THE NATURE AND IMPLEMENTATION OF THE EXPANDED CORE CURRICULUM IN SELECTED SPECIAL SECONDARY SCHOOLS FOR THE VISUALLY IMPAIRED IN LUSAKA AND CHIPATA DISTRICTS OF ZAMBIA

By

Geoffrey Shanzi

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DECLARATION

I, GEOFFREY SHANZI, declare that this dissertation is my own work and that it has not been previously submitted by anyone at the University or any other University.

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APPROVAL

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ABSTRACT

Although there is an increase in the number of visually impaired learners completing secondary education in recent years, the acquisition of skills found in the Expanded Core Curriculum to help them compensate on their sight remains relatively low. In such a context, it becomes critical to investigate the nature and implementation of the expanded curriculum in schools for the visually impaired in Zambian schools.

The study employed descriptive survey design and was guided by the following research objectives: to establish the different areas of the Expanded Core Curriculum that are being implemented, to ascertain methods used by the special education teachers in teaching the expanded core curriculum, and to determine challenges faced by special education teachers in implementing the areas of the expanded core curriculum.

The sample consisted of four administrators, twenty teachers and thirty two visually impaired learners. Random and purposive sampling was used to arrive at the pupil and teacher samples. In collecting data, questionnaires were administered to learners and teachers. Administrators were interviewed and learners were engaged in focus group discussions. Qualitative and quantitative data analyses were used.

The current study revealed that special education teachers were not aware of the term 'Expanded Core Curriculum' for the visually impaired. However, they were able to identify some areas of the expanded core curriculum. The study also revealed that the most common teaching strategies used by the special education teachers included:- expository methods, question and answer, cooperative learning, peer teaching, and demonstration.The study further revealed a number of challenges that affect effective implementation of different areas of the expanded core curriculum. These included lack of the syllabus guidelines on the implementation of the expanded core-curriculum, high pupil-teacher ratio, school environments not disability friendly, lack of teaching and learning materials.

Based on the findings, the study has made the following recommendations: Ministry of Education should formulate deliberate policies to enhance the acquisition of skills found

in the expanded core curriculum.The Curriculum Development Centre should design a syllabus to systematically teach all the critical areas stipulated in the expanded core curriculum.

DEDICATION

I dedicate this work of my hands to my dearest wife Mukamakuwa Chondoonda and our three children Christine, Geoffrey and Favor. My heart goes out to my family who listened and understood my situation in the overwhelming work laid upon me making me not available in moments they needed me most.

I also dedicate this work to my father Mr. Japhet Shanzi and my mother Christine Tembo who laboured and insisted that I go to school despite hardships. I cherish the love, encouragement and concern for my welfare from my brothers Godfrey, Japhet and Samson and my sister Emily.

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ACRONYMS

CDC	Curriculum Development Centre
ECC	Expanded Core Curriculum
EFA	Education for All
ICEVI	International Council for the Education of people with Visual Impairment
IEP	Individualized Education Plan
LSEN	Learners with Special Educational Needs
MESVTEE	Ministry of Education, Science, Vocational Training and Early Education
MoE	Ministry of Education
O&M	Orientation and Mobility.
PTA	Parent Teacher Association
SEN	Special Educational Needs
UNESCO	United Nations Educational, Scientific and Cultural Organizations
UNICEF	United Nations International Children's Emergency Fund
VI	Visual Impairment
ZPD	Zone of Proximal Development

CHAPTER ONE
INTRODUCTION

Overview

This chapter outlines the background to this study. The chapter further presents the statement of the problem, purpose of the study, research objectives, and research questions, significance of the study and operational definitions of key terms used in the study.

1.0 Backgrounds to the study

There is clear evidence that the curriculum is one of the critical factors in ensuring effective learning. Pratt (1994:5) points out that the word “curriculum” is derived from the Latin word 'currere', meaning “to run “or “race track.” Similarly, Marsh (2007), postulates that the term curriculum has its origin from the running-chariot tracks of Greece that implies covering a certain route or the course of study to be undertaken. In the first text book written by John Franklin Bobbitt in 1918, curriculum includes course of deeds and experiences that enable children to become adults that society expects them to be (Alberta Education, 2010).

In the field of education, Thomas and Morrison (1995) points out that a curriculum is the blue print or a plan of the school that includes a list of experiences for the learners. It is a way to achieve the end of education as it lays the basis for increasing the ability of many individuals to become active participating adults. Similarly, the Basic School Curriculum Framework (2000:6) defined curriculum as ‘‘a specification of desired knowledge, competences, skills, values and attitudes which learners need to achieve.’’ In simple terms, curriculum refers to a set of learning goals articulated across grades that outline the intended content in a school program. It encompasses all the selected, organized, integrative, innovative and evaluative educational experiences provided to learners consciously or unconsciously under the school program in order to achieve the designated learning outcomes (Reys, Lapan, Holliday and Wasman 2003).

Koga and Hall (2004), contends that in order to have a holistic understanding of what a curriculum is, it is important to note that there are three dimensions of the curriculum

and these includes the Core (formal) curriculum, Co-curricular (extra-curricular) and the Hidden Curriculum. The core curriculum refers to the learning experiences and activities that are well structured and are prescribed by the curriculum specialist. Urevbu (1985:3), states that ‘‘this is what is laid down as the syllabus or that which is to be learnt by students". In simple terms, this is the officially selected body of knowledge which government, through the Ministry of Education wants both the learners with visual impairment and non learners with visual impairment to learn. It includes intended, taught and learned activities that are planned, organized and implemented within regular school hours (Zambia Education Curriculum Framework, 2012). For example, in Zambia the formal curriculum focuses on subjects like Mathematics, English, Science, Geography, Biology, History, Physical Education, Civic Education and Art. In most instances, this curriculum is shaped or directed by the national goals that set the guideline on what is to be taught (Curriculum Development Center, 2013).

On the other hand, the Co-curricular or Extra-curricular activities refer to activities that supplement and complement the core curriculum. Christopher (1998) defines Co-curricular activities as a series of activities related with the school program, which help to bring out all round development of the learners, outside the subjects for examination schedule. Sabrine,Willigenburg and Houdt (2009), state that this curriculum may include activities such as clubs, games, sports, drama or debates. In short, it contains activities which try to develop the student’s physical, moral, mental, social, and emotional capabilities. Tan and Pope (2007), allude to the fact that the main aim of this curriculum is to create all-round development of learners. As an integral part of students’ holistic education, it helps the learners, regardless of the disability to discover their interests and talents while developing values and competencies that will prepare them for a rapidly changing world.

