increasing academic demands as they progressed through the grades. Laptops are universally accessible tools that allow the learners to take notes, read and respond to written text. The teacher is able to read the learners' work and no Braille is required. Text in electronic format can be read using JAWS. The software can also be used to navigate the internet which is very useful for independent research and learning.

The visually impaired learners use a Brailler, laptop and a memory stick to transfer and store documents. At present, the learners are able to touch type and are learning how to use the software more effectively. The screen-reading software enables them to listen to information in electronic format, while the Braille embosser and conversion software allows them to convert electronic documents into Braille.

Noel, despite having attended a special school for the Blind, was less competent in using computers than expected. Justin was more proficient. He had been exposed to computer early on to enhance his independence.

The technology used is generally very costly so only the essential equipment was purchased and the parents could not afford to upgrade this equipment. Jane looked at alternative, more cost-effective ways to make the curriculum accessible when the technology was not available. Her initiative shows that creativity, perseverance and motivation are far more important than technology.

Assessment

Assessment is an essential component of the learning and teaching process and is a means of gauging how well the learners understand particular concepts and master specific skills. The learners are continuously assessed in a variety of ways including tests, projects and oral presentations.

The assessment standards for the learning outcomes set out by the teacher remained the same for the visually impaired learners [P1/15, P2, P8, P3/F, P12, P14, P11, P16]. Worryingly, the blind learners were graded on the visual presentation of their assignments (the same as everyone else),

an aspect that they could not do. They also had little idea of what is an impressive presentation in order to instruct another person to do it on their behalf. It appears that inclusion, for the teachers, was understood as treating all learners ‘the same’, opposed to ‘fairly’.

The teacher and facilitator work together to draw up a ‘reasonable’ assessment. The teacher is knowledgeable about the curriculum while the facilitator’s strength lies in making the curriculum accessible for blind learners. Some consideration is paid to the questions in the test to judge whether the expected output is manageable for the visually impaired learners. The decision on how to conduct the assessment lies with the teacher, while the facilitator merely advises. Justin and Noel were assessed with the assistance of the facilitator who converted the test into Braille for the learners and then transcribed their answers from the Braille answer sheet so that the teacher could mark it. Visual aspects such as drawings were removed or changed so that the learners could demonstrate their abilities. The facilitator also simplified a complicated graph or map used to test the learner’s ability to read it.

Respondent P15: Facilitator (doc - 15:112):

I'd make it more simple but whatever's being assessed will be assessed...

The tediousness of Braille and the visual nature of the curriculum meant the learners with visual impairment needed additional time and some explanations to complete written tests [P1/15, P2, P3/M, P3/F, P8, P10, P32, P18, P28, P29]. To minimise disruption to the rest of the class, additional time at a separate venue was arranged for Noel and Justin.

Respondent P 2: Class Teacher (doc - 2:25):

They will just now have to get up and continue the test in another venue where it's quiet and then we can continue with our lesson, so as not to keep the entire class waiting ...

When asked why oral assessments were not used, time constraints were cited as a reason for not exploring this option. The researcher also sensed uneasiness with the authenticity of this method of assessment from the facilitator and teacher.

Academic Performance

The academic performance of the visually impaired learners was mostly grade appropriate, but both learners needed support to perform at the required level and or pace. Justin's scores ranged from three (satisfactory achievement) to four (outstanding/excellent achievement) with the majority of the learning areas rated four. Noel's scores ranged from two (partial achievement) to four (outstanding/excellent achievement) with the majority of learning areas rated at three.

Justin is a well-rounded child who excels in all the learning areas and his academic performance exceeded the expectations for Grade 6 [P1/15, P2, P3/M, P3/F, P8, P12, P11, P14, P16]. He works diligently and grasps concepts easily. However, the pace of the curriculum and research work involved necessitates that he receives support from the learning support teacher.

Respondent P 2: Class teacher (doc - 2:60):

He goes home, learns, revises, I can see it when I mark his tests. He's on the ball. He knows what's going on; he understands the majority of the concepts most of the time. So he's on par, his working competently, even above competently.

Justin struggles with language comprehension [P1/15, P3/M, P14], but this is not related to his ability to read Braille, rather an underlying language difficulty.

Respondent P15: Facilitator (doc - 15:98):

Justin has had a problem and it still needs help, with comprehension stuff and I don't think it's a blind thing. For instance he will never answer the question that's being asked ... It's relative to the question but it's never the correct thing.

In contrast, Noël needed to catch-up through remedial teaching. He was unaccustomed to the pace of work, expectations, language of instruction, workload and vastness of the curriculum, so he experienced additional barriers and had gaps in his learning [P10, P1/15, P2, P11, P18, P14, P28]. At the special school he attended previously the language of instruction was Afrikaans and the curriculum was, in all likelihood, watered down.

Respondent P28: Noel (doc - 28:2):

The learning areas are completely different and they much, you learn much more than what you use to, that I use to learn....it was quite poor the Maths there.

Despite a period of adjustment and additional support, Noel's academic progress was slow. Teachers and support staff therefore suspect that he has learning difficulties. Despite these challenges he remains happy and always tries his best. The remarks of the respondents [P1/15, P2, P11, P14, P18] support this notion.

Respondent P 2: Class Teacher (doc - 2:58):

Noel who has joined us this year... coming from the Worcester school where they didn't do the academics in terms of the pace and quantity at what we doing it in mainstream schools, Noel has struggled tremendously with Mathematics...

Confusion about the use of the curriculum, text books and other learning materials, made it difficult for the teaching staff to recognise its flexibility. This challenged their creativity in tailoring it to meet the needs of Justin and Noel. The accommodations discussed above made it somewhat easier for the learners to cope with the content and pace of the curriculum and other tools in the mainstream school. Accommodations such as extra time were considered to some extent; however, the exclusion of learning areas and resulting gap in knowledge and understanding of the world were not considered at all. The teaching strategies which included the use of more verbal and tactile teaching tools benefited other learners as well and encouraged the teachers to be reflective. In the classroom and school in general, the learners were encouraged to be independent by developing their computer skills and reducing their reliance on the facilitator given their academic abilities. The usefulness of technology to aid academic inclusion was recognised but the facilitator and learners were not completely dependent on this, allowing room for improvising and problem-solving in order to enhance the learning and teaching process. The academic performance of the visually impaired learners was affected by their backgrounds but it was fairly appropriate for the grade. Academic inclusion plays an important role, but is only one aspect of inclusion. In the following section, the social inclusion of the learners who are blind and related issues are discussed.

5.3.4 Social Inclusion

The learners' participation in school activities and their ability to socialize is a good indicator of their acceptance within the school. For this reason, the visually impaired learners' visible participation in day-to-day happenings at the school, how the learners were socially integrated with the sighted learners, as well as related factors such as bullying and discipline, were considered.

Participation in school

The learners participated in all facets of school life [P1/15, P2, P3/M, P3/f, P4, P5, P6, P7, P8, P10, P11, P12, P13, P14, P16, P17, P18, P19, P20, P21, P22, P23, P24, P25, P26, P27, P28, P29, P31, P32]. They participated in the classroom through group work and in extra-mural activities such as athletics, swimming, choir, theatrical arts and culture as far as possible, even though the level of participation varied. Noel and Justin actively participated in the prize-giving and cultural evenings, which were deemed the 'highlight events' of the school year. Parents and educators proudly commented on the learners' participation, while classmates regarded their participation as a given and nothing extraordinary.

Respondent P19: SGB Chairperson (doc - 19:29):

[T]hey're included in prize giving... and we have a choir and they're involved in all of those aspects of the school. They're involved with sports day. They've got their class, 100 metres that they run. ... They part of what's happening at that school all the time, which I think is fantastic.

The learners' participation in the classroom was aided by the facilitator and peers from time to time. In the beginning it was evident from the video footage that Jane had to encourage interaction and participation among classmates by providing support to both the visually impaired learners and the sighted learners. For example, she commented on the behaviour of pupils in the class, which amused the learners and triggered conversation among peers.

Justin enthusiastically contributed to the lesson by answering a question or commenting. For example in the video footage he was recorded eagerly raising his hand to answer a question on geometry. According to the facilitator and past teachers, Justin's enthusiasm to answer hinges on

his confidence in the accuracy of his responses. Noel's lack of confidence and competence in the work covered was a great barrier to his participation in the classroom, so he seldom asked or answered questions.

Respondent P 2: Class teacher (doc - 2:40):

I think he can sense when he's in the classroom and there are other eyes and ears on him. Automatically he senses that, he's not as confident, it's apparent.

The visually impaired learners enjoyed group work and group projects [P1/15, P2, P4, P3/M, P3/F, P8, P12, P21, P25, P28, P29]. Participants remarked how well they interacted during group work tasks and the enthusiasm and joy with which tasks were tackled. The type of activity, however, dictated the level of participation as the learners never participated in group work activities that involved drawing and other visual tasks.

Respondent P28: Noel (doc - 28:7):

We don't always go in a group, we only go in a there if we can... do that sort of thing, if we can't then we just do something else ... when they do things in the group like sometimes they have to do picture drawings...

Including the visually impaired learners in class activities such as group work and group projects also depended on the willingness of the classmates. Some classmates were very willing to include Noel and Justin as part of their group and did not mind the extra effort or the limited contribution they made, but others felt it a burden to include them in their group.

Respondent P14: Learning support teacher (doc - 14:37):

There are times when there is a group project and they're not picked to be in the group. I suppose because their contribution is limited.

Respondent P1: Facilitator (doc - 1:12):

Some don't like to have them in their group because that means that they got to put in extra effort.

In order to minimise the strain on a particular group the two learners were separated into different groups for group activities and discussions [P1/15, P2, P3/M, P4, P7, P14, P17, P18.P21, P22, P24, P25, P28, P29]. In terms of group projects, Noel indicated that Justin and he were usually paired up for convenience because of the extra support they needed [P15/1, P3/M, P3/F, P14, P10, P28]. Prior to Noel's admission to the school, Justin was paired with a sighted learner. A classmate gave a good example of how he and Justin worked together on a project by dividing the labour into manageable tasks for both of them. It appears that the tasks allocated to the visually impaired learner were more stereotypical and disability-related.

Respondent P25: Classmate (doc - 25:20):

Justin and I did, 'Care for our Environment'. ... I told him to write down, then I did the heading and then I stuck it on nicely, and his Braille.

The nature of games children play change with time, as they develop, which affects the ability of children who are blind to participate fully. In the early years, it is easier for children with different abilities to play together, but later the games become more physical and it is perceived as more dangerous for the learners to take part. Sports also become more competitive, hence it is seen as a disadvantage, having visually impaired learners in your team as it slows down the game. This resulted in Noel and Justin's non-selection for team sports. Consequently their participation in physical education was restricted. They were discouraged from playing any contact sports for fear of injury, so during physical education they did laps around a track with a partner instead of playing a team sport with rest of the class. The different activities to an extent promoted separateness.

A classmate, however, fondly recalled a time when they played cricket together in grade three and he was disappointed that it ended. Justin revealed that he had broken several bats, so his parents refused to replace the last one. This shows that playing a team sport is possible, if efforts are made to make the game accessible and promote understanding among classmates.

Respondent P12: Past Teacher (doc - 12:35):

I think when Justin was little, when he was in grade one and grade two, it was a lot easier because the children would all play together and. But I think when, as they got older it's become more physical stuff that is difficult for him to participate in.

Respondent P 2: Class teacher (doc - 2:15):

I'm quite sad about that because they supposed to be involved in our soccer games that we play at break, but some children ... don't want to play with them. They just ignore them because they can't kick a ball or something like that.

Justin's parents explained how his personality, i.e. he's gregarious nature, contributed to his eagerness to part take in all activities. He had a keen interest in playing soccer and cricket with peers during interval, despite his inability to fully and competitively participate.

Respondent P 3: Justin's mother (doc - 3:49):

It's also a personality thing, you know, not everybody's very gregarious and sociable. I think Justin by nature is a gregarious child, which makes it a little tricky because he wants to be involved.

Respondent P 3: Justin's father (doc - 3:50):

I mean he so badly wants to play, you know. And anything, you know, he's game for.

In summary, Justin and Noel participated in all aspects of the life of the school, but their levels of participation varied and were influenced by their confidence, personality and type of activity. Although the facilitator aided their participation in the initial stages, the positive educational environment of the school has sustained the continued participation.

Socialization and integration

Noel and Justin are happy and eager to go to school, indicating a sense of belonging. They are liked by most of their classmates and treated well. The vast majority of respondents agreed that the learners seem to 'fit in' and get along with their peers who accept them

[P1/15,P2,P3/M,P3/F,P4,P5,P6,P7,P8,P9,P10,P11, P12,P16,P18,P24,P25,P28,P29]. The video

footage, which shows the visually impaired learners socialising with a small group of boys from their grade, enjoying their lunch together and discussing cars and school work, confirms this.

Respondent P30: Noel (doc – 30:79):

[M]ost of the children in the class are very nice. Some of them go out to break with us.

Respondent P10: Noel's mother (doc - 10:27):

[T]hey do have a sense of belonging and acceptance. You would soon know and hear and feel if there was anything wrong.

In the months prior to the study, the visually impaired learners did, however, choose to isolate themselves from their sighted peers [P1/15, P2, P3/M, P3/F, P4, P7, P16, P18, P22, P32]. Noel's enrolment at the school and a previous blind learner from Zimbabwe (who left the school) hindered Justin's social integration because he rejected the other sighted learners and only chose to be with the other blind learner. Justin became very possessive over Noel and prevented him from socialising with others. The class teacher, facilitator and social worker noticed this and stepped in.

Respondent P18: Social worker (doc - 18:6):

[M]y main concern was I used to see the two of them at break, just the two of them sitting together. And I felt that that was very isolated for them.... that's not really inclusive education, if they sitting on their own and not integrating with the other children.

The social worker explained the natural tendency of adolescents to be drawn to those with whom they identify. The inclination of the blind learners (Justin in particular) to isolate themselves from the sighted learners in an attempt to protect the friendship was, in her view, relatively 'normal'. In the closing remarks of the interview, Justin made a discerning statement of friendship in which he emphasised that Noel was his 'blind friend', confirming that perhaps the friendship was most significant and thus treasured by him because of their similarity.

Respondent P29: Justin (doc - 29:22):

Noel is my blind friend, he's also blind and he's my friend.

Respondent P32: Support Person (doc - 32:26):

I think it tells you that actually it's the other blind person that he feels more comfortable with.

The facilitator, class teacher and social worker collaborated to remedy this social isolation. Noel and Justin went for group sessions with the social worker to improve their social skills and a 'buddy system' was introduced to widen the learners' friendship circle. Two of their sighted classmates volunteered to take them out to break and help them in class for one week. In the beginning, this system was monitored; thereafter, at the time of the research, it happened more naturally. The social worker commented that the buddy system presented an opportunity for some sighted learners who were perhaps uncomfortable with Justin and Noel to communicate with them. The learners with visual impairment spent their breaks on the sports stand with a diverse group of friends.

Respondent P15/1: Facilitator (doc - 15:68):

It was decided with the social worker because of the clickiness that we needed to break it up

The close friendship between Justin and Noel is quite evident from the video footage, but they interact more with other children during break-time. The intervention to promote their social integration can therefore be deemed successful. Unfortunately, the friendships with sighted learners have not extended to home. Justin and Noel socialise after hours and on weekends, but sighted children rarely came to visit them at home or vice versa. Both families are very private and have busy schedules, but to encourage socialization outside school, Justin and Noel's parents enrolled them in the boy scouts.

Bullying

The majority of the respondents cited that they were unaware of any bullying or serious incidents of this nature [P2, P3/F, P3/M, P6, P8, P12, P10, P11, P14, P16]. Bullying such as teasing, albeit undesirable, was regarded as a normal part of growing up and important for building resilience by many of the participants. Some respondents identified Justin as the perpetrator in bullying incidents [P1/15, P4, P7, P9, P12, P14, P18, P22].

Respondent P11: Principal (doc - 11:25):

[W]e had never had any instances of nastiness, ugliness, silliness, bullying, anything like that from the children

Respondent P12: Past Teacher (doc - 12:40):

No, not that I can remember. In fact I think sometimes Justin who was [the one] that did the bullying. You know, "go away, I don't want to deal with you", "I don't want to play with you", you know that kind of thing.

Respondent P14: Learning support teacher (doc - 14:36)

I think there has been some minor teasing and excluding and things. I don't think it was major, it was easily dealt with. ...Not desirable but normal because I think that happens to any child in any situation and actually I think it's almost healthier for them to be part of it.

Instances of bullying served as a learning opportunity to teach socially appropriate responses for both sighted and visually impaired learners. Justin could only show his dismay physically and verbally, since facial expressions and gaze, the more subtle cues, could not be used by him. This was explained to the sighted learners and they were shown how not to over-assist and began to recognise his abilities.

Respondent P11: Principal (doc - 11:27):

He didn't like the children because at first of course they wanted to do everything for him; ... He sent them off, push them off and as a result of that I think they realised that he was very capable of finding his own way around.

According to classmates, Justin does not deal well with teasing or critical comments and it triggered aggressive responses. The female classmates who were interviewed mentioned that some learners mocked Justin because of the strange behaviours he displayed such as fluttering his hands and head (Blindisms).

Bullying was not a significant negative factor in the social inclusion of the visually impaired learners in this study.

Discipline

Disciplining a child teaches them important lessons on acceptable and non-acceptable social interactions. Knowing what is acceptable in society should promote social interaction and social inclusion. Initially, the teachers were uncomfortable with disciplining a 'blind boy' and were over-sympathetic towards him. The facilitator therefore intervened and provided some guidance and support to the teacher. She emphasised the importance of promoting good behaviour and life skills by punishing negative behaviours.

Respondent P 1/15: Facilitator (doc - 1:18):

When we first came to the school, Justin would get away with murder but I wouldn't allow it, so they needed me to sort of guide them on that,..So what I saw with the other teachers was because of the blindness, they were always 'ag shame' and so I had to say to them 'no'.

Some learners and parents noted that Justin and Noel were given 'special treatment'. Justin was only reprimanded for a serious offence such as cheating, whereas the other learners were sent to detention for the same offence. This unfair treatment caused some resentment among peers [P17, P22, P25]. Although all learners were expected to behave with the same respect, the punitive action taken to reprimand those stepping out of line was not applied consistently to Noel and Justin. They were aware of the 'special treatment' they received and admit that they were not punished like the other learners. On the other hand, it was also noted that the visually impaired learners were generally well behaved.

Respondent P17: Parent of classmate (doc - 17:10):

Lately I have heard though that they're a little resentful that we've treated, Justin in particularly, treated so special... the teacher doesn't punish him. ...[M]aybe the teachers are a bit nervous that if they gave a blind boy detention that they being really, really nasty, ...

Respondent P29: Justin (doc - 29:18):

No you see, my teacher just talks to me about it.

Respondent P11: Principal (doc - 11:39):

So the expectations on behaviour and discipline are exactly the same but obviously here they are disciplined the same way but you can't let them go to detention to write out....

There was an agreement between the facilitator and teacher that classroom discipline was the teacher's responsibility, as the disciplining role in Justin's earlier grades lay with Jane.

Misconduct from Justin and Noel were dealt with sensitively by the professional team comprising teacher, facilitator and social worker. The wellbeing of the learners with visual impairment was of greatest concern, so the punitive steps taken looked beyond the actual misbehaviour and tried to uncover the root cause. This was a very good, child-centred practice that would have minimised resentment from peers, if it were applied to all learners. This perceived 'special treatment', might have created a social divide and hindered social inclusion. Fortunately the incidents requiring this intervention were few.

5.3.5 Support

The preceding elements discussed, i.e. educational environment, preparation, academic inclusion and social inclusion, all depended on the support, in terms of advice and goodwill, received by the key role-players. This support aided in creating enabling conditions.

Parent Support

This section discusses the elements of support received and offered by the parents. The support the parents received from friends and family encouraged them to 'just do it' and make the bold move to send their blind sons to mainstream schools and it is through their continuous and active support that their sons remain at the school.

Respondent P 3/P: Justin's father (doc - 3:21):

You know, nobody knows what to do and basically as we were going along and doing it, all the family was just saying well great, go for it, just do it.

The parents agreed that people, rather than literature, were their greatest source of information. For example, the support person, a blind physiotherapist who came from the special school system, provided lots of assistance and advice in the decision-making phase that dissuaded them

from the special school option. A consultant from a local NGO that supported inclusive education provided information and advice on inclusive education. She advised the parents on the steps to follow if they wanted to include their son in a mainstream school and encouraged them to approach their local community school. She also put the parents in contact with other useful resource people to access support.

Respondent P 3: Justin's mother (doc - 3:28):

[Renee] was a huge wealth of information for us and support. And for me initially [Lettie], she was just the drive to get us going with the mainstreaming... there are so many people, so I've kept a book ...,

The parents consciously built a network of support around them and they documented the contacts and advice of all the people who supported them. They were particularly conscious of getting the right support in the years running up to primary school. Justin's parents negotiated and accessed support from professionals working in child development to make certain that their son was developmentally on track and received early intervention. They approached ex-special school for the blind teachers for guidance on how to promote learning in the classroom. They also enrolled the support of the preschool principal in their search for a suitable primary school with an accommodating principal. WESTERN CAPE

Respondent P 3: Justin's Mother (doc - 3:26):

[W]e, as we've gone along and each year we've built up, we've networked, we've sort of built a structure around us of people we know and things that we have learnt

The parents were the crucial support and drivers in the process to include their children. They provided the tools and resources such as the facilitator and Braille that make the curriculum and learning material accessible. In the early years, Justin's parents arranged, and paid for, their son's Braille tuition (provided by Renee). Organising Braille material was rather challenging, since the parents had to buy printed textbooks, drop them off for printing in Worcester (very far out of Cape Town), pay for them and then pick them up after they had been printed in Braille. Sourcing Braille material and ensuring that the learners were Braille literate would be the responsibility of the Education Department, if the learners were at a special school for the blind.

