

**THE DEVELOPMENT OF A SELF-HELP SKILLS
EDUCATION PROGRAMME FOR A GROUP OF
VISUALLY IMPAIRED CHILDREN**

by

SABINA SEESURRUN

**Submitted in accordance with the requirements
for the degree of
MASTER OF ARTS**

**In the subject
PSYCHOLOGY**

**At the
UNIVERSITY OF SOUTH AFRICA**

SUPERVISOR: PROF. M. J. TERRE BLANCHE

JANUARY 2015

DECLARATION

Student number: **3285-980-5**

I declare that **The development of a self-help skills education programme for a group of visually impaired children** is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

SIGNATURE

(Miss)

DATE

Abstract

The Mauritius School for the Blind is primarily funded through government support. Therefore, it is currently a requirement of the School to adhere to the same curricula as used in all primary schools in Mauritius. This research highlights the necessity for a curriculum that can be specifically designed to meet the needs of visually impaired children. The objectives of the study were; to conduct an evaluation to determine the visually impaired children's educational goals; to establish the key orientation, mobility and independence skills required by children and young people at the School who are visually impaired; to identify ways in which the skills development programme can be implemented within, and beyond, the School's curriculum; to propose a set of self-help skills training processes that can form part of the current curriculum to enable visually impaired children at the School for the Blind to become more independent. A triangulation research methodology constituting both qualitative and quantitative research was used. The participants consisted of 12 visually impaired children, the Head of the School, three NGO staff members and six teachers. Thematic analysis led to themes and categories emerging in the arena of self-help skills development. Independence and self-help skills were the main themes determined through data analysis. The secondary themes which emerged from the main ones consisted of social skills, travel skills, daily living skills and education. Sub-themes derived from social skills were cultural differences and its associated feeling of discrimination. Sub-themes under travel skills included independent travel and assistance. Finally, education comprised of sub-themes such as a special programme on self-help skills and training for teachers. The above analysis stressed the need to set up a committee in order to start developing a curriculum in the arena of self-help skills.

Key terms: Visual impairment; social skills; daily living skills; travel skills; self-help skills; independence; education.

Acknowledgement

My sincere thanks to all the persons who have helped me complete my dissertation. I hereby express my heartfelt gratitude:

To the management and staff of the School for the Blind, for dedicating their time and sharing information to make this research successful.

To the research participants for sharing their experiences, and trusting that this research can contribute to the welfare of children with disabilities.

To the UNISA library, for providing me with reference books and journals pertaining to my study.

To the non-governmental organisation, Lois Lagesse Trust Fund, for allowing NGO staff members to participate in the study.

To my study supervisor, Professor Martin Terre Blanche for his invaluable advice, guidance and suggestions, as well as his professional assistance through each stage of my study. Prof Terre Blanche's instructions have enabled me to complete this dissertation effectively.

To my former co-supervisor, Ms Thandeka Tshabalalala, for her valuable input on the contents of the research proposal.

To Elizabeth A. Chamberlain – parts of my questionnaire were based on the questionnaire used in (Chamberlain, 2003). The article was published in a refereed journal.

To Dr. Basseer Jeeawody for his continuous support throughout my study. He has acted as a mentor and friend many times when I needed someone to turn to.

I am extremely grateful to Mrs. Jesika Singh; my former UNISA online mentor. She has also helped with editing some of the chapters.

To Julie Talbot-Dunn for editing, proofreading and for the final layout of my dissertation.

To Mr. Francois Li-Ying member of Lois Lagesse Trust Fund, for his help in paraphrasing some texts.

To Mrs. Viveka Bikoo, who cross-checked the participants' transcripts.

To my personal friends and colleagues for their help and support. They inspired me to do my best.

Last but not least, to my family who kept me going throughout my study.

Table of contents

Abstract.....	3
Acknowledgement.....	4
Chapter 1 Introduction	11
1.1 Statement of the problem	12
1.2 Aims of the study and objectives	12
1.3 Definition of terms and theoretical framework.....	13
1.3.1 Visual impairment.....	13
1.3.1.1 Legal definition.....	14
1.3.1.2 Educational definition.....	15
1.3.2 Special educational needs or special needs.....	16
1.3.3 Individual Education Programme	17
1.3.4 Daily living skills.....	17
1.3.5 Orientation and mobility	17
1.3.6 Curriculum	17
1.4 Framework of Mobility and Independence.....	18
1.4.1 Early and foundation mobility and independence	18
1.4.2 Advanced mobility and independence	18
1.5 Format of the study	18
Chapter 2 Literature Review	19
2.1 Historical Progression	19
2.1.1 Historical development of the School for the Blind in Mauritius.....	23
2.2 Psychological and behavioural characteristics of visually impaired children	24
2.2.1 Individuation and identity formation among visually impaired children	24
2.2.3 Lag in conceptual development	26
2.2.4 Poor intelligence	27
2.2.5 Academic retardation	27
2.2.6 Slower speech development.....	28
2.2.7 Personality disorders	28
2.2.8 Problems in social adjustment	28
2.3 Skills development.....	29
2.3.1 Mobility techniques	30

2.3.2 Education needs to be considered.....	33
2.4 Learning and motivational theories	36
2.4.1 Self-determination theory	37
2.4.1.1 Behavioural autonomy.....	40
2.4.1.2 Self-regulated behaviour.....	40
2.4.1.3 Psychological empowerment.....	41
2.4.1.4 Self-realisation.....	41
2.5 Conclusion.....	43
Chapter 3 Research Method.....	45
3.1 Research design	45
3.2 Target population.....	45
3.3 Sampling.....	46
3.4 Ethical approval.....	46
3.5 Data collection.....	47
3.5.1 Field Observation	47
3.5.2 Survey.....	47
3.5.3 School profile	48
3.5.4 Focus Group	48
3.5.4.1 Transcript from focus group	49
3.6 Questionnaire for children.....	50
3.6.1 Testing the questionnaire.....	50
3.6.2 Research process.....	50
3.7 Credibility, reliability and validity of the findings.....	52
3.8 Credibility of the researcher	53
Chapter 4 Research Findings and Analysis	54
4.1 Introduction	54
4.2 Context.....	54
4.2.1 School profile	55
4.2.2 Demographics of children attending school	55
4.3 Curriculum and assessment	58
4.3.1 School and extra-curricular activities	58
4.3.2 Support services provided in and out the school	59

4.3.3 Needs identified from the School profile.....	59
4.3.4 Survey with the children	59
4.4 Analysis and findings.....	60
4.5 Themes occurring in all data.....	60
4.5.1 Relating the themes to the data collection	61
4.5.2 Overview of data reduction.....	62
4.5.3 Equipment and services at school	63
4.5.4 Children’s understanding of visual impairment.....	64
4.5.5 Social skills	65
4.5.5.1 Sub-theme: Cultural differences	66
4.5.5.2 Sub-theme: Feeling discriminated against	66
4.5.6 Daily living skills.....	67
4.5.7 Travel skills.....	67
4.5.7.1 Sub-theme: Independent travel	68
4.5.7.2 Sub-theme: Assistance	69
4.5.8 Education	69
4.5.8.1 Sub-theme: Special programmes on self-help skills.....	69
4.5.8.2 Sub-theme: Curriculum.....	71
4.5.8.3 Sub-theme: Training for teachers.....	72
4.6 Conclusion	73
Chapter 5 Discussions and Recommendations.....	74
5.1 Introduction.....	74
5.2 Key findings.....	74
5.3 Summary of learning areas from table 10.....	79
5.4 Enhancing self-determination skills in visually impaired children.....	79
5.5 Recommendations.....	80
5.6 Limitations	80
5.7 Strength of the research	81
5.8 Current improvements	82
5.9 Conclusion	82
References.....	83

Appendix A. Request for permission to conduct research – Ministry of Education and Human Resources	91
Appendix B Request for permission to take part in research – visually impaired children	93
Appendix C Consent form - parents	95
Appendix D Questionnaire for visually impaired children – used for my reference ..	98
Appendix D-1: Organisation of data from interview transcript – to facilitate identification of patterns and similarities	101
Appendix D-2: Presentation of sub-categories, categories, secondary theme obtained from interview transcript related to questions 3, 4, 5 and 10, each participant’s code name (P1, P2 to P12), and their responses.	102
Appendix D-3: Representation of themes, secondary themes and categories related to interview transcript of 12 visually impaired children.....	109
Appendix E Interview questionnaire – staff	110
Appendix E-1: Interview agreement permission form - interviewee	111
Appendix E-2: Summary of Focus Group Transcript	112
Appendix E-3: Presentation of themes, secondary themes, categories and sub-categories related to the focus group interview with the Head, 6 teachers and 3 NGO staff. (The highlighted text indicates the sub-categories emerging from the raw data.).....	116
Appendix F ..Presentation of themes, secondary themes, categories and sub-categories related to field notes of my reflections and observations during the research process.	121
Appendix F-1: Presentation of themes: Self-help skills and Independence emerged from the secondary themes: daily living skills, orientation and travel skills, communication which in turn emerged from the categories.	123
Appendix G School profile 2013 - study setting.....	124
Appendix H Cross-checking - confirmation.....	133

Tables and Figures

Table 1: Students' details	55
Table 2: Types of impairment experienced by children at school.....	55
Table 3: Special equipment and facilities	56
Table 4: Services offered by the school and by the NGO.....	56
Table 5: Personnel	57
Table 6: Non-academic staff	57
Table 7: School programme.....	58
Table 8: Example of information obtained from survey.....	59
Table 9: Example showing themes related to patterns.....	61
Table 10: Strategies cited by various authors	77
Figure 1: Themes	63
Figure 2: Equipment and Facilities.....	63
Figure 3: Services at the School.....	64

Chapter 1

Introduction

In Mauritius, the School for the Blind is a specialised school for visually impaired children with 22 students between the ages of six and seventeen years. Seven of the children have 90% visual impairment. It is a government supported school with an obligation to implement educational curricula in accordance with other primary schools in the country. Therefore, the curriculum must be designed to meet the needs of visually impaired children, thus preparing them towards independence. The teachers appointed at the school have a primary school education background and are qualified as primary school teachers.

According to King (2010), self-help skills enable a child to meet his or her own needs and involve activities and behaviours that eventually lead to independence. King explained that, in the process of children growing up, they learn to acquire skills that enable them to dress themselves, set the table, or pour juice. These activities are all indicative of self-help skills and development of maturity.

He further argued that self-help skills also involve cognitive and emotional development, for example, learning to express anger with words instead of throwing a toy, respecting the property of others and being able to read a book without help (King, 2010).

Many self-help skills that are normally learned through observation are delayed in visually impaired children (Strickling, 2010). The research therefore, created an opportunity for the School to develop a programme for self-help skills development, which can be incorporated within the curriculum to foster independence.

June Waugh, curriculum specialist at the California School for the Blind, USA claimed that independence is often misinterpreted as the ability to do things without help. She believed that a person who has achieved independence, whether visually impaired or not, knows him or herself well and also understands how to meet his or her own needs, with or without the help of others. She further added that it was important to create a balance between feeling free and feeling comfortable whilst being able to ask for help (June Waugh in *The Educator*, 2008, p. 21).

1.1 Statement of the problem

It is perceived that, at the School for the Blind, it is desirable to include contents and teaching techniques associated with the development and enhancement of self-help skills in the existing curriculum. It is essential that research is conducted and opportunities created for the school to develop a programme for self-help skills development, which can be incorporated within the curriculum to foster independence.

According to Norshidah and Khalim (2010), the inability of children to see, compared to sighted children, generally restrains their learning experience and restricts their learning activities. Norshidah and Khalim argued that for those with low vision, the process of receiving information through the sense of sight will be limited. Teaching styles, instructional materials and educational goals in the form of special education have therefore to be designed and modified to meet these children's learning needs and abilities. Special education programmes include special services or 'related services'.

This dissertation explores the special needs of visually impaired children at the School for the Blind and investigates educational strategies that could be introduced to enhance the well-being, welfare and independence of the children so as to prepare them to lead a more fulfilled life in society.

1.2 Aims of the study and objectives

The aims of the study are: to discover the self-help skills needs of the visually impaired children at the School of the Blind in Mauritius; to describe the current curriculum used in specialised schools as it relates to the issue of self-help; and to develop an educational programme that will enable visually impaired children at the School for the Blind to become more independent.

The following objectives are targeted to achieve the above aims:

1. To conduct an evaluation to determine the visually impaired children's educational goals.
2. To establish the key orientation, mobility and independence skills required by children and young people at the School who are visually impaired.
3. To identify ways in which the skills development programme can be implemented within, and beyond, the School's curriculum.

4. To propose a set of self-help skills training processes that can form part of the current curriculum to enable visually impaired children at the School for the Blind to become more independent.

1.3 Definition of terms and theoretical framework

The American Foundation for the Blind (AFB) is a non-profit organisation founded in 1921 and is a leading national resource for people who are blind or visually impaired as well as the organisations that serve them, and the general public (Kaiser, 1999, p. 9).

The American Foundation of the Blind (2001), defined *visual acuity* as, “The sharpness of vision determined by a person's ability to discriminate fine details” (American Foundation for the Blind, 2001, in Reidmiller, 2003, p. 24).

Glaucoma: Abnormally high pressure within the eyeball. (Eye Care, 2004)

Cataracts: Eden (1978) defined cataract as: “An imperfection in the clarity or a clouding of the lens of the eye. It will be experienced by a majority of people who live to an old age.” (Eden, 1978, in Allen, 2007) Moreover, the University of Minnesota (2005) stated: “In children, some cataracts are present at birth and others develop with metabolic or systemic abnormalities. In older children, cataracts are related to injuries or ocular inflammation due to juvenile arthritis” (University of Minnesota, 2005, in Allen, 2007).

1.3.1 Visual impairment

The IDEA – Individuals with Disabilities Education Act – was passed by congress in 1975 as PL 94-142, and amended in 1986 (PL 99-457) and 1990 (PL101-476) (Hunt, 1994). The Act was re-authorised in 1997 (PL 105-17), (Kaiser, 1999, p. 14). According to IDEA '97: “Visual impairment, including blindness, means impairment in vision that, even with correction, adversely affects a child’s educational performance. The term includes both partial sight and blindness” (Jackson, 2010). Authority: 20 U.S.C. 1401(3) (A) and (B); 1401(26).

The American Foundation for the Blind (2001), defined the term, ‘visual impairment’ as: “Vision that cannot be fully corrected by ordinary prescription lenses, medical treatment, or surgery” (American Foundation for the Blind, 2001, in Reidmiller, 2003, p. 25).

Castellano (1951) proposed that: “Blindness/visual impairment means using alternative skills and tools in place of, or in addition to, eyesight in order to gain information or perform tasks” (p. 15). One example discussed by Castellano is the sorting of laundry whereby Braille or tactile labels may be used as tools.

According to Scott (1982), the medical and legal definition of blindness in North America and many other countries is: “Vision of not more than 20/200 in the better eye after correction or a defect in the visual field so that the widest diameter of vision subtends an angle no greater than 10 degrees” (p. 1). Scott further discussed that this definition includes children who are totally blind, as well as those with limited sight who object to being called blind. He proposed that the teacher is key to discovering if the child has any usable vision. Scott (1982) maintained that: “The new term ‘visually impaired’ is intended to include all those students whose vision is sufficiently impaired to affect their functioning in school. It includes children with a wide range of vision, from those totally blind to those with enough sight to move around independently and those who can see print at close range” (p. 1). Furthermore, Reddy, Ramar and Kusuma (2000), stated that there are two definitions to describe visual impairment: the first being the legal definition as used by ordinary people and those in the medical profession; and the second being the educational definition as used by educators. These can be developed as follows:

1.3.1.1 Legal definition

The legal definition of blindness, according to Reddy et al. (2000), is based on assessment of visual acuity (ability to see in sharp detail) and field of vision: “A person is said to be legally blind if the child has visual acuity of 20/200 or less in the better eye even with correction, or has a field of vision so narrow that its widest diameter subtends an angular distance no greater than 20 degrees. The fraction of 20/200 means that the person sees at 20 feet what a person with normal vision sees at 200 feet. Normal vision acuity is thus 20/20” (p. 32).

“There is also another category referred to as ‘partially sighted’. According to the legal classification system, partially sighted individuals are those who have visual acuity falling between 20/70 and 20/200 in the better eye with correction” (Reddy et al., 2000, p. 32).

According to the American Foundation for the Blind (2008), 'legal blindness' is a legal term used to assess to what extent a person is entitled to obtain certain benefits in connection with the degree of his or her visual loss.

Also, the clinical diagnosis of blindness is given as: "Refers to a central visual acuity of 20/200 or less in the better eye with the best possible correction, and/or a visual field of 20 degrees or less" (The American Foundation for the Blind, 2008). Legal blindness does not refer to total blindness. In fact, people who are legally blind may have a certain percentage of visual acuity.

1.3.1.2 Educational definition

Barraga (1976) described visually impaired children as: "Children having visual disabilities that interfere with their learning ability and who require adaptations in teaching methods, learning materials and/or of the learning environment" (Barraga, 1976, p. 16 in Rogow, 1988, p. 34).

The terms 'legal blindness' and 'partial sightedness' are rather limited in their definitions and therefore educators found that they had to construct a more satisfying definition (Reddy et al., 2000).

Reddy et al. (2000) further added that educational definition is concerned with the techniques of reading instruction. In general, visually impaired people are those who are partially sighted and therefore need to learn Braille and use aural methods, for example, audiotapes and records.

The list of the various causes of visual impairment mentioned by Reddy et al. (2000) was given as:

- Errors of refraction

- Glaucoma, cataracts and diabetes

- Prenatal causes

- Improper muscle functioning.

The description of the term ‘visually impaired’, for general educational purposes, includes examples of visually impaired students who are not able to see and consequently depend entirely on their other senses in order to learn effectively. This compares to those children with some vision who are able to use their partial vision to support their learning (The American Foundation for the Blind, 1986, p. 15).

The American Foundation for the Blind (1986) further discussed that the National Guidelines for Educational Excellence was set as an educational tool for people, including educators, who are involved in planning and providing related services to blind and visually impaired students. The publication discussed that the term ‘low vision’ has been replaced by the term ‘blind and visually impaired’ and acknowledged that: “Although all blind individuals are visually impaired, all visually impaired persons are not blind” p. 3.

Programme planning and evaluation for blind and visually impaired students therefore focuses on the educational and specific needs of blind and visually impaired students and how programmes can be adapted effectively to meet these needs.

According to the American Foundation for the Blind (2012), the term ‘visual impairment’ includes all categories of vision loss, from moderate vision to high vision loss, which unfortunately cannot be rectified to normal vision even with standard eyeglasses or contact lenses in many cases.

Fortunately, visual impairment does not prevent someone from leading a normal life. Today, science and technology offers visually impaired people the chance to receive training and use a wide variety of adaptive techniques and other resources to become integral members of society.

1.3.2 Special educational needs or special needs

Heward (2003) explained that children with special needs require a specifically designed curriculum and instruction to fully develop their capacities. Therefore, it is essential that curriculum and instruction are modified according to the children’s disabilities (Heward, 2003, in Oluremi, 2012, p. 179).

1.3.3 Individual Education Programme

Reidmiller (2003) defined “Individual Education Programme (IEP) as: “A planning tool that documents the educational programme that is developed by an interdisciplinary team. The IEP specifies the required goals, objectives, and timeframe necessary to meet the student’s identified needs. These educational goals and standards are adjusted to the student’s ability and are continually evaluated” (p. 9).

1.3.4 Daily living skills

Daily living skills are defined as: “Self-care, home living, communication, socialisation, travel, shopping, money management and leisure skills” (Jageman & Long, 1990, p. 8 in Kaiser, 1999, p. 13).

1.3.5 Orientation and mobility

Ballemans et al. (2011) defined orientation as: “The ability to recognise and establish a position in relation to the environment, whereas mobility is the physical ability to move in an orderly, efficient and safe manner through the environment” (p. 881). For the purpose of this study, orientation and mobility is considered a discipline in which children learn to interact with, and move safely through, the environment in both known and unknown areas, with independence and purpose. Thus, this ability to move around comfortably is essential to independence.

1.3.6 Curriculum

Baine (1999) defined ‘curriculum’ as: “The content and sequence of the knowledge and skills to be taught in an area of instruction” (p. 5). Baine claimed that in developing countries, in special education, simpler craft or other activities replace some of the difficult tasks. Kelly (1999) argued that: “Our definition [of curriculum] must embrace all the learning that goes on in schools, whether it is expressly planned and intended or is a by-product of our planning and/or our practice” (Kelly, 1999, p. 5 in Smith, 1996, 2000, www.infed.org/biblio/b-curric.htm).

According to Irwin (1955), Braille is defined as: “A tactile reading system using a configuration of six dots arranged in two parallel rows of three. The dots represent letters, whole word contractions, punctuation, and numbers” (Irwin, 1955, in Kaiser, 1999, p. 11).

1.4 Framework of Mobility and Independence

According to Pavey et al. (2002), the final Framework for Mobility and Independence curriculum is the result of the combined views of both mobility and independence educators and the key recommendations from the literature on mobility and independence and child development.

1.4.1 Early and foundation mobility and independence

“Body and spatial awareness includes early sensory-motor development, spatial language, mobility, and orientation in different settings. Social and emotional development encompasses activities such as asking for assistance, social conventions, manners, confidence and motivation” (Pavey 2002, p. 23; The Educator 2006, p. 9).

1.4.2 Advanced mobility and independence

“Travel skills, including route planning and technical aspects of travel, mobility and orientation, road safety, cane techniques. Independent living skills (ILS) are such as kitchen skills, eating, hygiene, money handling, and dressing” (Pavey 2002, p. 23; The Educator 2006, p. 9).

1.5 Format of the study

Chapter 1: The introduction poses the main focus of the study. It clarifies the aims and objectives of the research. The definition of key terms used in the study is explained.

Chapter 2: The literature review provides an in-depth and critical review of relevant literature.

Chapter 3: The research methodology chapter will explain the research methods, the research design and instruments used.

Chapter 4: Presents the research findings. It constitutes discussion of results with respect to the research questions and the literature review.

Chapter 5: This chapter will present a discussion, draws some conclusions and a list of possible recommendations for future.

Chapter 2

Literature Review

2.1 Historical Progression

The literature review elucidated a multiplicity of issues concerning the visually impaired children. Several theories were incorporated, as references for developing their self-help skills.

This chapter critiques the literature, exploring the definition of terms with historical background and the theories involved which help to build the capacity of visually impaired people through educational intervention, their daily living skills and their mobility and independence. The purpose of this review is to provide a context for this research study that incorporates a self-help education programme that focuses on developmental skills.