Further, the Hidden curriculum refers to the unwritten, unofficial, and often unintended lessons, values, and perspectives that students learn in school. It consists of the unspoken or implicit academic, social, and cultural messages that are communicated to

students while they are in school. The hidden curriculum concept is based on the recognition that students absorb lessons in school that may or may not be part of the formal course of study. For example, how they should interact with peers, teachers, and other adults; how they should perceive different races, groups, or classes of people; or what ideas and behaviors are considered acceptable or unacceptable. Martin(1983), refer to hidden curriculum as knowledge gained in school settings which are learned but not openly intended such as the transmission of norms, values, and beliefs conveyed in the classroom and the social environment. The hidden curriculum begins early in a child's education. It helps learners to form opinions and ideas about their environment and their classmates. The areas of this curriculum mold perspective of students to deal with issues such as gender roles, social classes, stereotypes, cultural expectations, politics and language.

Despite all these curricular being implemented, most learners with visual impairment are leaving school without acquiring necessary skills that will help them adapt to society and live independent lives. For example, a study conducted by Mulenga (2007) clearly showed that despite young learners with visual impairment successfully completing secondary school and a significant proportion of these furthering their education in tertiary institutions, the majority are either unemployed or underemployed. Mulenga (2007), further points out that one major reason for this has been lack of skill acquisition to enable them fit in society or in the world of employment.

Lack of skill acquisition emanates from the fact that for the sighted, acquisition of the skills occurs easily and gradually through observation of teachers or significant others while for the visually impaired, this requires a lot of effort and time if they are to successfully grasp any skill for them to live independent lives. In support of this, Demario, Rex and Morreau (1990) in their study have indicated that 80% of what we learn comes from observation. Therefore, if learners with visual impairment are to grasp any concept, a lot of adaptation to master that particular task depends on the remaining senses.

In order to address many challenges and educational needs the learners with visual impairment face, in 1993 the Development of the National Agenda in America designed the Expanded Core Curriculum (ECC) comprising a set of nine skills which other researchers have referred to as "disability-specific skills" or "visual -related skills" (Huebner, Merk-Adams, Stryker and Wolffe, 2004). By definition, the Expanded Core Curriculum (ECC) is the body of knowledge and skills needed by students with visual loss in order to be successful in school and in post-graduate pursuits as a result of unique, disability-specific needs (Hatlen, 1996). It is important to also mention that, the ECC is a set of skills that are needed for learners with a visual impairment to obtain positive adult outcomes. Marsh and Willis (2008), add that the aim of creating the Expanded Core Curriculum was to systematically provide an additional set of skills in critical areas to help individual learners compensate for their loss of sight (Kamionka, 2002).

First conveyed by Hatlen (1996), the Expanded Core Curriculum (ECC) refers to the commonly acknowledged nine areas of instruction that children and youths with visual impairment (both those who are blind and those with low vision), including those with additional impairment, need to be efficacious in school, the community, and the workplace.

Therefore, the current study aimed at assessing the nature and implementation of the Expanded Core Curriculum in special schools. Specifically the study looked at a set of nine skills found in the Expanded Core Curriculum that includes the compensatory skills, social interaction skills, recreational and leisure skills, orientation and mobility skills, independent living skills, assistive technology skills, career education skills, sensory efficiency skills, and lastly the self-determination skills (Hatlen,2000; American Foundation for the Blind, 2008).

The compensatory skills within the Expanded Core Curriculum include those skills that the learners with visual impairment need to access in all areas of the core curriculum at levels that are commensurate with their sighted peers (Agran, Hong and Blankenship,

2007). Agran et al. (2007), maintains that Compensatory skills vary on the basis of the students' needs and may include using optical devices to read and write, use of Braille for those with total visual loss or large print reading and writing to those who are partially sighted. They may also include the use of alternative communication systems such as tactile symbols and other materials for concept development and spatial awareness (Hatlen, 1996 and Snyder, 2005).

The second important area of the Expanded Core Curriculum is the facet of Orientation and Mobility. Lahav and Mioduser (2003), define orientation as the mental map people have about their surroundings while mobility is the ability to travel safely and efficiently from one place to another. In simple terms, Orientation and Mobility is the systematic way in which children and youths with visual impairment orient themselves to their environments and move as safely, efficiently, and independently as possible in those environments. Kirk(2009),states that skills in orientation and mobility enable the learners with visual impairment to master spatial concepts and the physical environment which involves understanding of one's location in a given environment (orientation) coupled with the ability to physically move through the environment safely, independently and efficiently(mobility) (Dimigen, Roy, Horn and Swan, 2001). Stone (1995) states that due to loss of sight, the remaining senses of hearing, touch, smell, kinesthetic and taste can be used to help a learner with visual impairment recognize his or her position in relation to the obstacles or landmarks around in the environment. In this instructional area of orientation and mobility, the learners with visual impairment are taught the use of the long cane, sighted guide and other techniques for using any remaining visual that they may have such as the use of optical devices (telescopes or monocular) (Charles and Malian ,1980).

On the other hand, social skills are designed to help learners with visual impairment in their posture, facial expressions, assertiveness and speech. These help the learners to participate actively and appropriately in social situations. Schneekloth (1989) recommends that these skills must be taught to learners with visual impairment because

the loss of sight prevents them from casually observing how people interact and socialize. He thus advises that the learners with visual impairment must be taught on skills such as when and how to smile, frown, nod, wink, shrug, and the many other nonverbal communication skills. Celeste (2007), suggests that for learners with visual impairment to be successful, they must be included in regular schools for positive social interaction with their sighted peers.

The other important area of the Expanded Core Curriculum is the facet of independent living skills. This area of the Expanded Core Curriculum is often referred to as "daily living skills." It consists of all the tasks and functions persons perform in accordance with their abilities in order to lead lives as independently as possible. These curricular needs are varied as they include skills in personal hygiene, food preparation, money management, time monitoring, grooming, eating, meal preparations and taking care of household chores (Charles and Malian, 1980). Pagliano (2005), points out that these skills help to combat learned helplessness, a feeling that may make a learner with visual impairment feel worthless or not useful.