Respondent P 3: Justin's father (doc - 3:80):

But it's driven by us, it's not driven by the Education Department ...Up until this year, there has been no input, ... We as parents have done it solely on our own.

Respondent P 1: Facilitator (doc - 1:112):

So they've got double trouble because they've got to buy textbooks, as well as get them converted.

Respondent P16: Music teacher (doc - 16:28):

[B]oth the boys have very supportive parents. So that makes a huge difference, you know to their progress and keeping up with their homework and all those things.

The teachers and facilitator acknowledge that the parents' support and hard work was pivotal and motivated them as educators to support the blind learners better. Justin's parents did all the initial ground work; including financing their child's support needs, giving input where ever possible and monitoring his progress from grade to grade. Having positive people around who listened and provided advice was comforting, inspiring and affirming to the parents who took up the challenge of educating their blind child in the unconventional setting of a local mainstream school.

Support from school

The school showed great interest and enthusiasm. They were very supportive from the time they were approached and even arranged to observe Justin for a day at his preschool to determine his support needs. In fact the entire school community were very supportive of Justin attending the school [P1//15, P2, P3/M, P3/F, P4, P6, P9, P10, P11, P16, P17, P19]. The researcher also detected a sense of pride from the parents and teachers which was captured by the SGB Chairperson.

Respondent P19: SGB Chairperson (doc – I9:35):

I was very excited, very happy to see, very emotionally taken up by the fact that we had visually impaired kids at the school... And then when I landed up on the Governing Body I actually felt a sense of pride...

The school not only supported the parents by buying into the dream for their child. In addition both the school and parents worked together to build each other's support networks.

Respondent P11: Principal (doc- 11:65):

The support and contact has been a two-way process. The parents were supportive... but they in turn were given the opportunity to meet up with the various stakeholders such as the Education Department; so both parties had the opportunity to network.

The positive outlook of the school was evident when they decided to go ahead to include the blind learners, despite the uncertainty of how to do so. The challenges encountered were dealt with optimistically and showed the openness to learn.

The school provided support to Noel and Justin's teacher by allocating a smaller, more manageable class of learners. This was justified by implementing a weighting system where the visually impaired learners were counted as 2 – 3 learners, depending on their support needs. The smaller class also made room for the extra equipment and shelving space to store the learners' Braille materials.

In addition to this, the school provided a room for the brailing equipment from which the facilitator could work and an additional room for the learning support teacher. They also arranged mobility instruction for the learners through the League of Friends for the Blind (LOFOB) after realising this was required to enhance Noel and Justin's independence. This need became apparent when Noel, who recently joined the school, had particular difficulty finding his way around the premises. The school also provided ICT support to the learners and facilitator to improve their computer skills with the assistance of an ICT educator. In the beginning the school was open and accommodating to the dream of the parents to have their blind children included, but later on they provided more direct support to Noel and Justin.

Support to teacher

The parents realised that supporting the teacher was critical. They thought it unfair to expect the teacher to know Braille and how to attend to a blind learner's every need in a large classroom – a view shared by the principal, teachers and parents of classmates. The parents therefore employed

a facilitator to assist the learners and the teacher in the classroom by making the curriculum and learning materials accessible.

The school made accommodations by providing a smaller class and the family provided a facilitator to ease the work of the teacher. Although the principal was open to providing additional training and support to the class teacher, she admitted that the teachers never asked for additional support, as the facilitator did a good job and provided assistance over and above what was required of her.

Respondent P11: Principal (doc – 11:19):

It was really going to be a case of waiting for the teacher to say look, this is what I need. But I must say it's been absolutely fantastic, they haven't ever asked for anything, anything extra. But I think that a lot that is because of [Jane]. She does more than is expected of her I think.

Initially the teachers including the current class teacher, previous teachers and facilitator were a bit apprehensive about having another adult in the classroom, because they feared being judged when not performing at peak [P1/15, P2, P8, P12]. The facilitator handled the situation very well and made the teachers feel at ease by encouraging them to use her as much as possible and to be themselves. All the teachers later admitted that they warmed quickly to the facilitator and enjoyed having her in the classroom.

Respondent P 2: Class teacher (doc - 2:7):

I was concerned about having an adult in the class. My concern is that it would be a almost test of myself as an educator and someone watching over me ..., those are my real feelings of apprehension, not about the learners as such ...

Respondent P 8: Past teacher (doc - 8:9):

So she actually made it a lot easier than I thought it was going to be.

The learning support teacher from the Education Department, who is meant to support both teachers and learners with barriers to learning, was unable to offer any technical support because the area of visual impairment was beyond her scope of practice. She attempted to assess Noel but was unsuccessful; hence her support was limited to encouraging words.

The class teachers confessed that they felt supported throughout the process as everyone offered words of encouragement, advice and assistance. Every new class teacher also had a strong and active support base of previous teachers, the principal and a social worker, among others, to share concerns and information, bounce ideas off, and get advice and support on pedagogy and social behavioural matters.

Respondent P 2: Class teacher (doc - 2:15):

[T]he principal was very supportive and in general everyone is very supportive, everyone who I come in contact with.

Support offered by facilitator

Jane was the main source of support to the teacher and learners with visual impairment to ensure their social and academic inclusion. Her primary role was to make the learning and teaching accessible to the learners with visual impairment. She aided the learners by ensuring that they were on track and understood what was being taught in the classroom and she worked hand-in-hand with the teacher to support the learners to reach the learning outcomes.

Respondent P10: Noel's mother (doc - 10:43):

That's up to [Jane] to check that they on the track. She's on hand to check that they not left behind.

Respondent P 2: Class Teacher (doc - 2:68):

She's the eyes and ears,... so she's literally making the curriculum and making school life on a day-to-day basis accessible for them.

The facilitator prepared learning and teaching material in Braille and developed tactile teaching aids for Noel and Justin after consultation with the teacher, hence the teacher needed to be prepared well in advance. Although this took away from the spontaneity of teaching at times, it encouraged the teacher to be better organised.

Respondent P12: Past teacher (doc - 12:12):

I basically told her, like I'd give her the modules that we working on for the next little while and then I'd tell her tomorrow we going to do this, this and this and then she'd make sure that she had those pages in Braille and stuff like that.

The facilitators' work extended beyond the two learners with visual impairment as she also assisted with administration tasks, discipline and supported other learners with barriers to learning. For example, Jane collected money from the pupils for special events, she would watch over the class when the teacher stepped out, she helped with art, reading and preparing for concerts. The parents were in favour of this approach, as they preferred the facilitator to be seen as a class assistant whose primary task was to facilitate the curriculum for their blind sons.

Respondent P12: Past teacher (doc - 12:11):

She was absolutely amazing and kept her distance but also kind of assisted when necessary with the other children but didn't get overly involved.

Respondent P17: Parent (doc - 17:25):

[Jane] was my big help in the classroom and I said just give the money to aunty...She was the great collaborator. Thank goodness she was in the classroom.

Respondent P 1: Facilitator (doc - 1:131):

I helped with everything, so that I'm not a burden in the class, but rather when I leave at the end of the year, I would like them to be able to say, "oh no, I'm going to have a year without Jane".

All contributions made by the facilitator were greatly valued by the teachers.

Peer support

Noel and Justin received a considerable amount of support from their peers. Their classmates instinctively assisted when needed it and sometimes their classmates even took over some of the responsibilities of the facilitator. For example, classmates assisted by getting the volume of a particular textbook out before a lesson started, guided them through the school when they were lost and helped the blind learners get on stage to receive a prize during assembly. The peer

support provided to the visually impaired learners was evidenced in the video footage and responses from learners, parents and teachers [P1/15, P2, P4, P7, P8, P9, P10, P11, P12, P13, P16, P19, P21, P25, P28, P29].

Respondent P29: Justin (doc - 29:12):

When, Aunty [Jane] is not there they, when we start working, they come to my table and they help me.

Respondent P 2: Class teacher (doc - 2:42):

They do it out of their own. But we never have to tell any other, anyone else to actually jump in and assist. They do it, the kids do it naturally...

Respondent P 9: Mother of classmate (doc - 9:8):

if they see him looking a bit lost, somebody will grab his hand or his shirt and say 'hey, come...'

Peers also assist on class outings by helping them move around safely when hiking and describing the surroundings. Also, on special events such as on entrepreneurship day, one of the classmates would assist by describing what items were on sale so that the blind learners could purchase what they wanted. The learners with visual impairment also supported each other. Since Noel was new to the school, he received a great deal of support from Justin, e.g. he helped him to settle into the new routine and navigate around the school.

Respondent P 2: Class teacher (doc - 2:92):

He relies heavily on [Justin] and he needs lots of coaxing

Respondent P 3: Justin's father (doc - 3:68):

Here he found somebody, somebody ...his own age that he was able to mentor.

The learners spontaneously assisted and supported the learners with visual impairment and this became an ordinary part of school life.

Support from the education department

The support offered by the Education Department from both the district office, referred to as the Education Management and Development Centre (EMDC), and the provincial department,

(WCED) was perceived as late and insufficient by most of the participants [P2, P8, P12, P18]. They expressed a desire for a better support system and quicker response time. The social worker also complained that when requesting assistance one is 'pushed from pillar to post' and calls are not returned. For example, she placed a request for mobility instruction, three months prior to the interview, which was not attended to, so the school took matters into their own hands and found an organization that could provide the service.

Respondent P 8: Past teacher (doc - 8:31):

I think the Department was a bit slow at first to come on board but they seem to now have recognised that this is a unique situation and looked for ways that they can help.

Initially Justin's parents preferred to keep all information regarding their son's schooling private. They did not want to bring any attention to him and they were afraid to share any information about including him in a mainstream school in the event that they might not succeed. This may have been why the Education Department stood back and did not intervene early on. The EMDC, however, offered broader support to the school through the link teams and other structures and the support focused on whole school development and learners experiencing barriers to learning. The support was, therefore, always available on request, yet the respondents perceived it to be minimal and only recently forthcoming.

Respondent P31: SLES Head (doc - 31:5):

We are in touch with the school about other broader school issues. So if there was anything that needed to be done, they would have informed us about it.

Respondent P11: Principal (doc - 11:89):

I must even say though the EMDC is slow and it drags its feet, they are very supportive of what we are doing. They are and they will help us where they can.

The school recently requested assistance with software, mobility and high school placement and planning. The EMDC responded positively to their request and the learners received IT support and JAWS was purchased for them to use.

Respondent P 3: Justin's father (doc - 3:110):

When we got these EMDC people to come in, I must say that we were pleasantly surprised ... recently they've brought some software

The school and parents valued the support provided by the Education Department. They expressed the desire for more support. The parents, in particular, were mindful of the challenge faced by the department to meet the requirements for inclusive education with their limited capacity, since it is a fairly novel concept.

Respondent P 3: Justin's father (doc - 3:78):

Are the education department able to deal with this, are they equipped? No, because... it's a whole new world for them.

Support from the Special School Resource Centre (SSRC)

The SSRC, Pioneer School, is meant to provide support and guidance to schools including learners with barriers to learning and monitor their progress in conjunction with the DBST. They are meant to provide resources and ideas on how to implement inclusion on a more practical level.

The SSRC was approached for support and, although they were not in favour of inclusive education, they kindly provided assistance. Due to the huge distance between the SSRCs that specialised in visual impairment and Bounty School, the provision of hands-on support was challenging. The parents, school and facilitator therefore contacted them telephonically or, when necessary, made the journey out to the SSRC. Prior to Justin attending primary school, the SSRC allowed the facilitator to observe some of their classes. There she learnt some useful strategies about how to make the curriculum more accessible using tactile equipment. The parents also built a relationship with the school psychologist, whom they consulted from time to time. Also, the printers affiliated to the SSRC continued to convert the learner's textbooks into Braille.

Respondent P 1: Facilitator (doc - 1:71):

We've had problems with the Pioneer School where they don't agree with what we're doing yet they've always been helpful. You phone and they will do their best to be able to answer the question ...but, it's very little support that they can actually give.

The SSRC also introduced the parents to Renee, a blind physiotherapist, who was encouraged by them to dissuade Justin's parents from 'mainstreaming' him. Instead, Renee spoke of her personal experience and offered to support them. She later became their greatest resource on issues related to the education of visually impaired children and taught both Justin and his facilitator Braille and other useful skills.

Respondent P32: Resource Person (doc - 32:1):

I was introduced to them, ironically by the school at Worcester, by the Pioneer School who asked me to speak to them and persuade them not to mainstream their child.

Noel was a past pupil of the SSRC, but his mother received no support from them following his inclusion in their neighbourhood school. She was disappointed that they had never contacted her to enquire about his progress. On the positive side, the SSRC developed Noel's independence and self-reliance by teaching him activities of daily living. Noel's mother felt that these skills (e.g. making ones bed , tying shoe laces and doing domestic chores) gave him a good grounding.

Respondent P10: Noel's mother (doc - 10:50):

I was quite disappointed in them, I thought even if just one of the teachers could have phoned to say how you going?

The facilitator and others assumed that Noel would be skilled in computer use since he came from the SSRC, but this was not the case. They also assumed that he would have been assessed by the professional team of educational therapists and were hoping to draw from their recommendations. Unfortunately his portfolio only included reports from his mobility instructor (P18). The role-players realised that the SSRC's personnel were not necessarily particularly knowledgeable or skilled in supporting and developing learners with visual impairment. A further example of this was when the facilitator requested assistance on how to notate equations

in mathematics and do complex calculations. The SSRC suggested using a calculator. Furthermore, Noel had very poor posture due to low muscle tone. This is common in visually impaired children, but with regular therapy it can be improved. Although biological factors might account for why it has not improved over time, complaints from staff of Pioneer School about a shortage of therapists and an inability to meet the therapeutic needs of the learners led the researcher to conclude that his condition was not given the intense attention it deserved.

On the whole, the support provided by the SSRC, despite their view on inclusive education, positively contributed to the inclusion of the visually impaired learners at their neighbourhood school.

Community support

Community support commenced recently, after Justin's parents allowed their story to be told by the media. Initially they wanted to avoid attracting attention in case their attempt to educate their blind child in their neighbourhood school failed. The increasing financial burden on the family and growing confidence in their endeavour has, however, made them more open to sharing their experience and accepting assistance from the community. Once people in the community were aware of the family and school they contributed generously.

Respondent P11: Principal (doc – 11:71):

[H]is parents didn't... want it publicised ...But I think what has changed for the parents is the fact that it's becoming more and more costly and actually you need to get people out in the community to help you and in fact they want to help you.

The facilitator's testimony on a Christian radio station, depicting her life and experience of supporting the two blind learners, sparked a positive response from the community. Friends and listeners who heard her speak offered donations.

Respondent P 1: Facilitator (doc - 1:177):

It's amazing how when people know what you do, how they just so want to help.

Some of the donations received included laptops and software from the Lions Club and Khanya project as well as mobility training from LOFOB. The Disability unit at the University of Cape Town lent Justin's family a Braille embosser, text-to-Braille software and thermoform machine (xykem heater) that raises images. The facilitator received a number of donations from friends and family such as scrap paper and a folding white cane.

Financial support

The bulk of the cost is shouldered by the parents. The parents pay the facilitator's salary, and for Braille textbooks and all other additional expenses such as private tuition from the learning support teacher. Although the Braille textbooks are subsidised, they still cost about R3,000. The parents of the blind learners estimated the monthly cost as approximately R 5,000 per child, excluding school fees.

Respondent P 1: Facilitator (doc - 1:111):

[T]hey pay my salary as well as [the learning Support Teacher] and also the school fees...And the textbooks are enormous costs... because they've got to ...purchase them in print and then they've got to be translated into Braille.

The facilitator was conscious of the financial strain on the parents and tried to reduce the demand by requesting they purchase only the essential items. She improvises by making much of the material herself, in cases when items are not readily available.

The school recently started contributing financially by subsidizing the facilitator's salary after a request from Justin's parents. The addition to the facilitator's salary was equivalent to the annual school fees of one learner.

Respondent P19: SGB Chairperson (doc - 19:5):

[Justin]'s father came to see us and he wanted to discuss the possibility of some sort of contribution to their, to the helper...There is no problem in including them in the budget at all. All that needs to happen is it needs to be put in front of us.

The parents of the visually impaired learners carried most of the financial cost of including their children, but the recent contribution towards the facilitator's salary from the school showed joint responsibility and acknowledged that the facilitator is indeed an asset to the school.

5.3.6 Contributing interpersonal factors

This section considers the personal and interpersonal factors among the role-players that influenced the educational environment, academic and social inclusion and the support provided. The elements discussed include the leadership of the school, relationships, communication, collaboration and roles and responsibilities of the key role-players.

Leadership

Ms. Lynne, the principal, is admired and respected by all. She is a strong supporter of inclusive education with a thorough understanding of the curriculum and the educational system. The school is well managed and the staff's personal and professional wellbeing is well catered for. Her leadership style contributed greatly to the warm and positive atmosphere of the school and the staff and parents commented on her character and their excellent working relationships with her [P1, P2, P3/M, P3/F, P8, P9, P10, P12, P13, P14, P16, P17, P18 and P19]. She is a decisive leader, solution driven and her 'open-door' policy makes people feel free to raise their concerns and contribute to solutions. Her awareness of the importance of a supportive environment to educate and develop learners and staff is reflected in her commitment to adapt, be flexible and learn; all of which are marks of a transformational leader.

Respondent P 3: Justin's mother (doc - 3:104):

When you go to the Headmistress and you say to her we think we have a problem and she says well let's see if we can find a solution.

Respondent P17: Parent (doc - 17:19):

The school in general is warm and positive. [Ms. Lynne] has a lot to do with that.

Respondent P11: Principal (doc - 11:59):

I think school support is creating an environment, creating an opportunity where the learner can be educated and where they can learn. So the support would be the school environment. Are we prepared to adapt and be flexible and welcome them? I think that it's a case of being open and willing to learn because we've learnt an awful lot and we had to adapt and change as we go along.

The strong positive leadership contributed concretely to the enabling conditions for the inclusion of the visually impaired learners. The positivity had a ripple effect on relationships, collaboration and co-operation among the other stakeholders, who subsequently were motivated and work well together.

Relationships

The relationships and networking amongst all the stakeholders enabled the inclusion of the learners with visual impairment. Over time the parents nurtured relationships with many individuals and organisations, that advised and supported them as the need arose. These relationships often flourished into friendships. For example, the parents made special efforts to show their gratitude and appreciation towards the facilitator, resource person and other contributors by giving gifts or treating them to dinner on special family days.

Respondent P 1: Facilitator (doc - 1:61):

When my kids were little, they would buy Christmas presents and birthday presents for them. So they've been very supportive.

The facilitator also collaborated with the class teacher in the classroom and established a very good, open, problem-solving relationship, which resulted in friendship outside of the school.

Respondent P15: Facilitator (doc - 15:9):

[W]e just got on like a house on fire

The parents of the visually impaired learners, like other parents of children with barriers to learning attending the school, were able to openly discuss issues with the principal and educators.

Respondent P 2: Class teacher (doc - 2:34):

[T]here is no preferential treatment as such, I don't call in any more regularly than I've done any of the other learners.

The teachers and parents expressed a deep appreciation and respect for one another and a shared commitment to do what is best for the visually impaired learners. This common goal created a bond between the role-players and they consciously nurtured relationships where openness, support and advice were encouraged.

Communication

The open and active communication between the role players created a positive school environment and an atmosphere of acceptance within the school. They had a sense of shared responsibility, where people felt free to ask for advice and problem-solve together.

Respondent P11: Principal (doc - 11:64):

[I]t's been really a two-way thing....I think that is important, there's got to be communication for things to happen.

Good two-way communication and listening among role-players ensured that the right action was taken and the learners' and teachers' needs were met. The communication was informal and ad hoc and there were more one-on-one discussions and telephone conversations or email than round table or formal meetings. The facilitator and teacher communicated daily to ensure that lessons were accessible and the learners were grasping the concepts. The teacher and facilitator also communicated very regularly to clarify learning outcomes for particular lessons. The facilitator also felt free to contact the support person whenever she was uncertain of what to do. Encouragingly, all parties and support people were easily accessible via telephone.

Respondent P 1: Facilitator (doc - 1:149):

Obviously the teacher and I are in communication all day, everyday

Respondent P 1: Facilitator (doc - 1:75):

Renee is always on the other side of the phone to help.

Respondent P 1: Facilitator (doc - 1:150):

[T]he headmistress and I, sort of, you know, will meet in the passage and I will inform her whatever I need. If I have information that she needs to know about, especially when we were negotiating these laptops, I was in her office quite often. And she would welcome me in there, that's not a problem

Formal meetings were needs driven, hence regular scheduled quarterly meetings with the role-players were not in place [P1/15, P2, P3/F, P3/M, P8, P10, P12, P18]. The facilitator and social worker expressed the desire to meet more frequently. However, everyone's busy schedules made it difficult. The learning support teacher contacted the parents once or twice a term, while the facilitator met with them to discuss urgent matters or when large amounts of information had to be relayed that could not be dealt with by email.

Communicating information from one grade to the next was easy and convenient, since the facilitator moved with the learners. In preparing new class teachers for the visually impaired learners, Jane discussed in detail Noel and Justin's profiles (i.e. their backgrounds, academic performance, social skills and areas where they needed assistance) with them. In addition the class teacher had access to previous teachers and the parents who were encouraging and eager to share their own experiences.

Respondent P12: Class teacher (doc - 12:24):

I had a meeting with the parents, finding out from their side what they expected of the teacher and the class and just finding out from them the children's kind of quirks and personalities and stuff like that...

In general, the school valued communication between parents and school. During the first term, parents were invited to meet with their child's new teacher and have the opportunity to highlight expectations and any concerns. For example, parents of classmates have, on occasion, raised their concerns about having a visually impaired learner in the class and how this may impinge on their child's education. The school was always very open with the rest of the school community about the visually impaired learners, accommodations put in place to ensure their effective schooling and the benefits of an inclusive environment.