According to Castellano (1951), visually impaired children first received a formal education in Paris in the 1780s when a school for the blind was established. She stated that: “The founder of the school developed a way to emboss books and demonstrated for the first time that blind children could be educated and become literate” (p. 2). Castellano went on to say that: “Louis Braille developed the reading and writing code. Following the success of the Paris institution, schools for the blind were established in other European countries” (Castellano, 1951, p. 2).

“Down through the centuries, visually impaired persons have been abandoned to cope with the unseen environment without constructive assistance” (Rusalem, 1972, p. 4).

Rusalem (1972) further mentioned that residential schools for the blind were established in Boston, New York and Philadelphia in the early 1830s in the United States. The first programme was organised as a sheltered workshop by Samuel Gridley Howe who was the founder of the Perkins School for the Blind in Boston. The rest of the nineteenth century saw an increase in the various categories of schools and programmes.

Little by little, the first official state agencies for visually impaired people came into existence, catering for the needs of all children with visual impairment through, “Home teaching, sight conversation, home industries and welfare benefits” (p. 5).

Currently, programmes for visually impaired children are progressing in a favourable manner taking into account the capability of each child according to his or her needs.

Rusalem stated that: “Rehabilitation agencies have moved into innovative programming of their own, including the development of mobility training, low-vision aids centers, vigorous selective placement services, and well-run small business enterprise programmes” (Rusalem, 1972, p. 5).

According to Moodley (2004), “The first school for the deaf/blind was established in 1881 in South Africa” (p. 38). Landsberg (1998) mentioned that, “Not only academic education was being taught, but also vocational training such as music, basket making, piano tuning, mattress making and knitting were introduced” (p 25), (Landsberg, 1998, in Moodley, 2004, p. 39).

Holiday (2013) stated that the Perkins School in Massachusetts was opened on 1832 by Samuel Gridley Howe. This was the first residential school for the blind which aimed to provide vocational and life-skill studies for blind and visually impaired students as well as the regular curriculum lessons. This resulted in a rapid increase in the demand for places for visually impaired students and, by 1910, schools for the blind had been established in a great number of states throughout the US.

Tuttle (1984) reported that: “Residential schools were mainly set up during the nineteenth century. He further added that specialised reading and writing systems and adaptative aids were being developed” (Tuttle, 1984, in Moodley, 2004, p. 29).

Roberts (1986) suggested that music and handwork should be included in the regular curriculum for children who did not suffer from visual impairment. Moodley (2004) mentioned that public and private schools were established between the year 1832 and 1875. He added that focus was given to the integration of visually impaired children with sighted children in public schools. Moodley mentioned that a trained teacher was made available to provide specialised instruction to visually impaired children (Roberts, 1986, in Moodley, 2004, p. 34).

Hadidi (1998) explained that in the Arab region, the first school for visually impaired children was set up in Cairo, Egypt in 1870. He argued that the purpose of the school institution was protection and not in providing education to visually impaired people.

Hadidi (1998) further maintained that in Arab countries, it is difficult to get accurate and updated information on the educational development of visually impaired children. Only a few visually impaired children attended the residential and special day schools which, at the time, were their only choice. In Arab countries recently, great efforts have been made to explore new developments for visually impaired people. The primary responsibility of education still remains with the family, but some efforts have been made in the Arab region for special education methods, philosophies, curricula, and job recruitment.

According to Roberts (1986), “When blind students attended schools for the blind, their parents at home taught daily living skills (ADL) activities” (Roberts, 1986, in Chamberlain, 2003, p. 10). Herring (1996), Langley (1996) and Tooze (1981), claimed that visually impaired children who live at home do not perform daily living skills due to lack of education of the subject. Parents often want to help and assist their children every day (Herring, 1996; Langley, 1996; Tooze, 1981, in Chamberlain, 2003, pp. 9-11).

Chamberlain (2003) claimed that “in reality, this is counterproductive because it fosters dependence rather than independence” (p. 10).

Olmstead (2005) explained that special classes for the visually impaired were started early in the twentieth century by local school districts in the USA. These classes enabled some children to live at home and attend school. Later on, this situation improved with the establishment of the resource room programme within local districts, where some of the children were enrolled in general classes; they went to the resource room when they needed assistance. These community-based programmes led to the development of itinerant programmes such as the one started in California in 1938 and the one in New Jersey in 1943 (Olmstead, 2005).

Zebehazy and Whitten (1998) found that teaching in specialised schools, consisted of mainly the core curriculum or academic subjects and this was taught during the 19th century as well up to mid-20th century. Lohmeier argued that, in those days, children only received writing and reading skills in Braille without learning the main core skills for their

daily life. Therefore, the Braille formula was ineffective and was not as successful as expected (Zebehazy & Whitten, 1998, in Lohmeier, 2005, p. 126).

In the American Foundation for the Blind Directory Profile (2014), the first transition programme was founded by Dr Philip Hatlen in 1972. In this programme, daily living and independent living skills, such as cooking, were taught in the students' apartments. The students learnt, from the beginning, to choose what they would like to learn to cook, where to shop for their food, how to cook for themselves and where to store their food safely. Other learning areas such as cleaning skills were also being carried out in the apartment with the cooperation of the roommates. The curriculum thus consisted of knowing the different cleaning products and equipment required as well as learning proper cleaning techniques. Moreover, folding techniques and clothing styles constituted learning areas within care and clothing skills. Cane travel techniques were also practised in the vicinity of the locality extending to wider areas to enhance independent travel. Braille is encouraged in reading and writing skills within all areas in the curriculum. Assistive technology and recreation services are also included in this programme.

According to the American Foundation for the Blind Directory Profile (2014), The New York State School for the Blind opened in 1868 and still provides a learning environment where children can achieve their full potential. Parents and staff work together to help each child reach their educational goals in his or her Individualised Education Programme (IEP). Their educational programme is designed in such a way that daily living skills are included along with the residential programme according to their age and developmental level.

The different learning areas provided by The New York State School are: personal hygiene needs, dining skills, food preparation, home living skills such as making one's bed, caring for clothing, basic clean up skills, use of assistive technology, Braille and reading instruction. Recreational services are made available, including an adapted physical education class. Additional programmes involve crafts, story-telling, weightlifting, swimming, art therapy, music therapy, travel and mobility and low vision services.

According to Punani and Rawal (2000), the development of Orientation and Mobility was explained as follows; soon after World War II, formal and specific training began in 1947 in the USA. A Mobility Research unit and National Mobility Training centre were started

in Nottingham University and Birmingham respectively. A mobility training manual was published in the USA. The National Association for the Blind in India also started programmes in Dehradun, Mumbai and Bangalore in 1971.

2.1.1 Historical development of the School for the Blind in Mauritius

In the Mauritian National Policy Paper and Action Plan on Disability, Government programme (2005-2010), it was mentioned that the history of disabled persons had followed a similar trajectory to that of other countries where some disabled people were relegated to begging whilst the others were simply kept at home with their families out of the view of the public. As elsewhere, disability was seen as a social stigma and many viewed it as a source of shame. Moreover, the consciousness of civil society was raised with the poliomyelitis outbreak of the 1940s which resulted in large numbers of children becoming disabled. Civil society responded by setting up voluntary associations.

A landmark decision in 1946 saw the setting up of the Society for the Welfare of the Blind by Lois Lagesse and Seewoosagur Ramgoolam who believed that “visually impaired people could be educated, trained and eventually earn their living in a decent, honest and professional manner” (p. 16). This initial action gave rise to an interest among social workers to improve the living conditions of people with disabilities. This included the hearing impaired, physically disabled and those suffering from intellectual disabilities. By the 1970s, parents, with the support of the Labour Government, started to form non-governmental organisations (NGOs). Together with parastatal bodies, they introduced specialised care, education and training for all disabled people.

“Association Des Parents D’Enfants Inadaptés de L’Ile Maurice, Society for the Welfare of the Blind and Society for the Welfare of the Deaf were parallel organisations providing the same services to the intellectually disabled, visually and hearing impaired persons respectively” (p. 17). This culminated in the International Year of the Disabled, which was celebrated in 1981. The efforts by the Mauritian government continued and included legislative measures aimed at accelerating the integration of people with disabilities into mainstream society.

In the late 1940s, Mr Lois Lagesse was the first person to gather together a small group of blind people and, with the support of others, founded the Welfare of the Blind and Prevention of Blindness Society situated in Port Louis, the capital city of Mauritius. The

activities taught were basketery and the making of doormats for the men and handknitting for the women. In year 1957, the centre was transferred to Beau Bassin, the actual location of the Lois Lagesse Trust Fund Centre. The number of blind people increased to 20. In the late 1960s, the first blind person sat for the Primary School Leaving Certificate (Muneean, Bouvery, Tallybally, Carpin, & Kureembakus, 1992, pp. 11-12).

The School for the Blind was set up in 1957 by Mrs Nadia Pyndiah, a blind lady, who was remunerated by the Welfare of the Blind and Prevention of Blindness Society. During the early 1960s, she was appointed by the Ministry of Education. At the time of her appointment, only five pupils were attending the school (Muneean, Bouvery, Tallybally, Carpin, & Kureembakus, 1982-1992, p. 11).

2.1.2 Current policy guidelines in Mauritius

Referring to the Education and Human Resources Strategy Plan of 2008-2020, it can be inferred that, until 2006, no comprehensive policy on special needs education had yet been developed. In spite of important measures such as free education and the funding of a few special needs schools by the Government, all physically impaired children could not be guaranteed admission to specialised institutions. Moreover, there was also a lack of accurate statistics regarding the number of children requiring special educational programmes in Mauritius. These factors clearly demonstrate the urgency of implementing the Special Educational Needs policy guidelines and strategic framework so that predefined goals and objectives are achieved every year. In this way, all SEN children in Mauritius would be able to benefit from the relevant, high-quality educational facilities that they deserve.

2.2 Psychological and behavioural characteristics of visually impaired children

2.2.1 Individuation and identity formation among visually impaired children

According to Goodwyn, Bell and Singletary (2006), “Identity” is the way visually impaired children see themselves and how they feel about themselves. It is important for visually impaired children to be able to develop a positive blind identity which enables them to feel equal to others. Rogers (1951) stated: “The self is the most important aspect of each person’s world” (p. 174). He explained that people have an intrinsic need to receive ‘positive regard’ from others as well as being motivated to maintain and enhance their own identity (Rogers, 1951 in Baron & Byrne, 2000, p. 174).

According to different scholars, “Societal attitudes are one of the main barriers or handicaps to the development of persons with disabilities” (p. 11). Societal attitudes, for example, portray a person with disability as a burden, dependent and an object of pity (Zelalem, 2002, p. 11). Moreover, Huebner (1988) and Sacks and Rosen (1994) explained that daily living skills are of vital importance for the well-being and self-concept of visually impaired children.

Halliday and Kurzhals (1976) argued that an education programme for the young visually impaired child can be divided into areas of learning. According to Halliday and Kurzhals, “A stimulating environment for the visually impaired children has as its goal the step-by-step development of the child correct understanding of the environment. As the understanding develops, the visually impaired children start to learn and develop interests in their environment” (pp. 15-17, vi).

Guilloteaux (2007) claimed that “motivation of the visually impaired children at the school is determined by the context in which interaction takes place between the students and the teacher, peers, friends, activities of learning, teaching strategies” (p. 50). Turner and Meyer (2000) defined it as: “Instructional context [including] the influences of the teacher, students, content area, and instructional activities on learning, teaching, and motivation” (p. 180), (Turner & Meyer, 2000, p. 180 in Guilloteaux, 2007, p. 50).

According to Hatlen (1996), it is important for those young people who are visually impaired to be able to acquire basic living skills in order to cope with their daily life. Institutions which specialised in providing these skills within their curriculum are ideally placed to help those students. Hatlen expounded the fact that “expanded core curriculum” would greatly help visually impaired students (Hatlen, 1996 in Iselin, 2002, p. 335).

Hazekamp and Huebner (1989) also included in this category the following skills: “Personal hygiene, dressing, care of clothing, housekeeping, food preparation eating skills, managing money, social communication, use of telephone, written communication, time, and organisation” (Hazekamp & Huebner, 1989 in Lewis & Iselin, 2002, p. 335).

2.2.3 Lag in conceptual development

Reddy et al. (2000) claimed that, with regard to conceptual development, children with visual impairment were slower to develop than their sighted peers. The development of concepts is not the same between visually impaired and sighted individuals mainly due to the difference between the tactile sense for exploring the environment and visual experiences. According to the American Foundation for the Blind (1986), a visual impairment will often hamper a student's development of concepts related to vision and learning of educational subjects. A visual impairment usually affects how a student learns about and functions within various environments. Hence, visually impaired children will require specific skills to understand and adapt to environments and to eventually move, travel and play independently within them. Orientation and mobility needs that should be addressed include: developing a conceptual understanding of body image as well as comprehension of concrete environmental concepts, spatial concepts, compass directions, and concepts relating to traffic and traffic control. Body image comprises concepts such as planes, parts, laterality, and directionality in relation to objects and environmental features.

Furthermore, The American Foundation for the Blind (1986), stated that "Concrete environmental concepts that are used in real life relate to such items as grass, lawn, cement, wood, carpet, tile, tree, bush, street, curb, and intersection. Examples of spatial concepts include far, near, close, high, low, above, below, facing, in front of, behind, beside, away from, next to, forward, backward, sideways, and 90, 180, and 360 degree turns" (p. 11).

Reddy et al. (2000) explained that tactual perception is primarily how the visually impaired child learn and develop a variety of concepts as compared to the sighted child who acquires the concepts through his or her sense of sight. They further discussed the two kinds of tactual perceptions, which are the synthetic touch and analytic touch. "Synthetic touch refers to a person's tactual exploration of objects small enough to be enclosed by one or both hands. On the other hand, "analytic touch involves touching of various parts of an object and then mental constructing these separate parts". "The sighted person is able to recognise different objects or the parts of a particular object simultaneously whereas the blind person must perceive things in succession. Due to lack of perceptual vision, visually impaired people are not able to develop integrated concepts" (Reddy et al., 2000, pp. 36-37).

The American Foundation for the Blind (1986) provided examples for compass directions related concepts as: “relationships are north, south, east, and west: sides of streets: names of corners: and relationships among changes in direction. Traffic and traffic control concepts include fast, slow, parallel, perpendicular, same direction, opposite direction, near side, far side, stop signs, walk signs, and light-controlled intersections” (p. 11).

Reddy et al. (2000) further argued that visually impaired children experience a range of problems including behaviour, learning, placement in society and social adjustment issues. Further obstacles to achieving life skills include poor intelligence, academic retardation, slower speech development, personality disorders and problems in social adjustment (pp. 38-39).

2.2.4 Poor intelligence

Sternberg (1999) stated: “Intelligence involves (a) the capacity to learn from experience and (b) the ability to adapt to the surrounding environment” (p. 469).

Madden (1981) argued: “The intellectual development of children who are visually impaired may differ in ways that are both intrinsic and extrinsic from that of children whose vision is not impaired. In the former case, conditions inherent in the disability may contribute to development” (p. 1) which, as Lowenfeld (1977) stated, “May be slower than normally expected” (p. 53). The latter case has demonstrated that certain educational experiences, which fail to trigger sufficient stimulation and challenge, may have an impact on development (Lowenfeld, 1977, p. 53 in Madden, 1981, p. 1).

2.2.5 Academic retardation

Reddy et al. (2000) argued that although visually impaired children use alternative devices such as large-print books or Braille, they are found to be slow achievers in academic subjects. Visually impaired children lag behind by one or two years concerning their educational development. In spite of teaching aids like the large prints or Braille, these children face much difficulty in attaining the same standard as sighted children of the same age. Due to their visual problems, many children take more time to process the same information that is provided to sighted children.

2.2.6 Slower speech development

Reddy et al. (2000) stated that progress in speech development is much slower in comparison with sighted peers and that visually impaired people cannot learn by observation and imitation; they can only learn by using their remaining senses such as sense of hearing and sense of touch.

2.2.7 Personality disorders

Reddy et al. (2000) believed that visually impaired children have greater chances of being affected by nervous strain, insecurity and frustration due to their impairment.

When Punani and Rawal (2000) referred to “Training in O & M” (p. 87), it is obvious that training will offer visually impaired children the chance to face real life situations and provide them with a sense of security and confidence. This will improve their ability to adapt to various situations and aid their personality development in the long run.

2.2.8 Problems in social adjustment

Reddy et al. (2000) argued that sighted children fairly frequently tend to reject their visually impaired peers because they do not respond in the same way.

DeMario (1990) explained that in this modern world, people have to manage by themselves. Consequently they need certain abilities and thus basic training should be provided. As a result, they would become autonomous and adapt to society (DeMario, 1990 in Lewis & Iselin, 2002, p. 335).

Marks (1996) further discussed that all accounts given by visually impaired people showed that it is not just visual impairment that causes a problem, but it is the perception of those who view people who are visually impaired. Visually impaired people are very sensitive and they easily sense that people treat them with pity or contempt. This leads to much frustration. They feel that they are different and this can be an obstacle to their adaptation in society. Thus society as a whole must change its mind set concerning visually impaired people (Marks, 1996 in Hedley, 2010, pp. 6-7).

2.3 Skills development

The American Foundation for the Blind (1986) stated:

“A student with visual impairment will need special skills in using alternative strategies and specialised equipment and materials to communicate effectively. The needs are: being skilled in reading, using appropriate modes (for example, braille or print and recorded form) for such purposes as gaining academic information and pursuing personal, career, and recreational interests, being able to operate basic communication equipment and being cognisant of and able to use appropriate special devices for reading and writing, such as slates and styli, brailers, prescribed optical devices, talking computers, reading machines, and other electronic equipments. Moreover developing a good sense of body image, understanding these concepts: laterality, time, position, direction, size, shape, association, discrimination, sequence, quantity, sensations, emotions, actions, colours, matching and classifying.” (p. 8)

According to Hatlen (1996) and Sapp and Hatlen (2010), the Expanded Core Curriculum includes Braille as well as other modes of accessing the general curriculum, proper orientation, mobility and assistive technology. Furthermore, importance should also be given to the acquisition of independent living skills which Holiday (2013) referred to as “daily living skills” (p. 47), which include personal hygiene, dressing, food preparation, money management, housekeeping, time monitoring and organisational skills. Finally, aspects like recreation, leisure, sensory efficiency (visual, tactual, auditory skills) and social interaction skills and self-determination should also be covered by the curriculum (Hatlen, 1996; Sapp & Hatlen, 2010, in Pogrund, Shannon & Teryl, 2013, p. 31; Holiday 2013).

Pogrund et al. (2013) argued that, “Individuals with Disabilities Education Act (IDEA) supports instruction in the ECC by requiring Individualised Education Programmes (IEPs) in both academic and functional areas related to the student's disability” (Individuals with Disabilities Education Improvement Act, 2004, p. 31).

Holiday (2013) explained that “Compensatory and functional skills include such learning experiences as concept development, spatial understanding, study and organisational skills,

speaking and listening skills, and adaptations necessary for accessing all areas of the existing core curriculum” (p. 45).

According to Reddy et al. (2000), a large part of a visually impaired person’s skill in mobility is the ability to detect obstacles and hazards in the environment. Obstacle sense is known as the visually impaired person’s ability to ‘sense’ an object along his or her path, for example along a street. Walking along the street he or she often seems to be able to ‘sense’ an object in his or her path. This ability has come to be known as obstacle sense. Many people believe that visually impaired people have what we call a ‘third eye’. In other words, they develop extra sensory perception. However, this is not really the case. Visually impaired people do develop, after a certain period of time, the ability to detect obstacles in their way, but unfortunately this does not make them as capable as normal people in walking around. Reddy et al. (2000) said that “It is just an aid” (p. 37).

According to Castellano (1951), cane travel is explained as follows: “The cane is held so that its tip lands about three steps in front of the feet. It is swept from side to side just slightly wider than shoulder width. Like vision, the cane gives a preview of what lies ahead and to the sides. It tells if a path is clear or if an object is in the way and locates a safe spot to place the foot. It can detect drop-offs like curbs and enables safe negotiation of stairs up or down” (Castellano, 1951, p. 39).

According to Stone (1995), “When an individual is not able to travel around freely, this has a devastating effect on his or her self” (Stone, 1995, in Punani, 2000, p. 88). Orientation and mobility training would help the child towards vocational training and gaining employment with the result that he or she would be able to earn their own money and be socially integrated.

2.3.1 Mobility techniques

Mobility techniques are discussed by Punani and Rawal (2000) as follows: for easy movement of visually impaired children various techniques were developed, such as visualising and being assisted by a sighted guide whilst passing through a narrow space, going up or down stairs, using a chair or passing through doorways. Moreover, walking alone safely with protective techniques, using upper hand-forearm techniques, lower hand-forearm techniques, locating dropped articles, using landmarks indoors and direction

taking were also addressed. Cane Techniques include use of pre-cane devices, use of long cane, choosing the right type and quality of cane, correctly holding and using canes, squaring off, adaptation of the cane technique and shore lining etc. (Punani & Rawal, 2000, p. 89).

Chamberlain (2003) and Hill and Snook–Hill (1996) suggested that O & M services should begin as soon as possible. O & M training is also beneficial to children suffering from low vision. The training of young children should comprise body imagery and concept skills which are essential for travelling. When designing O & M training programmes for adults and children, it has to be taken into account that adults have a knowledge base of environmental, spatial and positional concepts that children do not. For instance, an adult understands the concept of a block in a neighbouring building. But a child needs to be taught the concepts of shapes and numbers to be able to assemble all the information and visualise a block as having four sides and looking similar to a square.

When fundamental concepts are not understood, travel skills may be affected. According to Mills (1980), O & M training should be 30-50 minutes in length, five days a week, for students in primary grades. Similarly, for students in upper elementary grades, the O & M training should be 40-80 minutes in length and five times a week. As the child grows up, further skills can be taught with regards to complex areas of travel. Thus, when a child joins middle school, travel can change from residential and school compounds to small business premises and shopping complexes. Moreover, when the student is admitted to high school, Mills stated that O & M training should be complete with the individual having sufficient skills to use public transportations and travel independently throughout the town.

Referring to Payne (2001), in case a child does not succeed in acquiring necessary travel skills before graduating from high school, this will significantly diminish his or her chances of securing employment as an adult. Tooze (1981) claimed that for a visually impaired individual to live an independent life, he or she will need to be trained in daily living skills and orientation and mobility (Hill & Snook, 1996; Payne, 2001; Tooze, 1981, in Chamberlain, E. A., 2003, p. 260).