Recreation and leisure skills as another area of the expanded core curriculum, promote the enjoyment of leisure activities, including learning new leisure activities and making choices about how to spend leisure time. Kamionka (2002), states that these may include traditional as well as adapted physical education activities. Other sets of skills in the Expanded Core Curriculum are the visual efficiency skills. These are used by those who are partially sighted. Allan and Stiteley (2006), point out that the visual skills help the learners with visual impairment to maximize the remaining vision or use other senses in order to learn effectively. As such, instruction in this area may focus on the use of optical devices such as magnifiers, bioptic aids, telescopes, closed circuit television s or reading spectacles.

Another area of the Expanded Core Curriculum that deserves some attention is the area of technology. As pointed out by Hatlen (1996), technology is a tool that unlocks

learning and expands each student's horizon. As such, the assistive technology skills enable the learners with visual impairment to access and store information from libraries around the world through internet. These skills emphasize on the use of computers and other electronic equipment to help the learners with visual impairment function independently and effectively at school or home for researching, note taking, studying for tests and a variety of other academic pursuits (Hebbeler, 1993; Taylor, 2005).

One of the undermined yet important areas of the Expanded Core Curriculum is the aspect of career education. This provides the learners with visual impairment of all ages with the opportunity to learn first-hand the work done by various professionals such as the bank teller, the gardener, doctor, the social worker or teachers. It provides the learners with visual impairment opportunities to explore their strengths and interests in a given profession in a systematic, well-planned manner (Sapp and Hatlen, 2007). In other ways, career education skills are aimed at encouraging learners to explore career options and learn about the world of work. These may include self-awareness and career exploration activities, job seeking skills instruction, information about job keeping, and encourage opportunities for gaining work experience. For effective implementation, Hatlen (1997), recommends that career education for learners with visual impairment begin as early as possible.

Lastly are the self determination skills. These enable learners with visual impairment to become effective advocates for themselves based on their own needs and goals in life (Hatlen, 1997; Kamionka, 2002; Palmer, 1998). Sapp and Hatlen (2007) points out that this has been added to the Expanded Core Curriculum to address the need for learners with visual impairment to help develop realistic concepts of who they are and what they can do. They add that, Self-determination refers to a person's right to decide freely without undue influence on how he or she wishes to live his or her life (Sapp and Hatlen, 2007).

Documents from the different parts of the world support the need for the learners with visual impairment to receive an education that meets their unique needs through the

expanded core curriculum. For example, three major North American studies in Carolina clearly demonstrated the need to use the Expanded Core Curriculum (Sacks and Wolffe, 1998; Webster and Roe, 1998; Wolffe and Sacks, 1997). They recommend that skills found in the Expanded Core Curriculum meet the unique needs of learners with visual impairment. Similarly Webster and Roe (1998), adds that the Expanded Core Curriculum recognizes competencies beyond the core curriculum that help learners with visual impairment to develop independently and become individuals who can contribute to society.

Within America, many special education teachers and the learners with visual impairment implement support the importance of the Expanded Core Curriculum in skill acquisition. For example a survey conducted on a large-scale study across the United States and Canada on teachers for learners with visual impairment revealed that all were implementing the Expanded Core Curriculum based on the positive comment contributed. Most of them discussed how the skills in the Expanded Core Curriculum (ECC) prepare learners for real life. Some went further, stating that when learners master ECC skills, it is the "difference between life and a successful life."

Similarly in Australia, Brown and Beamish (2012), concluded that most special education teachers were implementing the Expanded Core Curriculum when they conducted a research on teachers of learners with visual impairment at government primary and secondary schools in Queensland, Australia. For example the results from their study indicated that most participants ranked areas of the Expanded Core Curriculum as the area taught most frequently. One reason brought forth for using the Expanded Core Curriculum was that when the learners with visual impairment master skills found in the expanded core curriculum, they are able to function independently at school and home. Thus, Wolffe et al. (2002), recommend that skills in the Expanded Core Curriculum must be taught as they help the learners with visual impairment to function better in the classroom, home and community. Additionally, this finding was

consistent with international recommendations for best practices for the learners with visual impairment (Bishop, 2004; Hatlen, 1996).

In South Africa, the Expanded Core Curriculum is implemented in schools under physical education programmes. For example, a study by Jalali (2012), demonstrated that through physical education programs with the use of components from the Expanded Core Curriculum (ECC), learners with visual impairment can develop the fundamental skills needed to maintain a physically active and healthy lifestyle. As such, the field of education has instituted a curricular approach to ensure that children with visual impairment receive the education they need in addition to the set of skills found in the Expanded Core Curriculum to their core curriculum. One major reason as to why the Expanded Core Curriculum has been used under physical education is based on the fact that different studies indicate that children with visual impairment demonstrate delays in fundamental motor skills, including locomotor, object control, and balance skills. With the implementation of the expanded core curriculum, learners with visual impairment can develop the fundamental skills needed to maintain a physically active and healthy lifestyle (Haibach, Lieberman, and Pritchett, 2011; Houwen, Hartman, and Visscher, 2010; Wagner, Haibach, and Lieberman , 2013).

In Zambia, learners with visual impairment have been provided special education services for approximately 100 years. The first school for the learners with visual impairment opened in 1955 at Magwero in Chipata district of the Eastern Province by the missionaries (Kalabula, 2003). In 1971 the education of the learners with visual impairment and other disabilities became the responsibility of the Ministry of education after a presidential decree. Kelly (1991) states that Zambia did not have an articulated national policy on special education until 1977 when the Ministry of Education assumed responsibility for educating learners with disabilities. Notably, three policies have provided the foundation for current practices on inclusive education in Zambia: the Education Reform Document (1977), Focus on learning (1992), and Educating Our Future (1996). Kalabula and Mandyata (2003) postulate that currently, educating

children with visual impairment is being carried in three modalities: residential schools, residential unit in an ordinary class and inclusive school.

Kalabula (2007) alludes to the fact that in Zambia all the schools for the visually impaired follow the National curriculum. Although the term Expanded Core Curriculum is not mentioned in most of the subjects for the visually impaired, most of these skills reflected in the syllabi are also found in the expanded core curriculum. For example Kalabula, (2007) indicates that in 1988 alongside the National curriculum (core curriculum), a supplementary curriculum consisting activities for daily living, mobility and Braille was designed by teachers for visual impairment in conjunction with the curriculum development centre. Further Curriculum Development Centre (2013) has developed the syllabi in which most of the subjects stipulate a number of skills being offered that are found in the expanded core curriculum. For example, the syllabus for grade eight and nine clearly contain skills such as Braille, the use of computer found in assistive technology skills, while in lower grades orientation and mobility is taught. Further, guidance and counseling provide an avenue for understanding career education skills in the upper grades.