Collaboration among stakeholders

There was generally active and positive collaboration and seemingly natural co-operation among staff. The teachers, facilitator and the principal at the school worked well as a team. The researcher observed a group of four teachers working pleasantly together in the staffroom. There was a lively discussion on how to adjust their work schedules for the following year to ensure that they do class activities together. The buzz in the staff-room was happy and pleasant.

Field notes 4 October 2006.

Any individual who could make a meaningful contribution was drawn in to collaboratively address an issue. The collaboration was most evident between the teacher and facilitator, but overall everyone worked well together.

Respondent P 2: Class teacher (doc - 2:86):

We have excellent collaboration, really innovative. We have a very effective system going ... whatever work we have planned to do for the term, I give to the facilitator

In the previous sections several examples were cited where role-players worked cooperatively to problem solve and/or implement relevant interventions. The social worker, teacher and facilitator worked together to promote better social integration of the visually impaired learners. The school, parents, community-based organisations and Education Department worked together to acquire assistive technology and other assistive devices. These examples of collaboration illustrate how the collective action of individual role-players enabled the inclusion of Noel and Justin. The facilitator did, however, play a pivotal role by co-ordinating the collaboration, resulting in her shouldering the bulk of responsibility at times. The social worker, who recognised the facilitator's strain, therefore, supported a more formal, whole team approach.

Respondent P18: Social worker (doc - 18:21):

[T]here needs to be more of a team approach. That [Jane] needs more support when working with the kids, that it's not all [Jane]'s responsibility.

Roles and responsibilities

The roles and responsibilities of the key role players were fairly clearly defined. The parents, school and facilitator discussed what roles they were going to assume from the onset. Jane and the parents agreed that activities of daily living such as dressing, tying shoelaces, brushing hair and teeth, etc. would be taught at home and would remain the responsibility of the parents.

Respondent P1: Facilitator (doc - 1:28):

[It's] the parents that need to do the home based stuff with them I believe, I can encourage them but and I have, but that's as far as I can go.

In the discussion on the conditions of admission of the learners, it was decided that Jane's remuneration and any special equipment were the responsibility of the parents. In turn, Jane was welcomed as a member of staff and enjoyed the privileges and support the school had to offer.

The facilitator clarified the boundaries between herself and the class teacher, to prevent any confusion and dispel any anxiety the teacher may have felt. She was careful not to impinge on the role and responsibilities of the teacher and hence sought the teacher's permission before assisting in the classroom. She kept her distance and never got overly involved in the general classroom activities.

Respondent P 1: Facilitator (doc - 1:142):

Obviously, with the teacher's permission, because I, my most important thing is never to stand on any toes and not to get in the teacher's way.

The role of the teacher and facilitator were blurred at times, because of the instructional role the facilitator often played. In addition, although Jane's role was to mediate and make the curriculum accessible, her close relationship and proximity to them, made the distinction of who was the teacher unclear to the blind learners classmates.

The inability of the class teacher to read Braille, made it hard to gauge the learners' understanding in subjects such as mathematics without the mediation of the facilitator. The facilitator, therefore, at times took primary responsibility for the education of the visually

impaired learners. She made certain that they grasped the concepts and sent additional work of aspects they needed more practice in, home. The expectations of Jane, to ensure that they were on track, therefore, clashed with the responsibility of the class teacher who was meant to be ultimately responsible for the education of the learners. Justin's parents tried to affirm the teacher as the primary educator by insisting that Justin asked his teacher, and not Jane, for clarification in the same way as all the other learners did. The impression from classmates and their parents was, however, that the facilitator was the 'blind children's teacher' [P17, P4, P7, P8, P10, P12, P17, P18, P22, P32].

Respondent P 8: Past teacher (doc - 8:3):

I felt sometimes that I wasn't completely their teacher because I had to sometimes explain things to [Jane], who then explain to them. Because for example maths when they were working, I couldn't see where they were going wrong and I'd have to wait for June to transcribe it for me, then see, then explain to her this is where they've gone wrong.

Respondent P32: Resource person (doc - 32:3):

Because I sometimes get the feeling ... that actually the person really educating Justin is [Jane]. She's basically the one who's really teaching him

Respondent P17: Mother of classmate (doc - 17:16):

I don't think they realise that Jane is the person who interacts with the kids, not so much the teacher as such...

No roles for the facilitator or teacher were defined and formalised by the Department of Education. Jane, however, assumed the role of a teaching assistant which included overseeing the class when the teacher stepped out or was absent, helping with concerts, assisting learners who struggled with maths and reading. This reduced the load on the class teacher, wherever possible. A contributing factor might be the lack of clarity on what the role of the teacher is. The class teacher assumed her regular role as teacher to the class, but when it came to Justin and Noel, she took her cue from the facilitator. In light of the heavy load carried by the facilitator, the social worker suggested that the teacher shoulder more responsibility.

Respondent P15: Facilitator (doc - 15:10):

I made her understand that ..., she was the teacher, she was the disciplinarian and it was her job to teach and discipline [Justin]. And it was my job to make sure that her job was easy

The social worker asked Jane to document her daily duties to formalise her role with a detailed job description that clarified her responsibilities and differentiated the role of the teacher to that of the facilitator with the aim of enabling the inclusion of the visually impaired learners.

According to the respondents the facilitator played an indispensable role [P1/16, P2, P3/F, P3/M, P10, P11, P13, P14, P18, P32]

Respondent P32: Resource person (doc - 32:4):

[T]he system is always going to work as well as your best facilitator can be.

Other role-players were clearer about their roles and responsibilities. The private learning support teacher understood that her role and responsibility was to develop Noel and Justin's research and language skills. The principal understood that her role was to facilitate Noel and Justin's inclusion by linking the various role-players and encouraging active communication among the parents, school and Education Department. More broadly she led and inspired the school to take on the challenge of educating the blind learners.

The SGB deals with business matters such as finances, infrastructure, staffing and guidance on the image of the school, much like a board. They are not involved in the day-to-day running of the school and curriculum issues as this is not their area of expertise, but have appointed several administrators to assist with these matters. This has freed up time for the principal, so she can better attend to the wellbeing of the staff and the delivery of the curriculum.

5.3.7 Spin-Offs

Benefits

Including the visually impaired learners has benefited the whole school community immensely. Among these benefits are: the preserving of the family unit, promoting inclusivity, an

appreciation for diversity and a positive attitude towards disability. Moreover, this example of promising practice towards inclusive education will benefit the education community in general.

The visually impaired learners' identities as members of the community was affirmed by them attending the local community school, as opposed to a separate special school away from their community.

Respondent P10: Noel's mother (doc - 10:57):

We went to our church over Christmas ...So if he wasn't at the local school, his teacher wouldn't have known who he is. He would have just been a blind boy.

Respondent P10: Noel's mother (doc - 10:2):

It gives the child a better life, they more accepted in the community and as far as I am concerned they should be in their community, not isolated.

Parents are able to enjoy the privileges of parenthood, watch their child develop, care for them and be more involved in their education. Including their child at the local school also helped to enhance relationships within the family and the community. It was comforting for the parents to have their child at home rather than at a boarding school far away and the parents have fewer worries about their child's wellbeing as they are able to care for him themselves. If the visually impaired learners attended the school for the blind, they would have to live in the school's hostel, since it is more than 60km away. Both Justin and Noel's parents expressed their joy at having their sons at home.

Respondent P 3/M: Justin's mother (doc - 3:120):

We didn't want to say, here's my child, you take responsibility for him, absolutely not...I didn't, they are my, our responsibility, I want to take care of [Justin].

Respondent P3/F: Justin's father (doc -2:135):

I want to see him growing up, I want to see his milestones, we want to see all that and we've seen those.

Including Justin and Noel was socially beneficial to them and their peers. They were able to negotiate real life and deal with the way people react to their disability from an early stage. This helped them develop social and communication skills. All the learners had the opportunity to form friendships with people who were different to themselves and the non-disabled learners learnt how to react and interact appropriately with people with disabilities. Parents, teachers and the visually impaired learners' peers supported this view.

Respondent P17: Mother of Classmate (doc - 17:12):

The advantages are always that your child will then be part of society and ... It's a matter of, this is the bigger world, get used to it...it's not nice, it's not always kind to your disability...

The acceptance of difference was evident in the way the learners focussed on similarities between themselves and their visually-impaired peers. They were conscious of the disability yet emphasised abilities, talents and skills. A strong appreciation of, and respect for, diversity came through in the responses from participants; in particular, the comments from learners were insightful and mature and focussed on equity and social justice. The blind learners were regarded as 'normal' and therefore entitled to the same rights, treatment and privileges. The learners were also more comfortable with disability and knowledgeable about the equipment used to support learners with visual impairment.

Respondent P 4: Classmate (doc - 4:20):

Just to respect them, they the same as us, just that they're blind. Same as deaf people, everyone's different but we all the same on the inside

Respondent P 4: Classmate (doc - 4:17):

[T]hese other schools, I mean there no blind people there. They don't know probably anything about Braille or Braillers, or get to know any blind people there and its very nice to know extra stuff.

Respondent P25: Classmate (doc - 25:8):

I think they should try to blend in with other children because they shouldn't be treated different, just because they blind.

Furthermore, the learners, staff and parents who were exposed to Justin and Noel have a better understanding of disability and their stereotypes of helplessness were challenged through interacting and observing the learners who are blind's capabilities and skills.

Respondent P13: Learning support teacher (doc - 13:10):

[A] lot of people do think, when somebody can't see, they then, mentally can't cope... the children in this school know that that's not true.

In the classroom, teachers of the visually impaired learners have commented on how they have benefited through becoming more reflective and versatile in their practice by including tactile material, which has enhanced their teaching and facilitated learning for other learners. Having Jane in the classroom has also eased the load on the teacher, because she assisted with classroom management, helped other learners who struggled and helped with the administration.

The experience of the school illustrates to others that including learners with any impairment is possible provided that everyone involved has a positive attitude, and support, appreciate and respect one another, and are committed to working together. Teachers who included the visually impaired learners are positive about their experience of inclusive education and encourage others to take on the challenge.

Respondent P19: SGB Chairperson (doc - 19:11):

[I]t shows other schools that you don't have to have specialized institutes for the impaired learners... we can as a, schools can obviously take anybody and provided we have the correct means, the bits and pieces the mechanics in place, we can accommodate....

Respondent P 8: Past teacher (doc - 8:35):

So I think if a school is worried and thinks; no, no, no, they can't cope they should actually give it a go. They'll be pleasantly surprised.

The experience united the school and coined Bounty Primary as an inclusive school where the entire school community feel a sense of pride and value the experience.

Respondent P 2: Class teacher (doc - 2:18):

Parents actually took the opportunity to stand up and praise not myself but praise the system and the way it's been set up to let their kids in on something which otherwise would not ordinarily had happened in a school. It was one of those feel good moments for me.

5.3.8 Learnings and suggestions

In hindsight, it is easier to identify aspects that would have facilitated the inclusion of the visually impaired learners. Participants suggested that guidelines and easy access to information would have been useful. The learning support teacher suggested that handouts with basic information on how to include learners with particular disabilities explaining what is expected from schools and role-players should be developed. Also, the need for more relevant and regular capacity building was identified. This capacity building should take the form of training for pre-service teachers, in-service workshops and on-going support. The participants also suggested that workshops and teaching exchanges between the special school and mainstream school would be helpful. SSRCs also need to be strengthened so that they can be a focal point of advice and services to teachers and parents of children with disabilities.

Respondent P11: Principal (doc - 11:87):

I think that really one needs to have initial training right from when you are a student teacher... and the same sort of ongoing training just to assist.

5.4 Summary

In summary, the findings revealed that the educational environment and positive attitude of problem solving together and 'failing forward' made it particularly conducive for the visually impaired learners to be included. The interpersonal factors (leadership, communication, collaboration) and support received were very influential in shaping how the learners' needs were being met both socially and academically.

What also emerged was that the understanding of inclusive education and the perceived inflexibility of the curriculum led to the facilitator assuming a somewhat cumbersome and authoritative role and resulted in the learners being more integrated than included at times.

Nevertheless the experience on the whole was reassuring. The classmates of the blind learners were more accepting of diversity and were proud of the experiences and knowledge they acquired. The teachers acknowledged that their practices were enhanced and their fears challenged. Moreover, the school leadership were proud of the school's achievements of being one of the rare or possibly first schools to take up the challenge of including blind learners.



Chapter 6: Discussion

6.1 Introduction

The discussion chapter ties together the lessons learnt in the preceding chapters, with what was uncovered through the investigation of how the blind learners were included in their regular neighbourhood school.

Chapter one of this study showed how the dearth of research in the field of inclusive education for visually impaired learners motivated the work and provided an orientation to the overall study. Chapter two presented a review of current literature on inclusive education and the enabling conditions for its successful implementation. Chapter three examined the historical aspects of education of the Blind and the move to inclusive education both in South Africa and abroad, as well as practices that promote the development and inclusion of visually impaired children.

Chapter four provided the theoretical bases for the qualitative and descriptive nature of the study used to uncover the factors that contribute to the inclusion of the visually impaired learners. Chapter five presented an analysis and interpretation of the research findings in relation to the educational environment, preparations made, academic inclusion, social inclusion, support provided, contributing interpersonal factors and other spin-offs of the process.

In the discussion of the results, the issues emerging from the study are reflected on and analysed against the background of the theoretical framework provided in chapters two and three. At the same time, insights into how the two blind learners were physically, socially and academically included in their mainstream, neighbourhood school are provided with emphasis on the degree to which they were included, enabling factors, challenges, strategies, learning and successes.

Thereafter, recommendations based on the findings are made to inform future initiatives to promote inclusive education for blind learners. Finally, the limitations of the study are noted to alert the reader to the confines within which the findings should be viewed.

6.2 Educational Environment

6.2.1 Ethos and school culture

“[W]e very much have an open door policy, the community are welcomed into the school and we are always open and willing to hear advice and ideas in order to get the best out of the children”.
(Bounty School Principal)

In the researcher’s view, the school found including the learners with visual impairment relatively easy, since it already embraced many of the elements of an inclusive school. The school prospectus and respondents attest that the school had a longstanding history of being nurturing and child-centred with strong community ties. The school’s commitment to fostering a nurturing school ethos and environment where both learners and staff are respected and able to flourish, is in accordance with the characteristics of an inclusive school described in White Paper 6 (DoE, 2001); the Guide for Full Service and Inclusive School (DoE, 2009a) and by Booth, et al (2000); Lipsky and Gartner (1997); Potterton et al (2005) and Stubbs (2008).

The school environment, according to several participants and the researcher, was generally welcoming and accommodating to all who wanted to make a positive contribution, be it for the learners, teachers or for the benefit of the greater community. For example, parents who volunteered as class representatives helped the teacher with class administration, which freed the teacher to attend to learning and teaching matters. Non-staff members who supported the learners who were blind felt comfortable working there. The facilitator was welcomed as an honorary member of staff, which made it easy for her to perform her duties.

6.2.2 Leadership

The school principal, who was held in high regard by all respondents, played a critical role in developing and maintaining a school ethos and environment that enabled the inclusion of the visually impaired learners. She, in the view of the researcher and several respondents, did not assume a role of power and status, but rather encouraged others to take the lead and show responsibility and initiative in areas where they had expertise. She presented as a dynamic and approachable leader who values the knowledge and skills of all, builds relationships based on

openness and trust and encourages problem-solving and collaboration. These characteristics match the requirements of an effective inclusive school principal proposed by Keyes et al (1999) and Skrtic (1991, cited in Mayrowetz & Weinstein, 1999). In their view, the leadership style of an effective inclusive education school principal is free, open and non-bureaucratic, where individuals are encouraged to problem-solve and exercise leadership in areas where they are skilled (Skrtic 1991, cited in Mayrowetz & Weinstein, 1999; Keyes et al ,1999). The non-autocratic leadership style evidenced in Bounty School is marked as key for the development of inclusive schools in South Africa by Engelbrecht et al (2003), Engelbrecht et al (2006), Kgothule (2004).

The leadership displayed in Bounty School also coincides with the leadership functions of schools where inclusive education is institutionalised, described by Heller and Firestone (1995 cited in Mayrowetz & Weinstein, 1999). In these schools, as observed at Bounty School, several stakeholders assumed leadership roles, regardless of their designation. For example, parents led fundraising initiatives and ran the tuck-shop. Similarly, the facilitator took the lead role in addressing issues related to visual impairment as she was considered the most skilled in this area.

Many respondents, in particular past teachers of the learners with visual impairment, spoke of the instrumental role the principal played in creating a supportive environment where they felt motivated to take on new challenges, experiment and show leadership. Fortunately, the division of labour between the SGB, administration and school principal freed the principal to devote her attention to issues critical for inclusive education such as the school culture, curriculum and parent, staff and learner relations. The principal also displayed a strong sense of social justice which Keyes et al (1999) regard as crucial for the leadership of inclusive schools. For example, she identified with the personal struggle of the parents of the visually impaired learners and their desire to have their children near them; trusted that the class teacher, facilitator and District Office would do their utmost to support the blind learners and enjoyed a good relationship with role-players in the school community.

A disadvantage of the free, democratic leadership style is that certain management issues noted by Katsiyannis et al (1996) and Keyes et al (1999), unless brought to the attention of the principal, could easily be overlooked. At Bounty School, the principal was the only member of

staff with a special school qualification, so closer monitoring and evaluation of staff might have revealed gaps in training in orientation and mobility for the learners and curriculum differentiation for the teachers, or curtailed the over-reliance on the facilitator.

In personal communication, the principal showed herself to be mindful of being flexible and open to learning and change when embarking on the process of implementing inclusive education. She was aware that inclusive education acknowledged the right of all learners to learn with support and was committed to honouring those rights as the head of an inclusive school.

“[I]t also means that all learners are different and they all need different support obviously, different needs and that an inclusive school recognises those different needs...” (Principal)

6.2.3 Understandings of inclusive education

Kleefe & Davis (1998) caution that the way in which inclusive education is implemented and the measures taken to promote it hinge greatly on how it is understood. In the study, inclusive education was predominantly and erroneously viewed by all the respondents' within the school community (teachers, parents, learners and facilitator), with the exception of the principal and head of SLES, as including children with special needs or disabilities in mainstream schools. This assumption, however, is more descriptive of integration and mainstreaming, both of which are underpinned by the medical model of disability, where the focus is on the child with the impairment, “fitting in”. By contrast, inclusive education involves the school identifying and alleviating barriers to learning in the system so that the learner is adequately supported. Stubbs (2008) acknowledges that mainstreaming and integration are often regarded as precursors to inclusive education. The actions taken to include the visually impaired learners in this study show a move from integration or mainstreaming towards inclusion. All initial interventions, with the exception of sensitising the school to disability issues, were predominantly preconditions for admission set by the school that needed to be met by the learner and their families. These preconditions – namely employing a facilitator, providing equipment and material, instruction in core curriculum for the Blind, and the ability to keep pace with the curriculum – did not impose any additional responsibility in terms of finances or effort on the school, suggesting an integration and mainstreaming approach as opposed to an inclusive

approach. Imposing a more instructional role on the facilitator, who was regarded as the visual impairment specialist, also fits with this understanding. Moreover, the initial cost of these preconditions and accommodations, including the cost of Braille textbooks usually provided free to learners who are blind at special schools, had to be met by the parents of the learners. In later years, the school started to take more responsibility by helping to purchase a laptop computer and offering to subsidise part of the facilitator's salary. The District Office also later purchased JAWS screen reading software for the learners' use. The assuming of more responsibility on the part of the school indicates a shift towards inclusive education.

6.2.4 Political climate and public awareness

The growing interest in inclusive education and the change in legislation might have influenced the shift in responsibility to some degree. In the years following the adoption of Education White Paper 6 (DoE, 2001), the movement gained momentum with the government allocating more resources. The positive gains with regards to legislation, policy and budgetary allocations on a macro-level, also contributed to the learners' inclusion. Prior to the CRPD (2006) that strongly states the government's obligation to provide assistive devices and reasonable accommodations for children with disabilities, the CRC (1989) limited the obligation insofar as the government had the means to meet it.

The view by parents, children and teachers, supports the assertion by Wildeman and Nomdo (2007) that there is little agreement on the definition of inclusive education among duty-bearers and that awareness-raising initiatives by government targeting the greater public were lacking. In this study, awareness-raising by civil society organisation such as IEWC to an extent compensated for this oversight, evidenced in that both families were inspired and supported by the organisation's advocacy efforts. This reinforces the crucial role played by civil society organisations to advocate, inform and promote the implementation of inclusive education, a point made by Stubbs (2008). The expertise and equipment provided by local NGOs greatly contributed to the inclusion of the visually impaired learners. Accessing support from NGOs was more successful and less cumbersome than following the bureaucratic channels of the Education Department. Respondents in the study reported that after failing to get a response

from the Education Department for orientation and mobility instruction, they contacted LOFOB, who provided the service promptly.

6.2.5 Attitudes to inclusive education

The overwhelming positivity of key role-players (parents, learners, teachers and school management) towards the inclusion of the visually impaired learners facilitated the process. The positive feelings towards inclusion were strongly related to how it promotes integration, human rights and appreciation of diversity, which is consistent with the goal of “building more inclusive societies” in UNESCO (2009).

The high number of teachers who were positive about the inclusion of the visually impaired learners in the study contrasted with the findings of studies conducted in South Africa by Swart et al (2002); Engelbrecht et al (2003) and Loebenstein (2005) and international studies by Scruggs and Mastropieri (1996), Avramidis and Norwich (2002), Avramidis et al (2000), Mushoriwa (2001), Moberg and Savolainen (2003) and Chhabra et al (2010). In these studies general education teachers felt that teaching children with disabilities was beyond their scope of practice and cumbersome. The findings of this study, however, concur with the assertions by Briggs, et al (2002) and Lanier and Lanier (1996) that teachers are more positive about including learners with sensory impairments as they usually pose no behavioural problems and come with additional support in the form of an itinerant teacher, teacher’s aid or facilitator.

Consistent with the views of Villa et al (1996); and Avramidis et al (2000), past teachers of the blind learners in the study were particularly more positive about inclusive education after their experience. Prospective teachers found their positivity encouraged them to take on the challenge of including the visually impaired learners in their classes.