Lewis and Iselin (2002) claimed that, even though sighted children acquire independent skills “gradually and without planned, systematic instruction from adults” (p. 335), they do

learn by observing others. Visually impaired children do not attain the same level of capability in the mastery of independent living skills as their sighted peers. However, the method of direct instruction would be more relevant to teach them the skills.

Lewis and Iselin (2002) argued that children who lack competence in social and daily living skills will face a major handicap in their adult life and their contribution to society is quite limited. They further argued that, consequently, children with disabilities especially visually impaired children need special care concerning mobility and independence but this should go beyond their education at school towards integration in society at large.

Sacks (1987) and Sacks and Gaylord-Ross (1989) conducted a study whereby peers and teachers taught social skills to visually impaired children in elementary school. They argued that: “Social behaviours that were targeted for intervention were determined with the input of the visually impaired students and their teachers” (p. 31).

The training that was provided consisted of the “direction of gaze, body posture, positive initiations, and joining of peer groups and sharing in group activities. It involved modelling the use of prompts, discussions on the need for desired social behaviours, and role play” (p. 31). The outcome was that general improvement was noted in social behaviour that extended far beyond the classroom through peer-mediated training (Sacks, 1987; Sacks & Gaylord-Ross, 1989, in Sacks, Kekelis, & Gaylord-Ross, 1992, p. 31).

According to the American Foundation for the Blind (1986), a visual impairment is an obstacle to the child’s becoming autonomous. Thus, for these children to become functional, we need to devise a special programme for effective learning to take place. The American Foundation for the Blind (1986) further discussed about the the fact that “Assessment and instruction regarding daily living skills should include areas like personal hygiene, skills such as tending to toileting, care of teeth and hair, and bathing needs, dressing skills, clothing care techniques, housekeeping skills such as locating and using housekeeping areas in the home, food preparation skills, eating skills, money management skills, social communication skills, skills in telephone usage, written communication skills and time monitoring skills” (p. 13).

Furthermore, according to Reddy et al. (2000), lack of sight can influence a person’s experiences more because a primary means for obtaining information from the

environment is not available. They added that typical classrooms use visual medium more, which makes the situation even more difficult. Teachers need to make some modifications, but they can apply the same general educational principles. The important difference is that visually impaired students need to depend on other senses to acquire information. Reddy et al. (2000), further argued that “special modifications are required in areas such as Braille, use of remaining sight, use of adaptive technology and listening skills” (p. 42).

2.3.2 Education needs to be considered

The American Foundation for the Blind (1986) stated that visual impairment tends to impact self-image and, hence, the ability to socialise. This in turn has an effect on the ability to participate fully in recreational activity, observe and absorb social interaction, and to respond appropriately where sexuality is concerned. As a consequence, visually impaired students have special educational needs such as socialisation, affective education, recreation, and sex education.

Social needs to be addressed include understanding and displaying acceptable social behaviour in a diverse group situation, being aware of and using appropriate words and the use of volume and intonation. It is also important to make use of appropriate techniques in nonverbal communication, such as the use of gestures, eye contact, and facial expressions. It is also important to be aware of body posture, movement and physical mannerisms in an appropriate and coordinated manner.

Educational needs that should be taken into consideration include children’s ability to feel their own self-worth and wellbeing. Visually impaired children should be able to recognise their own strengths and weaknesses in a realistic manner. They should acknowledge both positive and negative feelings in themselves and others and understand that both types of feelings are legitimate. Furthermore, they should be able to understand and recognise teasing and bad remarks directed towards them and respond appropriately. Visually impaired children should be able to identify and understand a wide range of feelings in themselves and in others, including happiness, guilt, frustration, boredom, confusion, anger, embarrassment, and pride. Furthermore, they should understand the ways in which people can become victimised by allowing others to make choices for them and understand the long-range results of too much dependence on others and to feel comfortable asking for or refusing help when it is appropriate (American Foundation for the Blind, 1986, p. 9).

Kef (2002) indicated that “social contacts and social support have positive effects on psychosocial adjustment, self-esteem and meeting the needs of learners” (Kef, 2002 in Habulezi, 2012, p. 21).

According to the American Foundation for the Blind (1986), “sensory perceptions and movements” are learning areas that include “learning to control the head, limbs, and body for purposeful exploration and movement, learning to sit, crawl, stand, and walk unaided” (p. 11).

Recreation needs vary. It is essential for a child’s wellbeing to be able to participate in a variety of recreational activities with a group or an individual basis. There are many ways to spend one’s leisure time. Learning to play indoor and outdoor games and developing a genuine interest in art and music will form lifelong habits of creativity and pleasure.

Finally, according to the American Foundation for the Blind (1986), sex education is also an important aspect that needs to be considered which includes “being able to identify with one’s own gender, identifying sexual roles in our society, being aware of the stages of a life cycle, having knowledge of the reproductive process in a variety of living things and being aware of the factors that influence the growth in one’s body” (pp. 9-11).

June Waugh (2008) explained that independence means that the visually impaired person is autonomous. The person has the opportunity to take care of himself or herself to the best of his or her ability (June Waugh in the Educator 2008, p. 21).

Developing a Self-Help Skills Education Programme with the appropriate contents and processes will increase the academic and psychological needs of visually impaired children towards increased independence from school life to social life. The skills areas typically included under the domain of self- help are toileting, eating, dressing and personal hygiene. This research has identified widespread self-help skills deficits in the group of visually impaired children.

Many visually impaired children suffer psychological problems because they do not fully understand their condition. They are also reluctant to talk about it or accept it. They feel that by talking about it, they are admitting their disability to themselves and others, which causes them to feel bad about themselves. To avoid this, these children must be helped to

fully understand and embrace their visual impairment. They can then manage the stigma produced by stereotypes and prejudice in society and project a positive and accepting attitude which becomes reflected in the attitudes of the people they meet (American Foundation for the Blind, 1986, p. 23).

The extent to which a student understands and accepts his or her visual impairment can be determined by whether the child:

- is able to recognise that one has a visual impairment
- is knowledgeable about one's own eye condition
- is able to explain one's eye condition to others
- understands how vision works
- understands and accepts any physical limitations caused by one's visual impairment
- understands how low vision devices can help improve visual abilities and accepts the use of appropriate low vision devices
- is able to accept the use of alternative techniques and apparatuses for obtaining sensory information where appropriate. For example, the use of Braille, tapes, and the long cane. Moreover, knowledge about the elements of personal eye care, including medications, hygiene, regular eye exams, and low vision assessments is also important.
- Has realistic knowledge of current research and treatment as they relate to one's visual impairment. (American Foundation for the Blind, 1986).

Sacks et al. (1992) explained that students felt ashamed of their visual impairments. Their confusion about the concept of disability arose from the struggle to describe negative messages they received from their friends, teachers, and parents. Their limited knowledge of their visual impairments also added more confusion.

It was found by Suzuki et al. (1991) that those with vision problems were less active than people with no disabilities. Moreover, Longmuir and Bar-Or (2000) indicated that young people with vision problems had notably lower physical activity levels than did their

counterparts with no disabilities. They used self-recall estimates of physical activity (Suzuki et al., 1991; Longmuir & Bar-Or 2000, in Kozub, 2006, p. 150).

Sacks et al. (1992) and Warren (1984) mentioned that visually impaired children may be deprived of the ability to acquire the same level of social ability compared to those with no visual disabilities. This is because they lack the visual observations that are critical to the development of relationships and the ability to move about independently and take control of their environment. According to Sacks et al. (1992), in Cognitive Structural Theory, interactions with peers are necessary for social development and the acquisition of Knowledge.

According to Pavey (2002), although visually impaired children live in this social world, they are not part of a spatial world. Therefore social and emotional development is necessary for them to communicate properly. To understand clearly how they fit into their social context, and to develop self-confidence and self-esteem, all aspects of mobility and independence should be considered as making up an applied discipline in which children learn to interact with, and move through, the environment with independence and purpose. Children with visual impairment are not from the same group and children will have different needs depending on, for example, their level of useful sight, the age of starting of their visual impairment and the level of previous support available to them (Pavey, 2002, in The Educator, 2006, pp. 9-10).

Holiday (2013) thus argued that social interaction skills are a fundamental requirement of any expanded core curriculum, often making the difference, in adult life, between social isolation and the fulfilment that comes from being integrated into and accepted by a local community.

2.4 Learning and motivational theories

Learning and motivational theories are relevant to my study because the children need to be encouraged to actively participate in activities, giving them the opportunity to make their own choices. This will in turn build up their self-confidence.

According to Deci and Ryan (1985), “When people are self-determined, they experience themselves as the initiators of their own actions, feel they have a choice about engaging in

the activity and feel they are behind their actions” (Deci & Ryan 1985, in Wigfield & Eccles, 2001, p. 148).

Over the past two decades, research into enhancing self-determination for students with disabilities has become increasingly important (Shogren & Turnbull, 2006). This has motivated me to focus on self-determination theory as a crucial component of my research (Shogren & Turnbull, 2006, p. 149 in Wu, H., and Chu, S. 2012).

2.4.1 Self-determination theory

According to Wehmeyer (1999), “self-determination was used as a psychological construct within theories of personality and, later, within theories of motivation” (p. 53).

Levin (2011), Deci and Ryan (1985) explained motivation by describing what insights influence people to act in a certain way. They defined self-determination as: “...the capacity to choose and to have those choices, rather than reinforcement contingencies, drives, or another forces or pressures, to be the determinants of one’s actions. But self-determination is more than a capacity, it is also a *need* (emphasis added). We have posited a basic, innate propensity to be self-determining that to engage in interesting behaviours” (p. 38).

According to Deci and Ryan (2008), self-determination theory assumes that individuals are “by nature active and self-motivated, curious and interested, vital and eager to succeed because success itself is personally satisfying and rewarding” (p.14). Deci and Ryan (2008) also mentioned that some people do tend to act passively and mechanistically, in the sense that this is due to their intrinsic characters (Deci & Ryan, 2008, p. 14 in Levin, 2011, p. 16).

Wehmeyer (1996) defined self-determination as: “Acting as the primary causal agent in one’s life and making choices and decisions regarding one’s quality of life free from undue external influence or interference” (Wehmeyer, 1996, p. 24 in Levin, 2011, p. 19).

Wehmeyer (1999) argued that a “causal agent is someone who makes or causes things to happen in his or her life. Self-determined people act as the causal agent in their lives. They act with intent to shape their futures and their destiny” (p. 56).

Vygotsky (1978) stated that there should be opportunities that provide optimal challenge. Hence we, as educators, must provide the opportunities for these individuals to make full use of their motivations to develop themselves fully (Vygotsky, 1978, p. 155 in Wigfield & Eccles, 2001).

According to Clark and McDonnell (2008), adults' objectives should be to provide ways and means to assist the children to be able to make choices by themselves and get involved in activities which are compatible with their special needs. They argued that "these opportunities should occur naturally and should be based on their child's interests" (Clark & McDonnell, 2008; Jolivette et al., 2002 in Wu, H., & Chu, S. 2012, p. 151).

According to Ryan and Deci (2000), people will act in such a manner that their psychological needs are satisfied. However, Deci (2008) stated that not all attitudes are determined in this way as behaviours exist on a continuum of different levels of self-determination. Behaviours that arise from states of high motivation tend to generate the most self-determined response.

After a time, children adopt certain behavioural patterns which occur naturally in themselves. In other words there is no outside interference as they motivate themselves on their own (Deci & Ryan, 2000, 2008, in Levin, 2011, p. 17).

According to Mithaug, Mithaug, Agran, Martin, and Wehmeyer (2003), self-determined learning theory stated that there are four events which are interconnected to explain how individuals learn. These are as follows:

- An individual is provided with an opportunity that prompts him to learn
- This opportunity gets the individual involved in that activity
- This involvement stimulates his thinking process and leads to certain attitudes
- This cognitive approach tends to have an impact on the way he learns.

They further explained that for learning to reach its peak, every step in the thinking process has to reach its highest level. For learning to take place, it is essential that the ability of each child is taken into consideration. This ability will enable the child to adapt so that the learning process suits his or her personal needs. In this regard, self-

determination is a “special form of self-regulation; one that is unusually effective and markedly free of external influences” (Wehmeyer & Mithaug, 2005, p. 39). In time, each individual will find that his or her ability to learn will improve and as a result, will develop this ability to find new opportunities which will lead to better learning (Mithaug et al., 2003). In fact, Mithaug and colleagues contend that “learning is adjustment” (Mithaug et al., 2003b, p. ix; Wehmeyer & Mithaug, 2005, in Levin, 2011, p. 19).

External factors will stimulate the child to internalise how he determines his cognitive learning (Wigfield & Eccles, 2001).

According to Wigfield and Eccles (2001) “Internalisation is the process through which behaviours that were originally externally regulated and non self-determined are taken in by the individual and transformed into personally valued, self-determined behaviors” (p. 158). They further argued that the way in which the child determines what he learns by himself occurs quite naturally. In fact, everyone has the capacity within himself to use his environment to make it compatible with his self-concept. Intrinsic motivation usually acts as a catalyst which allows the child to mature quickly. Consequently, whatever the child sees or hears around him will be used step by step by the child until this becomes an integral part of his learning process.

Using the ‘Problems in School’ questionnaire, Deci, Schwartz, Sheinman, and Ryan (1981) showed that “school teachers vary along a dimension of a control versus autonomy orientation in their teaching styles” (Deci, Schwartz, Sheinman & Ryan, 1981, in Wigfield & Eccles, 2001, pp. 159-160). According to self-determination theory, teachers who allow their pupils to be autonomous in one way or another are more effective than teachers who want to control the whole learning process of the pupils (Deci, Schwartz, Sheinman & Ryan, 1981, in Wigfield & Eccles, 2001, pp. 159-160).

Wehmeyer (1999) accepted the contributions of personality and motivational psychology in the field of individual self-determination, but has focussed more on self-determination as an educational objective. He feels that educators have a primary responsibility to “assist the growth and development of self-determination” (p. 54). Bruner (1966) also said that “teaching is an effort to assist or to shape growth” (p. 1), (Bruner 1996, p.1 in Wehmeyer, 1999).

Furthermore, Wehmeyer (1999) suggested that “instruction and curriculum are too often developed without an adequate foundation in and understanding of how children learn, grow, and develop” (p. 54). He argued that “one of the important duties of education and educators is to find the right techniques to foster growth and development of visually impaired children which will lead to self-determination” (Wehmeyer, 1999, pp. 54-55).

Wehmeyer (1999) proposed the functional theory of self-determination to make it relevant educationally. The theory purports that it is important to consider specific behaviours for their own sake but to make the children understand why such behaviours have to be adopted.

According to the functional theory of self-determination, there are four important aspects to take into consideration:

- Behavioural autonomy
- Self-regulated behaviour
- Psychological empowerment
- Self-realisation.

2.4.1.1 Behavioural autonomy

Sigafoos, Feinstein, Damond, and Reiss (1988) defined individuation as: “A progression from dependence on others for care and guidance to self-care and self-direction” (p. 432). The result of which is independent functioning or, when describing the actions of individuals achieving this results, that is behavioural independence (Damon, 1983; Sigafoos, Feinstein, Damond & Reiss, 1988, in Wehmeyer, 1999, p. 57).

2.4.1.2 Self-regulated behaviour

According to Wehmeyer (1999), Self-regulated behaviour refers to “self-management, self-evaluation, problem solving, decision making and goal setting” (Wehmeyer, 1999, in Levin S. L., 2011, p. 19). Whitman (1990) defined self-regulation as “a complex response system that enables individuals to examine their environments and their repertoires of responses for coping with those environments to make decisions about how to act, to act,

to evaluate the desirability of the outcomes of the action and to revise their plans as necessary” (Whiteman, 1990, in Wehmeyer, 1999, p. 57).

2.4.1.3 Psychological empowerment

According to Zimmerman (1990), psychology literature available in the community describes the term 'Psychological empowerment' as multiple dimensions of perceived control including its cognitive, personality and motivational domains. He further explained that the term 'cognitive' refers to 'personal efficacy' – 'personal' referred to results intended whereas 'personality' refers to locus of control. Wehmeyer (1999) mentioned that Community psychology involves theory, research and practice related to their mutual relationships between individuals and the social system that constitutes the community context. Zimmerman (1990) proposed a model in which positive perceptions of control (psychological empowerment) are an outcome of 'learned hopefulness'. He defined “learned hopefulness as the process of learning and utilising problem-solving skills and the achievement of perceived or actual control” (Zimmerman, 1990, p. 72 in Wehmeyer, 1999, pp. 57-58).

2.4.1.4 Self-realisation

According to Wehmeyer (1999), self-realisation refers to “knowing what one does well, and the ability to act accordingly” (p. 58). People who are self-determined are able to use accurate self-knowledge, including their strengths and weaknesses to inform their experience of their environment and significant others, thus ensuring they receive the benefit to themselves.

Wehmeyer (1999) further explained that these four aspects are the result of acquired interrelated activities. Wehmeyer included the following skills: “choice-making, decision-making, problem-solving, goal-setting and attainment, self-observation, self-evaluation, self-reinforcement, self-advocacy and leadership, internal locus of control, positive attributions of efficacy and outcome expectancy, self-awareness, and self-knowledge” (p. 59).

These interrelated activities are particularly useful to educators who may:

- Enhance their skills in each segment by using relevant teaching methods

- Make use of each segment of activity by paying attention to the particular needs and capacity of each pupil as they learn at their own pace which makes them more self-determined (Wehmeyer & Mithaug, 2005).

Wehmeyer (1999) further stated that “the model developed is applicable to for all persons, both with or without disabilities” (p. 60).

Wu, Hm., and Chu (2012), discussed strategies that can be designed to create an accessible environment for the students, giving them the opportunities to make their own choices in daily activities, helping them to identify their preferences, setting routines on a regular basis, and encouraging them to face challenges and look for solutions.

According to Issenberg and Quisenberry (1988), play is an important component in the socialisation of children of all ages. For example, children will learn the meaning of power, dominance, exclusion, space and the ideas of others (Issenberg & Quisenberry, 1988, in Rutherford, 1992).

Arusec and Lytton (1988) stated that play enables the child to have a better understanding of the role he or she plays in society. Furthermore, play will help them act differently in different circumstances (Arusec & Lytton, 1988 in Rutherford, 1992). This explains why Aingler and Finn-Stevenson (1987) have said that play promotes role playing. Thus, we can consider play as being a set of scripts, whereby the child incarnates various roles depending on different situations (Aingler & Finn-Stevenson, 1987 in Rutherford, 1992).

Ryan and Brown (2005) explained SDT as “one major reason teachers use controlling, rather than autonomy-supportive strategies in the classroom is that external pressures are placed on them” (Ryan & Brown, 2005 in Ryan C. P, 2009, p. 140).

Moreover, Guilloteaux (2007) supported Hickey and McCaslin (2001), who explained that “more research is being carried out while engaging in real and practical education-related tasks, such as designing learning environments, curricula, and schemes for the assessment of learning” (Hickey & McCaslin, 2001 in Guilloteaux, 2007, p. 31).

Sacks et al. (1992), discussed how social development and peer relationships can affect the social and emotional needs of visually impaired children. Readon and Sacks (1992) talked

about how those children develop a hierarchy of non-academic skills as a means of gaining greater independence, becoming more socially acceptable and thus, increasing their feelings of self-worth. However, it has been shown in visually impaired children aged 8-10 years, that a problem solving, self-monitoring process set in a mainstream environment helped the children develop their social skills and nurture friendships (Readon & Sacks, 1985; Jones & Chiba, 1985 in Sacks et al., 1992, p. 4, 7).

A peer group can be defined as a “relatively stable collection of two or more children who interact with one another, share common norms and goals and who have achieved a certain degree of role and status distribution on which the interactions of the group are based” (Louw, 1991, p. 362).

According to Vandell and Hembree (1994), the feeling of rejection by their “normal” peers has a deep impact on visually impaired children. They are less academically gifted and consequently less developed socially. They have found that the smaller their group of friends and the less they are accepted by their friends has a negative impact on “socio-adjustment, academic competence and self-concept” (p. 63), (Vandell & Hembree 1994, in Pouroulis, 2001, p. 63).

2.5 Conclusion

Data in the special education field in Mauritius is not adequate. The severe cases are being catered for on a social/medical model whereas the mild/moderate ones are considered as low-incidence disabilities. One should not think of the curriculum as being inflexible; rather, it should be viewed as a framework that can be adjusted to meet the needs of individual students with visual impairments. Although parts of the curriculum could be incorporated into the general education curriculum, some items are time intensive and need to be implemented during additional class activities. Furthermore, the curriculum is long-term and emphasises continuity, rather than a traditional short-term intervention approach. In Mauritius, independence is a value for visually impaired people and the necessary skills need to be taught.

The school I am currently engaged in is a specialised school but there is no specific structure in the curriculum and educational strategies to foster the benefit and wellbeing of visually impaired students.

This research will explore the specific skills/knowledge that would be required by these visually impaired students to enhance their self-help skills and improve their daily living skills.

Chapter 3

Research Method

This research study is exploratory, descriptive and constructivist. A triangulation process utilising both qualitative and quantitative methods is considered to be appropriate for exploration, description and construction. The method of inquiry fits the problem and goals of the questions in this research study.

Research questions

1. What are the school's (School for the Blind, Mauritius) current practices that enhance independence/self-help skills?
2. What kind of improvements can be made to increase independence in visually impaired children?
3. What are the self-help skills that can be implemented at the school?

3.1 Research design

This research study is exploratory and descriptive. The intent is to provide a rich description of the learners' current situation and needs relating to self-help. Furthermore, the researcher's intent is to provide a rich description of the development of a programme aimed at enhancing children's self-help skills. The design and strategies for the research study, with a detailed account of the methodology utilising both qualitative and quantitative methodologies, are presented in this chapter.

From the beginning of the year, informal field observation took place. A focus group interview, including the teachers, head and NGO staff of the Lois Lagesse Trust Fund was conducted. An interview with the visually impaired children also took place. An analysis of the data was conducted, and themes and subthemes emerged. A thematic analysis was used to obtain the themes and subcategories.

3.2 Target population

The school is located at Colonel Maingard Street, Beau Bassin, Mauritius. Children with visual impairment attend this school. As at 2013, there were 22 pupils attending the school, with six classroom teachers, the head of the school and a caretaker.

The NGO, the Lois Lagesse Trust Fund, works with the school by providing adapted equipment, Braille teachers, transcriber and transport to the school. NGO staff members have many years' knowledge and experience working with visually impaired children, adolescents and adults.

3.3 Sampling

Participants for this study include 12 children, aged six to 17 years old, six teachers, one head teacher and three NGO staff members. The level of comprehension of the children is not the same due to the age differences and due to their visual impairment.