Despite these set of skills found in the Expanded Core Curriculum in the Zambian curriculum and syllabi, it is not clearly stated on how they are implemented. In such context, it becomes critical to investigate the nature and implementation of the expanded curriculum in schools for the visually impaired in Zambian schools. Further, it is imperative to establish the extent to which these skills are taught. This study therefore examined this aspect at two schools namely; Munali and Magwero schools for the visually impaired.

1.1 Statement of the problem

According to Hatlen and Stryker (1996), most of the learners with visual impairment have been subjected to the core curriculum that focuses on academic subjects. This has proved to favour the sighted in the acquisition of skills and as such, most of the learners with visual impairment graduate without acquiring the necessary skills to fit in society or in the world of work. In Zambian special schools the situation might not be different, for example, Kalabula (2007) has indicated that most of the learners with visual impairment in Zambian schools lack important skills to help them lead independent lives.

In order to address this challenge, Hatlen and Stryker (1996) argue that the Expanded Core Curriculum should be implemented. However, despite the Curriculum Development Centre spelling out the necessary skills that should be taught to the visually impaired, there is lack of evidence-based research to show whether the learners with visual impairment are learning all the additional sets of skills found in the Expanded Core Curriculum. This study therefore, sought to establish the nature and implementation of the Expanded Core Curriculum to the learners with visual impairment at Munali and Magwero Schools for the visually impaired.

1.2 Purpose of the study

The purpose of this study was to investigate the nature and implementation of the expanded curriculum in schools for the visually impaired.

1.3 General objective

To determine the nature and implementation of the expanded curriculum in schools for the visually impaired.

1.3.1 Specific objectives

This study was guided by the following objectives:

(i) To establish the different areas of the Expanded Core Curriculum that are being implemented.

(ii) To ascertain teaching strategies used by the special education teachers in the delivery of areas of the Expanded Core Curriculum.

(iii) To determine challenges faced by special education teachers in implementing the nine areas of the Expanded Core Curriculum for children with visual impairment.

1.4 Study questions

The following questions guided the study;

(i) What are the different areas of the Expanded Core Curriculum that are being implemented?

(ii) Which teaching strategies are used by the special education teachers in the delivery of areas of the Expanded Core Curriculum?

(iii) What are the challenges faced by special educational teachers in implementing the nine areas of the Expanded Core Curriculum?

1.5 Significance of the study

The results of this study may help the Ministry of Education (MOE) to understand how the additional set of skills under the Expanded Core Curriculum can be taught systematically to the visually impaired. MOE may consequently use the results of this study to adequately provide learning materials appropriate to learners with visual impairment in the expanded core curriculum.

It is also hoped that the Curriculum Development Centre (CDC) may also benefit from the results of this study. As an institution entrusted with the task of providing curriculum guidance to the Ministry of Education, the study may assist the institution to design a better curriculum that will accommodate all the necessary skills to help the learners with visual impairment live independent lives after school. The colleges and universities may further use the study results of this research to advise all affected stakeholders on how to train learners on set of skills found in the expanded core curriculum.

In the case of the Examination Council of Zambia, it is hoped that the study may help the institution develop examination materials that will critically assess the areas of the Expanded Core Curriculum in individual children.

Thus, it is expected that the Teacher Education Colleges may use these research findings to design teaching strategies for training special education teachers to better teach skills found in the expanded core curriculum. Additionally, the findings of this research may a encourage teachers to use initiative in providing materials that will help learners with visual impairment learn effectively

Learners with visual impairment may also benefit from this study. For Example, it is hoped that learners may use the information to understand their capabilities, learn to develop these abilities, live independently while contributing positively to society. As such, the importance of this study in contributing to the well-being of education provision cannot be ignored.

1.6 Theoretical frame work

Lev Vygotsky's sociocultural theory of cognitive development guided the study. The theory emphasizes how children's interactions with significant others through the zone of proximal development, the role of language and culture tools contribute to the development of new skills in a learner. According to Vygotsky, the significant others such as special education teachers, parents or professionals structure appropriate activities to help the learner develop new skills (Santrock, 2010).

Woolfolk (2010) points out that at any given time in development, there are certain problems that a child is able to solve without the help from others while other problems, the child can only solve if every step is clearly explained by the significant others. To clearly explain this, Vygotsky brought in the concept of Zone of Proximal Development (ZPD).Vygotsky in Woolfolk (2010) used this term Zone of Proximal Development for the range of tasks that a child can do or complete with the guidance or assistance from

more-skilled individuals or adults. He divided the child's ability into two limits, that is, the lower and upper limits. For him the lower limit represents the level of skills that a learner can manage or work independently without needing assistance while the upper limit is the level of additional responsibility that the learner can only manage or do with help from the knowledgeable peers or someone possessing a skill in that particular area. Thus he called the range of tasks that are within a child's cognitive ability to learn with assistance from more-skilled person, peers or significant others the ZPD.

Lightfoot et al. (2009) has indicated that according to Vygotsky, parents and other more competent thinkers provide children with scaffolding that they need to enable them enter the important ZPD. In simple terms scaffolding is changing the level of support. For example, over the course of a teaching session, a more-skilled person adjusts the amount of guidance to fit the child's current performance. Dialogue is an important tool of this process in the zone of proximal development. In a dialogue, a child's unsystematic, disorganized, and spontaneous concepts are met with the more systematic, logical and rational concepts of the skilled helper.

Thus, this theory has been chosen because most of the learners with visual impairment need the support of the significant others to master the additional set of skills found in the expanded core curriculum. For example, if they are to effectively acquire skills in social interaction skills, recreational and leisure skills, orientation and mobility skills, independent living skills or compensatory skills, the special educational teacher must provide the guidance. This is supported by Sacks (1992), who postulates that the best way for the learners with visual impairment to learn new skills is through a carefully, consciously crafted and incidental fashion requiring a learning experience that derives from sequential teaching.