The open, welcoming school environment, nurturing school ethos and positive attitudes created enabling conditions that promoted the participation of the visually impaired learners. However, the narrow understanding of inclusive education as the mainstreaming of children with special education needs in regular schools, by the majority of respondents, emphasises the need for

greater advocacy and awareness-raising amongst the public in general and parents and teachers in particular.

6.3 Preparation for Inclusion

The measures in early childhood, school community and environment and human resources to prepare the learner and school both physically and psychosocially were consistent with good practices highlighted in the literature.

6.3.1 Early childhood development

In the early years, both the Justin and Noel, although to different degrees, received occupational and physiotherapy to keep pace with expected developmental milestones and prepare them mentally and physically for formal education.

Justin's father, being a medical professional, was particularly vigilant about keeping him abreast of the expected developmental milestones. Both his mother and father carried out activities prescribed by the physiotherapist and occupational therapist to enhance his development and allowed him the freedom to explore his world.

Noel's mother enrolled her son in a special school at about age three, with the understanding that he would receive the early intervention he required. Noel, in contrast to Justin, displayed very weak muscle tone. This affected his performance in school. Knowing the importance of early intervention highlights how essential it is to develop accessible and effective services for children who are born blind and their families. This would involve strong collaboration between the departments of health, education and social development at all levels, as prescribed in the Disability Policy Framework and accompanying Guidelines (OSDP, 2008) and the Guidelines for ECD Services (DSD, 2009).

6.3.2 Preparation of the school community and environment

In order to evaluate what support the school would need to arrange, the principal and key staff observed Justin and interviewed his parents and other relevant people. This approach is similar to that suggested in the Screening Identification Assessment and Support (DoE, 2008a) strategy.

Consistent with the recommendations of Castellano (2005), the school made no drastic changes to the physical environment. The changes were limited to removing clutter and making more space available for books and equipment. Describing the school setting and giving the learners time before school commenced to orientate themselves to their surrounding was sufficient for Justin, but Noel's difficulties negotiating the environment alerted the school to his need for O & M training.

The school also applied a weighting system to reduce the learner to teacher ratio of the class where the visually impaired learners were placed: a recommendation of the NCSNET and NCESS report (DoE, 1997).

Both the school principal and facilitator employed strategies noted by Castellano (2005) to prepare the psychosocial environment. The principal invited capable, 'independent' and successful blind adults to speak to the staff and learners and to show teachers new to disability what is possible and what to strive towards. The facilitator used child-to-child, age-appropriate activities to explain disability and demonstrate how to assist blind learners in a way that was both responsible and did not provoke pity. The principal and facilitator were mindful of not perpetuating the disability stereotype of helplessness. In line with the recommendations by Lowenfeld (1975) cited in Tuttle and Tuttle (2005), the blind learners self-concept and the skill of balancing when to accept, refuse or ask for help was also fostered.

The principal, sensitive to the social significance of the blind learners' inclusion, used existing systems such as parent-teacher orientation at the beginning of every year, to inform the parents of non-disabled learners at the school about the inclusion of the visually impaired children. This reinforced that they were children from the community, not extraordinary, but the 'same' as other learners.

6.3.3 Human resources preparation

The principal and key staff also visited Justin's pre-school and the school for the blind in Worcester to observe and learn more about the educational needs of visually impaired children. The school staff and facilitator had little to no experience with children who are blind, but learnt on the job. In the researcher's view, a more solid theoretical understanding of the educational needs of visually impaired children would have been useful. Developmental challenges, especially those related to social inclusion and the steps required to promote independence, widely noted in the literature about educating children who are blind, could have been anticipated and planned for better, rather than dealing with matters in an ad hoc manner. Furthermore, the school's lack of a formal policy on inclusive education or a designated person on the SGB championing it (as prescribed by the South African Schools Act), perpetuated the ad hoc approach and resulted in there being no formal guides on the financial and practical responsibilities of individual stakeholders.

Encouragingly, the class teachers had a strong and active support base of previous teachers, the principal and a social worker, amongst others, with whom they could share concerns and information, bounce ideas off, and ask for advice and support on pedagogy and social behavioural matters. This greatly contributed to the successes of including the visually impaired learners.

Significantly, the study showed that adopting a positive, persevering attitude, a 'trial and error' approach of dealing with issues as they arose and using every experience as a learning experience, can be as effective and is possibly more important than applying a perfect formula before a child with a visual impairment enrolls.

6.4 Academic Inclusion

The most significant actions taken to promote the academic inclusion of the learners who are blind, were carried out by the parents and facilitator, who provided equipment, material and advice to make the curriculum accessible. This is in contrast with the legislation that places the

greater responsibility for creating inclusive environments on the government and hence its employees and systems.

6.4.1 Meeting the accessibility needs of the visually impaired learners in the classroom

The accessibility needs of the learners were partially met. In the study, material was converted to Braille, graphics were represented in tactile forms and more language was used to explain and describe material during lessons, as recommended in Castellano (2005) and Holbrook and Koenig (2000). It became evident that many more adaptations could have been utilized, such as using audio modifications in learning, teaching and assessment for content-loaded learning areas where the focus is on acquiring knowledge and skills and not developing literacy, as suggested by Holbrook and Koenig (2000). In the researcher's opinion, the perceived constraints of the NCS to be tailored for visually impaired learners by the teacher and facilitator, curtailed use of these modalities. On the positive side, innovative, low cost tactile learning and teaching material made by the facilitator was observed to be effective for bridging understanding of concepts. The efforts of the facilitator, who was recognised by all the respondents as being pivotal in making the curriculum accessible, illustrates how a positive mindset and creativity is more valuable than sophisticated theoretical knowledge and formal training.

“She's the eyes and ears. So she's literally making the curriculum and making school life on a day to day basis accessible for them”. (Class Teacher)

The teacher and facilitator worked hand-in-hand and built a good, open, collaborative relationship that focused on problem-solving. They communicated regularly to clarify the objective of the lesson or content to be covered. This helped the facilitator make the lesson accessible and develop appropriate tactile learning and teaching material which enabled the visually impaired learners to learn and participate more meaningfully in the classroom. From time to time, the teacher and facilitator also discussed the progress of the learners and whether they were mastering the concept being taught. The facilitator aided the learners by ensuring that they were keeping pace with the class and understood what was being taught. The approach used at Bounty School is similar to the co-teaching model used in Greece, as described by Argyropoulus and Stamouli (2006). In many ways, the facilitator was an invaluable support to

the teacher and occasionally assumed the role of a class assistant, assisting with many other classroom activities beyond attending to the visually impaired learners. As highlighted by Ritter et al (1999) and Hunt (2000) and evidenced in the study, this is beneficial to the 'typical' learners in the class who consequently receive additional pastoral and educational support and benefit from the adapted learning material and teaching strategies used.

The personality, commitment and personal background of the facilitator greatly advantaged the inclusion of the visually impaired learners. This confirms the assertion by Castellano (2005) that appointing the 'right person' to serve as a support is critical.

According to McKenzie and Lewis (2008), para-educators such as the facilitator, are meant to function under the direction and supervision of a certified professional. Although, in the study, the resource person to some degree could be regarded as the certified professional, as a trained physiotherapist she had limited knowledge of the NCS and there was no-one formally appointed to attend to quality assurance. This shortcoming is in part due to the lack of capable people within the education support structures. The facilitator's reflectiveness, noted in discussions, partly compensated for this, but she inevitably lost out on opportunities to timeously improve her skills in order to progressively respond to the visually impaired learner's needs as they developed and continued through the grades. WESTERN CAPE

In the researcher's opinion, the facilitator's status as the visual impairment specialist, and the teacher's lack of familiarity with the educational needs of visually impaired children, led to an over-reliance on the facilitator with regard to curriculum-related matters. For example, certain learning areas and lessons were excluded on the recommendation of the facilitator who had no formal training in the NCS or the guidance of a curriculum competent supervisor.

Interestingly, the two past teachers who were interviewed were considerably more creative in adapting their techniques to accommodate the visually impaired learners, were more positive about the flexibility of the curriculum and, in the facilitator's view, were less reliant on her to make accessible learning and teaching material. Consistent with Kochhar et al (2000), teachers in the study also testified that they became more reflective in their practice in general, improving their teaching skills and ultimately benefitting other learners who were less visually orientated.

The varying perceptions of the flexibility of the curriculum again point to the importance of designing effective pre-service and in-service teacher training courses aimed at empowering teachers to meet the needs of learners with diverse learning needs.

In contrast to general best practices and the recommendations of SIAS (DoE, 2008a) and Lohmeier (2009), the visually impaired learners did not have an Individual Support/ Education Plan. Such a plan would have included goals and interventions to develop the learners academically, socially and in the expanded core curriculum for blind learners (e.g. activities of daily living and O & M).

6.4.2 Academic performance

In the view of the class teacher, both learners' academic performance was on par with the grade requirements. Justin, who was more engaged in lessons and was included since the start of his educational career, was, however, regarded as academically stronger. This is in line with research by Bardin and Lewis (2008) that found higher academic achievement in learners who participated more actively in the class. Justin's parents, teachers and the facilitator had high expectations of him. His performance is consistent with the assertion of Ritter et al (1999) that higher expectations in mainstream settings translate into higher performance. Similarly, the higher demands of a broader curriculum might in part account for Noel's comparatively lower performance in a mainstream setting.

Besides having high expectations for their academic achievement, the nurturing student-teacher relationship, evident in the interactions between the blind learners, the facilitator and the class teacher, greatly contributed to the visually impaired learners' academic success. This is consistent with findings of Barraga and Erin (1992); Tuttle and Tuttle (2000); Chang and Schaller (2002) and several others.

On the negative side, Justin's above average academic achievement was to the detriment of his social and mental wellbeing. While to his teachers, he appeared to be keeping pace with the class, in effect he was spending excessively long hours completing homework, and this deprived him of the time to enjoy activities customary for children of his age.

6.4.3 Expanded core curriculum for the visually impaired

Consistent with the findings of Pavey et al, 2003, the O & M training of the visually impaired learners was neglected in their mainstream setting. Contrary to expectation, the learner who was previously enrolled at the special school for the Blind did not have anISP/IEP, neither was he more competent in O & M or JAWS. He was, however, very skilled in activities of daily living (ADL) such as household chores: an area that special schools for the Blind are historically renowned for over-emphasizing. This also highlights the limited capacity of special schools to provide a high level of support to learners that includes teaching them the compensatory skills required to access the curriculum using technology.

Consistent with the findings of Wolffe et al (2002), the learner who was included from the start of his educational career was less proficient in activities promoting independent living. His computer literacy and JAWS skills were, however, stronger. Being immersed in a setting where none of the educators knew Braille, resulted in a more accessible mode of communication and computer literacy being encouraged early on.

Besides developing compensatory skills, other strategies consistent with those proposed by Castellano (2005) were employed to promote independence. The facilitator used role-playing and discussion to discourage peers from over-assisting in the first grade. She also withdrew support to Justin in the classroom as he progressed up the grades. The many sporting and cultural activities available at the school ensured that the learner's recreational and leisure skills were well-developed.

In the researcher's view, the constructive collaboration demanded in drawing up an ISP might have enhanced the visually impaired learner's development in the expanded core curriculum areas that were lacking.

6.5 Social Inclusion

Social inclusion now and in later life was what drove the parents of the learners who are blind to enrol their children in their neighbourhood school. This motivation, according to Engelbrecht et

al (2005) and Schoeman (2000), is the main reason behind many parents' decision for inclusive education.

The study showed that the visually impaired learners participated in all aspects of life at the school ranging from academics to sport and cultural events. The social competence, confidence and personality of the visually impaired learners, acceptance by peers and the type of activity, did, however, influence their social inclusion and degree of participation.

In the early years, Justin and the sighted learners reportedly played well together and no real coaxing was required to get them to interact. However, as the games they played became more organised and competitive, the interaction decreased. The vulnerability to isolation, noted in the study, corresponds with findings by Tuttle and Tuttle (2000), who warned that isolation will increase particularly as interacting with sighted children becomes too much of an effort for peers. Similarly, the findings coincide with the findings of Guralnick and Groom (1987) cited in Celeste (2007) which dubbed blind learners as the least preferred playmate in an inclusive setting. The researcher's observations during physical education, where the blind learners were excluded from the team sport played by the rest of the class, further supports this argument.

The social inclusion of Justin amongst his sighted peers deteriorated when a second blind learner (Noel) joined the school. The two blind learners isolated themselves. A buddy system was therefore put in place and the blind learners attended sessions with the social worker to learn socially appropriate behaviours and help them feel more comfortable with themselves. In the researcher's view, the individual sessions with the social worker should have come sooner as they form part of the core curriculum areas related to social inclusion. The researcher's opinion corresponds with the recommendations by Celeste (2007), Curry and Hatlen (1988), and Wolffe (2000) who agree that social skills, self-determination and socio-emotional maturity are aspects that require direct intervention for visually impaired learners. Those involved in the intervention deemed it successful and were pleased with the learners' social inclusion at school, but concerned that they rarely socialised with their sighted peers at home. The researcher's observation of Noel and Justin socialising with a group of boys during break confirmed that the intervention was successful.

In the classroom the blind learners were located at the back of the classroom, close to their material but too far away from their classmates to exchange comments. Castellano (2005) advised that the blind learner's workstation should not be separate and obtrusive, as it was in this case, as this promotes division and the perception of difference. To a degree, this was mitigated by the facilitator who would comment on the unseen happenings to encourage the blind learners to interact and be part of the classroom.

The learners were expected to participate by themselves in group activities, while the facilitator kept her distance and allowed them to interact naturally. In this case, the proximity of the facilitator, contrary to Giangreco and Doyle (2007), did not hinder interaction with peers, but rather facilitated it. What is concerning, however, is that the activities assigned to the blind learners in group projects were often stereotypical as they related to converting written text to Braille. This begs the question as to whether the inclusion of the blind learners was tokenistic. On a positive note, all respondents reported that sighted peers naturally assisted the visually impaired learners with challenging activities or when the facilitator was absent.

Although the blind learners were extremely positive about their classmates and felt well-treated, the perspectives of some classmates were less positive. These classmates complained of bullying and favouritism. One of the blind learners cheated in a test and was not disciplined as harshly as his peers, which caused some resentment. Castellano (2005) and Holbrook and Koenig (2000) warn about the development of such a situation and stress that matters requiring discipline should be dealt with in the same manner for both 'typical' and visually impaired learners. In this case, the teacher had investigated the cause of the action and addressed it accordingly. This learner-centred approach should be applied to all learners.

Another barrier to social inclusion mentioned by classmates and noted in literature Wolffe (2000) were the 'blindisms' displayed by Justin. While his family and the facilitator did their best to deter him from fluttering his hands and poking his eyes, the mannerisms, although less frequent, persisted.

Although barriers to social inclusion existed, they were minimal and were being addressed. The positive educational environment of the school and commitment of role-players to ensure success has ensured the continued participation of Justin and Noel in the school.

6.6 Collaboration

The researcher's observations from field notes and responses from participants indicated that collegiality and sharing among staff and other stakeholders were common. In relation to the visually impaired learners, the stakeholders in this study consulted with each other when the need arose, so no formal meetings were scheduled. Although informal, the collaboration demonstrated by the stakeholders promoted interdependence and individual accountability, aspects which Thousand & Villa (1992) cited in Topor et al (2000) describe as trademarks of good collaboration. The principles and structure of the collaborative support displayed by the team, especially around matters of urgency, was more indicative of trans-disciplinary teamwork coined by Campbell, 1987 (cited in Topor et al, 2000). For example, every team member was jointly responsible for implementing the intervention to encourage the visually impaired learners' social integration designed by the social-worker (in consultation with others).

Interventions by the facilitator extended beyond her field of expertise. For example, the role of co-ordinating the support among role-players as well as monitoring the visually impaired learners' progress was wrongly placed on the facilitator, since she was not a trained educator or employed by the Education Department. Her function conflicted with the role of the ILST spelt out in the SIAS (DoE, 2008) document. The team's role is to address barriers to learning of learners in the school. Shifting the function to the ILST and tailoring its composition to include individuals involved in the education of the visually impaired learners would have, in the researcher's view, ensured that the learners' needs were met and the goal of whole school improvement simultaneously attained.

6.7 Blurring of roles and responsibilities

The roles and responsibilities of role-players were not clearly specified because inclusive education for blind learners in South Africa is still in its infancy. This meant that no specific guidelines were in place.

In this study for example, the learners' use of Braille prevented their teacher from gauging their understanding of concepts during a lesson, placing additional instructional duties on the facilitator. Consequently, the facilitator or private tutor gave the visually impaired learners additional lessons and exercises for practise in areas they found challenging, which would otherwise be the duty of the teacher. In the researcher's view the role of the paraprofessional involves considerably more than just mediating the visual aspects of the curriculum. This observation is consistent with McKenzie and Lewis (2008) who reported that paraprofessionals often engaged in more direct instruction than desired, often in specialised areas. The efficacy of imposing instructional responsibilities on para-educators (facilitators) with limited education and training is a concern of Giangreco and Doyle (2007) and the researcher. Consistent with the recommendations by Marks et al (1999) and McKenzie and Lewis (2008), the findings demonstrate the need to develop certified courses for paraprofessionals, as well as clear job descriptions for stakeholders in an inclusive school setting.

6.8 Educational Support Provisioning

In the researcher's and respondents' views, the lack of capacity of the education support structures to fulfil their roles outlined in Education White Paper 6 (DoE, 2001) made the process of including the visually impaired learners challenging.

Consistent with the findings of SAHRC (2007), Sukhraj-Ely (2008), the facilitator, parents and researcher reported that the SSRC for the Blind in Worcester were not in a position to provide guidance and support to them on making the NCS accessible, since they themselves were grappling with many of the same issues. Furthermore, the lack enthusiasm for inclusive education of the SSRC, in Noel's mother's view, explained their failure to follow up on Noel's progress in the regular school. This is in contravention of the monitoring and supportive role

outlined in the guidelines for SSRCs (DoE, 2007). However, the SSRC never refused to assist, so the parents, facilitator and principal consulted them as the need arose. The distance between the SSRC and Bounty School posed a further challenge which, to some degree, is meant to be alleviated by the deployment of learning support teachers. Unfortunately, the learning support teacher assigned to Bounty school had no special education background in visual impairment and felt ill-equipped to advise on ways to differentiate the curriculum for the visually impaired learners. This disconnect in support provisioning to Bounty School was consistent with reviews of the implementation of inclusive education by the SAHRC (2007).

The most basic of accommodations, acquiring Braille textbooks for the visually impaired learners from Pioneer Printers, also proved particularly challenging, since the printing house is often inundated with orders for textbooks from special schools around the country. To compensate for the delay, the facilitator brailled the text they required in the interim. The parents, school and facilitator also did well by acquiring the costly assistive technology needed by the visually impaired learners through donations from other institutions. Although the cost in this regard was significantly lower than expected, the burden of providing the assistive technology fell mainly on the parents who were already burdened by the cost of the facilitator and accessible material. The responsibility of the State, in the researcher's opinion, favours children in special schools who are provided with accessible material and devices with minimal or no cost to their care-givers. The unequal access to resources for learners in regular schools hindered the visually impaired learners' inclusion.

The facilitator's inferior computer skills, by her own admission and in the researcher's view, limited her ability to transfer the JAWS and other computer skills needed by the visually impaired learners to boost their academic potential and independence, to them. Abner & Lahm (2002) and Mack et al (1990) agreed that high quality support in this area is crucial for academic success. This highlights the need to develop human resources in assistive technology within district-based support teams or strengthen partnerships with organisations with the requisite technical expertise.

In the researcher's view, using peers to support the visually impaired learners academically or with learning assistive technology is greatly underutilised. The peer support focussed primarily on logistics such as getting around or finding the correct volume of a Braille book.

As discussed, due to a lack of capacity, very few concrete accommodations were made by the teacher and school to facilitate the academic inclusion of the blind learners. The academic performance of the learners therefore depended greatly on their own abilities and the dedication of the facilitator and their parents. Without the financial investment of the parents towards the facilitator's salary and resources, the school would not have succeeded in including the visually impaired learners. The parents, particularly Justin's, developed a network of support including individuals and organisations that they could consult throughout their journey to include their blind sons in a regular school. The community, once aware of the parents' and school's initiative, were willing to contribute financially and in kind. Similarly, when approached for help, the school and district office stepped forward. This indicates that the external factors enabling the visually impaired learners' inclusion increased over time, but financing and co-ordinating human and material resources remains the greatest challenge.

6.9 Limitations

Although many lessons can be drawn from this study, the context of the case under investigation is not indicative of the general situation in South Africa. The school and learners come from a fairly affluent, middle class community, limiting the generalisation to less advantaged communities which form the majority of the South African social landscape.

Other limitations related more to the way the study was carried out. The limited time frame and resources restricted the depth of the investigation. The questions asked during the investigation may not have been answered in full. Furthermore, the study is set at a particular point in time and no follow up study was done.

Nonetheless, important principles about inclusive education can be drawn from this study.

6.10 Recommendations

6.10.1 Micro-level (school)

- i. School policy on inclusive education needs to be developed to cover roles and responsibilities of parents, class teachers, facilitator and other relevant stakeholders.
- ii. The school budget should make provision for support, training and equipment needed for learners who are blind or have any other special needs.
- iii. A member of the SGB must be appointed to champion and monitor inclusive education.
- iv. Training for the class teachers in the theory and strategies for learners with special needs should be provided.
- v. Training for the para- educator in the curriculum and pedagogy should be provided.
- vi. Awareness raising activities for the school community on inclusive education philosophy, policy and practices need to be put in place.
- vii. Local civil society organisations for the visually impaired with Braille printing facilities should be used to produce accessible material.
- viii. Textbook publishers should be obligated to provide screen reader or Braille compatible electronic versions of books.
- ix. In districts located far from the SSRC, vision and sensory centres that focus on assessment, assistive technology training and educational planning should be established.
- x. Itinerant visual impairment teachers should be appointed and trained to monitor and teach visually impaired children to use assistive technology.
- xi. An ISP/IEP must be developed using a combination of Lohmeier's (2009) approach and the SIAS.
- xii. Formal support structures such as the ILST and DBST must be used to enhance collaboration and improve planning, monitoring and problem-solving.