Given that there are 22 students, I selected a subset of 12 visually impaired children to be interviewed; each of the 22 students' names were placed in a bag and 12 names randomly selected. There are six teachers working at the school as well as the Head of school. All the classroom teachers and the Head participated in this study.

Two NGO staff members with visual impairment work with the school as Braille teachers and one of them helps in transcribing texts to Braille.

3.4 Ethical approval

Consent was requested from the following parties:

- Ministry of Education (Appendix A)
- Individual participants for the focus group (Appendix E);
- The visually impaired children (Appendix B)
- The parents of the visually impaired children (Appendix C)

A tape recording permission form, (Appendix E-1), was also completed by each participant. The response from the Ministry was positive and consent forms were signed by all the participants. (See attached with Appendix A)

The children were approached on an individual basis to help them feel comfortable and also to promote good rapport which would enable a strengthening environment. As the children are vulnerable, visually impaired and underage, it was very important for the researcher to obtain consent from the parents. The parents were fully informed about the rationale of this particular research and how its objective was to implement a more

effective educational programme which would benefit the school in the long term. The questionnaire for the children was adapted from the Chamberlain paper published in a journal (Chamberlain, 2003).

Permission from the author was not obtained because the article was published in a refereed journal. In my dissertation, I have fully acknowledged the source for this particular questionnaire. Acknowledgement is also given to Chamberlain. Once I had adapted the questionnaire, it was piloted. Selected colleagues were requested to study the questionnaire which was developed and comments were obtained.

3.5 Data collection

3.5.1 Field Observation

Field research involves observing events and people in their natural setting.

As I was present at the school, I had the opportunity to conduct field observations and informally observe the children. The advantage of field observations is that the information is more valid because the children are not aware that they were observed. The observations were made on the same children who were identified in the sampling process.

Each week I identified new patterns in the children's actions and interactions. I took notes for general observations every day, which I then organised into a field chart. I compared the data in different ways. An example of the chart can be viewed in Appendix F.

In the process of reviewing the data, the contents were found to be related to skills such as daily living, travel and social skills. These formed the initial categories which were then divided into sub-categories such as how to eat, drink, use the toilet, move safely and talk correctly.

3.5.2 Survey

In order to obtain a profile of the children, I conducted a survey to gather information on age group, gender, degree of disability, and teaching staff provided statistics relating to the children's qualifications. These statistics also indicated the extent of their disability and the potential need for educational programmes. The school profile form, duly completed for the year (Appendix G), is also used for reference.

3.5.3 School profile

I scanned the school profile and looked for the relevant information pertaining to identification and needs for the visually impaired children at the School for the Blind. To identify patterns, I used tables 1 to 6 to do a cross comparison of information (See Appendix G). The school profile was developed by the Head and the teachers of the school.

3.5.4 Focus Group

A focus group provided qualitative data to present and an in depth view of elements which would be appropriate in developing a specific education program for visually impaired children. According to Terre Blanche and Durrheim (1999), 'Focus group' is a general term given to a research interview conducted with a group.

Because of their in-depth experience with teaching and facilitating learning for visually impaired children, three NGO staffs were invited to participate in the focus group discussion. A time was set up and one hour was devoted towards the discussion. Each member of the group was individually invited to participate in the ensuing discussion which was based both on their current experience, and also on their previous experiences in mainstream education. Their experiences were fully acknowledged and the rationale for selection to the focus group was provided. As the researcher, I informed them that I valued their experiences and fully acknowledged their contribution towards the enhancement of learning and facilitating learning for visually impaired children. I also acknowledged their contribution towards enhancing curriculum development and introducing innovative strategies in the school; and in particular, their contribution towards helping visually impaired children.

For the focus group, six questions were posed as follows:

1. With reference to the current curriculum in this school, please comment whether the curriculum is specifically orientated towards the integration of daily living skills for the visually impaired?
2. Based on your observation, what daily living skills programme can be incorporated within the current curriculum at the school?
3. To what extent would a newly developed self-help skill programme be beneficial to the children at the school?

4. How can the students be made more adaptable for independent travel?
5. What barriers can be encountered with the emerging curriculum for the visually impaired children?
6. Is there any other suggestion you would like to make towards the development of a specific curriculum towards visually impaired children?

The participants were invited to respond one at a time and make comments. Each person was given an opportunity to contribute to the discussion. Occasionally, further elaboration was necessary, and therefore I had to seek clarifications and request the participants to explain in greater detail. Furthermore, participants in the focus group were given an opportunity to respond or to react to the statements made in this discussion. Thus, this process enabled collection of a very rich set of data which was tape recorded and also scribed at the same time to ensure that the data was sufficiently backed up.

Three NGO staff members were included in the focus group because of a strong track record of their teaching and learning process with visually impaired children and also their experience within the community, their interaction with parents, and their awareness of the children's and parents' needs in the community. Thus, they were approached because of the global experiences they have had, and also the potential richness of contributions they would make towards developing a comprehensive and holistic education strategy for visually impaired children. The education strategy would entail development of a self-help skills programme and the NGOs would be in a very good position to make contributions towards developing such a programme.

3.5.4.1 Transcript from focus group

I read through the transcript and highlighted what I considered to be the most relevant points. Keywords, phrases and ideas that related to the same topic were highlighted. The small number of categories allowed me to use different colours for each theme. An example can be viewed in Appendix E-3.

Themes were established through the pattern of responses obtained. Data reduction entailed the organisation of raw data into forms, enabling it to be more accessible for summarisation and the drawing of conclusions.

3.6 Questionnaire for children

The questionnaire for the children was adapted from the Chamberlain paper published in a journal (Chamberlain, E. A., 2003); Independent living skills for students who are blind or visually impaired. (ProQuest, pp. 9-11).

The questionnaire relating to the children (see Appendix D) is a guide for me to ask the same questions to each visually impaired participant. An analysis of data based on the questionnaire was made. The results here included information obtained and also how each child ranked the level of importance to perform skills after school (see Appendix D-1).

In this research project, a draft questionnaire was compiled based on the researcher's observation, perception, knowledge and skills and, most importantly, directions obtained for the literature review. Statements were presented in the questionnaire with a Likert rating scale of 1-5. A separate letter was sent to the participants about this research (see Appendix A). The questionnaire was used for my reference only.

3.6.1 Testing the questionnaire

The questionnaires were reviewed by teachers to comment on its suitability.

3.6.2 Research process

Parts of the questionnaire were based on the questionnaire used in (Chamberlain, 2003). The instrument of the study consisted of using open-ended questions and close-ended questions. Participants were asked to rate their opinion on the importance of learning the required task. Answers were recorded using a Likert-type scale. As the children are visually impaired, I interviewed each participant orally and recorded their response on the questionnaire. I conducted the interview in the native language 'Creole' and then translated the responses into English. My colleague checked the translation.

Permission was obtained to remove them from their classes and a time was set up for the interview to take place. Each child in turn was posed the questions, their responses taped and then transcribed.

I exercised empathy during the interviews. Empathy would involve being able to: "Take and understand the stance, position, feelings, experiences, and world view of others"

(Patton, 1990, p. 56). Patton further added that: “Empathy communicates interest in and caring about people, while neutrality means being non-judgemental about what people say and do during data collection.” During the interviews, my unbiased, neutral and empathic approach allowed me to provide an empirical basis on which to describe participants’ perspectives. I was therefore able to provide accurate data whilst reporting their feelings, perceptions experiences and insights.

The conversation with the children was conducted in a relaxed style. The interaction with each person set the tone and helped to direct the research process. Participants were treated with respect, and confidentiality was maintained throughout the process so that names of participants would not be revealed.

I organised data from the interview transcript in such a way as to facilitate the identification of patterns and similarities. A grid format was designed to include the questions, each participant’s name, and their response in each column. An example of the grid can be viewed in Appendices D-1 and D-2.

I highlighted and listed all repeating words. I then highlighted key words and ideas relating to the theme ‘self-help skills’. I listed repeated topics and compared and contrasted repetitions. Daily living skills, travel skills, social skills, education and seeking help emerged as secondary themes. An example can be viewed in Appendix D-3. The two major themes that emerged were Self-help Skills and Independence.

Continuous comparisons between the categories enabled me to find common meanings. Merging the categories led to the formation of themes. By cross comparing the data, the categories that again emerged were: daily living skills; travel skills; social skills; and education.

Example

Themes	1	2
Secondary themes		
Categories		

3.7 Credibility, reliability and validity of the findings

This research study used both qualitative and quantitative methods. All the necessary steps were taken to ensure the credibility, reliability and validity of the findings.

Credibility: Cross-checking of the transcripts of the focus groups transcripts was undertaken by a colleague from the school. Hence, a statement was prepared which included the qualifications of the colleague. Please Refer to Appendix H, with the statement duly signed by Mrs Viveka Bikoo.

The credibility of the researcher is dependent on their training in primary education, their teaching experience and their graduation degree in Psychology and Communication. The credibility of the researcher has a direct bearing on the credibility of the findings by virtue of the researcher's role in the data collection and analysis process.

Reliability refers to the consistency of the results on different items in a test. Whenever attributes or opinions of people are measured, it is necessary to consider the reliability of the measuring instrument as well as its validity. By following the principle of (Terre Blanche and Durrheim, 1999), I checked the reliability of the transcriptions by reading them while listening again to the recording. Reading through the notes many times and brainstorming enabled me to find the sorts of interpretation that are likely to be supported by the data. I also restated the participants' responses to ensure the information provided was accurate.

Validity: validity is defined as the extent to which a measuring instrument indicates what we are interested in measuring. Many forms of validity are mentioned in research literature amongst which feature two major forms: internal and external validity. Internal validity is the ability of a research instrument to measure what it is purported to measure, whereas external validity refers to its ability to be generalised across persons, settings and times.

For the purpose of this research, the researcher considered content and construct validity as part of the quantitative aspect of the research. Content validity is the extent to which it provides adequate coverage of the topic under study. If the instrument contains a representative sample of the universe of subject matter of interest, then content validity is good.

As I was working all day at the school, I made use of evidences, constant comparison and participants' responses to validate the data and the themes. I compared the pieces of data, the interview with previous data such as the school profile. The findings are transferable to another setting.

3.8 Credibility of the researcher

The researcher is conscious that she is also a teacher at this school. She is therefore aware of possible conflicts that could create bias and influence results.

My position as an insider has supported my research in several ways. Being present at the school provided me with sufficient time to observe and listen to the children, and to understand their feelings and experiences at the school. Moreover, I was able to interact with the staff. Participants felt free to ask me for any clarification on the research and a good rapport was created between me and the participants. This helped me to identify all themes raised by respondents.

This breaking down of barriers could have threatened the validity of my research, as the participants may have in turn interpreted the researcher. I was aware that these kinds of situations could have arisen.

I have a rich cultural background, being of Indian origin and trilingual. This has proven to be advantageous in generating a greater sensitivity and understanding of the cultural background of the children.

Adjusting each interview, for example, in order to obtain accurate and complete data whilst maintaining sufficient standardisation to secure the credibility of data was a major challenge.

Chapter 4

Research Findings and Analysis

4.1 Introduction

This chapter presents the analysis of the data. The study setting, which includes the visually impaired children, staff, curriculum, and environment, is outlined in a brief profile of the school.

4.2 Context

Terre Blanche and Durrheim (1999) argued that: “To get on with the practical task of doing an analysis, to understand what a text is doing, we have to situate the text in context” (p. 163).

In line with the principle of Terre Blanche and Durrheim (1999), my presence at the school gave me the opportunity to work with data in context. The school setting also gave me the opportunity to conduct my research in an empathetic and open manner with the participants. The context is presented in greater depth in Appendix G.

During the data analysis stage, I worked with texts from field notes, interview transcripts, and other collected materials including: the school profile; data from each interview question; and how participants ranked the importance of self-help skills. I first transcribed data into text including observation field notes records, interview transcriptions, and school profile.

Broad topic areas were identified in this study as a way to organise the data in search of commonalities among participants. The process of data analysis in this research comprised the breaking of information into manageable components, followed by synthesis and the search for patterns and themes. Thematic analysis led to themes and categories emerging in the arena of self-help skills development.

According to Lacey and Luff (n.d.), “Charts can be either thematic for each theme across all respondents (cases) or by case for each respondent across all themes” (p. 14). Here, the case is what we are studying.

Example

Theme1	Theme2
--------	--------

4.2.1 School profile

To present the context of the study, this chapter begins with the profile of the School. A more detailed profile is attached to the Appendices (Appendix F). In this school, 22 pupils were enrolled for the year 2013. 12 visually impaired children were selected as participants in this study.

4.2.2 Demographics of children attending school

Table 1 shows the number, gender and age group of the students at the school. The number of boys was 12 and girls 10, hence a total number of 22 visually impaired children were attending the school in 2013.

Table 1: Students' details

No. of Pupils		Age Group
Boys	12	8-17
Girls	10	8-16

The type of impairment in Table 2 below is for all the children at the school. It is a record. There are three pupils with multiple disabilities including visual impairment, speech and physical impairment. There are no cases of hearing impairment, mental health or autism. The table shows the presence of visually impaired children with learning difficulties. The learning difficulties can be the cause of their visual problems.

Table 2: Types of impairment experienced by children at school

S.N	Impairment Type	Yes	No
1.	Visual	Y	
2.	Hearing		N
3.	Speech		N
4.	Physical		N
5.	Mental/ Behavioural		N
6.	Multiple Disabilities. Please specify: 1. visual impairment, speech and physical.	Y	
7.	Learning Disabilities	Y	
8.	Autism		N
9.	Others, Please specify:		

Moreover, findings from the data in Table 3 showed that equipment available at the school included Braille, curriculum materials with large print, ramps, laptop/zoom text and embosser.

Table 3: Special equipment and facilities

Equipment/facilities	Yes	No
Sign Language on CD		No
Tactile/Kinaesthetic		No
Braille	Yes	
Hearing Aids/Audio equipment		No
Speech training equipment		No
Curriculum materials with large print	Yes	
Rails/Ramps	Yes	
Specialised classroom furniture		No
Other (specify): Laptop/zoom text/embosser	Yes	

Table 4 indicates services available are computer facilities, outreach services and transport but highlights the absence of some important services.

Table 4: Services offered by the school and by the NGO.

SERVICES	Yes	No
Sign Language Course		No
Mobility Training		No
Physiotherapy		No
Speech and Language Therapy		No
Occupational Therapy		No
Psychological support and counselling		No
Job placement for school leavers		No
Interpreter services		No
Computer facilities to ex-students	Yes	
Outreach services	Yes	
Others (specify): Transport services	Yes	

Academic qualifications, professional qualifications and years of service for each member of staff are presented in Table 5 below. A code name was assigned for each member of staff such as Staff.1, Staff.2. It has been established that none of the teachers have been trained in the field of special education although they do possess the Teacher's Diploma in Education.

Table 5: Personnel

Staff	Academic Qualifications	Professional qualifications	Year(s) of service
Staff.1	School Certificate	Teacher's Certificate, Advanced Certificate in Education, Certificate in Educational Management, Certificate for visually impaired	
Staff.2	Higher School Certificate	Advanced Certificate in Education, Diploma in Educational Management, Teacher's Diploma	26
Staff.3	Higher School Certificate	Advanced Certificate in Education, Teacher's Diploma.	21
Staff.4	General Certificate Education A level	Teacher's Diploma, Diploma in Educational Management, BA-communication/psychology, Hons BA Psychology	18
Staff.5	Higher School Certificate	Advanced Certificate in Education	9
Staff.6	Higher School Certificate	Teacher's Diploma, BA French/Education	18
Staff.7	Higher School Certificate	Diploma in Hindi, Hons BA Hindi	9

Table 6 below is an indication of the non-academic staff at the School. Staff.8 is an instructor who teaches Ratanne work to visually impaired children. He is also the caretaker of the school.

Table 6: Non-academic staff

Name	Qualifications	Years of service
Staff.8	Std VI, Certificate in Ratanne	36
Staff.9	Form I	37

At the School, the screening process is done according to previous academic records. Table 7 shows the subjects that are being taught at the school. The subjects currently taught at the school are: Mathematics, English, French, Science, Health Education, History/Geography, Creative Education, Numeracy and Literacy. These subjects are also taught in mainstream schools as normal curriculum. The subjects provided by the NGO are Vocal music, Braille, Instrumental music, ICT, Ratanne, Classe D'Ecoute and swimming class.

Table 7: School programme

Subjects	Special classes funded by NGO
Mathematics	Vocal Music
English	Braille
French	ICT
Science	Rattane
History/Geography	Instrumental music
Health Education	Classe D'ecoute (Listening skills)
Creative education	Swimming activities
The Arts	None
Numeracy and literacy	None

4.3 Curriculum and assessment

The curriculum applied at the school is similar to mainstream education. It is adapted and modified in its simplest form through the use of available adaptive equipment. Life skills, orientation and mobility and social interactions are not taught at school level.

For examination purposes, an extra time of 30 minutes is allocated for core subjects and 20 minutes for other subjects. Examination papers are in large print format. There is a reader and writer that are made available during the examination period. Internal examination is carried out termly and the question papers are prepared by the teacher and adapted accordingly. Totally blind children are provided with question papers transcribed in Braille.

4.3.1 School and extra-curricular activities

A National Day celebration is organised each year to celebrate the independence of Mauritius. An Education Tour is organised to reinforce class lessons and topics by visiting places of interest and historical monuments in Mauritius.

A Music Day is celebrated to enable children to participate in activities such as singing, dancing, drama and playing instruments at school level. White Cane Day, which takes place on 15th October each year, is celebrated by the Lois Lagesse Trust Fund (NGO) to educate the public and sensitise them towards the abilities of visually impaired people.

Every Friday, for one hour, swimming activities help the children develop skills towards improving their swimming abilities as well as improve their health.

4.3.2 Support services provided in and out the school

Support services include: large print materials; reader and writer are provided by the Mauritius Examination Syndicate for CPE (Certificate in Primary Education) examinations for reading and writing support; photocopying facilities; Braille teaching by staff from the Lois Lagesse Trust Fund; Perkins machine; free transport services (van); food and nutrition; fax machine; ICT (Information, Communication and Technology) teacher; Classe D'ecoute (listening skills); musical instruments; display Braille; Jaws; talking dictionary; enhanced vision screen; embosser; transcriptions in Braille; American thermoform to make copies in Braille. Glasses are sponsored by LLTF (Lois Lagesse Trust Fund). Donations are provided by sponsors.

4.3.3 Needs identified from the School profile

1. Due to their impairment, visually impaired children are more likely to experience nervous strain and feelings of insecurity and frustration. Psychological support would definitely help them.
2. No sport activities are practised at the school.
3. No orientation and mobility training is provided.
4. No daily living skills training is provided at school level.

4.3.4 Survey with the children

Table 8 below, is an example from the survey that indicates the gender, age, degree of visual acuity and special support needed for six visually impaired children of standard 4 (class level that pupils aged eight years old attend in a normal school) currently at the school.

Table 8: Example of information obtained from survey

Pupil No	Boy/Girl	Age	Degree of visual acuity (see Note 1)	Special support needed (see Note 2)
1.	Boy	12	Low vision	Enlarged print
2.	Boy	16	Low vision	Enlarged print
3.	Girl	8	Blind	Braille/ramps/adapted toilet
4.	Girl	8	Blind	Braille/ramps/adapted toilet
5.	Girl	13	Low vision	Enlarged print
6.	Girl	14	Low vision	Enlarged print

4.4 Analysis and findings

Some principles were used in the data analysis process described by Terre Blanche and Durrheim..

According to Terre Blanche and Kelly (1999): “Data analysis involves reading through your data repeatedly and engaging in activities of breaking the data down (thematizing and categorising) and building it up again in novel ways (elaborating and interpreting)” (cited in Terre Blanche & Durrheim 1999, p. 140).

The focus group participants had the opportunity to share their own experiences and suggestions for a group of visually impaired students to develop a self-help skill education programme towards increased independence.

The content was analysed taking into consideration the comments made, the words, the phrase and the ideas. In addition to the field notes, the School profile 2013, which was the primary source obtained from the School office, supported the data. Secondary themes, sub-themes and categories are grouped into themes emerged from the analysis.

The following are themes I identified in the interviews and observation data during cross analysis. Patterns related to daily living skills, travel skills, social skills, and education were also evident in participants' interview responses. These patterns were used as secondary themes. Patterns in the content analysis of observations also led to the use of the secondary themes of daily living skills, travel skills, social skills, and education.

4.5 Themes occurring in all data

This section presents the facilities at the school that are conceptually different from the skills the children need. Their understanding of their visual impairment and the way in which culture affects their experience of disability are also presented.

I devised the main themes of Independence and Self-Help Skills and the secondary themes of, Daily Living Skills, Travel Skills, Social Skills and Education. Table 9 below is an example of the patterns located in all data.

4.5.1 Relating the themes to the data collection

Instructions for reading Table 9: The data collection method is listed in the first column. Patterns related to the theme “Independence” were identified and the categories listed in the second column. The third column lists the need for creating independence which is also related to the theme. Examples from the observation method are listed in the last column.

Table 9: Example showing themes related to patterns

Data method	Pattern located	Identifying needs	Example from data
Observation	Self-care skills	Need for creating independence	Needs assistance, she cannot dress, eat and tie her laces on her own. The carer assists her at school. (8, F, blind)
	Travel skills	Need for creating independence	He is often knocked out by objects in front of him while walking. He always seeks guidance. (17, M, partially sighted)
	Language/ Communication	Need for communication	Is not able to express herself fluently. She works on her own when prompted each time. Limited speech in all situations. (13, F, partially sighted)
Interviews-focus group	Daily living skills	Need for daily living skills and travel skills at school	“Daily living skills, we do not have it at school level. Although it is a need for the visually impaired.”; “Daily living skills is very important for the child to become independent. She or he can dress and undress herself, toileting skills, travel skills.”; “How to walk alone, how to dress and undress, shoe lacing, these are not taught at school.”
	Travel skills	The need for the integration of orientation and mobility in education.	’Travel skills needs to be integrated to teach the child how to use a white cane, what obstacles she can come across when travelling’
	Social skills	Need to learn socially appropriate behaviour	“Teaching also how to talk in a proper way.”
	Knowledge	Education and training required for teachers.	“We are not trained. We could have a resource person in that field.”
Interviews with visually impaired	Daily living skills	Need for Daily living skills at school.	Activities such as eating skills, dressing skills, personal hygiene skills are never used in day to

children			instruction.
	Coping with unseen environment	Independent travel	“When I walk along the road, I get difficulties such as since I see with left eye, am used to walk on left side.”
	Special programmes at school	Daily living skills Travel skills Social skills	The school does not have any special programmes for organising activities such as Dressing, Eating, Hygiene, Kitchen skills, Independent travel, Money handling.
	Preparation for independence. Management of money Using some form of communication. Organising materials	The importance of an Education programme.	To learn how to take a bus to go to places. To cook and eat food. To know how to count money To know how to handle money in shops, in banks. How to read a letter, fill a form. How to talk to people. How to organise my personal belongings
Document data (School profile)	Visually impaired children’s needs and requirements.	Identifications of strengths and weaknesses in the school profile.	No orientation and mobility training is provided. No daily living skills training is at school level. There is no sign post in Braille or large print to identify and guide children to places as toilet, office, standard 1, and standard 2. Ramps are available only in some places.