Vygotsky's sociocultural theory of cognitive development further emphasizes the role of language as being critical for cognitive development in terms of learning a new task. This is because it provides a way to express ideas and ask questions, the categories and the concepts for thinking and the links between the past and the future. He believed that

language in the form of speech guides cognitive development in the acquisition of a new skill. Similarly the learners with visual impairment in the absence of sight depend on a language to learn things around them or interact with others.

According to Smith *et al.* (2010), a person with a visual impairment has some loss or distortion of his or her vision hence he or she very much depends on language to learn new skills. This means that the learners with visual impairment gets information about the world largely through language which makes him or her to be in contact with objects and people in the world. Similarly Berk (1992) confirmed that children rely more on language to get help on a difficult task they are doing.

The sociocultural theory of cognitive development further includes the cultural tools. Vygotsky further believed that all human activities take place in the cultural setting and cannot be understood apart from these settings. Miller (1993) defined culture as, "shared beliefs, values, knowledge, skills, structured relationships, ways of doing things (customs), socialization practices, and symbol systems (such as spoken and written language)". Culture is communicated through home and societal routines. Vygotsky also included physical and historical influences in the concept of culture. For example, culture can be influence by a people's response to a physical terrain, natural disasters, or war.

Similarly the interactions that the learners with visual impairment make create mental structures that help them to understand the world. Berk (1992), comments that our interactions with others creates cognitive structures and thinking process. Thus, Vygotsky argued that looking at child development without cultural context distorts our view of development, and often causes us to look at causes of behavior as residing within the child, rather than in their culture.

The learners with visual impairment do not benefit mostly from their sight but through their remaining senses and the help that is provided by peers, special education teachers or significant others. Therefore, the special education teachers have a duty to create an

environment that will allow the learners with visual impairment learn all the skills found in the Expanded Core Curriculum by taking into consideration the zone of proximal development, the role of language and cultural tools.

1.7 Limitation of the study

Due to inadequate time and resources, only two out of six residential schools for the learners with visual impairment were sampled. The six special schools for learners with visual impairment are scattered across Zambia, as such, the learning experiences of learners with visual impairment in these different regions may not be the same. Therefore, the results of this study may not be generalized to all schools.

1.8 Delimitations

The study was conducted in two districts that is in Chipata at Magwero School for the Blind and in Lusaka at Munali School for the Blind.

1.9 Operational definition of terms

The following definitions are provided to ensure uniformity and understanding of these terms throughout the study.

Blindness: Total loss of sight or inability to see.

Children with Special Needs: Children who for various reasons cannot take full advantage of the curriculum as it is normally provided.

Compensatory Skills: Adaptations and modifications that are made to standardize materials so that they are accessible.

Compulsory Subjects: Subjects to be taken by all learners at a particular level or in a career pathway.

Core Curriculum: General education goal and benchmark areas that all learners must obtain prior to high school graduation as mandated by the state. also referred to as the state standards.

Expanded Core Curriculum: it is a special curriculum unique to learners with visual impairment that constitutes concepts and skills that often require specialized instruction in order for learners with visual impairment to compensate on their loss of sight.

IDEA 2004: Individuals with Disabilities Education Improvement Act of 2004.

Inclusive Education: Inclusive education is a practice of including children with special educational needs in the regular educational programs.

Junior Secondary Education: Refers to the education provided at Grades 8 and 9.

Learning disabilities: The various factors that impede the easy acquisition of knowledge.

Senior Secondary School: Institutions of learning that provide Grades 10 to 12 education.

Special Educational Needs: Refers to the education services and strategies provided to learners with different abilities and challenges.

Visual acuity: The distance between an individual and an object which is in direct focus of sight and it is measured in meters or feet.

Visual field: The peripheral visual or sight on the sides whose diameter is measured in degrees.

Visual impairment: Total or partial loss of sight.

CHAPTER TWO
LITERATURE REVIEW

Overview

This chapter explores relevant literature on the nature and implementation of the Expanded Core Curriculum in schools for the visually impaired. The research findings and conclusion made by other researchers on the Expanded Core Curriculum have been presented according to the following themes: establishment of the different areas of the Expanded Core Curriculum that are being implemented, ascertain teaching strategies used by the special education teachers in the delivery of areas the Expanded Core Curriculum and the challenges faced by special educational teachers in implementing the areas of the Expanded Core Curriculum.

2.1 Different areas of the Expanded Core Curriculum being implemented

The learners with visual impairment have unique educational needs that relate directly to the developmental delays often experienced in early childhood. In addition to the core curriculum that all learners are expected to study, the learners with visual impairment have a wide range of additional set of skills that they need to gain in order to successfully complete the core curriculum (Snyder,2005). Making appropriate decisions about the development and implementation of programmes and services for learners with visual impairment requires a clear understanding of the unique learning needs of these learners. Hatlen (1996) proposes that learners with visual impairment are significantly impacted by two areas of the learning experience. These are the core curriculum that primarily focuses on academic skills and the Expanded Core Curriculum that is designed to meet the unique needs of persons who are visually impaired.

2.1.1 Core Curriculum

The core curriculum addresses skills which all learners, sighted or learners with visual impairment, are expected to learn by the time they reach high school graduation

(National Association of State Directors of Special Education, 1999). For example in Zambia according to the Education Act of 2011, the Ministry of Education, through the Curriculum Development Centre stipulates skills which both the sighted and the learners with visual impairment must learn by the time they complete secondary education (Curriculum Development Centre, 2012). The existing core curriculum in Zambia for all schools consists of Language Arts, Mathematics, Health, Science, Fine Arts, Social Studies, Economics, Business Education, Vocational Education, and History among others.

This means that learners with visual impairment are held to the same set standards as their sighted peers with regard to the development of skills in the core curriculum. However, in order to have an equal opportunity to acquire those skills necessary for graduation, adaptations are made to the curriculum so that learners with visual impairment can access the same reading, writing, arithmetic, and other curricula activities that are received by their sighted peers (Lewis, 2002; Lueck, 1999; Pagliano, 2005; Palmer, 2005).