- xiii. To balance the development of life-skills and academics, the principle of reasonable accommodation should be applied to reduce the visually impaired children's homework load.
- xiv. Guidelines for teaching learners with visual impairment plus an introductory course should be offered by the DBST to regular schools that include, or intend to include, a child with visual impairment.
- xv. The capacity of the SSRC and district office in the locality should be increased to support the inclusion of visually impaired children.
- xvi. Learners should be used to support peers experiencing barriers to learning in the classroom.

6.10.2 Macro-level

- i. More aggressive advocacy for implementing inclusive education policy and public awareness raising campaigns should target civil organizations (specifically in the field of visual impairment) in order to enrol their support.
- ii. Awareness-raising should promote a deeper understanding of inclusive education in relation to social inclusion and provide education on the laws, policies and guidelines and the punitive steps that can be taken if they are contravened.
- iii. Greater effort must be made to reach out and empower parents of children who are visually impaired about their rights.
- iv. Office bearers need to be aware of the policies and procedures and their responsibility in implementing inclusive education.
- v. Partnerships between the departments of Education, Health and Social Development need to be strengthened by appointing a co-ordinating body to enable inclusive education for children with special education needs from ECD and through their formal education years.
- vi. Every visually impaired child should have an ISP from the time the disability is acquired or detected.

- vii. A database of children who are visually impaired must be developed in order to improve the provisioning and monitoring of services.
- viii. Documentation, geographical boundaries and data collection systems need to be harmonised across departments to improve access to early intervention, resource allocation and tracking of children.
- ix. Parents/caregivers of visually impaired children must receive effective counselling and support with regard to optimising the physical, social, cognitive and emotional development of their children.
- x. A directory of services for children with disabilities and visual impairment specifically should be updated and made available at all public and private facilities.
- xi. A help desk on disability and inclusive education with a text-messaging, online or telephone service must be established and widely publicized.
- xii. A portal dedicated to the education of children with visual impairment should be created for accessing and exchanging information and ideas.
- xiii. Tertiary education and in-service training courses for professionals commonly involved with children with special needs must be expanded to include inclusive education policy and practices.
- xiv. Pre-service training of teachers and therapists should involve joint courses and collaborative projects.
- xv. Professionals should also be trained in the soft skills required for effective teamwork.
- xvi. Incentives must be offered to encourage in-service teachers to voluntarily participate in training programmes to develop their skills in inclusive education.
- xvii. Skills development programmes should be SETA accredited and include training, demonstration teaching, mentoring and portfolio assignments related to the interventions actually being carried out over a one year period.
- xviii. The full support of organizations such the SANCB would boost efforts to develop a general education system capable of supporting visually impaired learners.

- xix. Civil society organisations and companies in the field of visual impairment must be encouraged to provide technical expertise and training in areas such as assistive technology, adapting material and activities of daily living.
- xx. An accredited para-educator course for facilitators or teaching assistants of the visually impaired, which addresses the broad range of skills required to support visually impaired learners, needs to be developed.
- xxi. The capacity of SSRCs for the visually impaired needs to be enhanced.
- xxii. A formal certification in education for the visually impaired with a strong focus on inclusive education should be reintroduced to ensure that SSRC staff are better equipped to support inclusive education.
- xxiii. Teacher exchange programmes between special schools, regular schools and inclusive/full service schools should be established to demystify 'special education' and encourage a culture of learning and sharing amongst teachers and schools.
- xxiv. Visually impaired students must be encouraged to qualify as educators, assistive technology experts, social workers or therapists. The power of using people with disabilities to support inclusive education is evidenced in the study where a blind physiotherapist served as a resource to Justin's family.
- xxv. The roles and responsibilities of professionals, SGBs, parents, facilitators/teacher assistants, learners and other relevant players in an inclusive school must be defined more clearly.
- xxvi. The funds allocated must match the support needs at every level.

6.11 Further Research

Research into how learners who are visually impaired are, and could be, included in less-advantaged communities or across a range of communities will give a more realistic perspective of what the challenges are and how they can be addressed.

The number of children with access to appropriate assistive devices needs to be determined in order to identify and fill the gaps. In addition, a study to measure the proficiency of school-aged learners who are blind in Braille and assistive technology, and its effects on academic performance would be useful in determining the most efficient ways of dealing with a demanding curriculum in the information age.

Further action research in areas of academic and social inclusion is needed to develop culturally sensitive and more practical ways of addressing challenges such as social isolation in adolescence, stereotypical behaviour and teaching learning areas such as Technology and Mathematics.

Research into how special schools for the Blind are presently functioning and meeting the needs of the learners requiring a high level of support needs to be conducted. This will help determine how far they are from fulfilling their role as set out in the Guidelines to Ensure Quality Education and Support in Special Schools and Special Schools as Resource Centres (2007). Such research will also give insight into the gaps in knowledge, skills and resources.

6.12 Conclusion

Including a learner who is blind in a regular local school is often perceived as a difficult or complicated task. Few guidelines are readily available to inform local schools on how this may be successfully achieved. Research conducted suggests that accommodations to the environment are relatively straightforward and this was the case in the school studied. Preparing the psychosocial environment can also be achieved with relative ease. In this case the school invited a blind person to address the school and show them what can be achieved and what to strive towards. Learners were prepared for the arrival of the blind learners by the facilitator who

showed them responsible ways of helping that did not provoke pity. Both of these actions are supported by literature on including learners who are blind in local schools.

In terms of academic preparation, the study showed the importance of early intervention, as emphasised in the literature, in facilitating cognitive, social, emotional and physical development as a foundation for learning. This underlines the need to develop programmes that identify children with visual impairments early on, provide family support and interventions and follow up on these children's entry into, and progress through, the education system. This study showed that the special school was not able to conduct follow-up visits or assist the local school and its teachers with curriculum differentiation, as envisaged by current guidelines on inclusive education in regular schools. Further, the study showed that curriculum differentiation is difficult for many teachers and not always appropriately managed.

The danger of learners who are blind becoming socially excluded was also highlighted. While inclusive education seeks to promote integration, social inclusion is not easily achieved as the literature shows that learners who are blind are the least preferred playmate in a regular school setting. In this study, the development of social exclusion was identified and addressed through the intervention of a social worker at the school with successful outcomes, underlining the need for vigilance in local school settings.

The central role played by the facilitator in including the blind learners points to the value of paraprofessionals in inclusive settings, but also highlights how boundaries between role-players can become blurred. The facilitator in this study often played a leading role in adapting material and differentiating the curriculum, despite not being trained in the NCS or curriculum differentiation. Her personality and commitment, the lack of capacity of the teachers in dealing with visually impaired learners plus the lack of a formal policy on roles and responsibilities, resulted in her assuming this role by default.

Although the school in this study cannot be seen as representative of the majority of South African school settings, many lessons can be learned from this experience. The study highlights the need for more awareness-raising on the nature of inclusive education and how it can be implemented. Service delivery to children with intrinsic barriers to learning needs to be

strengthened from early childhood through to the completion of formal education. Information on inclusive education, intrinsic barriers to learning such as blindness and visual impairment and how the effects of these barriers can be addressed and mitigated, needs to be more readily available. Human resources in the fields of education, health and social development need to be improved with the reintroduction of formal tertiary education courses on teaching learners with visual impairments, in conjunction with the development of other pre-service and in-service training opportunities for professionals and paraprofessionals in inclusive education settings. Roles and responsibilities of various role-players and stakeholders in education, from local school level to national level, also need to be clarified, as does the process of allocating resources for the development of full service schools. Finally, more research is needed on how inclusive education for learners who are blind can be effectively implemented in a range of South African contexts.

In conclusion, including learners who are blind in local schools can at first seem a daunting and complicated task, but each time such a step is made lessons can be learnt and the path becomes clearer. The participants in this study had very little knowledge or experience of building an inclusive educational setting at the outset, but engaged in the process with open minds, creativity and trust. By adopting a collaborative approach and an attitude of 'failing forward' they managed to achieve the objective of inclusive education.

“So I think if a school is worried and thinks; no, no, no, they can't cope. They should actually give it a go. They'll be pleasantly surprised”. (Teacher, Bounty School)

References

- Abner, G. H., & Lahm, E. A. (2002). Implementation of assistive technology with students who are visually impaired: Teachers' readiness. *Journal of Visual Impairment and Blindness*, 96(2), 98 - 105.
- African Union. (2002). *Continental Plan of Action for the African decade for Persons with Disabilities 1999 – 2009*. Retrieved October 23, 2007, from <http://www.africa-union.org/child/Decade%20Plan%20of%20Action%20-Final.pdf>
- Ajuwon, P.M., & Oyinlade, A.O. (2008), Educational placement of children who are blind or have low vision in residential or public schools: a national study of parents' perspectives. *Journal of Visual Impairment & Blindness*, 102(6), 325 – 339.
- Allan, J. (1999). *Actively Seeking Inclusion: pupils with special needs in mainstream schools*. London: Falmer Press.
- Anderson, G., & Arsenault, N. (1998). *Fundamentals of educational Research* (2nd ed.). London: Falmer.
- Argyropoulos, V., & Stamouli, M. (2006). A collaborative action research project in an inclusive setting: Assisting a blind student. *British Journal of Visual Impairment*, 24(3), 128 - 134.
- Avramidis, E., & Norwich, B. (2002). Teacher's attitudes towards intergration / inclusion: a review of the literature. *European Journal of Special Needs Education*, 17 (2), 129-147.
- Avramidis, E., Bayless, P., & Burden, R. (2000). A survey into mainstream teachers' attitudes towards the inclusion of children with special educational needs in the ordinary school in one local education authority. *Educational Psychology*, 20(20), 191 - 212.
- Bacon, E.H., & Schultz, J.B. (1991). A survey of mainstreaming practices. *Teacher Education and Special Education*, 14(2), 144 – 149.
- Baker, E., Wang, M., & Walberg, H. (1994). The effects of inclusion on learning. *Educational Leadership*, 52(4), 33-35.
- Bardin, J. A., & Lewis, S. (2008). A survey of academic engagement of students with visual impairments in general education classes. *Journal of Visual Impairment and Blindness*, 102(8), 472 - 483.

- Barraga, N. C., & Erin, J. N. (1992). *Visual handicaps and learning* (3rd ed.). Austin, Texas: Pro-Ed.
- Barton, M. L. (1992). *Teachers' opinions on the implementation and effects of mainstreaming*. Retrieved October 1, 2008, from http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/12/ec/e3.pdfm
- Bina, M. J. (1999). Schools for the visually disabled: Dinosaurs or mainstays? *Educational Leadership*, 56(6), 78 - 81. Retrieved June, 16, 2007 from <http://proquest.umi.com/pqdweb?did=39789307&Fmt=4&clientId=48290&RQT=309&VName=PQD>
- Bishop, V. E. (1996). Causes and functional implications of visual impairment. In A. L. Corn & A. J. Koenig (Eds.), *Foundations of low vision: Clinical and functional perspectives* (pp. 86-114). New York: AFB Press.
- Bishop, V.E. (1997). *Educational inclusion: premises, practice and promise*. Paper presented at the International Council for Education of People with Visually Impairment (ICEVI) 10th world conference, Sao Paulo, Brazil. Retrieved August, 9, 2008 from <http://www.icevi.org/publications/icevix/wshops/0053.html>
- Booth, T., & Dyssegaard, B. (2008) *Quality is not enough, the contribution of inclusive values to the development of Education for All*. Copenhagen: Danida.
- Booth, T., Ainscow, M., Black-Hawkins, K., Shaw, L., & Vaughan, M. (2000). *Index for Inclusion: Developing Learning and Participation in Schools*. Bristol: CSIE.
- Borsay, A. (2004). *Disability and Social Policy in Britain since 1750: A history of Exclusion*. Basingstoke: Palgrave.
- Bowman, I. (1986). Teacher training and the integration of handicapped pupils: Some findings of a fourteen nation UNESCO study. *European Journal of Special Needs Education* 1(1), 29 – 38.
- Briggs, J.D., Johnson, W.E., Shepherd, D.L., & Sedbrook, S.R. (2002). Teacher attitudes and attributes concerning disabilities. *Academic Exchange Quarterly*, 6(2), 85-90.
- Bruce, I., Harrow, J., & Obolenskyay, P. (2007). Blind and partially sighted people's perceptions of their inclusion by family and friends. *British Journal of Visual Impairment*, 25(1), 68 -85.

- Bunch, G., & Valeo, A. (2004). Student attitudes towards peers with disabilities in inclusive and special education schools. *Disability & Society*, 19(1), 61- 76.
- Bunch, G., Dore, L., Dore, R., Finnegan, K., & Humphries, C. (2005). *Crucial Terms Project: Final Report*. Toronto, ON: Marsha Forest Centre.
- Castellano, C. (2005). *Making it work: Educating the Blind/Visually Impaired Student in the Regular School*. Connecticut: Information Age Publishing.
- Celeste, M. (2007). Social skills intervention for a child who is blind. *Journal of Visual Impairment and Blindness*, 101(9), 521 – 533.
- Chhabra, S., Srivastava, R., & Srivastava, I. (2010). Inclusive Education in Botswana: The Perceptions of School Teachers. *Journal of Disability Policy Studies*, 20 (4), 219-218.
- Chien-Huey Chang, S. C., & Schaller, J. (2002). The views of students with visual impairments on the support they received from teachers. *Journal of Visual Impairment and Blindness*, 98, 558 - 575.
- Clough, P., & Lindsay, G. (1991). *Integration and the Support Service in Special education*. Windsor: NFER–Nelson.
- Cole, C.M., Waldron, N., & Majd, M. (2004). Academic programs of students across inclusive and traditional settings. *Mental Retardation*, 42(2), 136 – 144.
- Cook, T., Swain, J., & French, S. (2001). Voices from Segregated Schooling: Towards an inclusive education system, *Disability & Society*, 16 (2), 293-310.
- Correa-Torres, S. M., & Howell, J.J. (2004). Facing the challenges of itinerant teaching: Perspectives and suggestions from the field. *Journal of Visual Impairment and Blindness*, 98 (7), 420 - 433.
- Curry, S. A., & Hatlen, P.H. (1988). Meeting the unique educational needs of visually impaired pupils through appropriate placement. *Journal of Visual Impairment and Blindness*, 82(14), 417-424.
- Denscombe, M. (1998). *The Good Research Guide: for small scale social research projects*. Buckingham: Open University Press.

Department of Education. (n.d.). Thutong: South African Education Portal. Retrieved January 5, 2010 from www.thutong.doe.gov.za

Department of Education. (1997). *Quality education for all: Report of the National Commission on Special Needs in Education and Training (NCSNET) and National Committee for Education Support Services (NCESS)*. Pretoria: Government Printers

Department of Education. (2000). *Norms and Standards for Educators*. Pretoria: Government Printers.

Department of Education. (2001). *Education White Paper 6: Special Needs Education Building an Inclusive Education and Training System*. Pretoria: Government Printers.

Department of Education. (2002). *Overview of the National Curriculum Statement*. Pretoria: Government Printers.

Department of Education. (2003). *Teacher's Guide for Developing Learning Programmes*. Pretoria: Government Printers

Department of Education. (2005a). *Conceptual and Operational Guidelines for District-based Support Teams*. Pretoria: Government Printers.

Department of Education. (2005b). *Draft Guidelines for Inclusive Learning Programmes*. Pretoria: Government Printers.

Department of Education. (2007). *Guidelines to Ensure Quality Education and Support in Special Schools and Special Schools as Resource Centres*. Pretoria: Government Printers.

Department of Education. (2008a). *National Strategy on Screening, Identification, Assessment and Support (SIAS)*. Pretoria: Government Printers

Department of Education. (2008b). *Fact Sheet 5: Number of learners with special needs in ordinary schools by category of disability from 2007 annual survey ordinary schools*. Retrieved August 9, 2009 from <http://www.thutong.doe.gov.za/ResourceDownload.aspx?id=38991>

Department of Education (2008c, April). *Inclusion Today*, newsletter of the Directorate: Inclusive Education, 1(1). Retrieved June 16, 2009, from

<http://www.thutong.doe.gov.za/inclusiveeducation/InclusiveEducation/Newsletter/tabid/2619/mctl/IssueView/id/180/Default.aspx>

Department of Education. (2009a). *Guidelines for Full Service and Inclusive Schools*. Pretoria: Government Printers.

Department of Education (2009b). *Implementing Education White Paper 6 on Inclusive Education, report on the project management tender EDO 295*. Pretoria: Council for Scientific & Industrial Research (CSIR).

Department of Health (2003). *Standardisation of Provision of Assistive Devices in South Africa: A Guide for Use in the Public Health Sector*. Pretoria: Government Printers.

Department of Social Development (DSD). (2009). *Integrated National Strategy on Support Services to Children with Disabilities*. Pretoria: DSD.

Dey, I. (1993). *Qualitative Data Analysis*. London: Routledge

Directgov. (n.d). *Special Educational Needs: Assessment*. Retrieved January 5, 2010 from http://www.direct.gov.uk/en/Parents/Schoolslearninganddevelopment/SpecialEducationalNeeds/DG_4000835

Engelbrecht, P., Oswald, M., & Forlin, C. (2006). Promoting the implementation of inclusive education in primary schools in South Africa. *British Journal of Special Education*, 33(3), 121-129.

Engelbrecht, P., Oswald, M., Swart, E., & Eloff, I. (2003). Including learners with intellectual disabilities; stressful for teachers? *International Journal of Disability, Development and Education*, 50(3), 293-308.

Engelbrecht, P., Oswald, M., Swart, E., Kitching, A., & Eloff, I. (2005). Parents' Experiences of Their Rights in the Implementation of Inclusive Education in South Africa. *School Psychology International*, 26(4), 459 - 477.

Ferrell, K.A. (2000). Growth and Development of Young Children. In M.C. Holbrook & A.G. Koenig (Eds.), *Foundations of Education: History and Theory of Teaching Children and Youth with Visual Impairment Vol. 1* (2nd ed., pp.111 – 134). New York: American Foundation for the Blind Press.

Fisher, D., Sax, C., & Pumpian, I. (1996). From intrusion to inclusion: Myths and realities in our schools. *The Reading Teacher*, 49 (7). Retrieved March 12, 2008, from

<http://proquest.umi.com/pqdweb?did=9470787&Fmt=4&clientId=48290&RQT=309&VName=PQD>

Fitch, F. (2003). Inclusion, exclusion, and ideology: Special education students' changing sense of self. *The Urban Review*, 35(3), 233-252.

Fitwi, N.M. (2003). *Assessing Educational Resources and Support Services for Learners with Visual Impairment in the Mainstream Junior Schools in Eritrea*. Unpublished Master's thesis, University of the Western Cape, Bellville, South Africa.

Forest, M., Pearpoint, J., & O'Brien, J. (1996). *MAPs, Circles of Friends, and PATH: Powerful tools to help build caring communities*. In S. Stainback & W. Stainback (Eds.), *Inclusion: A guide for educators* (pp. 67-86). Baltimore: Paul H. Brookes.

French, S. (Ed.). (2006). *An oral history of the education of visually impaired people: Telling the stories for inclusive futures*. Ceredigion: The Edwin Mellen Press.

French, S., Swain, J., Atkinson, D., & Moore, M (Eds.). (2006). *An oral history of the education of visually impaired children: telling stories for inclusive futures*. Lampeter: Edwin Mellen Press.

Giangreco, M.F., & Doyle, M.B. (2007). Teacher assistants in inclusive schools. In L. Florian (Eds.), *The SAGE handbook of special education* (pp. 429-439). London: Sage.

Gouzman, R., & Kozulin, A. (n.d.). *Enhancing cognitive skills in blind learners*. International Centre for the Enhancement of Learning Potential, Jerusalem, Israel. Retrieved March 8, 2011 from http://www.icelp.org/asp/Research_on_Instrumental_Enrichment.shtm#4

Hartley, J. (2004). Case study research. In C. Cassell & G Symon (Eds.), *Essential guide to qualitative methods in organizational research* (pp. 323 -333). London: Sage.

Hatlen, P. (1996). The core curriculum for blind and visually impaired students, including those with additional disabilities. *Rehabilitation and Education for Blindness and Visual Impairments*, 28, 175-182.

Hatlen, P. (2000). Historical Perspectives. In M.C. Holbrook & A.J. Koenig (Eds.), *Foundations of*

Education: History and theory of teaching children and youth with visual impairment Vol. 1 (2nd ed., pp.1-54). American Foundation for the Blind, New York.

Haug, P. (2003). Qualifying Teachers for the Schools for All. In K. Nes, M, Stromstad & T. Booth (Eds.), *The challenge of inclusion: Reforming teachers* (pp. 97-115). London: Routledge.

Hay, J.F., Smit, J., & Paulsen, M. (2001). Teacher preparedness for inclusive education. *South African Journal of Education*, 21(4), 213 – 218.

Hehir, T. (2003). Beyond inclusion: Educator's "able-ist" assumptions about students with disabilities compromise the quality of instruction. *School Administrator*, 60 (3), 36 -40.

Helen Keller Society. (n.d). Retrieved May1, 2008, from <http://www.helenkeller.org.za/index.htm>

Holbrook, M.L., & Koenig, A.J. (2000). Basic Techniques for Modifying Instruction. In M.C. Holbrook & A.J. Koenig (Eds.), *Foundations of Education: Instructional strategies for teaching children and youth with visual impairments Vol. 2* (2nd ed., pp.111 – 134). New York: American Foundation for the Blind Press.

Huebner, K.M. (2000). Visual impairment. In M.C. Holbrook & A.J. Koenig (Eds.), *Foundations of Education: History and theory of teaching children and Youth with visual impairment Vol.1* (2nd ed., pp.55 – 76). New York: AFB Press.