4.5.2 Overview of data reduction

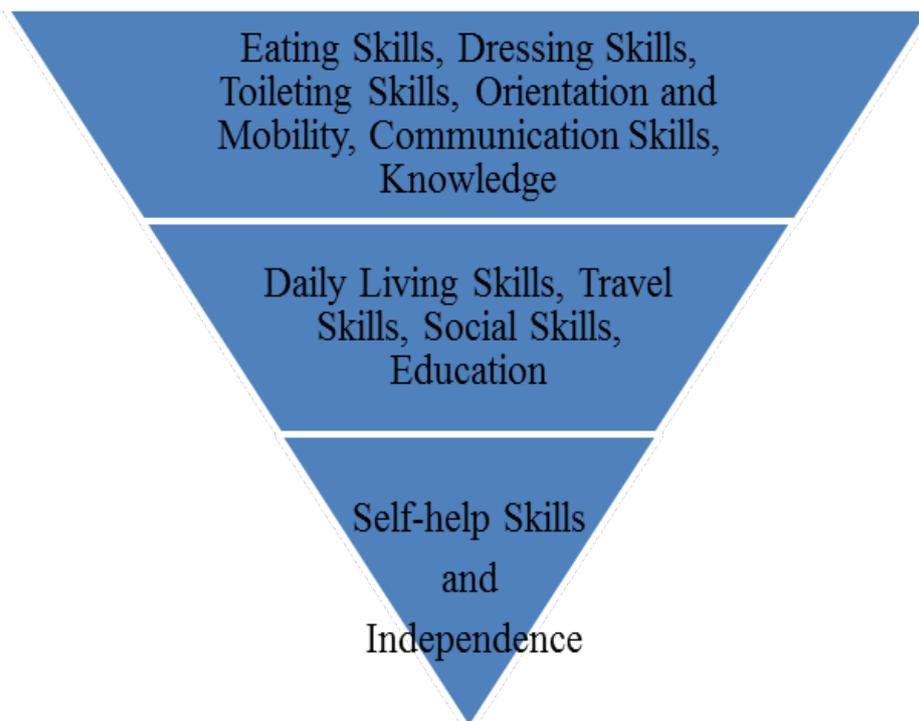
Data reduction is a presentation of the findings related to all sections of the research. The themes related to skills that the visually impaired children need are presented in Figure 1. Figure 1 thus shows how data reduction entails the organisation of raw data into forms enabling it to be more accessible for summarisation and drawing of conclusions.

Key themes that emerged are Independence and Self-help Skills and the secondary themes are Daily Living Skills, Travel Skills, Social Skills and Education.

The sub-themes under social skills are cultural differences and feeling discriminated against. Sub-themes under travel skills are independent travel and assistance and finally secondary themes under education are special programme on self-help skills, curriculum and training for teachers.

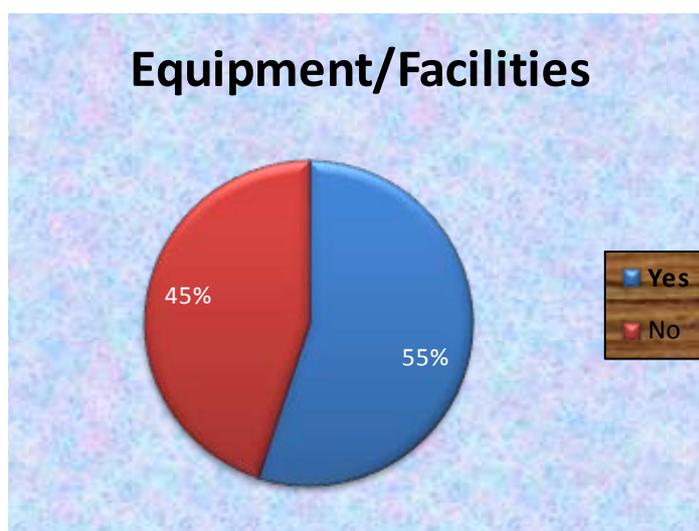
The categories are Eating Skills, Dressing Skills, Toileting Skills, Orientation and Mobility, Communication Skills and Knowledge. Figure 1 shows the funnel whereby the categories are filtered to get the secondary themes and then the main themes.

Figure 1: Themes



4.5.3 Equipment and services at school

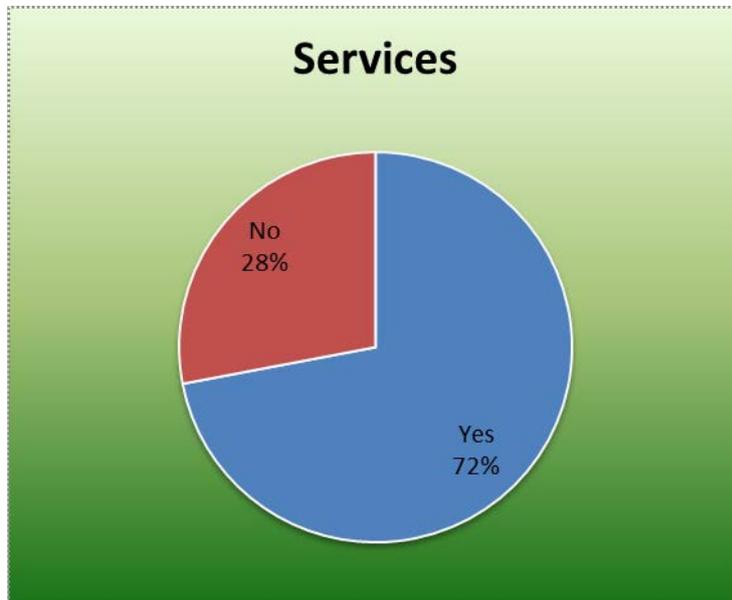
Figure 2: Equipment and Facilities



Using data from Table 3 and Figure 2, we can show that 45% of the equipment/facilities not available at the school are: sign language on CD; tactile/kinaesthetic; specialised

classroom furniture; hearing aids/audio equipment; and speech training equipment. 55% of the facilities that are available are: Braille; curriculum materials with large print; rails/ramps; and laptop/zoom text/embosser.

Figure 3: Services at the School



Data from Table 4 and Figure 2 show that 72% of services not offered at the school are: sign language courses; mobility training; physiotherapy; speech and language therapy, occupational therapy; psychological support and counselling; job placements for school leavers; and interpreter services.

Only 28% of the services currently available are: computer facilities to students and ex-students; outreach services; transport services; and nutrition advice.

4.5.4 Children’s understanding of visual impairment

The responses of the participants are discussed herein:

The interview was conducted in Creole and the text was checked by a colleague from the school.

“What is your understanding of visual impairment in general and your own visual impairment in particular?” (Referring to Appendix D, question 3, p. 31). Participants understand that the term ‘visual impairment’ applies to people who cannot see at all, and also to people with low vision.

Participants' explanation of the term "visual impairment" applies to people who are blind or partially sighted. The participants also expressed the need for assistance.

In terms of credibility, one of the teachers at the school checked my translation.

Participant 1 stated: "Persons who cannot see including those who can see a little."

Participant 2 said: "The person cannot see at all, also people who have low vision." From Table 2, it is observed that the types of impairment at the school include children with visual impairment and children with visual impairment combined with learning difficulties and with multiple disabilities such as speech and physical.

What kind of problems that you encounter because of your visual impairment? (Referring to Appendix D, question 4 p. 31)

Participants said that they have to rely on their other senses in order to recognise things. And they need assistance to travel. One participant said, in addition to the above, she suffers from painful eyes. Children mentioned that they have difficulty to see small characters. They also mentioned that they move very close to an object for identification.

Examples

Participant 1	"I get eye pains sometimes- left eye. I cannot recognise things at times unless I touch."
Participant 4	"When I see small characters, I get eyes strain, I move close to objects to identify."
Participant 11	"When I walk along the road, I get difficulties such as since I see with left eye, am used to walk on left side. I cannot read well as I cannot see the alphabets, words clearly. I use my left eye as my vision and the left eye I see black. Am used to this, so I ignore that I am visually impaired."

4.5.5 Social skills

Partially sighted children are seen to talk more than the totally blind students. Partially sighted children are seen to mix together and the blind students are observed to sit in a place together talking less. They have limited speech in all situations. They reply only when prompted, otherwise remaining silent the whole day, waiting for a response.

“Is not able to express herself fluently. She works on her own when prompted each time. Limited speech in all situations.” (14, F, partially sighted, Field observation)

NGOM1	A blind Braille teacher- personally, we need to seek help when travelling, to talk, to try to get a clue. At the very beginning, it is very hard but with time, we get adapted to this routine life. Travel skills, orientation and mobility are essential tools towards socialisation.
-------	---

4.5.5.1 Sub-theme: Cultural differences

Mauritius is a multicultural country. Thus there are different perceptions to understand the disability. From a religious perspective, bearing a blind child is a punishment or “Karma” as interpreted in “Hindu” religion. The traditions entail the presence of spirits as the cause of the disability. Culture and religion are linked to the ways of beliefs and practice. Due to modernisation and industrialisation, people’s attitudes towards culture are changing as they adopt western ideas of independence. Disability is integrating into the mainstream society. It was also observed that some visually impaired children were often absent according to the register of the school. The reason noted was that they were “fasting”, “wearing religious symbols” as a sign for protection, and assisting prayers almost every day (S.Seesurrun, personal communication, May 2013).

4.5.5.2 Sub-theme: Feeling discriminated against

We cannot deny the fact that people with visual impairment are still being discriminated against and suffer prejudices. There has been progress by some families, NGOs and people with visual impairment themselves.

Participant 11 mentioned: “I ignore that I am visually impaired as when I realise I have the problem, I feel frustrated and my neighbours sometimes unexpectedly tell me that I do have a problem and am disabled in some way. To escape from the feeling of frustration, I ignore that I have a problem”.

Participant 3 said: “I feel different as I am not in a normal school. Different in the sense that I do enjoy the same, and equal facilities as normal children. There are some restrictions...”. According to The Act which establishes a Board for Training and Employment of Disabled Persons with the following function: “...to prevent [...] discrimination against disabled persons resulting or arising out of their disability’ (The ILO InFocus Programme on Skills, 2004).

4.5.6 Daily living skills

All participants mentioned that activities such as how to eat solid food, table manners, bringing a spoon to his or her mouth and sipping a drink from a glass, dressing skills how to zip, button, snap, and fasten taught at school are never used in day to day instruction (Appendix D, question 6, p. 31).

TD1 mentioned, "...for example children go to swimming activities, it would be beneficial if they are trained how to dress and undress".

The teachers, the head and the NGO staff confirmed the findings.

The teachers argued that, "Eating", "Dressing and undressing", "Communicating well", "Walking properly", "Identification of personal belongings", "Identification of the door - how to enter and leave the room" are important for the child to become independent.

I have observed some learners who need assistance, who struggle to dress, eat and tie her laces on his or her own. The career assists her or her at school. The school profile shows the absence of daily living skills as an educational programme to be taught at the school.

4.5.7 Travel skills

During my observation, I came across learners with visual impairment who had difficulty in moving alone, who stayed standing, waiting for assistance. The classrooms are not spacious enough for the learners to move freely which means they come across obstacles. There are no curtains in some classrooms and hence the children cannot cope with the bright light. The learners change classes when they have to attend vocal and instrumental music. There is no signpost in Braille to indicate the toilet, office and classrooms. Ramps are available outside the school which help the visually impaired children reach the garden.

Participant 2 mentioned: "When I walk, I cannot see in front of me, I have to confront obstacles ahead of me unless assisted".

Participant 12 further discussed the importance to learn: "...how to face obstacles, how to identify dangers on the way, how to utilise things, play activities, and organise more

outdoor activities, how to travel by bus and mobility and to go to places like the shop, important places”.

From the School profile (refer to Appendix G), as mobility is related to sports, a physical education instructor would be helpful. Training in orientation and mobility, as Punani and Rawal (2000) emphasised, is a pre-requisite for promoting sport activities among the visually impaired children.

4.5.7.1 Sub-theme: Independent travel

80% of the participants responded rarely, 20% alternatively and 20% never, on learning how to move, travel and play independently and safely within environments (see Appendix B-2, no 7).

According to the Head, “for him to be adaptable, he must have a mental mapping that enables him to move from place to place. The bus stop is to the right of a clue. Identifying clues for his mobility. Seeking assistance or help. How to move with the white cane. Learning how to use the white cane”.

Participants replied that through education they would learn to be less reliable on others. The knowledge they needed was in the field of self-help skills.

Participant 8 stated, “I need someone with me for help”.

Head of the school (H) suggested: “The two main skills to be independent are mobility and daily living skills. These are major skills the child must master to become independent”.

I observed a partially sighted child helping a blind child to go to the garden. I saw the learners with visual impairment and the blind together during break time. The learners are able to recognise and respond to names (friends, teachers, people around). The blind students need assistance when eating, toileting and using ramps when walking.

4.5.7.2 Sub-theme: Assistance

According to June Waugh, visually impaired persons are said to be independent when they are able to know themselves well and are able to meet their own needs, without or with help (June Waugh in The Educator, 2008).

Three participants said, “Yes”, six participants said, “A little”, that they need assistance and that with time they can cope in some familiar places, and three participants said, “No” (referring to Appendix D, question 5, p. 31).

Over-protective behaviour teaches dependence rather than independence. Parents should be taught to enable the visually impaired child to recognise their abilities and potentials.

Participant 2 mentioned, “At the beginning I need assistance in my immediate environment, then get used to it with time and can manage alone”.

Visually impaired children said that they need assistance. They are unable to travel on their own as they are knocked by obstacles. The partially sighted children said that they need assistance at the beginning, and then they can manage on their own.

Participant 10 stated: “When I walk, I usually get knocked down by objects in front of me”.

Participant 12 said: “Sometimes I need help, for example to accompany me to places. I can take a bath, eat. But for dressing, my mother helps me”.

The theme Independence emerges from the data as the participants want to be less reliable on others.

4.5.8 Education

4.5.8.1 Sub-theme: Special programmes on self-help skills

The school does not have any special programmes for organising activities such as: dressing; eating; hygiene; kitchen skills; independent travel; and money handling. The only activities at school are: vocal; ICT; swimming; and instrumental music (Refer to the school profile, Appendix G).

The Head stated: “The follow up of the skills at school should be done by parents at home. Parent education is important. There is the need to have special classes for parents – what is taught at school must be taught in parallel at home”.

The participants expressed the need to learn skills that will help them become independent. P1 stated, “How to cross the road, travel by bus”.

P6 said: “How to dress and be able to button and unbutton shirts, to use the toilet properly and to open and close the tap”.

P3 mentioned, “How to use a white cane”.

P5 added, “To know how to handle money in shops, in banks”.

P1 said, “How to talk to people. How to organise my personal belongings”.

NGOS1: “Need to try daily living skills, also numeracy and literacy to include”.

100% of the responses were extremely important/very important in the area of self-help skills mentioned below:

- Dressing skills – tying shoes and fastening buttons and zippers.
- Clothing care skills – using techniques for storing clothing and identifying colours and patterns, using services like ironing.
- Personal hygiene – toileting, care of teeth and hair and bathing.
- Eating skills.
- Housekeeping skills – Kitchen skills – using kitchen equipment including adapted equipment, chopping, pouring, and cooking.
- Medication – read labels in medicines.
- Mobility and independence skills – cane techniques, avoiding hazards and recognising landmarks, road safety.
- Time skills – use of alarm clock, knowing how to tell time and use of clocks and watches.
- Money management – identifying and knowing coin equivalents.
- Organisation skills – arranging personal belongings.

(Refer to Appendix B-2, no 9)

Participant 11 argued that: “Programmes on dressing skills and eating skills are important for the child to become independent”.

Participant 10 stated: “To have educational sessions on discipline, dressing skills, travel by bus”.

Participant 8 mentioned, “School must have programmes like eating skills”.

TV1 stated: “Daily living skills are very important for the child to become independent. She or he can dress and undress him/herself, toileting skills, travel skills”.

The school profile supported the data by providing information about the absence of orientation and mobility training and daily living skills training.

4.5.8.2 Sub-theme: Curriculum

While the broad learning areas at primary level remain the same, the academic content has to be re-structured and re-adjusted to encourage visually impaired children to be involved in activities in domains such as life skills, travel skills, communication skills.

From Appendix D-2, it is noted that the staff mentioned the absence of daily living skills at the school.

To ensure confidentiality during the focus group, each staff member was provided with a code name such as: TB1. T stands for Teacher, B stands for the first letter of their surname, and the number 1. If there is another teacher with the same code, then that teacher becomes TB2, and so on.

TB1: “Referring to the current curriculum, nothing specific on daily living skills.”	No daily living skills
TV1: “Daily living skills, we do not have it at school level. Although it is a need for the visually impaired children.”	

There are certain areas of the curriculum which require much more than adaptation in order to meet the educational needs of blind children. This system still provides visually

impaired individuals with the most accurate ready source of reference material for reading and writing. The curriculum applied at the School is the same as in mainstream schools; it is being adapted and modified in its simplest form through the use of available adaptive equipment such as large print, use of enhanced vision screen, Braille, embosser and oral communication. Physical education classes, life skills, orientation and mobility, and social interaction skills are not taught at school level. Table 7 also supports the data.

TM1 mentioned, “The curriculum is not adapted at all”.

NGOS1 stated: “Travel skills needs to be integrated to teach the child how to use a white cane, what obstacles she can come across when travelling”.

TV1 argued: “Financial resources, human resources are local barriers to put curriculum development forward”.

4.5.8.3 Sub-theme: Training for teachers

From Table 5, it is found that the teachers are not trained in the field of special education although they each possess a Teacher’s Diploma in Education.

According to Davis (2011), the quality of the educational services, which includes the relevant qualifications that teachers need to work with visually impaired children, is necessary.

From the survey, we find that teachers at the school are not trained in the field of special education. They are primary school teachers seconded for duty in a specialised school, using the same curriculum as in mainstream schools.

TV1 mentioned: “We are not trained in this field, and therefore there needs to be a resource person on staff who has been trained in that field”.

TN1 stated: “...an adapted curriculum and a special instructor for the visually impaired children. May be we are doing it but we are not skilled in this field. We are not trained about teaching of daily living skills”.

4.6 Conclusion

This chapter described the data obtained from the visually impaired children, staff and observations made at the school setting. It appears that the main themes emerging from the data representation are a whole aspect of self-help skills and independence. The chapter has also presented the profile of the school.

The findings from this study show that visually impaired children have restricted ability to move around and deficiencies in their ability to perform tasks. Due to lack of visual feedback, the child is observed to skip a number of intervening steps of an activity.

Participants reported that they needed to learn skills that would make them independent in the future, both inside and outside of the school environment.

The findings from the field observation suggest that many respondents were not trained in some form of self-help skills such as daily living skills, travel skills and social skills. This suggests that these learning areas were not included in the curriculum at school.

Does the curriculum provide scope for teaching independence and self-help skills? My findings will lead to ameliorating what services the School has to offer including the environment, with proper assessment to focus on what skills pupils would require to become independent. The teachers will need to be prepared by doing more courses to update skills in professional development.

There are lots of things to be done to improve the welfare of these children and this research is taking essential steps towards making change happen.

It is evident that a gap has been identified by all concerned regarding promoting independence amongst the visually impaired children. To enhance the independence, there is a need to develop a self-help skills education programme for the visually impaired children.

A more general discussion and recommendations will be presented in Chapter 5.

Chapter 5

Discussions and Recommendations

5.1 Introduction

In Chapter 4, the findings reported were based on interviews with 12 visually impaired participants, six staff members, in addition to field observations and document data. They discussed their experiences and suggested what skills would be needed to prepare the School's visually impaired children for an independent lifestyle. The children were asked to rank the importance of self-help skills in the educational programme. Along with the participants' responses, observations and document data, it was observed that there was a gap in the practices at the School. Therefore, this research will help develop an educational programme for the visually impaired children. This chapter presents the key findings from the research, and highlights the need for improvements in the curriculum currently used in the education system at the School.

5.2 Key findings

It is observed that the School for the Blind does not provide practical courses on orientation and mobility to the children who are visually impaired. It is determined that the teachers require specialised training to enable them to help visually impaired children to be autonomous in their ability to travel. This ability to travel independently is an important pre-requisite before embarking on a programme for self-help development.

The majority of the visually impaired children declared that they needed assistance for a certain period of time and that they would be able to manage by themselves after that. From the findings, it can be predicted that orientation and mobility play a major role in making them more confident and this usually results in developing their self-concept.

When the visually impaired children's orientation and mobility is met, the teachers can proceed with a programme designed to help them cope with daily living conditions like dressing, eating, hygiene, kitchen skills, personal hygiene, money handling and other self-care activities.

The programme will teach the visually impaired children how to be less dependent on families and friends. Mobility skills' training enables the child to undertake daily living activities such as going to the shop and to other familiar places. Mobility skills also help

the child to interact with other people and develop their social skills. Punani and Rawal (2000) discussed the importance of mobility techniques which prepare visually impaired children towards taking part in sport activities.

Opportunities for children to develop their social skills by interacting with their friends and teachers include: Ratanne class; swimming activities; vocal music; and instrumental classes. But it was noted that these activities are restricted to the school environment, and the interview and observation findings revealed the importance of learning social skills so as to adjust to the outside world properly.

In respect to communication skills, improper posture has been observed at the school. Teaching children good posture habits at an early stage will not only help to prevent deformities in the future but will help them develop socially. Moreover, learning to travel safely will build up confidence in the child and he or she will perform his or her daily living skills effectively. This will lead towards the maintenance of self-identity and integration in the society.

Services currently available at the School include Braille, curriculum materials with large print, rails/ramps, laptop/zoom text and embosser. Other services which are lacking include mobility training, physiotherapy, speech and language therapy, occupational therapy, psychological support and counselling, job placement support for school leavers and interpreter services.