2.1.2 Expanded Core Curriculum

Pugh and Erin (1999), define the Expanded Core Curriculum as the curriculum designed to go beyond the core components of math, reading and writing, to address essential areas and experiences unique to learners with visual impairment. Similarly Hatlen (1996), defines it as a body of knowledge and skills that constitutes a special curriculum unique to students with visual impairment. In other words it can be stated that it is the curriculum that define concepts and skills that often require specialized instruction with learners who are blind or learners with visual impairment in order to compensate for decreased opportunities to learn incidentally by observing others

Observation is the primary integrating sense and plays a vital part in learning. It is estimated that up to 80% of learning is visual. Lohmeier (2005), confirms that 80% of

what we learn comes from observation as such, learners with visual impairment are unable to learn, model from, perceive, access or be motivated by 80% of the opportunities and experiences that occur in the world around them (Kirchner, Johnson, and Harkins, 1997; Roy et al., 1996; Trief and Feeney, 2003).

Therefore, to overcome this discrepancy, behaviors and skills that are typically acquired through observation by the sighted can be learnt through the Expanded Core Curriculum (ECC) that encompasses competence in areas beyond the core curriculum (math, reading and writing) in order for learners with visual impairment to participate and compete in a rapidly changing technological marketplace, home, at work and in the community (Nagle, 2001). Snyder (2005), points out that the Expanded Core Curriculum is a set of guidelines that delineates the skills that all the learners with visual impairment should attain, regardless of educational setting. Hatlen (1990), Dote-Kwan and Chen (2001) stipulate that some of these skills are disability-specific because of the teaching method involved. For example, social skills and daily-living skills, while some such as Braille or the long can involve disability-specific content.

Hatlen and Stryker (1996), suggest that in addition to the general education core curriculum that all learners are taught, learners with visual impairment, starting at birth, also need instruction in ECC. The ECC areas include needs those results from the visual impairment that enable the learners to be involved so as to make progress in the general education curriculum and the other educational needs that result from the child's disability. This means that the areas in the Expanded Core Curriculum are learned incidentally and through sequential systematic instruction by a knowledgeable person.

Hatlen (1996) and American Foundation for the Blind (2008), have outlined the areas that constitute the nine critical areas that make up the Expanded Core Curriculum that include compensatory skills, social interaction skills, recreational and leisure skills, orientation and mobility skills, independent living skills, assistive technology skills, career education, sensory efficiency skills and lastly the self-determination skills.

i. Compensatory Skills

Compensatory skills include skills necessary for accessing the core curriculum including concept development, communication modes, organization study skills, access to print materials, the use of Braille, tactile materials and audio materials (Stainback and Stainback, 1996).

These skills are divided into academic and functional skills. Hatlen (1996) identifies compensatory academic skills as those skills that the learners with visual impairment need to access all areas of the core curriculum. These include, access to literacy and mathematics through Braille, including literary and Nemeth Code (the tactual code that is used in mathematics and science) and the use of devices such as the Perkins braillewriter, the Cranmer abacus, and the talking calculator for computation. Those with low visual may use regular print with magnification devices while some learners need both print and Braille (Pugh and Erin, 1999).

On the other hand, Functional skills refer to those skills that learners with multiple disabilities, non-academic learners, need in order to develop the skills that are necessary for play, work, socialization, and hygiene. For example, the learners who are deaf-blind may have alternative communication systems such as tactile sign language, symbol or object communication, or calendar boxes. It is essential to offer specific and sequential hands-on lessons to build a broad base of experiences (Stainback and Stainback, 1996).

Hatlen and Stryker (1996) allude to the fact that compensatory skills address only modifications in the general curriculum therefore; experiences that are unique to persons who are visually impaired and specific to their disability may not be addressed. For this reason they suggest that for the learners with visual impairment to have equitable experiences there must be specific instruction that expands beyond the core curriculum and its access through expanded core curriculum.

ii. Social Interaction Skills

Warren (1994) states that, social interaction skills include awareness of body language, gestures, facial expressions and personal space This means learning about interpersonal relationships, self-control, and human sexuality. These are critical skills that if properly acquired by the learners with visual impairment will allow them to effectively interact with others. Notable action and gestures within the social interaction skills include how to smile, frown, nod, wink, shrug, and the many other nonverbal communication skills (Adelson, 1983; Als, 1982; Friedman, 1986). It is evident that to the sighted that these gestures or actions are easily learnt by carefully observing, imitating or incidental experience that is part of the daily routine by parents or caregivers.

Friedman (1986) however, points out that for parents of infants who are visually impaired, there is little or no reciprocation of such visual cues. This means that, even if these social interaction skills may seem to be easy to learn, they are a challenge to the learners with visual impairment. Similarly,(Mac Cuspie, 1990, 1996; and Warren, 1984, 1994) in their studies have indicated that visual impairment affect social development, including self-esteem, social competence, and the maintenance of friends especially those friendships with sighted peers.

Additionally, Wolffe and Sacks (1997) conducted a study in Arizona and found out that few learners with visual impairment were involved in social activities when compared to those with sight peers. They further indicated that most of the learners with visual impairment were spending their time after school home alone watching television or listening to the radio, rather than going to movies, hanging out with friends like their sighted peers. As such they concluded that adolescents who have the inability to socialize with peers may continue that pattern and disrupt the path to a successful transition into adult life.

Thus, Sacks (1992), suggests that the best way for the learners with visual impairment to learn social interaction skills is through a casual and incidental fashion, requiring learning experiences that derive through sequential teaching in the areas within social development. Areas within social development that require systematic instruction include physical skills-such as eye contact, gestures, body language, and inappropriate movement; and assertiveness training-appropriate tone of voice, assertive behaviour rather than passive or aggressive behaviour, ability to make positive statements, and self advocacy skills (Wolffe and Sacks, 1997).

iii. Career Education

Career education includes skills that provide learners with visual impairment of all ages the opportunity to learn through hands-on experiences about jobs that they may not otherwise be aware of due to loss of vision (Wolffe,1996). This provides learners with visual impairment of all ages the opportunity to explore and discover strengths and interests and plan for transition to adult life.

The transition from student to employee for all students both the learners with visual impairment and non visually impaired involves the development of many areas including awareness of internal and external abilities, interests, values, increased self-confidence and self control, decision making regarding careers, planning, problem solving, job variations and access into those fields (Healy, 1982, cited in McBroom & Tedder, 1993).

DeMario, Rex, and Morreau (1990), in their study particulary found that learners with visual impairment do not master the skills necessary for successful employment after graduation. Further research indicates that only 25% of persons with visual impairment between 21 to 64 years of age were employed as compared to the sighted peers (McNeil, 1993). Career education is a vital area to the Expanded Core Curriculum because much of what we perceive the work world to be is based on prior visual experiences (Hatlen, 1996).