Hunt, P. (2000). 'Community' is what I think everyone is talking about. *Remedial & Special Education*, 21(5), 305 -317. Doi: 10.1177/074193250002100507

International Council for Education of People with Visually Impairment (n.d.). *What is EFA-VI?* Retrieved May 1, 2008, from http://www.icevi.org/efa/what_is_EFAVI.html

Kakizawa, T., Douglas, G., Kagawa, K., & Mason, H. (2000). Students with visual impairments in special and mainstream schools in Japan: A survey. *Journal of Visual Impairment and Blindness*, 94(4), 214 - 228.

Kapperman, G., & Sticken, J. (2000). Assistive technology. In A. J. Koenig & M. C. Holbrook (Eds.), *Foundations of Education: Instructional strategies for teaching children and youths with visual impairments Vol. 2* (2nd ed., pp. 500-528). New York: AFB Press.

Katsiyannis, A., Conderman, G., & Franks, D. (1996). Students with disabilities: Inclusionary programming and the school principal. *National Association of Secondary School Principals (NASSP) Bulletin*, 80, 81-86. Retrieved March 16, 2007 from <http://proquest.umi.com/pqdweb?did=9407330&Fmt=3&clientId=48290&RQT=309&VName=PQD>

Keils, S., & Clunies-Ross, L. (2003). *Survey of educational provision for blind and partially sighted children in England, Scotland and Wales in 2002*. RNIB: London.

Keyes, M.W., Hanley-Maxwell, C., & Capper, C.A. (1999). "Spirituality? It's the core of my leadership", empowers leadership in an inclusive elementary school. *Educational Administration Quarterly*, 35, 203 – 237.

Kgothule, R.J. (2004). *A Programme for facilitating effective leadership for inclusive schooling*. Unpublished doctoral thesis, University of the Free State, Bloemfontein, South Africa.

Kleefe, C.H., & Davis, R. (1998). Inclusion Means.... *National Association of Secondary School Principals (NASSP) Bulletin*, 82(594), 54-64. Retrieved June 29, 2006, from <http://proquest.umi.com/pqdweb?did=01926365&Fmt=3&clientId=48290&RQT=309>

Kochhar, C.A., West, L.L., & Tayman, J.M. (2000). *Successful Inclusion: practical strategies for shared responsibility*. Columbus: Merrill.

Koenig, A. J. & Holbrook, C. M. (2000). Professional Practice. *Foundations of Education: History and theory of teaching children and youth with visual impairment Vol. 1* (2nd ed., pp.260 - 276). New York: American Foundation for the Blind Press.

Kohlbacher, F. (2006). The use of Qualitative content analysis in case study research. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research*, 7(1). Retrieved March 1, 2008, from <http://www.qualitative-research.net/index.php/fqs/article/viewArticle/75/153>

Kovacs, K. (2000). Hungary: Changing Attitudes in the Education of Children and Youth with a Visual Impairment. *British Journal of Visual Impairment*, 18(2), 61 - 67.

- Lanier, N. J., & Lanier, W. L. (1996). The effects of experience on teachers' attitudes toward incorporating special students into the regular classroom. *Education*, 117(2), 234-240.
- Lazarus, S., Daniels, B., & Engelbrecht, P. (1999). The inclusive school. In Engelbrecht P., Green, L., Naicker, S., & Engelbrecht, L. (Eds.), *Inclusive education in action in South Africa (pp.45-68)*. Pretoria: Van Schaik Publishers.
- Lehohla, P. (2005). *Prevalence of Disability in South Africa*. Pretoria: Statistics South Africa
- Lincoln, Y.S., & Guba, E.G. (1985). *Naturalistic Inquiry*. Newbury Park, CA: Sage Publications.
- Lipsky, D.K., & Gartner, A. (1999). Inclusive education: a requirement for a democratic society. In H. Daniels & P. Gartner (Eds.), *Inclusive Education. World Yearbook of Education*. London: Kogan Page
- Loebenstein, H. (2002). *Perceptions of inclusive education of parents of children without disabilities*. Unpublished master's dissertation, University of Stellenbosch, Cape Town, South Africa.
- Loebenstein, H. (2005). *Support for learners with intellectual disabilities in the transition to secondary schools*. Unpublished doctoral dissertation, University of Stellenbosch, Cape Town, South Africa.
- Lohmeier, K. L. (2009). Practice Report: Aligning State standards and the expanded core curriculum: Balancing the impact of the no child left behind act. *Journal of Visual Impairment and Blindness*, 103(1), 44-48.
- Lomofsky, L., & Lazarus, S. (2001). South Africa: first steps in the development of an inclusive education system. *Cambridge Journal of Education*, 31(3), 303-317.
- Loreman, T., McGhie-Richmond, D., Barber, J., & Lupart, J.L. (2008). Student perspectives on inclusive education: A survey of Grade 3-6 children in rural Alberta, Canada. *International Journal of Whole Schooling*, 5(1), 1-15.
- Lynch, P., & McCall, S. (2008) Educating children with visual impairment in Africa, *Institute of Development studies* 2 (68).
- Mack, C. G., Koenig, A. J., & Ashcroft, S. C. (1990). Microcomputers and access technology in programs for teachers of visually impaired students. *Journal of Visual Impairment & Blindness*, 84, 526-530.

- Malhotra, R. (2001). The Politics of the Disability Rights Movements. *New Politics*, 31, 65-75.
- Marek, B. (2000). A time of change: education of people with visual impairment in Poland. *British Journal of Visual Impairment*, 18(55), 54 – 59. DOI: 10.1177/026461960001800205
- Marks, S. U., Schrader, C., & Levine, M. (1999). Para-educator experiences in inclusive settings: Helping, hovering, or holding their own? *Exceptional Children*, 65, 315-328.
- Mayring, P. (2000). Qualitative Content Analysis. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research*, 1(2). Retrieved March 1, 2008, from <http://www.qualitative-research.net/index.php/fqs/article/view/1089/2385>
- Mayrowetz, D., & Weinstein, C. S. (1999). Sources of leadership for inclusive education: Creating schools for all children. *Educational Administration Quarterly*, 35(3). 432-449.
- McCall, S. (2000). DfEE: How green was my future? Revisiting the 1997 paper on children with SEN, Excellence for All Children. *British Journal of Visual Impairment*, 18(3), 118 – 122.
- McConkey R., Benard da Costa, A., Holdsworth, J., Jonsson, T., Kanyanta, B.S., Lopez, A., ... Shaban, R. (2001). *Understanding and Responding to Children's Needs in Inclusive Classrooms: A guide for Teachers*. Paris: UNESCO
- McConnell, S., & Odom, S. (1999). A multimeasure performance-based assessment of social competence in young children with disabilities. *Topics in Early Childhood Special Education*, 19(2), 67-74.
- McKenzie, A. R., & Lewis, S. (2008). The role and training of paraprofessionals who work with students who are visually impaired. *Journal of visual impairment and Blindness*, 102 (8), 232 - 243.
- Merriam, S.B. (1998) *Case Study research in education: a qualitative approach*. San Francisco: Josey-Bass
- Mertens, D.M. (1998). *Research methods in education and psychology, Integrating diversity with quantitative and qualitative approaches*. California: Sage Publications
- Miles, M.B., & Huberman, A.M. (1994). *Qualitative Data Analysis* (2nd ed.). London: Sage Publications.

- Moberg, S., & Savolainen, H. (2003). Struggling for inclusive education in the North and the South: Educator's perceptions of inclusive education in Finland and Zambia. *International Journal of Rehabilitation Research*, 26(1), 21-31.
- Mushoriwa, T. (2001). A Study of the Attitudes of Primary School Teachers in Harare Towards the Inclusion of Blind Children in Regular Classes. *British Journal of Education*, 28(3): 142-147.
- Muthukrishna, N., & Schoeman, M. (2000). From "Special Needs" to "Quality Education for All", a participatory, problem-centred approach to policy development in South Africa. *International Journal of Inclusive Education*, 4(4), 315-335.
- Nagel, G. (1998). Towards access and equity: The education of students with visual impairment in New Zealand. *British Journal of Visual Impairment*, 16(3), 123 – 125.
- Naicker, S.M. (2000, June). *From Apartheid Education to Inclusive Education: The Challenges of transformation*. Paper presented at International Education Summit for a Democratic Society, Detroit, Michigan U.S.A.
- Naiker, S. (1999). Inclusive education South Africa. In Engelbrecht P., Green, L., Naicker, S. & Engelbrecht, L. (Eds.), *Inclusive education in action in South Africa* (pp.12-23). Pretoria: Van Schaik Publishers.
- National Center on Educational Restructuring and Inclusion (1994, June). *National study of inclusive education*. New York: NCERI. Retrieved 21 April, 2008, from http://www.eric.ed.gov/ERICWebPortal/search/detailmini.jsp?_nfpb=true&_ERICExtSearch_SearchValue_0=ED375606&ERICExtSearch_SearchType_0=no&accno=ED375606
- Neuman, W.L. (1997). *Social Research Methods qualitative and quantitative approaches* (3rd. ed.). Needham heights: Allyn & Bacon.
- Office of the Deputy President (1997). *White Paper on an integrated national disability strategy*. Retrieved April 13, 2007 from http://polity.org.za/govdocs/white_papers/disability1.html
- Office on the Status of Disabled Persons (OSDP) (2008). *National disability policy framework and guidelines for the implementation of the national disability policy framework*. Pretoria: OSDP.

Paquette, D., & Ryan, J. (2001). *Bronfenbrenner's ecological systems theory*. Retrieved January 26, 2007, from <http://pt3.nl.edu/paquetteryanwebquest.pdf>

Patton, M.Q. (2002). *Qualitative research and evaluation methods (3rd ed.)*. California: Sage publications.

Pavey, S.A., Douglas, G.G.A, McLinden, M.T., & McCall, S. (2003). An investigation into the mobility and independence curriculum framework. *British Journal of Visual Impairment*, 21(1), 4-9. DOI: 10.1177/026461960302100102.

Payze, C. (1997, Sept). An overview of computer aided qualitative data analysis techniques. In M.J. Terre Blanche (Ed.), *The body of Politic*. Conference proceedings of the 2nd annual South African qualitative methods conferences, Johannesburg, University of South Africa.

Potterton, M., Utley, E., & Potterton, J. (2005). *Together Now: Implementing Inclusive Education*. Johannesburg, CIE Education Services.

Project Participate. (n.d.). *Promoting families, health and development: Handouts and forms*. Retrieved August, 9, 2006 from <http://projectparticipate.org/handoutsforms.asp?strbobby=1>

Republic of South Africa (1994). *Constitution of the Republic of South African Bill Act no. 108 of 1994*. Cape Town: Government Printers

Republic of South Africa (1996). South African Schools Act No 84 of 1996. *Government Gazette (Vol.377, No.17579)*. Cape Town: Government Printers

Republic of South Africa (2007). *Children's Amendment Act No. 41 of 2007*.

Richards, T.J., & Richards, L. (1994). Using computers in qualitative research. In N.K. Denzin & Y. Lincoln (Eds.), *Handbook of qualitative research* (445 – 462). Thousand Oaks, CA: Sage.

Riehl, C.J. (2000). The Principal's Role in Creating Inclusive Schools for Diverse Students: A Review of Normative, Empirical, and Critical Literature on the Practice of Educational Administration. *Review of Educational Research*, 70 (1), 55-81.

Rieser, R. (2008). *Implementing Inclusive Education: A Commonwealth Guide to Implementing Article 24 of the UN Convention on the Rights of People with Disabilities*. London: Commonwealth Secretariat.

Ritter, C. L., Michel, C. S., & Irby, B. (1999). Concerning inclusion: Perceptions of middle school students, their parents, and teachers. *Rural Special Education Quarterly*, 18(2), 10-17.

Roberts, C.A., & Wilson, R.W. (2002). ICT and the research process: issues around the compatibility of technology with qualitative data analysis. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research*, 3(2). Retrieved March 1, 2008, from <http://www.qualitative-research.net/index.php/fqs/rt/printerFriendly/862/1872>

Rustemier, S (2004). *The case against segregation into special schools: a look at the evidence* (Research Report), Bristol: Centre for the Studies for Inclusive Education (CSIE).

Salend, J. S., Laurel, M., and Duhaney, G. (2002) 'What Do Families Have today About Inclusion? How to Pay Attention and Get Results', *Teaching Exceptional Children*, 35(1), 62–66.

Salend, S.J., & Duhaney, L.G. (1999). The impact of inclusion on students with and without disabilities and their educators. *Remedial & Special Education*, 20(2), 114-127.

Sapon-Shevin, M. (1996). Full inclusion as disclosure tablet: Revealing the flaws in our present system. *Theory into Practice* 35(1), 35-41.

Schoeman, M. (2000). *Parents and the Community in Inclusive Education*. Position Paper for UNESCO on the Role of Parents in the Transition Towards Inclusive Education.

Scruggs, T. E., & Mastropieri, M.A. (1996). Teacher perceptions of mainstreaming-inclusion, 1958-1995: A research synthesis. *Exceptional Children*, 63(1). Retrieved March 17, 2007, from <http://www.highbeam.com/doc/1G1-18761568.html>

South Africa Human Rights Commission (SAHRC). (2007). *Right to basic education; inclusive education: Report on hearings by the SA Human Rights Commission*. Retrieved June 16, 2008, from <http://www.pmg.org.za/minutes/20070301-right-basic-education-inclusive-education-mainstreaming-report-hearings-sa-human-ri>

South African National Council for the Blind. (n.d). *About us*. Retrieved May 1, 2008, from <http://www.sanfb.org.za/about us>

Stiker, H. (1999). *A History of Disability*. (W. Sayers, Trans.). Michigan: University of Michigan Press.

(Original work published in 1997)

Strully, J., & Broderick, L. (n.d.). *Thoughts on leadership*. Retrieved October 1, 2006, from <http://www.inclusion.com/artleadership.html>

Stubbs, S. (2008). *Inclusive education: Where there are few resources*. Oslo: Atlas Alliance.

Sukhraj, P. (2006, July). *The Implementation and Challenges to Inclusive Education Policy and Practice in South Africa*. Paper presented at the Conference of the International Council on Education of Visually Impaired Persons, Kuala Lumpur, Malaysia.

Sukhraj-Ely, P. (2008). *Inclusive Education Policy and Practice: Investigating the Educational Rights and Needs of Learners and Students with Visual Impairments in South Africa*. Unpublished doctoral thesis, University of Kwa-Zulu Natal, Durban, South Africa.

Swart, E., Engelbrecht, P., Eloff, I., & Pettipher, R. (2002). Implementing inclusive education in South Africa: Teacher's attitudes towards and experiences. *Acta Academica*, 34(1), 175 – 189.

Topor, I.L., Holbrook, M.C., & Koenig, A.J. (2000). Creating and Nurturing Effective Educational Teams. In M.C. Holbrook & A.J. Koenig (Eds.), *Foundations of Education: Instructional strategies for teaching children and youth with visual impairments Vol. 2* (2nd ed., pp. 3 - 26). New York: AFB Press.

Tate, K., & Purdy, N. (2000). Attitudes towards disability: teacher education for inclusive environments in an Australian university. *International Journal of Disability, Development and Education*, 47(1), 25-38. DOI: 10.1080/103491200116110

Thahane, I., Myburgh, C.P.H., & Poggenpoel, M. (2005). The life-world of visually impaired adolescents: An educational guidance perspective. *Education*, 125 (3), 393 – 403. Retrieved April 21, 2008, from http://findarticles.com/p/articles/mi_qa3673/is_3_125/ai_n29175555/

Thomas, G. (1997), Inclusive Schools for an Inclusive Society. *British Journal of Special Education*, 24(3), 103–107.

Tuttle, D.W., & Tuttle, N.R. (2000). Psychosocial Needs of Children and Youth. *Foundations of Education: History and theory of teaching children and youth with visual impairment Vol. 1* (2nd ed., pp.161 - 172). New York: AFB Press.

UNESCO. (1994). *The Salamanca Statement and Framework for Action*. Retrieved April 16, 2006, from: www.unesco.org/education/pdf/SALAMA_E.PDF

UNESCO. (2000). *Dakar framework for action: Education for all: Meeting out collective commitments*. Paris: UNESCO.

UNESCO (2001). *Open File on Inclusive Education*. Paris: UNESCO

UNESCO. (2004). *The Right to Education for Persons with Disabilities: Towards Inclusion: EFA Flagship Concept Paper*. Retrieved June 16, 2006, from http://portal.unesco.org/education/en/files/37630/11350142815EFA_Flagship_Paper.pdf/EFA%2BFlagship%2BPaper.pdf

UNESCO. (2005). *Guidelines for Inclusion: Ensuring Access to Education for All*. Paris: UNESCO.

UNESCO. (2006). *Strong Foundations: Early Childhood Care and Education*, EFA Global Monitoring Report 2007. Paris: UNESCO

UNESCO. (2009). "Inclusive Education: The way of the future", *Final report of the International Conference on Education 48th Session, Geneva, Switzerland, 25-28 November 2008*, UNESCO International Bureau of Education: Paris

United Nations. (1948). *The Universal Declaration of Human Rights*. Retrieved March 2, 2011, from <http://www.un.org/en/documents/udhr/index.shtml>

United Nations. (1989). *Convention on the Rights of the Child*. Retrieved June 16, 2007, from <http://www2.ohchr.org/english/law/crc.htm>

United Nations. (1993). *Rules on the Equalisation of Opportunities for Persons with Disabilities*. Retrieved April 12, 2007 from www.un.org/documents/ga/res/48/a48r096.htm

United Nations. (2006). *Convention on the Rights of Persons with Disabilities*. Retrieved June 16, 2007, from www.un.org/disabilities

Villa, R.A., Thousand, J.S., Meyers, H., & Nevin, A. (1996). Teacher and administrator perceptions of

heterogeneous education. *Exceptional Children*, 63(1), 29-45.

Wagner, M., Blackorby, J., Cameto, R., & Newman, L. (1993). *What makes a difference? Influences on post-school outcomes of youth with disabilities*. A report from the National Longitudinal Transition Study of Special Education Students. Menlo Park, CA: SRI International.

Walter-Thomas, C.S., Bryant, M., & Land, S. (1996). Planning for effective co-teaching: The key to successful inclusion. *Remedial and Special Education*, 17(4), 255-264.

Wildeman, R.A., & Nomdo, C. (2007). *Implementation of inclusive education: how far are we?* IDASA Budget Information Service, Occasional Paper. Retrieved December 16, 2007, from <http://www.idasa.org.za>

Wolffe, K. E., Sacks, S. Z., Corn, A. L., Erin, J. N., Huebner, K. M., & Lewis, S. (2002). Teachers of students with visual impairments: What are they teaching? *Journal of Visual Impairment and Blindness*, 96, 293 - 304.

Wolffe, K.E. (2000). Growth and Development in Middle Childhood and Adolescents. In M.C. Holbrook & A.G. Koenig (Eds.), *Foundations of Education: History and theory of teaching children and youth with visual impairment Vol. 1* (2nd ed., pp.135-160). New York: AFB Press.

World Health Organization. (1999). *The international classification of impairments, disabilities, and handicaps*. Retrieved, June 16, 2007, from <http://www.who.int/whosis/icidh/icidh.html>

World Health Organisation. (2009). *Blindness*. Retrieved May 1, 2009, retrieved from <http://www.who.int/topics/blindness/en/>

World Vision. (2007). *Educations' Missing Millions: Including disabled children in education through EFA FTI processes and national sector plans*, Milton Keynes (Research Report). Retrieved December 21, 2007, from http://www.worldvision.org.uk/upload/pdf/Education%27s_Missing_Millions_-_Main_Report.pdf

Yin, R. (1994). *Case study research: Design and methods* (2nd ed.). Thousand Oaks, CA: Sage Publishing.

Yin, R. K. (2003). *Case Study Research, Design and Methods* (3rd ed.) Newbury Park: Sage Publications.

Zebehazy, K., & Whitten, E. (2003). Collaboration between special schools and local education agencies: A progress report. *Journal of Visual Impairment and Blindness*, 97(2), 73 - 84.



Appendices

Appendix I: WCED Permission Letter



Navrae
Enquiries **Dr RS Cornelissen**
IMibuzo
Telefoon
Telephone **(021) 467-2286**
IFoni
Faks
Fax **(021) 425-7445**
IFeksi
Verwysing
Reference **20060310-0040**
ISalathiso



Wes-Kaap Onderwysdepartement

Western Cape Education Department

ISebe leMfundo leNtshona Koloni

Ms Nafisa Baboo
2 Astra Court
ROSEBANK
7710

Dear Ms N. Baboo

RESEARCH PROPOSAL: AN INVESTIGATION INTO THE INCLUSION OF TWO VISUALLY IMPAIRED LEARNERS AT A MAINSTREAM SCHOOL.

Your application to conduct the above-mentioned research in schools in the Western Cape has been approved subject to the following conditions:

1. Principals, educators and learners are under no obligation to assist you in your investigation.
2. Principals, educators, learners and schools should not be identifiable in any way from the results of the investigation.
3. You make all the arrangements concerning your investigation.
4. Educators' programmes are not to be interrupted.
5. The Study is to be conducted from **20th September 2006 to 6th October 2006.**
6. No research can be conducted during the fourth term as schools are preparing and finalizing syllabi for examinations (October to December 2006).
7. Should you wish to extend the period of your survey, please contact Dr R. Cornelissen at the contact numbers above quoting the reference number.
8. A photocopy of this letter is submitted to the Principal where the intended research is to be conducted.
9. Your research will be limited to the following school: **Bergvliet Primary.**
10. A brief summary of the content, findings and recommendations is provided to the Director: Education Research.
11. The Department receives a copy of the completed report/dissertation/thesis addressed to:
**The Director: Education Research
Western Cape Education Department
Private Bag X9114
CAPE TOWN
8000**

We wish you success in your research.

Kind regards.