However, additional resources provided at the School by the non-governmental organisation, the Lois Lagesse Trust Fund, are: computer facilities to students and ex-students, outreach services, transport service and nutrition. Furthermore, it is essential to have certain equipment and specialised classroom furniture designed specifically for visually impaired children.

Since the inauguration of the school in 1970, the curriculum has more or less remained the same and there is no distinction in the curriculum for the visually impaired children. Consequently, the syllabus has to be reviewed and restructured so as to help the visually impaired children to adapt to a fast changing world. The participants unanimously stated that activities like dressing, eating and independent travel do not form part of the daily

instructions offered. They would greatly appreciate such daily skills being taught on a regular basis.

Teachers are trained to cater for non-disabled pupils – not for those with visual impairment, so it is apparent that the relevant authorities, for example the Ministry of Education and Human Resources should address the deficit to ensure that visually impaired pupils do not follow the same mainstream syllabus. Consequently, teachers should be trained to meet the learning needs of visually impaired children towards self-help skills.

By not allowing the child to independently perform certain tasks such as: washing the hands; locate the handle; open the door; open the tap; fill a bottle; we lose awareness of the many different small tasks which the child could perform. So, by adopting certain techniques we create a learning environment that encourages the child to practice. The literature review “...when an individual is intrinsically motivated to perform a behaviour (e.g. open the door), that behaviour is considered to be completely self-determined” (Deci and Ryan, 2008 in Levin 2011, p. 17) . Allowing the child to perform small tasks is often neglected by parents and teachers.

Some examples of tasks for daily living skills are: training the child to eat according to the requirements of different situations; and currency identification such as being able to recognise coins according to their size and shape. The findings revealed that all the visually impaired children expressed the need to learn skills that would help them in their daily life. Thus, the objective of the self-help skills programme is to allow the child to explore activities that will help them to meet their needs.

Wehmeyer (1999) argued that as educators, our main responsibility is to assist the growth and development of self-determination.

A total of 100% of the responses from the visually impaired participants were extremely important/very important in the area of self-help skills in areas such as: dressing skills; clothing care skills; personal hygiene; eating skills; housekeeping skills; kitchen skills; medication; mobility and independence skills; time skills; money management; and organisation skills.

The programme needs to include learning areas as presented in the literature review, and those areas that are connected with the categorical and thematic findings. The learning areas, as discussed by various authors in the literature, are listed in Table 9. These relate to the development of the education programme in the arena of self-help skills. Some areas were repeated by other authors.

Table 10: Strategies cited by various authors

Authors	Recommendations for self-help skills
(Hazekamp and Huebner, 1989)	Personal hygiene Dressing Care of clothing Housekeeping Food preparation Eating skills Managing money Social communication Organisation
(Reddy et al., 2000)	Mobility Braille Use of remaining sight, Use of adaptive technology Listening
(Castellano, 1951)	Cane travel
(Hill and Shook-Hill, 1996)	Orientation and Mobility
(Tooze, 1981)	Orientation Mobility Daily living
(Sacks, 1987) and (Sacks and Gaylord-Ross, 1989)	Social Training addressed the direction of gaze, body posture, positive initiations, and joining of peer groups and sharing in group activities. It involved modelling, the use of prompts, discussions of the need for the desired social behaviours, and role play.
(American Foundation for the Blind, 1986).	Recreation Effective education Daily living Personal hygiene, Dressing Clothing care techniques Housekeeping Food preparation Eating Money management Social communication Telephone usage Written communication Time monitoring

	<p>Orientation and mobility Concrete environmental concepts Spatial concepts Compass directions, Concepts relating to traffic and traffic control Conceptual understanding of body image Body image involves such concepts as planes, parts, laterality, and directionality in relation to objects and environmental features Sensory/motor needs Learning to control the head, limbs, and body for purposeful exploration and movement, learning to sit, crawl, stand, and walk independently, learning to control the head and body while sitting, crawling, standing, and walking, exhibiting appropriate mannerisms and developing the ability to balance while standing still and while in motion.</p>
(Pavey, 2002)	<p>A framework for Mobility and Independence curriculum was explained in the literature which presents: Early and Foundation Mobility and Independence Body and spatial awareness includes early sensory-motor development, spatial language, mobility, and orientation in different settings. Social and emotional development encompasses activities such as asking for assistance, social conventions, manners, confidence and motivation. Advanced Mobility and Independence Travel skills including route planning and technical aspects of travel, mobility and orientation, road safety, cane techniques Independent living skills (ILS) are such as kitchen skills, eating, hygiene, money handling, dressing</p>
(Punani and Rawal, 2000).	<p>Mobility techniques Sighted Guide While Approaching Narrow Spaces, ascending and Descending Stairs, being helped to a Chair, passing Through Doorways Walking Alone Trailing, Protective Techniques, Upper Arm and Forearm Techniques, Lower Hand and Forearm Technique, Locating Dropped Articles, Using Landmarks Indoor, Direction Taking Cane Techniques Pre-cane Devices, Use of a Long Cane, Right Type of Cane, Qualities of Cane, Holding the Cane, Using the Cane, Squaring off, Adaptation of the Cane Technique, Shore-lining</p>

5.3 Summary of learning areas from table 10

The key skills highlighted by the authors listed in table 10 are as follows:

- **Self-help skills:** dressing; food preparation; clothing care; eating; housekeeping; personal hygiene; money management; time monitoring.
- **Communication skills:** social communication; listening; organisation skills; Braille; written communication; telephone usage; social; use of adaptive technology; use of remaining sight.
- **Mobility skills:** orientation and mobility; mobility techniques; cane travel; Early and Foundation Mobility and Independence; Advanced Mobility and Independence.

5.4 Enhancing self-determination skills in visually impaired children

Giving the choice to the children to make decisions on the skills they want to learn, enhancing positive interaction within the school, providing support as well as building a supportive relationship with the children all contribute to self-determination skills. An environment that is conducive to learning motivates children towards autonomy. Providing challenging tasks like the ability to travel independently would help the child feel competent. Respecting and supporting the visually impaired children would enhance self-determined behaviour.

The teachers need to be professionally committed to implementing the same curriculum as used in mainstream education and to raise the performance level of visually impaired children. Currently, the School's teachers are restricted by having to follow the same syllabus for both sighted children and those with visual disability and are expected to ensure the two categories of children perform satisfactorily. Therefore, it can be predicted that the rate of failure for visually impaired children will be quite high.

Visually impaired children usually make a request for assistance when moving from one place to another as there are too many obstacles in their way. Children are generally highly motivated and, in the long run, are able to make their own decisions rather than depend constantly on their teachers and other people. From the literature discussed, it is obvious that we have to boost the self-esteem of visually impaired children to lead them to self-determination and help them learn efficiently.

5.5 Recommendations

It is envisaged that this research will illuminate elements, processes and strategies to strengthen the current curriculum and educational programme in this specialised school for visually impaired children. This research will not develop a curriculum for the school but it will be in a position to recommend an innovative way of developing an emerging curriculum.

As a researcher, I will be in a good position to:

- Share my findings with all the relevant authorities concerned.
- Present papers at specialised conferences dealing with education specifically for visually impaired children.
- Hold workshops/seminars and share the findings to share my findings from this research with teachers and staffs from the non-governmental organisation, the Lois Lagesse Trust Fund.

There is a need to establish a committee with selected teachers, including the Mauritius Institute of Education, to develop a curriculum to enhance independence for the visually impaired children at the School.

A draft curriculum will then be piloted, refined and implemented, and supported with a new policy guideline for the Ministry of Education. It will be important that the emerging curriculum will need to be effectively evaluated and further refined and eventually recommended to be implemented within other specialised schools.

Further research is required to update strategies on an on-going basis.

5.6 Limitations

Participants could not remember all of their experiences and happenings. Further studies could include task analyses or checklists for each learning area. The learning areas in the programme will depend on the children's needs and abilities.

The analysis of the document gave information on the number on the roll of visually impaired children, their types of impairment, teachers' qualifications, and equipment and

services available at the school. Some data in the documents could not be scanned properly. Some documents were not up to date.

As I have been working as an educator at the school for the past five years, I have had the opportunity to collect data whilst onsite. Taking this into consideration, I have been aware of how my dual roles could affect the study. As a teacher and also a researcher, I needed to be objective in my approach.

5.7 Strength of the research

The issues in this study are explored, but there is the need for a more comprehensive exploration of core and generic deficits in enhancing the self-help skills of the visually impaired children and the infrastructure where these children are educated.

The findings can be transferred to other special schools where children with intellectual impairment are educated.

A variety of methods and sources were used to collect the data to gain a broad picture of the field of study (within the school).

Changes in development of Special Education Needs Education in Mauritius to be included in further research.

The limitations mentioned can be worked out for future research, to discriminate between tasks which can be performed and those that cannot be performed. Examples: research on environment, pupils, teachers and management.

For pupils, research to what extent the pupils can discriminate between tasks which can be learnt and tasks which would be difficult to learn. In this respect, determine the value of task analysis and skill analysis.

Secondary research will be undertaken to develop a strategy whereby teachers' attitudes can be shifted from teaching a generic curriculum to a more specific curriculum relevant to the visually impaired children.

A third focus of research will be undertaken to look at the environment and determine how the deficit in infrastructure, for example lacks of rails, road conditions and accessible ramps, could be determined.

A fourth research recommendation would be to look at what specific management skills would need to be in place.

In-service teachers' techniques of orientation and mobility.

We need to keep abreast of the development and changes in this field.

5.8 Current improvements

The Ministry of Education and Human Resources are setting up Special Educational Needs Resource and Development Centres (SENDRCs) in decentralised locations around Mauritius with the benefit of being accessible without the need for long distance travel. The purpose of these centres is to provide access to specialised support as well as the equipment and training which SEN schools and Units are not able to provide.

In 2013, the Mauritius Institute of Education initiated a short-term six month course for in-service teachers working in specialised schools. The main objective of the course was to increase the capacity of staff to meet the educational needs of children with disabilities.

5.9 Conclusion

It is imperative that all relevant authorities consider visually impaired children as integral members of society. A civilised society is judged by the care it provides to its members with a physical or mental disability, including visual impairment. They are the most vulnerable people and every effort must be made to show them that they may be different but not abnormal. They are as capable as, if not more capable than sighted people. For example, they may have added skills such as the ability for enhanced tactile, olfactory and auditory perceptions,

Based on my findings, there is still the need to develop a programme on self-help skills to enhance the independence of the visually impaired children.

References

- Allen, T. (2007). Cataracts. In N. Cecil, R. Reynolds & E. Feltcher-Janzen (Eds.), *Encyclopaedia of Special Education: A reference for the education of children, adolescents, and adults with disabilities and other exceptional individuals*. Retrieved from <http://search.credoreference.com/content/entry/wileyse/cataracts/0>
- American Foundation for the Blind (1986). *Programme planning and Evaluation for Blind and Visually impaired Students: National guidelines for Educational excellence*. California State Department of Education. New York: AFB Press.
- American Foundation for the Blind (2008). *Expanding possibilities for people with vision loss. Key Definitions of Statistical Terms*. Retrieved from <http://www.afb.org/info/blindness-statistics/key-definitions-of-statistical-terms/25>
- American Foundation for the Blind (2012). *Expanding possibilities for people with vision loss*. Retrieved from <http://www.afb.org/section.aspx?DocumentID=1362>
- American Foundation for the Blind (2014), *The Hatlen Center, A Program of Junior Blind - AFB Directory Profile*. Retrieved from <http://www.afb.org>
- Baine, D. (1999). *Handicapped Children in Developing Countries: Assessment, curriculum and instruction*. Edmonton, A. B.: Vector International/ Educational Psychology, University Of Alberta.
- Ballemans, J., Gertrudis, I. J. M., Kempen, G. A., & Zijlstra, R., (2011). Orientation and mobility training for partially-sighted older adults using an identification cane: a systematic review. *Clinical Rehabilitation* 25(10), 880-891.
- Baron, R. A., & Byrne, D. (2000). *Social Psychology*. Boston: Allyn and Bacon.
- Castellano, C. (1951). *Making it Work, Educating the Blind/visually Impaired Student in the Regular School*. United States: Information Age Publishing.

Chamberlain, E. A. (2003). *Independent Living Skills for Students who are Blind or Visually Impaired*. (Order No. 3081417, Capella University). ProQuest Dissertations and Theses, 84-84. Retrieved from:

<http://search.proquest.com/docview/288276357?accountid=14648> (Doctoral Dissertation, Capella University, 1998).

Davis, C. R. (2011). *Teachers of students with visual impairments: Highly qualified and highly satisfied?* (Doctoral dissertation, Capella University). Retrieved from <http://search.proquest.com/docview/759951211>

Education and Human Resources Strategy Plan (2008-2020; 2009, October 1). Retrieved from <http://ministry-education.gov.mu>

Eye Care (2004). The New Harvard Guide to Women's Health. Retrieved from http://search.credoreference.com/content/entry/hupwh/eye_care/0

Goodwyn, M. A., Bell, E. C., & Singletary, C. (2006). Success factors from Focus groups. *Journal of Visual Impairment and Blindness*, 93(6), 341-351.

Guilloteaux, M. (2007). *Motivating language learners: A classroom-oriented investigation of teachers' motivational practices and students' motivation*. (Order No. U228426, The University of Nottingham, UK). PQDT - UK and Ireland. Retrieved from: <http://search.proquest.com/docview/301658500?accountid=14648>

Habulezi, J. (2012). *The Provision of Learning Support for Learners with Visual Impairment at a Senior Secondary School in Botswana*. (Dissertation, University of South Africa, Pretoria). Retrieved from <http://www.uir.unisa.ac.za>

Hadidi, M. Z. (1998). *Educational services for visually impaired children*. *Journal of Visual Impairment and Blindness*, 92(7), 535-538.

Halliday, C., & Kurzahls, I. (1976). *Stimulating environments for children who are visually impaired*. United States of America: Charles C Thomas.

- Hedley, M. (2010). *Lived Experiences of Children with Disabilities in Various Movement Program(Health and Physical Education)*. Brock University. Retrieved from https://dr.library.brocku.ca/.../3170/Brock_Hedley_Melanie_2010.pdf
- Holiday, J. (2013). *A study of curriculum development and reform in residential schools for the blind in the United States: Three case studies*. (Order No. 3606229, The University of Wisconsin - Madison). ProQuest Dissertations and Theses, 166. Retrieved from: <http://search.proquest.com/docview/1492329280?accountid=14648>
- Individuals with Disabilities Education Improvement Act (IDEA) of 2004, 20 U.S.C. § 1414 et seq. (2004). *Reauthorisation of the Individuals with Disabilities Education Act of 1990*.
- Jackson, R. (2010). *Curriculum Access for Students with Low-Incidence Disabilities: The Promise of Universal Design for Learning*. Retrieved from aim.cast.org/sites/aim.cast.org/.../LowIncidenceReport2011Revision.doc
- Kaiser, M. A. (1999). *History of the South Dakota School for the Blind and Visually Impaired: The first century*. (Dissertation, University of South Dakota). Retrieved from <http://search.proquest.com/docview/304537801>
- King, S. (2010). *The Limitless Potential of You*. Retrieved from: Self-help skills in children/livestrong.com: <http://www.livestrong.com/article/141612-self-help-skills-children/>
- Kozub, F. M. (2006). Motivation and physical activity in adolescents with visual impairments. *RE:View*, 37(4), 149-160. Retrieved from <http://search.proquest.com/docview/222957542?accountid=14648>
- Lacey, A. & Luff, D. (n.d). Qualitative Research Analysis. In The NIHR RDS for the East Midlands / Yorkshire & the Humber, 2009. Retrieved from rds-eastmidlands.nihr.ac.uk/resources/.../8-qualitative-data-analysis.html
- Levin, D. S. (2011). *Evaluating the efficacy of the empowered curriculum of self-determination for students with visual impairments*. (Order No. 3423678, Temple

University). ProQuest Dissertations and Theses, 144. Retrieved from <http://search.proquest.com/docview/759951211?accountid=14648>

Lewis, S., & Iselin, S. (2002). A comparison of the independent living skills of primary students with visual impairments and their sighted peers: a pilot study. *Journal of Visual Impairment and Blindness*, 96(5), 335-344.

Lohmeier, K. L. (2005). Implementing the expanded core curriculum in specialised schools for the blind. *RE:View*, 37(3), 126-133. Retrieved from: <http://search.proquest.com/docview/222955189?accountid=14648>

Louw, D. A., Van Ede, D. M., & Louw, A. E. (Eds), (1998). Human development (2nd ed.). Pretoria: Kagiso

Madden, R. M. (1981). *Teaching for divergent thinking in visually impaired children at a residential school*. Columbia University Teachers College: University Microfilms International.

Masoodi, J. J. (2004). *School Reform in Residential Schools for the Blind: A Historical Investigation*. Unpublished doctoral dissertation, University of Washington.

Mauritius Country Profile. *Employment of People with Disabilities: The Impact of Legislation (East Africa)*. Geneva: International Labour Office.

Moodley, S. (2004). *The impact of different reading/writing media on the education and employment of blind persons*. PhD thesis, University of South Africa. Retrieved from <http://uir.unisa.ac.za/bitstream/10500/1294/7/05thesis.pdf>

Muneean, A., Bouvery, M., Tallybally, A., Carpin, V., & Kureembakus, S. (October, 1992). *Association pour le bien-etre des aveugles*. Mauritius, 11-12.

National Policy Paper and Action Plan on Disability (2005). Valuing People with Disabilities. The Disability Sector and its current structure in Mauritius and Rodrigues. Retrieved from: www.gov.mu/portal/sites/disability/policypaper.pdf 16.

- Norshidah, M. S., & Khalim, Z. (2010). *How and why visually impaired students socially behave the way they do*. *Procedia- Social and Behavioral Sciences*, 9, 859-863.
doi:10.1016/j.sbspro.2010.12.249.
- Olmstead, J. E. (2005). *Teaching: Tricks of the Trade for Teachers of Students with Visual Impairments*. New York: AFB Press.
- Oluremi, F. D. (2012, March). *Special schools and mainstreaming programme in Nigeria and lessons for 21st century*. Retrieved from:
<http://0search.proquest.com.oasis.unisa.ac.za/psychology/doc>
- Patton, M. Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). Newbury Park, CA: Sage.
- Pavey, S., Douglas, G., McCall, S., McLinden, M., & Arter, C. (2002b). *Steps to independence: the mobility and independence needs of children with a visual impairment. Recommendations and Summary Report*. London: RNIB.
- Pogrud, R. L., Darst, S., & Boland, T. (2013). Evaluation Study of Short-term Programs at a Residential School for Students Who Are Blind and Visually Impaired. *Journal of Visual Impairment and Blindness*, 107(1), 30-42.
- Pouroulis, A. (2000/2001). Peer group status and academic performance in primary school children. *Unisa Psychologia*, 27 (1 and 2), 63.
- Punani, B., & Rawal, N. (2000). *Visual Impairment Handbook*. India: Blind People's Association. Retrieved from <http://www.bpaindia.org>.
- Reddy, L. G., Ramar, R., & Kusuma, A. (2000). *Education of children with special needs*. New Delhi: Discovery Publishing House.
- Reidmiller, L. (2003). *Art for the visually impaired and blind a case study of one artist's solution*. (Electronic Thesis or Dissertation) Retrieved from: <https://etd.ohiolink.edu>

- Rogow, M.S. (1930). *Helping the visually impaired child with developmental problems. Effective Practice in Home, School, and Community*. New York: Teachers' College Press.
- Rusalem, H. (1972). *Coping with the unseen environment. An introduction to the vocational rehabilitation of blind persons*. New York: Teachers' College Press.
- Rutherford, R. D. (1992). *An evaluation of the Denton Independent School District's early childhood education handicapped programme: Its effects on physical, self-help, socially, academic, communication and intellectual development of students*. Doctoral dissertation, Texas Woman's University.
- Ryan, C. P. (2009). *Autonomy, competence, and relatedness in the classroom: Applying self-determination theory to*. University of Rochester, New York, USA.
- Sacks, S. Z.; Kekelis, L., & Gaylord-Ross, R. (1992). *The development of social skills by blind and visually impaired students: exploratory studies and strategies*. New York: AFB Press, American Foundation for the Blind.
- Scott, E. P. (1982). *Your Visually Impaired Student. A guide for teachers*. United States of America. University Park Press.
- Smith, M. K. (1996, 2000). '*Curriculum Theory and Practice*' the *Encyclopaedia of Informal Education*. Retrieved from: www.infed.org/biblio/b-curric.htm
- Sternberg, R. J. (1999). *Cognitive Psychology* (2nd ed.). Orlando, FL: Harcourt College.
- Strickling, C. (2010). *Texas School for the Blind and Visually Impaired*. Retrieved October 2010 from: www.tsbvi.edu: <http://www.tsbvi.edu/infants/3293-the-impact-of-visual-impairment-on-development>
- Suzuki, M., Saitoh, S., Tasaki, Y., Shimomura, Y., Makishima, R., & Hosoya, N. (1991). *Nutritional status and daily physical activity of handicapped students in Tokyo metropolitan schools for deaf, blind, mentally retarded, and physically handicapped*

individuals. *American Journal of Clinical Nutrition*, 54(6), 1101-1111. Retrieved from: <http://search.proquest.com/docview/49938005?accountid=14648>

Terre Blanche, M., & Durrheim, K. (Eds.), (1999). *Research In Practice: Applied Methods for the Social Sciences*. Cape Town: University of Cape Town Press.

Terre Blanche, M., & Kelly, K. (1999). Interpretive methods. In Terre Blanche, M. and Durrheim, K. (Eds.). *Research in Practice. Applied Methods for the Social Sciences* (pp. 140-148). Cape Town: University of Cape Town Press.

The Educator (2006, July). *Steps to Independence: Orientation and Mobility for Persons with Visual Impairment*. United Kingdom: The International Council for Education of People with Visual Impairment. Volume XIX, Issue 1.

The Educator (2008, July). *Independence*. United Kingdom: The International Council for Education of People with Visual Impairment. Volume XXI, Issue 1.

The ILO InFocus Programme on Skills, K. A. (2004). *Mauritius Country Profile. Employment of People with Disabilities: The Impact of Legislation, (East Africa)*. Geneva: International Labour Office.

Warren, D. (1994). *Blindness and children; An individual differences approach*. New York: Cambridge University Press.