Using the expanded core curriculum, Wolffe (1996) identifies the essential elements in designing a career education program for learners with visual impairment as career awareness, preparation, placement, maintenance, and mentoring to intervene and improve the quality of career education for the learners with visual impairment. Therefore, it is recommended that career education must start in the earliest grades to give the student chances to explore strengths and weakness on any career choice they want to embark on.

Ndhlovu (2014), states that guidance and counseling teachers aid the learners in their vocational development. Guidance and counseling teachers mould the learners in accordance with the vocation that suit the learner's interest, aptitude, personality and capabilities. Learners are placed in their most relevant career pathway so that they continue developing their career before they get into the world of work.

iv. Independent Living Skills

Barraga and Erin (1992) postulate that independent living skills include the tasks and functions people perform in daily life to increase their independence and contribute to the family structure. These are activities encountered on a daily basis, for example washing, cooking, dressing or bathing. They consist of all the tasks and functions people perform, according to their abilities, in order to live as independently as possible.

These skills include personal hygiene, eating skills, food preparation, time and money management, clothing care, and household tasks (Koenig and Holbrook, 2000). People with vision typically learn such daily routines through observation, whereas individuals with visual impairment often need systematic instruction and frequent practice in these daily tasks.

As the existing core curriculum does not adequately address the independent living skills to the learners with visual impairment, the Expanded Core Curriculum will in a systematic manner help learners to assimilate concept formation and skill development.

Barraga and Erin (1992), state that instruction in independent living skills should begin in pre-school with a focus on toileting, dressing and mealtime. They further recommend that these skills must be carried over to elementary school where focus should be directed at managing self-care and personal possessions. Hence, these skills must be taught in a way that will promote best practice so that the student will be able to generalize the skills into different and realistic settings. Similarly Krebs (2002), suggests that effective implementation of the Expanded Core Curriculum calls for the participation of parents and the knowledgeable others if the learners with visual impairment are to learn.

V. Self-determination Skills

Self determination skills include choice-making, decision-making, problem solving, personal advocacy, assertiveness and goal setting (Sacks, 1992). This has been added to the Expanded Core Curriculum to address the need for learners with visual impairment to help develop realistic concept of who they are and what they can do. This is because many times these learners become victims of pity and low expectations, attitudes which may translate into low self-esteem, low self-confidence and may create a self-fulfilling prophecy of under-performance. Thus, Alberta Education (2010), point out that to develop self determination skills, children or adolescents who are learners with visual impairment must be provided with the necessary knowledge and experience. They must learn which choice are available to them, have the skills necessary to take advantage of these choice and be given opportunities to make age appropriate choices for themselves. They go on to say that learners with visual loss need to learn self-advocacy through clear communication of their strengths and abilities and a positive approach to constructive problem-solving to overcome any barriers that may exist. To do so, they need direct instruction in learning to evaluate options and in making choices.

vi. Assistive Technology Skills

Wolffe (1999) contend that assistive technology is an umbrella term that includes assistive and adaptive tools as well as instructional services that can enhance communication, access, and learning. It includes electronic equipment such as, mobile devices, portable note takers and computers.

Technology has been added to the Expanded Core Curriculum because it occupies a special place in the education of the learners with visual impairment. It enables them to access information that was otherwise unobtainable by unlock learning and expand the horizons of learners. D'Andrea and Barnicle (1997), in their study found out that the availability of e-mail, face book, electric journals through internet enhances communication and learning, as well as expands the world of the learners with visual impairment persons in many significant ways.

Devices such as Braille displays, Braille printers, Braille note takers, and speech synthesizers allows the student to provide feedback to teachers by first producing material in Braille for personal use, and then in print for the teacher, classmates, and parents. It gives persons the capability of storing and retrieving information. It brings the gift of a library under the fingertips to the learners with visual impairment. (Goudiras et al, 2009). However, Wolffe (1999) suggests that learners' fields of interest should be linked with their instructional goals when developing technology skills. Critical points to be considered by the teacher should include type of technology the learners may require and training the learners how the device is used.

vii. Orientation and Mobility skills

Orientation and mobility encompasses skills that enable learners with visual impairment of all ages to be oriented to their surroundings and to be able move as independently and safely as possible (Hill, 1986). This means that learners with visual impairment learn about themselves and their environments which include home, school and community.

It is a known fact that learners with visual impairment and those with non visual impairment do not have the same spatial and sensory understanding of their environments. This is due to the fact that a sighted child's conception of his or her environment is based on his or her observations. On the other hand, the conception of a learner with visual impairment is based on his ability to explore the environment (Baird and Goldie, 1979). If a learner with visual impairment is not able to explore his environment systematically, his perceptions about the world are limited and misconceived. Through orientation where a person is in the immediate environment and mobility instruction, the ability to physically move a learner with visual impairment has a systematic way not only to explore his environment, but also to learn to the greatest extent possible from the environment through which he is passing (Hatlen, 1996; Hudson, 1997).

Instruction in Orientation and Mobility is ultimately meant to enable learners with visual impairment persons to move purposefully in any environment, familiar or unfamiliar, and to function safely, efficiently, gracefully, and independently (Hill, 1986). Instruction in this area is valuable to the individual because it goes beyond the capabilities of getting from point A to point B. Instruction also has many intrinsic values including psychological, physical, social, economic, and daily living skills (Hill, 1986). All of these areas are enhanced and facilitated through the independence that derives from appropriate orientation and mobility instruction.

viii. Recreation and Leisure Skills

Recreation and Leisure skills enable learners with visual impairment to have opportunities to explore, experience, and leisure-time activities, both organized and individual that they enjoy (Kekelis, 1992). In most cases, learners with visual impairment have often been limited from recreational activities. Wolffe and Sacks (1997) in one study compared the lifestyles of visually impaired, low vision, and sighted youths. The study revealed that most learners with visual impairment were engaging in

few or no recreational activities as compared to the others. Further the study indicated a correlation between children's athletic and academic abilities and their social standing among peers. Martinex and Grayson (1978), states that recreational activities promote not only physical fitness but also self-esteem, socialization, and independence.