Signed: Ronald S. Cornelissen
for: **HEAD: EDUCATION**
DATE: 20th September 2006

Appendix II: List of Useful Organizations

(Adapted from list on SANCB website)

National Organisations

Albinism Society of South Africa

Self-help group offering information on the psychology and management of albinism; counselling; educational programmes

P O Box 9881, Johannesburg 2000

Tel: 011 838-8871; 011 838-8871

Fax: 011 838-6529

albo@corp dial.co.za

Blind Cricket SA (BCSA) Sports Club

PO Box 1245, Pretoria, 0001

Tel: 082 320-0498; 082 320-0498

Fax: 012 31-55420

Email: cois@thecricket.co.za

BlindSA

Braille production; bursaries; loans

Private Bag X9005, Crown Mines 2025

Tel: 011 839-1793; 011 839-1793

Fax: 011 839-1217

president@blindsa.org.za

website: www.blindsa.org.za



Chaeli Campaign

Fundraises for assistive devices for children with all disabilities including visual impairment. Supports inclusive education by providing therapeutic services to children and advice to teachers.

Chaeli Cottage, 18 Culm Road, Plumstead, 7800

Tel: +27 (0)861 CHAELI (242 354)

Fax: +27 (0)861 242 353

Cell: +27 (0)82 700 3729

info@chaelicampaign.co.za

www.chaelicampaign.co.za

Lions Club International: South Africa

Support initiatives to prevent blindness and promote the quality of life of people with visual impairments in communities across South Africa.

<http://www.lionsmd410.org.za/>

National Organisation of the Blind (NOBSA)

P O Box 215, Orlando 1804

Tel: 011 933-3808; 011 933-3808

Fax: 011 933-1060

nomsango@webmail.co.za

Retina SA

Support education and counselling to affected people and their families; Funds a gene-tracking project at UCT

P O Box 40432, Cleveland 2022

Tel: 011 622-4904; 011 622-4904 Fax: 011 622-6277

national@rpsa.org.za Website: www.rpsa.org.za



SA Braille Chess Association

P O Box 2772, Brooklyn, 0075, Pretoria

Cell: 082 358-2500; 082 358-2500

johannes@ctl.co.za

SA Guide-Dogs Association for the Blind

Guide dog breeding and training; mobility training

P O Box 67585, Bryanston, 2021

Tel: 011 705-3512; 011 705-3512

Fax: 011 465-3858

reception@guidedog.org.za

Website: www.guidedog.co.za

SA Library for the Blind

Library providing audio and tactile reading material to visually impaired readers

P O Box 115, Grahamstown, 6140

Tel: 046 622-7226; 046 622-7226

Fax: 046 622-7650

admin@blindlib.org.za

Website: www.blindlib.org.za

SA Mobility for the Blind Trust

Provides orientation and mobility training; trains instructors; outreach programmes; placement service

P O Box 28995, Kensington, 2101

Tel: 011 648-9035; 011 648-9035

Fax: 011 648-7559

sambt@mail.ngo.za



SA National Association of Blind & Partially Sighted Persons (SANABP)

Self-help group; provides computer training; produces Braille documents and music CDs

P O Box 4624, Polokwane, 0700

Tel: 015 223-3712; 015 223-3712

Fax: 015 223-3712

SA Tandem Association for the Blind - Western Cape

Sporting body

39 Comet Road, Surrey Estate, 7764

Tel: 021 637-4070; 021 637-4070

Fax: 021 674-7397

melvynk@telkomsa.net

Tape Aids for the Blind

National library service for the blind and print-handicapped

P O Box 47016, Greyville 4023

Tel: 031 309-4800; 031 309-4800

Fax: 031 309-1165

Toll free: 0800 335 522; 0800 335522

director@tapeaids.org.za

[Website: www.tapeaids.org.za](http://www.tapeaids.org.za)



Suppliers of Assistive Devices

Neville Clarence Technologies

Supplies hi-tech assistive devices and access software for the visually impaired across SA

118 Bronkhorst Street, Nieuw Muckleneuk, Pretoria, 0181

Tel: 012 346 2379

Fax: 088 012 346 2379

info@nctec.co.za website: www.nctec.co.za

Institute for the Blind - Pioneer Printers

Supplies Braille, large print and audio recording of literature, textbooks, exam transcripts and newsletters nation-wide for business and government

Worcester

Western Cape

South Africa

6850

Tel: (023) 347 2745; (023) 347 2745

Fax: (023) 342 1169

Sensory Solutions

Provide hi-tech assistive devices and access software for the visually impaired across SA.

226 Kruger Avenue, Lyttleton Manor, Centurion, South Africa

P.O. Box 17269, Lyttleton, 0140

Tel: +27 (12) 664 7704

Fax: +27 (12) 664 7706

info@SensorySolutions.co.za website: www.sensorysolutions.co.za



Tactile graphics

Makes tactile books and educational material for pre-schoolers.

Tel: +27 46 622 4354

Fax: +27 46 636 1445

zinkeyray@worldonline.co.za website: www.tactilegraphics.co.za

Special Schools for the Visually Impaired and Civil Society Organizations

Eastern Cape

Efata School for the Blind and Deaf

School for visually and hearing impaired learners from Grade 0-12

P O Box 177, Umtata, 5100

Tel: 047 536-0527; 047 536-0527

Fax: 047 536-0525/0477



GADRA Advice and Community Work

Social club and protected workshop

P O Box 6427, Market Square, Grahamstown, 6141

Tel: 046 636-1744; 046 636-1744

Fax: 046 622-3316

gadraadvice@imagnet.co.za <http://nml.ru.ac.za/ngo/gadra>

Khanyisa School for the Visually Impaired

School for visually impaired learners from Grade 0-12

P O Box 11155, Algoa Park, 6001

Tel: 041 485-2891; 041 485-2891 Fax: 041 485-3637

Nkosinathi Foundation of Blind and Partially Sighted People

Provides rehabilitation training, a low vision service, social support services

P O Box 2126, North End, 6056

Tel: 041 487-1150; 041 487-1150

Fax: 041 484-3430

sabwoec@mweb.co.za

REHAB

Services to people with visual, mental and physical disabilities; therapeutic, developmental, recreational, rehabilitative programmes; counselling; skills training; placement; supports self-help groups; provides accommodation and food

P O Box 11149, Southernwood, East London, 5213

Tel: 043 722-9680; 043 722-9680

Tel/fax: 043 722-1811; 043 722-1811

diffable@iafrica.com

Zamokuhle Senior Secondary School



School for visually impaired learners: Gr 7 – 12; hostels

P O Box 10, Bizana 4800

Tel: 083 752-1252; 083 752-1252

Fax: 039 251-0476

Free State

Bartimea School

School for visually impaired learners: Grade R – 12

Private Bag X723, Selosesha, 9783

Tel: 051 873-2205; 051 873-2205

Fax: 051 874-1726

bartimea@telkomsa.net

Free State Society for the Blind

Social club; self-help group producing detergents; provides mobility training; runs a low vision clinic at the National Hospital

P O Box 4420, Bloemfontein, 9310

Tel: 051 447-6934; 051 447-6934

Fax: 051 447-6934

fsblind@itdot.net

Thiboloha School for the Blind and Deaf

School for visually impaired, deaf and multi-handicapped learners: Grade 0 – 10

Private Bag X829, Witsieshoek, 9870

Tel: 058 713-2821; 058 713-2821

Fax: 058 713-1800

University of the Free State Unit for Students with Disability

Renders services to students with disabilities re access to courses, buildings, learning material, residences, and leisure and sports activities

P O Box 11037, University of Bloemfontein 9321

Tel: 051 401-3713; 051 401-3713

Fax: 051 447-3827

ceronior.bib@mail.uovs.ac.za

Gauteng

All Saints Blind Choir

Raises funds to improve quality of life of visually impaired people

c/o P O Box 1918, Rosslyn, 0200

Tel: 012 702-8226; 012 702-8226

Cell: 082 801-5664; 082 801-5664

Children's Disability Centre

Early Childhood Development: medical, developmental assessments of disabled children; therapy; support to children and caregivers; training and skills development in the management of disabled children; gathering and publishing of statistics; resource and consultancy centre networking with other organisations and government authorities

Postnet Suite 268, Private Bag 30500, Houghton, 2041

Tel: 011 643-3050; 011 643-3050

Fax: 011 484-5554

Cell: 082 638-3269; 082 638-3269

neln@medicine.wits.ac.za

Eco Access

Facilitates camps and outings to the natural environment where disabled and non-disabled people, particularly children, learn about each other and nature; advocates accessibility for disabled people to the environment and facilities such as game parks

P O Box 1377, Roosevelt Park, 2129

Tel: 011 477-3676; 011 477-3676

Fax: 011 477-3674

rob@eco-access.org

[website: www.eco-access.org](http://www.eco-access.org)

Filadelfia Secondary School

School for visually and hearing impaired learners and for physically disabled learners: Gr 8 – 12

Private Bag X76, Soshanguve, 0152

Tel: 012 793-1204; 012 793-1204

Fax: 012 793-1358

filadelfia@telkomsa.net

Johannesburg Society for the Blind

Services: information, counselling, rehabilitation, orientation and mobility, independent living skills, protected employment, training

Private Bag X20, Linmeyer, 2105

Tel: 011 613-8241; 011 613-8241

Fax: 011 613-1180

www.icon.co.za/~jhbbllindsoc

Prinshof School

School for visually impaired learners including children with additional disabilities: Gr 0-12; residential facilities, eye and medical clinic, multidisciplinary assessments, counselling; occupational therapy, independent living skills, assistive technology skills, computer and science labs, Braille and large print production centres, early intervention services and home programmes, sport and recreation

P O Box 2817, Pretoria, 0001

Tel: 012 328-4170; 012 328-4170

Fax: 012 328-4540

prinshof@webmail.co.za

www.prinshof.co.za



Sibonile School

School for visually impaired learners including children with additional disabilities: Gr 0-7; residential facilities

P O Box 534, Kliprivier, 1836

Tel/fax: 011 903-8909; 011 903-8909

sibonile@iafrica.com

Soweto Workshop for the Blind

Provides independence training

P O Box 90360, Bertsham, 2013

Tel: 011 494-2728; 011 494-2728

Fax: 011 494-2726

sowetoworkshop@absamail.co.za

TIBA Services for the Blind

Protective workshop doing packaging for businesses; eye screening service and referrals for cataract operations; social work service; orientation and mobility training

P O Box 734, Lenasia, 1820

Tel: 011 852-1315; 011 852-1315

Fax: 011 854-6560

tibaservices4blind@telkomsa.net

The Memorial Institute (TMI) Centre for Visually Impaired Children

Early intervention services and training to professionals working in the field

Private Bag X39, Johannesburg

Tel: 011 481 5163

Fax: 011 643 6027



KwaZulu-Natal

Arthur Blaxall School

School for visually impaired and multiply disabled learners: Grades 0 – 12, Deafblind unit, residential facilities, vocational training and career guidance, sport and other extra-mural activities, Orientation and mobility, independent living skills, assistive devices, multidisciplinary team, counselling

P O Box 8132, Cumberwood, 3235

Tel: 033 387-1400; 033 387-1400

Fax: 033 387-2211

blaxall@futurenet.co.za

Ethembeni School

School for physically disabled and visually impaired children: Gr 1-9; residential facilities

Private Bag X1021, Hillcrest, 3650

Tel: 031 783-4718; 031 783-4718

Fax: 031 783-4450

ethembeni@mweb.co.za

www.ethembenischool.org

I-Langa Labantu Bo Mzantsi Association

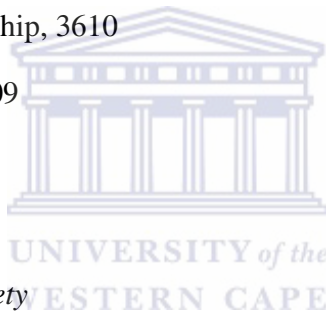
Independence training; training of trainers; blindness awareness workshops; low vision training; community outreach programmes; extra-mural activities for people with disabilities

P O Box 33137, Klaarwater Township, 3610

Tel: 031 706-8509; 031 706-8509

Fax: 031 709-6895

eymzobe@webmail.co.za



KwaZulu-Natal Blind & Deaf Society

Counselling, therapeutic intervention; life skills and independence training, Early Childhood Development (ECD) services, parent support groups, primary health, low vision, optometric and audiometric assessments); job placement, protective workshop, entrepreneurial training, Adult Basic Education, Braille literacy and sign language training and information on HIV & Aids

P O Box 1109, Durban, 4000

Tel: 031 309-4991; 031 309-4991

Fax: 031 309-3048

jacenair@nbds.telkomsa.net

www.nbds.org.za

KwaZulu-Natal Society for the Blind

Training in income generation skills, independent living skill, employment

P O Box 18702, Dalbridge, 4014

Tel: 031 202-7277; 031 202-7277

Fax: 031 202-2830

kzn@sancb.org.za

www.tradepage.co.za/nsbwww.kznblind.org.za

Magaye Visually Impaired People's Association

Adult basic education; rehabilitation programme; economic development programme

P O Box 2989, Pietermaritzburg, 3200

Tel/fax: 033 398-2050; 033 398-2050

Cell: 072 178-2885; 072 178-2885

Sikhona Arts and Culture Programme of the Disabled

Social Club; provides musical entertainment

Private Bag X05, Ntokozweni, 4089

Tel: 031 907-5090; 031 907-5090

Fax: 031 907-2790



Limpopo

Bosele School for the Blind and Deaf

School for visually and hearing disabled learners: Gr R – 12

Private Bag X128, Nebo, 1059

Tel: 013-263-1002; 013-263-1002

Fax: 013 263-9083

Cell: 082 420-6606; 082 420-6606

bosele.insti@mweb.co.za

Letaba School for the Handicapped

P O Box 2445, Tzaneen, 0850

Tel: 015 303-1655; 015 303-1655

Fax: 015 303-1194

letabaschool@lantic.net

Riakona CBR Programme

Rehabilitation programme (orientation and mobility, health education, adult education, Braille training, job placement); social integration; individual support (transport and food parcels)

P O Box 744, Thohoyandou, 0971

Tel/fax: 015 973-0824; 015 973-0824

Cell: 084 719-7737; 084 719-7737

riakona@telkomsa.net

Rivoni Society for the Blind

Private Bag X344, Elim, 0960

Tel: 015 556-3207; 015 556-3207

Fax: 015 556-3087

rivonisocietyfortheblind@telkomsa.net

Setotlwane LSEN Secondary School

Educate children with disabilities Gr 8 – 12

Private Bag X7273, Polokwane, 0700

Tel: 015 224-1501/2

Fax: 015 224-1500



Siloë School

Private Bag X7354, Polokwane, 0700

Tel: 015 651-0156; 015 651-0156

Fax: 015 651-0222

siloe@mail.ncdnet.co.za

Tshilidzini Special School

Private Bag X910, Shayandima, 0945

Tel: 015 964-3197; 015 964-3197

Fax: 015 964-1843

tshilidznin@absamail.co.za

Mpumalanga

Sediswesweng Blind Bureau

P O Box 97, Matjhirini, Siyabuswa, 0475

Tel: 013 983-0112

Silindokuhle School

P O Box 1397, Kwalugedlane, Komatipoort, 1341

Tel/fax: 013 782-4154



Northern Cape

Re-Tlameleng School

P O Box 2646, Kimberley, 8300

Tel: 053 871-3289

Fax: 053 871-3286

Western Cape

Athlone School for the Blind

School for visually impaired children and children with additional disabilities: Grade R – 12; residential facilities; Vocational training (switchboard training; welding workshop and cane products; call centre); multidisciplinary assessments, eye clinic, Braille and large-print production

Private Bag X1, Kasselsvlei, 7533

Tel: 021 951-2234/5/6/9

Fax: 021 951-5118

root@athloneblind.wcape.school.za

Athlone School for the Blind Association

Support organisation for the School and its learners

Private Bag X1, Kasselsvlei, 7533

Tel: 021 951-2234/5/6/9

Fax: 021 951-5118

root@athloneblind.wcape.school.za



Cape Town Society for the Blind

Provides training in technical and business skills: computer literacy, candle making, detergent manufacturing, cane & material weaving training, waitron training, business training, financial life skills; supports blind people to establish small businesses – advice, production and marketing support; employment consultancy

P O Box 1081, Woodstock, 7915

Tel: 021 448-4302

Fax: 021 448-5206

info@ctsb.co.za

website: www.ctsb.org.za

Helen Keller Society

Provides care (nursing, physiotherapy, counselling, occupational therapy, etc, low vision services and assistive devices) and accommodation for elderly and retired people, especially the visually impaired; Sells crafts, knitted goods and baking produced by blind and partially sighted people.

Private Bag X25, Howard Place, 7450

Tel: 021 531-5311

Fax: 021 531-8275

helenkeller@mweb.co.za

Ian Fraser Memorial Bursary Fund Trust

Provides bursaries to visually impaired students

P O Box 125, Howard Place, 7450

Tel: 021 531-2028

Fax: 021 531-6654

crd@saintdunstans.co.za

Inclusive Education Western Cape

Provide training and support geared towards inclusive education for parents and professionals, resource centre

P O Box 36330, Glosderry, 7702

Tel: (021) 674 1422

Fax: (021) 683 6379

Info@included.org.za

www.included.org.za

John & Esther Ellerman Memorial Trust

Provides funding for training visually impaired persons in orientation and mobility and skills of daily living

P O Box 125, Howard Place, 7450

Tel: 021 531-2028

Fax: 021 531-6654

crd@saintdunstans.co.za



League of Friends of the Blind (LOFOB)

Early childhood development of visually impaired children and parent support; independence training to newly blinded adults; rural outreach providing basic training and assistive devices; assists with preparation for inclusive education; sports clubs; low vision service.

P O Box 31010, Grassy Park, 7888

Tel: 021 705 3753

Fax: 021 705-2154

info@lofob.org.za

[website: www.lofob.org.za](http://www.lofob.org.za)

Pioneer School for Visually Impaired

School for blind and partially sighted learners, visually impaired learners with additional disabilities, deafblind learners: Grade 0 – 12; hostels; parent guidance; vocational training; tertiary career training; work placement; training of adults with visual impairments; orientation and mobility training

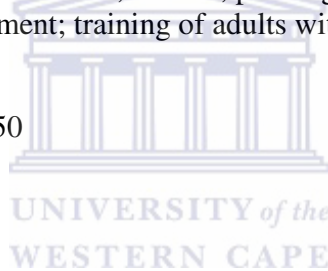
Private Bag X3048, Worcester, 6850

Tel: 023 342-2313

Fax: 023 342-3959

prinsipaal@pioneerschool.org.za

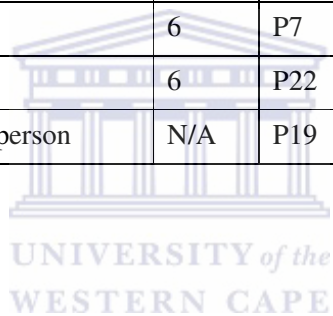
[website: www.blind-institute.org.za/pschool.htm](http://www.blind-institute.org.za/pschool.htm)



Appendix III: Subject Table

Interview No	Date	Designation	Grade	Respondent Code	Qualifications	Years of teaching experience
1.	2-5/10/2007	Facilitator	6	P1, P15	Matric	7 years
2.	3-4/10.2007	Visually impaired learner=N	6	P28, P30	N/A	N/A
3.	3-4/10.2007	Visually impaired learner- J	6	P29, P30	N/A	N/A
4.	09/12.2007	Mother of learner J	N/A	P3	Stay at home mom	N/A
5.	09/12.2007	Father of learner J	N/A	P3	Chiropractor	N/A
6.	09/12.2007	Mother of learner N	N/A	P10	Bank administrator	N/A
7.	12/01/2007	Facilitator's mentor , Braille Tutor and support person	N/A	P32	UCT Disability Unit Co-ordinator	N/A
8.	04/10/2006	Private learning support teacher	N/A	P14	BA LLB	11 - 15
9.	11/01/2007	Chief Education Specialist[Specialised Learner and Educator Support	N/A	P:31	M. Educational Psychology	
10.	4/10/2006	Social Worker	N/A	P18	B. Social Science (hon)	11-15
11.	4/10.2006	Principal	All	P11	HDE Remedial	31-35
12.	5/10/2006	Head of Department /Past teacher	5	P12	HDE	11 - 15
13.	3/10/2006	Class teacher	6	P2	Higher Diploma in Education	6 –10

14	03/10/2006	Music Teacher	All	P16	B. Music	21 – 25
15	05/10/2007	Previous teacher	4	P8	HDE	21 - 25
16.	04/10/2006	Teacher with no direct contact with Learners with Visual impairment	5	P13	HDE	16 -20
17.	05/10/2006	Mother of classmate	N/A	P17	N/A	N/A
18.	05/10/2006	Mother of classmate	N/A	P9	N/A	N/A
19.	05/10/2006	Close friend /classmate	6	P21	N/A	N/A
20.	06/10/2006	Close friend / classmate	6	P25	N/A	N/A
21.	06/10/2006	Learner (not close)	6	P6	N/A	N/A
22.	06/10/2006	Classmate	6	P4	N/A	N/A
23.	06/10/2006	Classmate	6	P7	N/A	N/A
24.	06/10/2006	Classmate	6	P22	N/A	N/A
25.	13/12/2006	SGB Chairperson	N/A	P19	N/A	N/A



Appendix IV: Observation Checklist

OBSERVATION CHECKLIST

Student

Date

Class / learning Area

Teacher

OBSERVATION	RATING			COMMENT
	Always	Sometimes	Never	
Culture in the class				
The learners offer assistance to each other when needed.				
The class work displayed celebrates both individual and teamwork.				
The learners report to the teacher when someone needs help.				
The students share rather than compete in tasks.				
The students avoid racist, sexist, homophobic, disability name calling.				
Students act as advocates for others who they feel have been treated unfairly.				
Students appreciate the achievements of others by complimenting them.				

Physical Access	Always	Sometimes	Never	Comment
The learners move around the school independently				

Appendix V: Sample Interview Guide

Interview Guide for Class Teacher

A. Attitude

Explain your understanding of inclusive education and where and how you first came to hear about it?