Wehmeyer, M. L. (1999). A functional model of self-determination: Describing development and implementing instruction. *Focus on autism and other developmental disabilities*. 14 (1), 53-62. Retrieved from:
doi:<http://dx.doi.org/10.1177/108835769901400107>

Wigfield, A., & Eccles, J. (2001). *Development of achievement motivation*. United States: Academic Press

Wu, H. Y., & Chu, S. Y. (2012). Self-determination of young children with special needs from culturally and linguistically diverse backgrounds. *Preventing School Failure:*

Alternative Education for Children and Youth, 56(3), 149-156. doi:
10.1080/1045988X.2011.619221

Zelalem, F. (2002). *The attitudes of parents towards their blind children: A case study in Bahir Dar Town* (Doctoral dissertation, Addis Ababa University). Retrieved from etd.aau.edu.et/dspace/bitstream/123456789/.../1/Fisseha%20Zelalem.pdf

Appendix A
Request for permission to conduct research – Ministry of Education and
Human Resources

Miss Sabina Seesurrun,

Royal Road,
Fond Du Sac,
13th December 2011.

To,
The Supervising Officer,
Ministry of Education and Human Resources,
IVTB House,
Pont Fer,
Phoenix,
Through Head,

Dear Sir/Madam,

Reference: Permission to conduct research at the School for the Blind, Beau Bassin.

I am registered for an MA degree in Psychology at the University of South Africa (UNISA), and working on a research proposal. The title of my research is:

The development of a self-help skills education programme for a group of visually impaired children.

I would, therefore, be grateful if permission can be granted to conduct my research. I am currently working as educator at this school since three years and my studies is through distance course basis.

The research is relevant to the philosophy of the school and the findings would be most relevant to enhance the education and well-being of the visually impaired children.

Thanking you in anticipation, I look forward to a positive outcome from this request.

Yours sincerely,

Miss Sabina Seesurrun.

Mobile Number: 7642340

Appendix B
Request for permission to take part in research – visually impaired
children

To prospective participants

Date: _____

Dear prospective student,

I am writing to introduce myself and inviting you to be part in a research project being conducted this year. My name is Sabina Seesurrun and I am presently studying with the University of South Africa for the Masters in Psychology.

The title of the research is the: “The development of a self-help skills education programme for a group of visually impaired children”. Within this field there is a definite lack of research on the implementation of self-help educational programme in the primary setting of the school.

To gather the required data, I will need to conduct interviews and gather data. Interviews will be audio taped to enable a true and accurate account of the interview to be gained. No materials will be circulated to anybody else. The information will be made available to UNISA and results may be available for sharing.

All information will be kept confidential. I will assign code numbers to all of the forms and records that will be obtained to protect the identity of the child.

Your permission will be completely voluntary.

The recommendation will be put in good use for the welfare of the visually impaired.

Thank you for participating.

Your input will be most valuable.

Best wishes

S. Seesurrun

Appendix C
Consent form - parents

Dear Parents,

I am a student at University of South Africa and am also a teacher at the School for the Blind. In order to complete my degree requirements, I am required to conduct a research study with a group of visually impaired school children. The School in collaboration with the Ministry of Education has allowed me to contact you to request permission for your child to participate in the study. I will briefly explain the study to the children who have returned the permission slip, and also ask for their agreement to participate.

The title of my research proposal is: The development of a self-help skills education programme for a group of visually impaired children.

Children who participate will be interviewed about their self-help skills. The interview will take about 50 minutes. If the child indicates at any time that they want to stop participating, they can do so.

There are no known risks to your child for participating in this study. Their grades will not be affected in any way, whether or not they participate in the study. However the data collected may lead to explore the special needs of the visually impaired children at the school.

This research is confidential and anonymous. Anonymous means I will record no information about you that could identify you. Confidential means that the research records will include some information about you, such as academic records. I will keep this information confidential by limiting individual's access to the research data and keeping it in a secure location.

Your child's participation in this study is completely voluntary.

Please sign and return the attached permission slip if you are willing to have your child participate. Your support is greatly appreciated.

If you have any questions about this study, do not hesitate to contact me on +2307642340.

Sincerely,
Sabina Seesurrun

(Name of child) ----- has permission to participate in the research study, **The Development of a self-help skills education programme for a group of visually impaired children**, to be conducted by Miss Sabina Seesurrun.

Signature of Parent or Guardian ----- Date -----

Appendix D

Questionnaire for visually impaired children – used for my reference

Questionnaire to be used with visually impaired children.

1. What is your age?
2. What is your gender?

Male	Female

3. What is your understanding of visual impairment in general and your own visual impairment in particular?
4. What kind of problems do you encounter because of your visual impairment?
5. Are you able to cope with the unseen environment?
6. Are activities such as how to eat solid food, table manners, bringing a spoon to his or her mouth and sipping a drink from a glass, dressing skills how to zip, button, snap, and fasten taught at school?
 1. Regularly
 2. Alternately
 3. Weekly
 4. Rarely
 5. Never
7. Are independent travel skills such as how to go about safely, used in day to day instruction?
 1. Regularly
 2. Alternately
 3. Weekly
 4. Rarely
8. Does your school have any special programmes for organising daily routine activities?
(You may tick more than one)
 1. Dressing
 2. Eating
 3. Hygiene
 4. Kitchen skills
 5. Independent travel
 6. Money handling
 7. Other

8. None

9. On a scale of 1-5, with 1 being “extremely important” and 5 being “not important”, how would you rank the importance to perform the following skills after school?

Skills	Extremely important (1)	Very important (2)	Important (3)	Somewhat important (4)	Not important (5)
Dressing skills – tying shoes and fastening buttons and zips.					
Clothing care skills – using techniques for storing clothing and identifying colours and patterns, using services like ironing.					
Personal hygiene – toileting, care of teeth and hair and bathing.					
Eating skills					
Housekeeping skills Kitchen skills – using kitchen equipment including adapted equipment, chopping, pouring, cooking.					
Medication – read labels in medicines.					
Mobility and independence skills – cane techniques, avoiding hazards and recognising landmarks, road safety.					
Time skills – use of alarm clock, knowing how to tell time and use of clocks and watches.					
Money management – identifying and knowing coin equivalents.					
Organisation skills – arranging personal belongings.					

10. How can the school prepare you to live on your own?

Appendix D-1: Organisation of data from interview transcript – to facilitate identification of patterns and similarities

Question	Participants					
	A	B	C	D	E	F
1.	14	8	13	16	13	8
2.	F	F	M	M	F	F
6.	Never	Never	Never	Never	Never	Never
7.	Rarely	Rarely	Rarely	Alternately	Rarely	Never
8.	None	None	None	None	None	None
9.	Extremely /Very important	Extremely /Very important	Extremely /Very important	Extremely/ Very important	Extremely /Very important	Extremely /Very Important
	G	H	I	J	K	L
1.	9	10	11	17	12	12
2.	F	M	M	M	M	F
6.	Never	Never	Never	Never	Never	Never
7.	Rarely	Rarely	Rarely	Alternately	Rarely	Never
8.	None	None	None	None	None	None
9.	Extremely /Very important	Extremely /Very important	Extremely /Very important	Extremely/ Very important	Extremely /Very important	Extremely /Very Important

Appendix D-2: Presentation of sub-categories, categories, secondary theme obtained from interview transcript related to questions 3, 4, 5 and 10, each participant’s code name (P1, P2 to P12), and their responses.

Responses to Question 3					
P1	P2	P3	P4	P5	P6
Cannot see and those who can see a little. I can see partially.	The person cannot see at all, also people who have low vision. As for me, am partially sighted.	People, who are not able to see, cannot see and also who can partially see. I partially see.	People who cannot see and have visual problems. They cannot perform tasks by themselves. As for me, am partially sighted.	Cannot see totally and also who can see a little. I can see little.	People who cannot see at all.
Sub-categories					
Cannot see and those who can see little.	Cannot see at all, people with low vision.	Not able to see, can partially see.	Cannot see, cannot perform tasks by themselves.	Cannot see totally, who can see a little.	Cannot see at all.
Sub-categories					
Blind and partially sighted.	Blind and low vision.	Blind and partially sighted.	Blind.	Blind and partially sighted.	Blind.
Categories					
Visual impairment.	Visual impairment.	Visual impairment.	Visual impairment.	Visual impairment.	Visual impairment.
P7	P8	P9	P10	P11	P12
I cannot see properly, I wear spectacles to see better.	The person cannot see or little. I can see with my right eye and cannot see with my left eye at all.	People who cannot see at all and also who also can partially see. I have dark spot in my eyes. The barrier black come across and block my vision. When it’s out, I can see. I wear spectacles.	The person needs help. People who cannot see at all. I see blurred. I wear spectacles to see well.	The person has vision problems; he cannot see at all, is blind or partially sighted who can see little. I am partially sighted. I cannot see with my right eye but with left eye, a little.	The person cannot see at all, or is partially sighted who can see little. I am partially sighted. I cannot see with my right eye, but little with left eye.

Sub-categories					
People who cannot see properly.	The person cannot see or little.	People who cannot see at all and also who also can partially see.	The person needs help. People who cannot see at all.	The person has vision problems; he cannot see at all, is blind or partially sighted who can see little.	The person cannot see at all, or is partially sighted who can see little.
Categories					
Partially sighted.	Blind and partially sighted.	Blind and partially sighted.	Blind.	Vision problems.	Blind and partially sighted.
Sub-categories					
Visual impairment.	Visual impairment.	Visual impairment.	Visual impairment.	Visual impairment.	Visual impairment.
Responses to question 4					
P1	P2	P3	P4	P5	P6
I cannot see far objects. Get eye pains sometimes- left eye. I cannot recognise things at times unless I touch. Feel categorised as I am not in a normal school.	When I walk, I cannot see in front of me, I have confronted obstacles ahead of me unless assisted.	I cannot see things from far. I see blurred images sometimes.	When I see small characters, I get eye strain, I move close to objects to identify.	I see blurred images sometimes, can see objects from near.	I have to rely on others for assistance. I cannot count money.
Sub-categories					
Cannot recognise things at times unless I touch. Feel categorised.	Confronting obstacles ahead unless assisted.	Having blurred vision sometimes.	Moving close to objects for identification.	See blurred images sometimes.	Have to rely on others for assistance. Cannot count money.
Categories					
Difficult to recognise. Attitudes	Struggling with immediate environment. Assistance	Vision problems.	Moving close.	Blurred images – confrontation.	Relying on others.

P7	P8	P9	P10	P11	P12
I walk slowly looking for any obstacles even if blurred in front of me.	I cannot dress myself properly; I cannot take a bath by myself.	I get headache often.	When I walk, I usually get knocked down by objects in front of me.	When I walk along the road, I get difficulties such as since I see with left eye, am used to walk on left side. I cannot read well as I cannot see the alphabets, words clearly. I use my left eye as my vision and the left eye I see black. Am used to this, so I ignore that I am visually impaired.	I cannot see small characters, I need large print. I cannot read long sentences.
Sub-categories					
Walk slowly looking for any obstacles.	Cannot dress myself properly; I cannot take a bath by myself.	Get headache.	Knocked down by objects in front of me.	When I walk along the road, I get difficulties I cannot read well as I cannot see the alphabets, words clearly I ignore that I am visually impaired.	I cannot see small characters. I cannot read long sentences.
Categories					
Difficulties in identifying obstacles ahead.	Unable to perform self-care activities. Slow skills acquisition.	Health problems due to vision.	Unable to Detect objects in front.	Facing difficulties in walking, reading. Ignoring the disability.	Literacy. Low vision devices.

Responses to question 5					
P1	P2	P3	P4	P5	P6
A little.	At the beginning I need assistance in my immediate environment, then get used to it with time and can manage alone.	A little. I feel different when not in normal school.	Yes, I can travel on my own.	I can manage a little.	No, I need assistance.
Sub-categories					
A little.	I need assistance in my immediate environment	I feel different when not in normal school.	Travel on my own.	A little.	I need assistance.
Categories					
Struggling.	Prevention of hazardous elements	Feeling discriminated against. Emotional	Independent travel.	Struggling.	Relying on others for assistance.
P7	P8	P9	P10	P11	P12
Yes, with precautions.	I need someone with me for help	Yes, I can outside work	No, I need my mother at home to help me. At school by me.	At home, yes, I can take a bath by myself. Outside I cannot cope, I need assistance.	Sometimes I need help for example to accompany me to places. I can take a bath, eat. But for dressing, my mother helps me.
Sub-categories					
With precautions.	I need someone with me for help.	I can outside work.	I need my mother at home to help me.	Outside I cannot cope, I need assistance.	I need help for example to accompany me to places.

Categories					
Adaptation to unfamiliar surroundings.	Cultural differences Adjusting of strategies to the needs of visually impaired children.	Independent	Cultural differences Assistance and guidance. Over-protective behaviour.	Assistance.	Help from others.
Responses to question 10					
P1	P2	P3	P4	P5	P6
How to cross the road, travel by bus How to use The kitchen. How to read a letter, fill a form. How to talk to people. How to organise my personal belongings.	To learn many things as: how to eat, to dress and undress, to lace shoes, To use the toilet properly. To be able to count money. To use a white cane for travel. To use kitchen utensils without harming myself	Programmes organised at school level such as how to keep yourself clean, how to count money. To use a white cane to travel.	To learn how to take a bus to go to places. To cook and eat food. To know how to count money.	To be able to go travel by bus on my own. To prepare food. To know how to handle money in shops, in banks.	To be able to walk and seek assistance when needed. To dress and be able to button and unbutton shirts. To use toilet properly and to open and close tap.
Sub-categories					
How to: Cross the road; Travel by bus; Use the kitchen; Read a letter; Talk to people; Organise personal belongings.	To learn how to: Eat; Dress and undress; Lace shoes; Use the toilet properly; Count money; Use a white cane for travel; Use kitchen utensils without help.	Programmes organised at school level such as: How to keep yourself clean; How to count money; How to use a white cane to travel.	To learn how to: Take a bus to go to places; Cook and eat food; Know how to count money	To be able to: Travel by bus on my own; Prepare food; Know how to handle money in shops, in banks.	To be able to: Walk and seek assistance when needed; Dress and be able to button and unbutton shirts; Use toilet properly and to open and close the tap.

Categories					
<p>Travel skills Kitchen skills Literacy Interaction with others Socially appropriate behaviour Organising personal belongings</p>	<p>Eating skills Dressing skills Toileting skills Handling money Use of white cane Kitchen skills</p>	<p>Personal hygiene Travel skills Handling money</p>	<p>Eating skills Travel skills Handling money</p>	<p>Independent travel Kitchen skills Handling money</p>	<p>Dressing skills Use of toilet Relying on others</p>
P7	P8	P9	P10	P11	P12
<p>To cope with outside environment</p>	<p>School must have programmes like eating skills.</p>	<p>To educate us and give us opportunities to participate in activities. Programme like travelling on the own.</p>	<p>To have educational sessions on discipline, dressing skills, travel by bus, mobility and orientation training, to develop fine motor skills</p>	<p>The school is preparing us academically through Mathematics on time, English, French for communication. We are learning Braille. The school must have resource persons on teaching independent travel. Activities like educational tours, fun day help us too. Programmes on dressing skills, eating skills are important for the child to become independent. He will not seek assistance every time.</p>	<p>The school should have sessions on eating skills, How to face obstacles, how to identify dangers on the way. How to utilise things, play activities, and organise more outdoor activities. How to travel by bus and mobility. To go to places like the shop, important places. To learn musical instruments.</p>

Sub-categories					
Cope with outside environment	Eating skills	Programme like travelling on their own.	Educational sessions on: Discipline; Dressing skills; Travelling by bus; Mobility and orientation training; How to develop fine motor skills.	Resource assistants on mobility and orientation. Programmes on dressing skills, eating. Independence Not relying on others for help.	Sessions on: Eating skills; How to face obstacles; How to identify dangers on the way; How to utilise things; How to travel by bus and mobility; How to go to places like the shop, important places.
Categories					
Strategies to cope with surrounding environment	Eating skills	Independent travel	Educational sessions Dressing skills Travel by bus	Dressing skills Eating skills Travel skills Relying on others Need for resource persons	Eating skills Travel skills Coping strategies with surrounding environment

Colours Secondary themes

Travel skills  Daily living skills  Education 

Independent  Social skills 

Note code name for Participants: participant 1 to 12 P1 to P12

Appendix D-3: Representation of themes, secondary themes and categories related to interview transcript of 12 visually impaired children.

Theme	Self-help skills and Independence				
Secondary themes	Daily living skills	Travel skills	Social skills	Education	
Categories	Eating skills	Coping with surrounding environment	Interaction with others	Coping strategies	
	Dressing skills	Independent travel	Socially appropriate behaviour	Slow acquisition of information	
	Toileting skills	Adjusting of strategies to the needs of visually impaired children	Organising personal belongings	Literacy	
	Handling money	Adjusting to unfamiliar environment	Feeling discriminated	Educational sessions/programmes	
	Kitchen skills	Use of a white cane	Attitudes		
	Personal hygiene	Unable to detect objects in front	Cultural differences		
	Self-care activities	Preventing hazardous elements			
		Difficulties in walking			
		Relying on others for help			
		Request assistance			

Appendix E
Interview questionnaire – staff

Interview questionnaire for staff - June 2012

Dear colleagues,

I am currently studying for an MA in Psychology through the University of South Africa. I shall be grateful if you would assist me in answering the questions related to self-help skills for visually impaired children.

All information will be kept confidential. Please feel free to express yourself as openly as possible.

Thanking you in anticipation.

Sabina Seesurrun

1. With reference to the current curriculum in this school, please comment whether the curriculum is specifically orientated towards the integration of daily living skills for the visually impaired?
2. Based on your observation, what daily living skills programme can be incorporated within the current curriculum at the school?
3. To what extent a newly developed self-help skill program would be beneficial to the children to the school?
4. How the students can be made more adaptable for independent travel?
5. What barriers can be encountered with the emerging curriculum for the visually impaired children?
6. Are there any other suggestions you would like to make towards the development of specific curriculum towards the visually impaired children?

Appendix E-1: Interview agreement permission form - interviewee

Permission form

Tape Recording Permission Form

I, _____ agree to be interviewed by and to have a session tape-recorded. I understand this is for a study on the activities of daily living skills and travel needs of people who are visually impaired.

Appendix E-2: Summary of Focus Group Transcript

Date of interview: 2nd July 2013

Each staff member was provided with a code name such as: TB1. T stands for Teacher, B stands for the first letter of their surname, and the number 1. If there is another teacher with the same code, then that teacher becomes TB2, and so on.

Examples for code names: Teacher V.B as TV1

NGO S.S as NGOS1

Themes identified in the transcript are shown in the next appendix.

Transcript from focus group

Q1.	With reference to the current curriculum in this school, please comment whether the curriculum is specifically orientated towards the integration of daily living skills for the visually impaired?
Response	
H:	Daily living skills are part and parcel of the curriculum of the visually impaired children. Because these children need to be mobile and independent in their daily life, they must acquire these daily living skills through education
TV1	Daily living skills, we do not have it at school level. Although it is a need for the visually impaired children
TB1	Referring to the current curriculum, there is nothing specific on daily living skills. We should have a curriculum adapted to the visually impaired children
TM1	The curriculum is not adapted at all
TN1	...an adapted curriculum and a special instructor for the visually impaired children. May be we are doing it but we are not skilled in this field. We are not trained about teaching of daily living skills
TV1	No, daily living skills is very important for the child to become independent. She or he can dress and undress herself,

	toileting skills, travel skills
NGOS1	Travel skills needs to be integrated to teach the child how to use a white cane, what obstacles she can come across when travelling
Q2.	Based on your observation, what daily living skills programme can be incorporated within the current curriculum at the school?
Response	
TD1	How to sit properly on a chair
TB1	Toileting skills
TV1	Opening and closing the tap
TB1	Eating
H	Dressing and undressing
NGOL1	Communicating well
TN1	Walking properly
TB1	Identification of personal belongings
NGOM1	Identification of his or her personal seat
TD1	Identification of the door- how to enter and leave the room
	Example: dressing and undressing at home- if children takes 20 minutes to dress and undress, parents do it in 5 minutes as they are busy and have to go to work
TM1	How to walk alone, how to dress and undress, shoe lacing, these are not taught at school
Q3.	To what extent a newly developed self-help skill programme would be beneficial to the children to the school?
Response	
TV1	It will be beneficial for the child to move on his own and perform his or her daily living skills properly

H	The two main skills to be independent are mobility and daily living skills. These are major skills the child must master and become independent
NGOM1	A blind Braille teacher- personally, we need to seek help when travelling, to talk, to try to get a clue. At the very beginning, it is very hard but with time, we get adapted to this routine life. Travel skills, orientation and mobility
TB1	Need training in mobility in classroom first, then school yard, then in street- the route from home to school and from school to home, he will get clues by himself
TM1	Orientation and mobility would be beneficial for the children to go to college, university, work, to travel on his own
TN1	Not dependent on parents
Q4.	How the students can be made more adaptable for independent travel
Response	
TV1	For him to be adaptable he must have a mental mapping that is to move from place to place. The bus stop is to the right is a clue. Identifying clues for his mobility, also seeking assistance or help.
NGOL1	How to move with the white cane, learning how to use the white cane
NGOS1	Right side of white cane, then move left leg towards right
Q5.	What barriers can be encountered with the emerging curriculum for the visually impaired children?
Response	
H	Barriers, the follow up of the skills at school should be done by parents at home. Parent education is important. There is the need to have special classes for parents- what taught at school must be taught in parallel at home
TB1	Before starting a mobility class, the parents needs to agree and cooperate, need to sensitise the parents.
TV1	financial resources, human resources are local barriers to put curriculum development forward
NGOL1	Outreach officer needs to monitor at home level. The child is doing his daily living skills well and to report in a file of each child.
TN1	That is to evaluate the parents

TM1	Outreach section needs to be dominant thus it will give us feedback about the progress of the child
TD1	Transition between partially sighted child and his loss of sight over time is time wasting
NGOL1	Adults with diabetes and so on will become blind, so corrective measures beforehand is needful
TV1	the outreach section needs to be active
H	If there is two way communication, dialogue, then no such barriers can be encountered
TB1	Barriers- parents' consent, some may disagree for undressing the child
Q6.	Is there any other suggestion you would like to make towards the development of specific curriculum towards the visually impaired children?
Response	
TB1	Adapted curriculum
TM1	Proper teaching aids
TV1	Perkins at school and 1 at home
H	Large print, assistive technology
TN1	Visual efficiency
NGOS1	Need to try daily living skills, also numeracy and literacy to include
TD1	Example children goes to swimming activities, it would be beneficial if they are trained how to dress and undress
TD1	Teaching also how to talk in a proper way
TV1	Need sport activities and activities every week, will motivate the child to come to school
TV1	We are not trained .We can have a resource person in that field

Appendix E-3: Presentation of themes, secondary themes, categories and sub-categories related to the focus group interview with the Head, 6 teachers and 3 NGO staff. (The highlighted text indicates the sub-categories emerging from the raw data.)