Tell me about your experience of including a learner with visual impairment?

Why you did it?

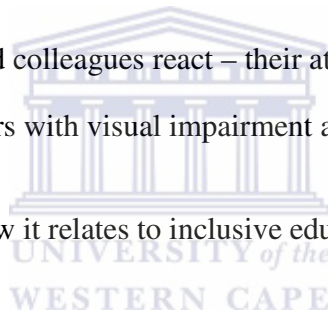
Your concerns.

The adjustment period.

How did other pupils, principal and colleagues react – their attitudes, etc.?

What was the impact on the learners with visual impairment and other learners – advantages and disadvantages?

Describe your school ethos and how it relates to inclusive education?



B. Preparation

Describe the steps leading up to you including the visually impaired learners e.g. the request, gathering information, negotiating with role players, conditions and organising support?

What preparations were or needs to be done to prepare

the school environment,

staff members,

learners,

parents?

Explain what preparation do you make for extra-murals, special occasions like concerts and class excursions?

Explain what special needs training, courses or research have you done to prepare yourself?

Tell me about the initial period of adjustment and lessons learnt that led to further preparations and adjustments.

C. Social inclusion (participation, acceptance, belonging)

Tell me about the how the learners with visual impairment are socially included.

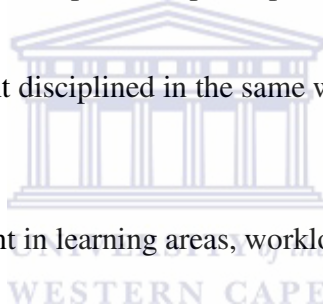
Do they have a sense of belonging and acceptance from peers?

How they get along with classmate, the friendships formed and are they extended to home.

Bullying?

Describe how the learners with visual impairment participate in group discussions, activities, projects and extra-mural activities?

Are learners with visual impairment disciplined in the same way as other children?



D. Coping with curriculum (content in learning areas, workload, instructional style of teacher)

In your opinion, does the curriculum accommodate learners regardless of special need? Please explain.

Describe the learners' participation and competencies in the various learning areas.

do they cover the same content as all the other learners in their class

Which learning areas are most challenging? Why?

Are they at the appropriate grade level for the respective learning areas? Please explain.

Do the learners with visual impairment receive the same homework and projects as all the other learners in their class? Please explain.

Explain what adjustments have been made to the curriculum, teaching material, teaching style and practices to ensure that they follow the lesson / discussions in class?

It is essential that blind learners learn Braille, activities of daily living and mobility, which are not part of the mainstream curriculum. How are the learners acquiring these skills? How are these skills incorporated into his curriculum?

Do learners with visual impairment have an Individual Education and Development Plan (IEDP, ISP)?

What is the role and responsibilities of the facilitator and how much of the work are the learners with visual impairment able to do independently?

E. Adapted assessment

Explain how the learners with visual impairment are assessed and what accommodations are made, challenges and possible solutions?

F. Support systems that help learners access the curriculum.

Explain your understanding of support?

Describe how you support the learners with visual impairment?

Describe the support the learners with visual impairment receive from
the school
peers

learning support teacher

Social worker?

Describe the support do you receive from

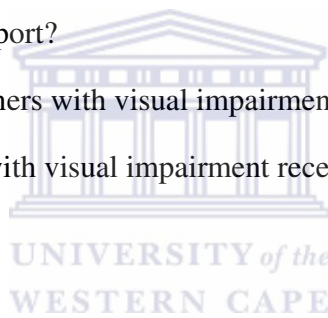
friends, colleagues and community (e.g. NGO's and church)

the family of the learners with visual impairment

EMDC, WCED

Special school for learners with visual impairment?

Its adequacy, impact, further needs and suggestions to improve your situation at that of other teachers wanting to support learners with visual impairment in mainstream schools?



Explain how your experience from the inclusion of the learners with visual impairment assists you with the inclusion of other learners in your class?

Describe what support systems are in place to promote independence of the learners with visual impairment as they are approaching high school?

Explain/estimate what expenses are incurred in including the learners with visual impairment, how they are met and challenges around financial support?

How can we build the capacity and skills of mainstream teachers who support visually impaired learners?

G. Co-operation and collaboration

How would you describe the relationship between you and the learners with visual impairment?

Describe the collaboration, co-operation and communication between:

The learners with visual impairment and their facilitator?

you and facilitator, e.g. planning lessons, doing learning activities, helping other learners, communicating with parents

facilitator, learner and you

you and the parents of the learners with visual impairment

principal and you

DBST, WCED and you

How often do you meet and what is discussed?

In your opinion, do you have closer contact with the parents of the learners with visual impairment than with the other parents? Please explain why?

How does the facilitator participate in the learning activities and help the other learners in the class? Please elaborate.

H. Physical inclusion

How do the learners with visual impairment find their way around the school?

What changes were made to the school building and classroom to improve access and what further changes to the building would you recommend?

I. Assistive technology

Describe the assistive devices the learners with visual impairment use, their function, and cost and how they were acquired?

What devices do the learners still need?

Describe the competence of the learners with visual impairment in operating a computer?

If you have any thoughts that may be of value to this research, please share them below:



Appendix VI: Sample of coded transcript



Class teacher interview.doc

Path: C:\Users\nafisa\Documents\Interviews Atlas ti\Class teacher interview.doc
Media: RICHTEXT

Printed: 2011-09-21T14:12:33
By: Super

From HU: A Case study of the inclusion of 2 vi Boys
HU-Path: [C:\Users\nafisa\Documents\A Case study of the inclusion of 2 vi Boys.hpr5]

Codes: 46
Memos: 0
Quotations: 54



001 Nafisa: Thank you for taking the time to be interviewed. Past teachers noted that Jane can best answer many of the questions. So just answer whatever you can and as best you can.

002
003 Class teacher: I will

004
005 Nafisa: Please explain your understanding of inclusive education and where and how you first came to hear about it?

006
007 Class teacher: My understanding of inclusive education in a nutshell is the mainstreaming of ELSEN learners, your learners with special educational needs, doing away with specialised schools which catered for needs of learners irrespective of the special needs. The first time I learnt about it was during my studies at college. That was with the advent of the White Paper, the initial White Paper that was published concerning ELSEN learners and that was the first time. Up until such time I never actually seen it working in action but that was the first time I actually heard about it.

 IE understanding limited:speci

008
009 Nafisa: Tell me about your experiences of including, Noel and Justin. For example, why you got involved, your concerns, the adjustment period?

010
011 Class teacher: My experience prior to this experience with Justin and Noel and I had very little experience with learners specifically with visual impairment. It would have been learners with special educational needs in terms of ADD and ADHD. Typically, your more typical and more prevalent forms of ELSEN learner, the typical ELSEN learner. But as such visual impairment, no prior experience before this. Why did I do this, simply quite honestly I think I was found in a situation where it was thrashed upon me before the time and this is my experience. I'm glad for the experience. It's been interesting; it's been interesting to say the least. My concerns as such, I did have concerns prior to this, prior to this year starting with the two learners in my class, having been told towards the end of last year in the third quarter and the fourth quarter of last year that I would be teaching the learners. I did have concerns, the feelings of possible, feelings of apprehension possibly, feelings of how am I going to cope. That was my initial concern. The adjustment didn't take too long. In terms of this year, the year started off, it's taken the first term of this year to see how the learners had come through the ranks from grade one, grade two, wherever they started. The adjustment didn't take too long, first of all for me to see how and

 teacher had no real choice in v

 teacher initially had apprehens

 teacher's adjustment time was

adapt to their style of doing things or what they've been accustomed to.

012 Nafisa: What about working with the facilitator?

014
015 Class teacher: I think that was my biggest concern. I was concerned about having an adult in the class. My concern is that it would be a almost test of myself as an educator and someone watching over me if I could call it that and that, those are my real feelings of apprehension, not about the learners as such but I think with the facilitator. Having chatted to, interesting having chatted to previous educators who had to, same facilitating their class, they had the same concerns at first, that they had adjusted accordingly and within a very short space of time. They had become familiar with the facilitator being in the class.

🌟 teacher feared another adult in

🌟 teacher got reassurance and in

016
017 Nafisa: Let me just check if it's recording. Can you please see if it is? It would be the worst thing ever if, it didn't record.
018 (laughing)

019
020 Class teacher: Lastly I'm looking at question E, what was the impact of learners with visual impairment on other learners, advantages and disadvantages. I'm just thinking of impact. Initially at the beginning of the year, remember these kids come from grade 5; classes are mixed at the end of every year. So what happened was they would, some of the learners in this class, as they are sitting here in grade six would have had been in the same class as the visual impaired learners

021
022 Nafisa: From grade R possibly?

023
024 Class teacher: Possibly. Some wouldn't have been in his class at all. For them, they would have been a novelty. It didn't take too long in terms of those learners to actually see what it's all about and also to slot into it and make the necessary adjustments as such. But on the learner's side the adjustment was minimal.

🌟 Sighted learners adjusted easil

025
026 Nafisa: How did the other people in the school (the principal, the pupils and the colleagues) react and what was their attitude in general? Do you remember how it was in the beginning?

027
028 Class teacher: In terms of?

029
030 Nafisa: Their attitudes of having them included at the

school.

031

032

Class teacher: The attitudes were mixed. I was, I think I was busy trying to find my own point of view. In discussion with colleagues in my grade, some of whom had since left the school, one or two were negative. I think they were set in their ways in terms of the entire, in terms of the model. They were set in their ways, some were anti the idea from the start, who weren't keen on the idea. Some young teachers, including myself, I think were a bit more open to it. Also not having that much of a choice as I said, thrashed into the position, where I have to make the best of the situation. Not necessarily a bad situation, in fact not a bad situation at all. But having made the best of it and thus far I would say I'm a richer person for it. I'm not poorer from it. In terms of principal, the principal as far as I know dealing with it before having had the learners in my class, the principal was very supportive and in general everyone is very supportive, everyone who I come in contact with.

Attitude mixed
Attitude: older teachers negati

Attitude: younger teachers pos

teacher has had a positive exp

school ethos and environment

033

034

Nafisa:

The parent?

035

036

Class teacher: Parents of the learners or other parents?

037

038

Nafisa: Parents of the other learners

039

040

Class teacher: I would, an interesting story, something that happened at the beginning of the year where we speak to the parents. They come into the classrooms and we educators sit down and talk to the parents in terms of what's happening for the rest of the year. I'd receive tremendous support from parents. Especially parents whose kids were in classes the first time and seen what was going on with the visually impaired learners. They actually stood up and made a point of standing up and telling other parents what a fantastic and how wonderful an opportunity it was to actually have seen this work in action, especially in terms of spin off for kids, in terms of the social benefits - learning patience, learning understanding, learning a bit of tolerance, learning a bit of empathy and I think empathy more than anything. At the beginning of the year, it was a very good meeting where I spoke to parents and parents actually took the opportunity to stand up and praise not myself by praise the system and the way it's been set up to let their kids in on something which otherwise would not ordinarily had happened in a school. It was one of those feel good moments for me.

school ethos and environment

social benefits to sighted learn

school ethos and environment

041

042 Nafisa: Especially after, all those apprehensions.

043

044 Class teacher: That's right

045

046 Nafisa: We spoke about the advantages to the other learners. What are the advantages and disadvantages for Noel and Justin?

047

048 Class teacher: Specifically for the learners, as the year goes along we see how things have to be done especially in terms of prepared beforehand. There aren't advantages as such. They will partake and participate in everything as much as, far as possible. It might not be at the same level but there is the participation, the participation factor is there. Advantages I think, the integration and being part of it. So that being immersed in whatever the mainstream learners are doing and we talking about academic activities, social activities; spring activities, whatever activities they doing. From tests to doing Phys Ed, you name it, they doing it. So they being exposed to it, they're coming out richer for that. I think any disadvantage would be possibly would be the time factor especially when it comes to a task more academic. One of, something on the down side would be that they tend to take a bit longer especially tests if I can think of an example, tests take a bit longer but it's not a disadvantage. From that they even grow. So basically the advantages far outweigh the disadvantages.

participate in all aspects of sch

benefits to VIL participate as p

assessment: given extra time

advantages more

049

050 Nafisa: I remember I use to get a half hour every hour for exam

051

052 Class teacher: That's right, for tests they are granted more time. They will for instance, they will start the test, let's say we doing a test and they will start the test at the same time as the rest of the learners. If the learners are given an hour and we the rest of the class have stopped the test. It's only the visual impaired learners who are still writing the test. They will just now have to get up and continue the test in another venue where it's quiet and then we can continue with our lesson, so as not to keep the entire class waiting but they are given more time with which to complete, which works very well.

assessment: given extra time

053

054 Nafisa: What about the steps leading up to giving support for the visually impaired learners? For example gathering information, negotiating roles and responsibilities and organise support and training.

055

056 Class teacher: If I can think back, the initiatives under our school were done by the principal. The gathering of

information, I had a lot of support. Jane, the facilitator, made an appointment last year to sort out the learners for this year such as text books for instance. Jane who would send away for **conversion** to Braille, so that could be done before hand. Gathering information, she would give me the background information about the learners, at what point they are academically, socially; whether it be areas of support. There is another facilitator, Candy, who works also close on a one to one basis. And another visual impaired learner who has since left our school, he left at the end of the first term, he particularly needed, he needed help and he needed reinforcement and support in certain sections of his academic work. And we sat down and she told me where his weak points are, his areas of growth and in these certain area and she went through it and this is how we went about it. So, yes beforehand there was quite a bit of preparation and laying down ground work so that I knew at what point they come in and we output into this along their journey and so on.

057

058 Nafisa: What about the parents?

059

060 Class teacher: I've seen the parents in passing and by the time the year had started, yes I had seen parents. I made myself available to the parents, I've seen them. I just let them know who I am and also let them know in fact whose class they'd be coming to. I met the parents; I mean on a very informal basis, I have met the parents.

061

062 Nafisa: Do you think you should have more contact with their parents than with any of the other parents in the class?

063

064 Class teacher: Actually no. In the same manner that there is no preferential treatment as such, I don't call in any more regularly than I've done any of the other learners. I might see them more often in that especially the one learner, Justin. His father comes in regularly and drops him off early in the mornings. So I'll chat to him and have an informal chat in the mornings and we'll just chat but all things trivial but we don't, I don't actually call parents in specifically more regularly than I do with any of the other mainstream learner's.

065

066 Nafisa: Because, the other children's parents also come in and chat?

067

068 Class teacher: Yes they come in, you'll see them, many parents do see

069

✿ Preparation: facilitator and tea
✿ Preparation: facilitator and tea

✿ boundaries regarding responsi

✿ parent-teacher/school contact

✿ parent-teacher/school contact

070 Nafisa: Because they drop their children off?

071

072 Class teacher: That's right. They do see and you'll see the learners assisting them, taking them to the gate or getting them wherever. Yes, they actually do see them and there is a presence.

073

074 Nafisa: What preparations were done to prepare the school environment, the staff members, the class teacher and the learners? I think we spoke about the what you did like consulting with Jane and all those things. Is there anything else you'd like to add?

075

076 Class teacher: I can think of where I've spoken to the grade five teacher for instance and I'd ask them also is there anything I need to watch out for. Is there any particular way in which I set up the class, is there anything out of the ordinary that she had done, in any other way I could support the learners? So, no that is about the only way that I'd spoken to other staff members. But I hadn't really consulted the other staff members or spoken to, about them. They had seen these visual impaired learners in passing and they pass comments about I wonder how they doing or they show some kind of support but there's no direct support. I have no direct involvement with them as such.

077

078 Nafisa: What still needs to be done to prepare the school environment?

079

080 Class teacher: I think if we just take the age of the school into account, I think the school design, it's aged in its design. Years back they would never envisage this kind of thing. So the school environment itself physically, it's not set up for any kind of ELSEN learner. Let's say for a wheelchair bound learner. We have many flights of stairs. We have three flights of stairs. We have long passage ways to negotiate. Ja, it's not actually conducive to being as I could say visually impaired learner friendly as such. We fortunate in that Josh is, has built confidence and he can negotiate his way around the school very easily, despite his challenges. He can actually just negotiate his way around the school very well on his own, independently. I've actually seen him do this. It's amazing.

081

082 Nafisa: My dad is also blind and he's been blind since he was five, six years old. He walks around the school. He knows his school, so he walks around school without a cane.

083

Support: peers assist instinctiv

teacher got reassurance and in

collegial support through encc

Environment: Physically inacce

independence: O & M skills of .

084 Class teacher: That's right! Justin is in the same boat. Noel, this is his first year, so I don't think he is as confident. He relies heavily on Justin and he needs lots of coaxing and lots of pushing and encouragement for instance, for a simple walk from outside our class down to office.

Independence: O&M skills of N

085
086 Nafisa: He still needs help?

087
088 Class teacher: Not help but lots of encouragement like how to come along. Tell him come along, walk a bit faster, like that kind of thing or use your cane, or he needs lots of encouragement. He's come a long way since the beginning of the year within this last 10 months. But he needs a lot of encouragement.

Independence: Noel needs enc

089
090 Nafisa: He's a very friendly child

091
092 Class teacher: Yes, he's friendly; he is a friendly boy by nature. I think he can sense when he's in the classroom and there are other eyes and ears on him. Automatically he senses that and then he's not as confident. It's apparent.

Participation: Noel less confide

093
094 Nafisa: I find it very funny because I'll phone there and his mom won't be there and he'll be starting a conversation.

095
096 Class teacher: Yes the same with me

097
098 Nafisa: Explain the preparation you make for extra murals, for special occasions like concerts and class excursions?

099
100 Class teacher: Ok, so anything out of the classroom as such. I'm thinking of extra murals. Justin does a variety of things. Justin and Noel do poetry club. They recite poetry, and confidence building, big confidence builder. There are always learners who assist them in getting in there. One of the friends will grab him and make sure he gets to the practice in the hall regularly in the week, in the mornings and some afternoons. And they do recite also at some school functions or in assemblies. So there is always a learner to make sure he goes. He goes to choir, he attends choir. So this morning, for instance, they had choir from just before eight to eight thirty. So there's a learner of the class who also attends choir will assist him and help him. I just make sure he comes back to class and then. So there is always some kind of assistance, there is always someone on hand whose going in the same direction as him, or if not someone in

Participation: partake in extra-i

Support: peers assist instinctivi


the same direction, someone whose in the same grade or another learner who knows them.


101
102 Nafisa: Would that have ever been made explicit to them to do that or do they do it quite instinctively?

103
104 Class teacher: I think initially, I think once the instruction had been given that they must please assist, after that they just do it. They do it out of their own. But we never have to tell anyone to actually jump in and assist. They do it, the kids do it naturally. They jump in and assist.

105
106 Nafisa: What special needs training or courses or research have you done to prepare yourself?

107
108 Class teacher: Specifically for the visually impaired, prior to this, nothing formal, nothing as such. Apart from our special needs course at college, as part of our studies, we had a special education course as part of our final, our last third year formal training, we actually did a bit of subject. And having spent some time as part of our teaching at teaching experience in ELSEN schools. No formal training. A lot of it is consultation, word of mouth and actually seeing how the system that they use works and fitting into that, but that's as far.

 Preparation: minimal training i

 Preparation: mainly consultatic

109
110 Nafisa: You didn't do your own like maybe

111
112 Class teacher: No, no it's go with the flow, there we go. Time was not on our side

113
114 Nafisa: Tell me about how the learners with visual impairment are socially included? How do they get along with their classmates and are the friendships extended to their homes?

115
116 Class teacher: This is a tricky one and I say it's tricky for the following reasons. That what I see in the classroom is what I see in the classroom. It's a very difficult one to answer in terms of what happens when the bell goes to dismiss them at the end of the day. So in terms of what's happening at school, they are integrated, they part of what's going on. From the other learner's perspective, I can tell you this for sure that there are, I can easily divide the rest of the learners into two groups. There are those who're going to assist freely and without any kind of encouragement to assist or jump in, they're caring, they're empathetic, they're looking out for their fellow man. And then there are those who would rather not include themselves. Not include themselves out of rather of, I'd rather not get involved, rather than I don't want to.

It's not a, because if asked a lot of them do. A lot of them do, initially maybe there's this sense of fear or a sense of failure that they don't know that they would be able to handle it. But a lot of them actually do get involved **of** their own. Some rather just stay away from it and say rather not, I won't take the chance as such. From what I see once the school bell goes or during break times, there is always someone to jump in and assist them, take them to break, make sure that they come back on time. So there's always support. They're integrated socially, there part of what we do, they are not excluded in anyway.

117
118 Nafisa: And friendships?

119
120 Class teacher: Friendships, I think the friendship between the boys are closer than, the two learners in my class, they closer than what they probably are between any of the other learners. From what I can see I don't think there are any mainstream learners who have extended friendships beyond the school, the school hours, the school day. Maybe that's just the way families or the way individual families are set up. I wouldn't know the reason but from what I can see, no they don't talk about it as openly as the visual learners. The non visual impaired learners would often talk about where they have been for the weekend or friends. The two other learners, I don't hear them talk about as often, so I'm assuming that then.

121
122 Nafisa: And bullying?

123
124 Class teacher: Bullying, no, absolutely no bullying what so ever, no, no bullying.

125
126 Nafisa: You implied that they do participate in group discussions, activities and projects. Can you comment more on it?

127
128 Class teacher: Projects is something that they have to hand in, in terms of written projects. There aren't many of those. A lot of them are individual based. The kids have to perform on their own. In any case, when there are non written projects let's say a skit or a recital or let's say some role-playing, they are included into groups. Each one would have a part to say. We're done it numerous times this year and each one takes part and they actually do it very well. Something I've noticed especially for Justin, he has to rely heavily on memory and his auditory perception. So let's say for instance we are doing a class assemble and the class has to present an assembly, even if I haven't given Justin his words in

 Support: peers assist, include a

 Social inclusion: VIL learners cl

 Social inclusion: friendships wi

 Participation: included in non-

 compensatory skills