Themes	Secondary themes	Categories	Subcategories	Interview transcript: Raw data
Self-help skills Independence	Daily living skills Travel skills Social skills Education	Dressing skills Eating skills Toileting skills Orientation and mobility Communication skills Knowledge	Why are daily living skills important in the Curriculum? The need to be mobile and independent. How is Education enhancing daily living skills at school level? The need for educating daily living skills for visually impaired children. The need for an adapted curriculum compared to current curriculum. Need for Special instructors. Why teachers working at the school are not skilled, not trained? The importance of daily living skills to enhance Independence. Knowing how to dress and undress on his or her own.	1. Daily living skills are part and parcel of the curriculum of the visually impaired children. Because these children need to be mobile and independent in their daily life. So they must acquire these daily living skills through education. Daily living skills, we do not have it at school level. Although it is a need for the visually impaired children. Referring to the current curriculum, nothing specific on daily living skills. We should have a curriculum adapted to the visually impaired children. The curriculum is not adapted at all. An adapted curriculum and a special instructor for the visually impaired children. May be we are doing it but we are not skilled in this field. We are not trained about teaching of daily living skills. No, daily living skills is very important for the child to become independent. She or he can dress and undress herself, toileting skills, travel skills. Travel skills needs to be integrated to teach the child how to use a white cane, what obstacles she can come across when travelling. 2. How to sit properly on a chair. Toileting skills.

		<p>How to use the toilet?</p> <p>How to travel safely in his or her surrounding environment?</p> <p>Integration of travel skills in education.</p> <p>How to use of white cane so as to identify obstacles?</p> <p>How to maintain proper posture?</p> <p>Having knowledge for :</p> <p>Toileting skills</p> <p>Eating skills</p> <p>Dressing and undressing skills</p> <p>Communicating</p> <p>Walking with care</p> <p>Identification of things,</p> <p>Knowing directions.</p> <p>Dressing and undressing skills.</p> <p>Practice to walk alone, dressing and undressing alone</p> <p>How to move on his own?</p> <p>How to shoe lace a shoe?</p> <p>The benefit of being trained in daily living skills, mobility.</p> <p>When and How to seek help?</p> <p>Learning how to use a white</p>	<p>Opening and closing the tap.</p> <p>Dressing and undressing.</p> <p>Communicating well.</p> <p>Walking properly.</p> <p>Identification of personal belongings.</p> <p>Identification of his or her personal seat.</p> <p>Identification of the door- how to enter and leave the room.</p> <p>Example: dressing and undressing at home – if children take 20 minutes to dress and undress, parents do it in five minutes as they are busy and have to go to work.</p> <p>How to walk alone, how to dress and undress, shoe lacing, these are not taught at school.</p> <p>3. It will be beneficial for the child to move on his or her own and perform his or her daily living skills properly.</p> <p>The two main skills to be independent are mobility and daily living skills. These are major skills the child must master and become independent.</p> <p>A blind braille teacher- personally, we need to seek help when travelling, to talk, to try to get a clue. At the very beginning, it is very hard but with time, we get adapted to this routine life. Travel skills , orientation and mobility.</p> <p>Need training in mobility in classroom first, then school yard, then in street- the route from home to school and from school to home, he will get clues by himself.</p>
--	--	---	---

		<p>cane?</p> <p>The need for Parent education and Special classes.</p> <p>Seeking help The main skills needed are: Adapted Travelling skills and daily living skills.</p> <p>How to ask assistance/help where needed?</p> <p>Walking on his or her own as learning process. How to use a white cane? Travel on his or her own How to become less reliable on others for help?</p> <p>Routines to adapted environment.</p> <p>How to become independent while travelling?</p> <p>How to identify clues? Orientation and Mobility –to move around freely.</p> <p>Assistance Learning to use a white cane. The importance of Special classes.</p>	<p>Orientation and mobility would be beneficial for the children to go to college, university, work, to travel on his own. Not dependent on parents.</p> <p>4. For him to be adaptable he must have a mental mapping that is to move from place to place. The bus stop is to the right of a clue. Identifying clues for his mobility, also seeking assistance or help. How to move with the white cane, learning how to use the white cane.</p> <p>Right side of white cane, then move left leg towards right.</p> <p>5. Barriers, the follow up of the skills at school should be done by parents at home. Parent education is important. There is the need to have special classes for parents- what taught at school must be taught in parallel at home.</p> <p>Before starting a mobility class, the parents needs to agree and cooperate, need to be sensitised the parents.</p> <p>Financial resources, human resources are local barriers putting curriculum development forward.</p> <p>Outreach officer needs to monitor at home level. The child is doing his daily living skills well and to report in a file of each child. That is to evaluate the parents.</p> <p>Outreach section needs to be dominant thus it will give us feedback about the progress of the child.</p> <p>Transition between partially sighted child and his loss of</p>
--	--	--	---

			<p>Need to educate parents</p> <p>Financial and human resources needed.</p> <p>The need for Curriculum development.</p> <p>How evaluation, progress and feedback on the child will help in the education of visually impaired children?</p> <p>What are corrective measures that can be applied at school level?</p> <p>Importance of communication at school.</p> <p>Consent needed from parents to apply daily living skills?</p> <p>Adapted curriculum needed.</p> <p>How the use of teaching aids Perkins School Large print Visual efficiency Low vision devices Numeracy and literacy enhance the child to develop?</p>	<p>sight over time is time wasting.</p> <p>Adults with diabetes and so on will become blind, so corrective measures beforehand are needful. The outreach section needs to be active.</p> <p>If there is two way communication, dialogue, then no such barriers can be encountered.</p> <p>Barriers – parents’ consent, some may disagree for undressing the child.</p> <p>6. Suggestions: Adapted curriculum.</p> <p>Suppose build up a curriculum, the suggestions-resources. Proper teaching aids. Perkins at school and 1 at home. Large print, assistive technology. Visual efficiency.</p> <p>Need to try daily living skills, also numeracy and literacy to include.</p> <p>Example children goes to swimming activities, it would be beneficial if they are trained how to dress and undress.</p> <p>Teaching also how to talk in a proper way.</p> <p>Need sport activities and activities every week, will motivate the child to come to school.</p> <p>2. We are not trained .We can have a resource person in</p>
--	--	--	---	---

			<p>How to dress and undress? How to talk in a proper way?</p> <p>The need to motivate the child?</p> <p>Enhancing a conducive school environment.</p> <p>How to tackle barriers that can interfere with the application of daily living skills at school?</p> <p>The need to motivate all stakeholders.</p> <p>Need for resource persons in fields required.</p> <p>How training of dressing skills will help the visually impaired children?</p>	that field.
--	--	--	---	-------------

Appendix F

Presentation of themes, secondary themes, categories and sub-categories related to field notes of my reflections and observations during the research process.

Themes	Secondary themes	Categories	subcategories	Notes	
Self-help skills	Daily living skills	Dressing skills	Toileting -how to maximise her participation, privacy, and comfort when she uses the bathroom.	Is able to manage on his own for toileting, eating and dressing skills. (13, M, partially sighted).	
Independent	Travel skills	Eating skills	Eating skills- how to eat solid food, table manners, bringing spoon to his mouth and sipping a drink from a glass.	Dresses herself, eats/drinks/brushes her teeth/puts her shoes/takes bath/goes to the toilet but sometimes she seeks guidance.(9, F, partially sighted)	
	Social skills	Toileting skills		Is able to manage on her own for toileting skills, eating, and dressing. (13, F, partially sighted.)	
	Education	Orientation and mobility	Knowledge	Dressing skills how to zip, button, snap, and fasten.	Is able to manage on her own (eating, dressing, toileting). Her school materials are not well organised in her classroom desk. Is not able to express her fluently. She works on her own when prompted each time. Limited speech in all situations. (14, F, partially sighted)
		Communication skills		Needs guidance.	
			How to organising materials.	Is able to eat and drink by himself. Goes to the toilet and takes his bath without any help. Is able to tie his laces and dresses himself. Is able to button his shirt but sometimes misses a button-hole in the process.	
			Personal hygiene	Is not allowed to cook at home because of his vision problem. Is not well organised – messy table and bag. (9 M, partially sighted).	
			Dressing skills		
			How to take precautions while cooking?	Is able to dress himself, eat, drink, brush his teeth and put his shoes, wash his body, to the toilet. Sometimes when his eyes pains, he seeks assistance. (11,M, partially sighted)	
			How to put the toothpaste onto their finger and rub it onto their teeth directly and then to start brushing?	Needs assistance, she cannot dress, eat and tie her laces	

			Knowing the stages in shoe lacing.	on her own. The career assists her at school.(8, F. blind) Has difficulty in dressing himself. He seeks assistance. (10, M, partially sighted).
--	--	--	------------------------------------	---

Appendix F-1: Presentation of themes: Self-help skills and Independence emerged from the secondary themes: daily living skills, orientation and travel skills, communication which in turn emerged from the categories.

Themes	Self-help skills and independence		
Sub-themes	Daily living skills	Orientation and travel skills	Communication
Categories	Toileting Eating skills Dressing skills Need guidance Organising materials Dressing skills Cooking skills Hygiene Shoe lacing	Travelling by bus Seeks assistance Identifying obstacles, using clues and landmarks Taking precautions while walking.	Expressing verbally Physical movement of head, repetitive mannerism Recognition of letters Taking responsibility of his or her belongings. Interactions with others Time skills

Appendix G
School profile 2013 - study setting

School for the Blind
 Colonel Maingard Street, Beau Bassin
 Telephone No: 4543253
 Mauritius
 Year: 2013
 School Profile form

A. LOCATION AND TYPE	
Name of School/Day Care Centre: School for the Blind	
Name of Head of School/Day Care Centre: Mr. I. Ramlall	
Address of school: Colonel Maingard, Beau Bassin	
Telephone No: 4543253 Fax No. (If any):	
Year Founded: <input type="text" value="1"/> <input type="text" value="9"/> <input type="text" value="4"/> <input type="text" value="6"/>	Year Registered: <input type="text" value="1"/> <input type="text" value="9"/> <input type="text" value="4"/> <input type="text" value="7"/>
Type: School <input type="checkbox"/> Yes <input checked="" type="checkbox"/>	Day Care Centre <input type="checkbox"/>
Daily School Hours	
AM	8.50 – 11.55
Break	11.55- 12.40
PM	12.40 – 14.30
Is School/Day Care Centre Registered with:	
(i) Ministry of Education	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
(ii) Ministry of Social Security	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Type of administration (tick appropriate box) board meeting	
Government <input checked="" type="checkbox"/> NGO <input type="checkbox"/> Private <input type="checkbox"/>	her, Specify <input type="checkbox"/>
B. PHYSICAL FACILITIES (Tick in appropriate box)	
1. Building	(ii) Does your school use E-learning materials?
a. School only <input checked="" type="checkbox"/>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
b. Partly residential <input type="checkbox"/>	
c. Partly commercial <input type="checkbox"/>	(iii) State number of educational toys 10
d. Other, (specify)..... <input type="checkbox"/>	
2. Type of ownership	(iii) Other learning materials (specify)
a. State owned <input checked="" type="checkbox"/>	Memory boosting Games <input type="text" value="2"/>
b. Private owned <input type="checkbox"/>	Shapes games <input type="text" value="5"/>
c. Rented <input type="checkbox"/>	Action zone <input type="text" value="3"/>
d. Other, (specify) <input type="checkbox"/>	

3. Use of rooms

Room	Yes	No	Number
Classroom	YES		7
Counselling room		NO	
Office	YES		1
Staff room		NO	
Workshop		NO	
Computer lab	YES		
Science lab		NO	
Gymnasium		NO	
TV room		NO	
Kitchen		NO	
Toilet	YES		3

4. Number and Size of classrooms:

No. of classrooms	Size of Classroom
1	6m × 3 m 75
2	4m95 cm × 3m65
4	3m10 × 3m70

5. Learning Materials (tick appropriate (box))

(i) Do you have a

- a. School Library Yes No
- b. Reading Corner Yes No

If yes, state number of books

	Type	French	English	Other	Total
Teacher	Reference	1	1	2	4
Student	Curriculum				
	Reading	2	2		4

6. Is there a school canteen?

Yes No

If yes, it is run by:

PTA
 NGO
 Private

7. Recreational facilities:

(State number of)

Toboggan
 Swing
 See Saw
 Volley ball pitches
 Football grounds
 Badminton pitches
 Mini basket pitches
 Table tennis
 Other, (specify) ...
 Carom board and dominoes.....3.....

8. Equipment (State number)

Fax Machine
 Cyclostyling machine
 Photocopying machine
 Other (specify) Zoomtext Lcd.....

9. ICT Support (State number)

Computer
 Radio/Radio Cassette
 Television Set
 Video set: VCR, VCD, DVD
 Projector
 Other (specify)...sound system.

11. Transport Facilities

Yes No

Own transport
 Social Security
 Private Van
 Other (specify)

C. ADMISSION EXERCISE

1. Pre-requisites for admission

- a. Complete medical check – up
- b. Part medical check-up
- c. Relevant information on child
- d. Information on degree of impairment

Yes	No
Y	
Y	
Y	
Y	

2. Describe the different steps prior to a child being admitted to your institution:

- a. Preliminary identification: Parents identify the child is having difficulty seeing such as the child is not able to put threads in needles, she has difficulty reading, keeps book close to eyes, misses steps while walking, often knocks down against objects.
- b. Parents then resort to hospital care where diagnostic is done by an ophthalmologist. Child is put under observation and advised to wear glasses where applicable.
- c. Normally parents admit the child to normal stream. Depending on the severity of the problem, parents resort to Lois Lagesse Trust Fund for two reasons: 1. for school management refuses admission 2. When medical practitioner refers them for optical care.
- d. Once a medical certificate is issued through diagnosis, parent contact the Lois Lagesse Trust Fund for follow up.
- e. Admission process: upon receipt of request for admission, the Outreach section of Lois Lagesse Trust Fund, from does a home visit to gather information on the child and interviews the parents while filling a personal data form of the child hereby diagnosing causes of visual problems. The interviews provide information on the background, profession of the parents, hazardous materials used, living conditions of the child living facilities dispensed to the child and academic report of the child.
- f. Admission procedure: The child is then referred to the administration of the school. Here the child along with relevant documents (birth certificate, medical certificate is being screened for his visual deficiency). First day at school- the transition from home to school is carried out through playing activities, storytelling, well decorated classroom.
- g. Formalised admission level: admission period can be varied at any time of the year according to referral time by doctors.

- h. A totally blind child is being provided with Braille facilities, tactile tools, talking dictionaries.
- i. A partially sighted child is provided with large print, enhanced vision screen, embossed maps.

.....

D. STUDENTS' DETAILS

No. of Pupils		Age Group	Section
Boys	12	8-17	Std 1- 6
Girls	10	8-16	Std 1- 6

E. TYPE OF IMPAIRMENT

S.N	Impairment Type	Yes	No
1.	Visual	Y	
2.	Hearing		N
3.	Speech	Y	
4.	Physical	Y	
5.	Mental/ Behavioural	Y	
6.	Multiple Disabilities -Please specify: 1. Visual impairment, speech and physical 2. Visual impairment and mental.	Y	
7.	Learning Disabilities	Y	
8.	Autism		N
9.	Others, Please specify:		

F. SPECIAL EQUIPMENT AND FACILITIES (Tick as appropriate)

	Equipment / Facilities	Yes	No
a.	Sign Language on CD		No
b.	Tactile/ Kinaesthetic	Yes	
c.	Braille	Yes	
d.	Hearing Aids/ Audio equipment		No
e.	Speech training equipment		No
f.	Curriculum materials with large print	Yes	
g.	Rails / Ramps	Yes	
h.	Specialised classroom furniture		No
i.	Other (specify) : Laptop/zoom text/embosser	Yes	

G. SERVICES OFFERED BY SCHOOL/CENTRE (Tick as appropriate)

Services	Yes	No
Sign Language course		No
Mobility training		No
Physiotherapy		No
Speech and Language therapy		No

Occupational Therapy		No
Psychological support and counselling		No
Job placement for school leavers		No
Interpreter services		No
Computer facilities to ex- student	Yes	
Outreach services	Yes	
Others (specify) : Transport services	Yes	

H. PERSONNEL

Academic staff

Name	Academic Qualifications	Professional qualifications	Years of service
Staff 1	SC	TCC, ACE, CEM, Certificate for visually impaired	
Staff 2	HSC	ACE, Diploma in Educational Management, Teacher's Diploma	26
Staff 3	HSC	ACE, Teacher's Diploma.	21
Staff 4	HSC/GCE "A" level	Teacher's Diploma, Diploma in Educational Management, BA-communication/psychology, Hons BA Psychology	18
Staff 5	HSC	ACE	9
Staff 6	HSC	Teacher's Diploma, BA French/Education	18
Staff 6	HSC	Diploma in Hindi, Hons BA Hindi	9

Non- academic staff:

Name	Academic Qualifications	Years of service
Staff 7	Std VI, Certificate in Ratanne	36
Staff 8	Form I	37

SCHOOL PROGRAMME (detailed description required –/ class level-wise)

There is no streaming. The screening process is done according to previous academic records.

Std I, II and III: Activity based learning, English, French, Mathematics, Health education, The Arts, Braille, Vocal Music, Instrumental Music, Classe D'Ecoute, Swimming session ICT, numeracy and literacy.

STD IV, V and VI: English, French, Mathematics, Science, History/Geography, Health Education, Arts, ICT, Braille, Vocal Music, Instrumental Music, Classe D'Ecoute. Swimming session, rattan work.

CURRICULUM (Normal, adapted – specify)

The curriculum applied at the school is same as mainstream, it is being adapted and modified in its simplest form through the use of available adaptive equipment such as large print, use of enhanced vision screen, Braille, embosser, oral communication.

Absence from physical education classes. Life skills, orientation and mobility, social interactions are not taught at school level.

Integrating orientation and mobility in subject areas as History and Geography is not being practiced.

ASSESSMENT (Give details about internal and end of cycle examinations)

Same as mainstream. For examination purposes, extra time of 30 minutes is allocated for core subjects and 20 minutes for the other subjects. Examination papers are in large print format. There is a reader and writer that are made available during examination period. Internal examination is done term wise and the question papers are prepared by the teacher and adapted accordingly. Totally blind children are provided with question papers transcribed in Braille.

SCHOOL CALENDAR (with complete description of activities planned for the year)

1. March – National Day celebration: one week prior to this celebration, activities are carried out such as rehearsal of national anthem, drawing and colouring of national flag. Teaching the children the importance of each colour and preparing sketches and poems to express their feelings of the country. During celebration day, there is speech, raising of flag, sketches, songs, poems. Refreshments are distributed.
2. May – Education tour: to reinforce lessons and topics done in class by visiting places of interests and historical monuments in Mauritius
3. June – Music Day: To enable children to participate in activities such as singing, dancing, drama, playing instruments at school level.

4. October – White cane day: 15th October is the White cane day celebrated by Lois Lagesse Trust Fund to educate the public and sensitise them towards the abilities of visually impaired. The activities that are presented by the children are: songs, poems, dance. Refreshments and packed lunch are distributed to pupils, staffs, and parents.

EXTRA-CURRICULAR ACTIVITIES (Provide list, objectives and time schedule)

1. Ratanne work carried out at school level- making of baskets.

Objectives: to develop manipulative skills and art work in visually impaired children.

2 periods every week.

2. Vocal music – 2 periods every week.

Objectives: to develop an interest in vocal music, making them realise their talent and skills. It promotes a stimulating environment for the child.

3. Instrumental music – 2 periods every week.

Objectives: to give basic training in instrumental music to children and to develop an interest in this field of learning. It also promotes a stimulating environment for the child towards development.

4. Swimming activities – every Friday (1 hour)

Objectives: making the children develop skills that can lead them to be a good swimmer and better health. In addition to the development of their gross motor skills.

SUPPORT SERVICES PROVIDED (Description of all support services provided in and outside of school)

1. Large print materials, reader and writer provided by MES for CPE examinations, photocopying facilities, Braille teaching by staffs from Lois Lagesse Trust Fund, Perkins machine, free transport services (van), food/nutrition, fax machine, ICT teacher, Classe D'Ecoute, Musical instruments, display Braille, Jaws, talking dictionary, Enhanced vision screen, Embosser, transcriptions in Braille, American thermoform to make copies in Braille. Glasses sponsored by LLTF. British High

Commission contributing in projects as Information technology, Global Rainbow Foundation making donations.

REMARKS (any other information relevant or specific to the school)

		Impact
1	Absence of a psychologist on a regular basis.	Due to their impairment, the visually impaired children are more likely to experience nervous strain and feelings of insecurity and frustrations are common with them. Psychological support would be helpful.
2	No sport activities /no physical instructor	Children development in gross motor skills can be delayed. Awareness of physical exercise to maintain a good health is not practiced.
3	No orientation and mobility training is provided.	Navigating through a route in the near environment is essential Spatial concepts, including far, near; close, concepts relating to traffic and the use of a cane are issues that could be addressed,
4.	No daily living skills training provided at school level	Money handling skills, personal hygiene and communication skills are essential areas that can be worked out through daily living skills sessions.
5.	There is no sign post in Braille or large print to identify and guide children to places as toilet, office, standard 1, and standard 2. Ramps are available only in some places.	Sign post needed to guide the child and direct him to the place he wants to go. Tactual perceptions of many common objects can be taught at class level.

Appendix H
Cross-checking - confirmation

To,
The Examiner
The University
P.O Box 392
Unisa, 0003
Date: 22nd August 2013

Statement for cross-checking of transcripts

I am writing in response of the research study being carried out at the School for the Blind, Beau Bassin by Miss Sabina Seesurrun.

The title is: *The development of a self-help skills education programme for a group of visually impaired children*

The data displayed in chapter four is a true representation of the transcripts of the data. Some examples are provided below:

Transcript from the focus group: TV1: “Daily living skills, we do not have it at school level although it is a need for the visually impaired children.” TV1 also mentioned that: “We are not trained, we can have a resource person in that field.” TM1: “How to walk alone, how to dress and undress, shoe lacing, these are not taught at school.” (Note: TV1 and TM1 are examples of code names for the staff).

Transcript from the visually impaired children: Participant 2 mentioned: “When I walk, I cannot see in front of me, I have to confront obstacles ahead of me unless assisted”. Participant 8 stated, “I need someone with me for help”.

Thank you
Yours faithfully,

Mrs. Viveka Bikoo (Teacher at the School for the Blind).

Professional qualifications: Advanced Certificate in Education, Diploma in Educational Management, Teacher’s Diploma (Primary Education).