Wolffe and Sacks (1997), suggest that adaptations can be made to most recreational activities to include learners with visual impairment to participate. These adaptations may include modifying the environment, such as installing a railing around the inside of a track so that learners with visual impairment can run independently, or orienting the learners with visual impairment person to the recreation setting. Beliveau and Rutberg (1978) in Baird and Goldie (1979) define five effective teaching strategies for orienting the learners with visual impairment person to the recreational space: 1.) Describe simply the general dimensions, 2.) From the doorway, identify boundaries using compass directions, 3.) From the doorway, walk around the entire perimeter of the room, 4.) Using the door as a reference point, walk to each major object with returning to your point of reference in between, 5.) Find a second reference point and repeat the first four tasks that is 1,2,3 and 4 (describe simply the general dimensions to walking to each major object with returning to your point of reference in between). Recreational activities for learners with visual impairment should be encouraged and be based on their abilities, not their limitations.

ix. Visual Efficiency Skills

Erin (2000), states visual efficiency skills provide instruction in the use of vision that includes the use of optical devices to enable learners with visual impairment to access and participate in activities in school, home and community.

Corn and Koenig (1996), state that one individual may complete a task or retrieve information from their immediate environment more successfully than another individual. Through adequate instruction, individuals with functional vision can learn

how to use their vision more efficiently, feel comfortable using it in unfamiliar environments, and adapt to the environment to make it more accessible for themselves.

It is a well known fact that learners with visual impairment do not acquire visual skills incidentally as such; they must be given direct instruction while each task is broken down into manageable units based on their disabilities. Corn, DePriest and Erin (2000) points out that factors affecting visual efficiency in learners include personal attributes, the onset of visual impairment and self concept, the type of visual impairment , severity of impairment, role models, instruction in efficiency skills, additional disabilities, and cognitive and sensory factors. Optical and non-optical devices as well as other instructional strategies, as determined through assessments, are considerations when developing visual efficiency skills in learners with low visual. By teaching learners to depend on their visual rather than using tactile or auditory modes as their primary function they can be more independent, have more information readily available and a better understanding of their environment.

2.2. Teaching strategies used by the special education teachers in the delivery of areas of the Expanded Core Curriculum

There are a variety of teaching strategies that learners with visual impairment use to read. Often a single student will use different strategies in particular settings or for specific materials or content. The first step in determining what approach will be most effective for an individual student is by conducting a class evaluation. This is supported by McLoughlin and Lewis (2005), who claim that quality teaching and learning, can only be achieved when student's background and prior knowledge, is assessed and known. Class evaluation allows for an understanding of the student's academic ability, learning styles and learning needs. This will thus, help teachers to plan teaching and meeting individual needs of the student. Apart from only using learners' academic records, Parents and significant others are vital partners in provision of information about the learning of learners with visual impairment (Johnsen, 2001; Smidt, 2009).

Depending on the information provided by a team of specialists, the parents and significant others, the special education teacher may employ individual teaching through

the use of the Individualized Education Plan (IEP) (Spungin, 2008). The IEP comprises a list of specific goals to be met, and the strategies to be used to meet those goals (Salisbury, 2008). For example, the teacher can use the IEP when teaching independent living skills to an individual child. This means that skills such as toileting, dressing or washing for self-care and personal possessions will be broken into small teachable tasks based on the abilities of the child. This is supported by Koenig and Holbrook (2000) who state that using the individualized education plan is effective as it will promote best practice to the extent that the learner will be able to generalize the skills into different and realistic settings.

Other researchers have noted that instead of using the individualized work plan the Expanded Core Curriculum can be incorporated in the core curriculum. For example, Hallahan and Kauffman (1991), agreed that we should educate learners with visual impairment in the same general way as sighted children. The main difference is that learners with visual impairment will have to rely on other sensory modalities to acquire information. They go on to say that students with little or no sight would possibly require special modifications in four major areas: Braille, use of remaining sight, listening skills and mobility training. The first three pertain directly to academic education, particularly reading and the last two refers to skills needed for everyday living.

Similarly, Sapp and Hatlen (2007) after conducting a national survey of fifty professionals deduced that it was vital to incorporate the Expanded Core Curriculum content in the students' lesson plan. The Expanded Core Curriculum can be embedded in the core curriculum as most of the areas of the Expanded Core Curriculum overlap with those of the formal curriculum for example; map reading is under orientation and mobility, calculation that deals with money in mathematics falls under independent living skills while peer teaching may fall under social skills. To effectively implement this, the special educational teacher can preteach, coteach, and reteach concepts that are partially covered by the general curriculum as one way to incorporate the Expanded

Core Curriculum content into a student's education. MOE (2000) and MOE (2001) points out that teachers are responsible for adapting the goals and the teaching strategies in order to suit the learners' strengths and weaknesses.

Koenig and Holbrook (2000) point out that other common forms of assistive technology and teaching strategies in the classroom for the learners with visual impairment include audio textbooks/digital book readers, portable note takers, scan/read systems, screen magnification or video magnifiers. However, McLoughlin and Lewis (2005), mention that, the most basic way on how this is done is through the use of Braille. Using the Braille alphabet, entire textbooks can be translated and learners with visual impairment can be given the same information as non-impaired students. Teachers can provide worksheets and handouts to aid in advance so that customized work for the specific classroom can also be translated into Braille using special computer software and a specific printer. Additional aids might work to make critical diagrams and charts into tactile representations; creating a tactile representation of something like the process of mitosis, or cell division , can include pipe cleaners, sandpaper, and other tactile elements that can represent the various components of the model that students might otherwise see.

Another strategy which is used by teachers in teaching learners with visual impairment is expository teaching method. Katsiyannis and Maag (2001), point out that this technique involves the provision of an explanation of a particular concept in the classroom context to learners by the teacher with very little participation or involvement on the part of the learners. This means that the class focuses on the teacher who explains or disseminates the information while the learners are less involved.

Bell (2005), states that expository teaching method makes learning extremely difficult to children with special needs. As a result, the teacher using this method needs to be careful on how information is put across. One major reason is that the learners with visual impairment are unable to visualize in their mind the information being presented

by the teacher in abstract terms. Penda, Ndhlovu and Ng'andu (2015) add that using expository method to the learners with visual impairment makes them fail to see in their minds and attach meaning to what is being said or make sense out of the information they are receiving. They therefore recommend that teachers using this approach need to modify it by using multisensory inputs in the learning process. For instance learners with visual impairment can be helped to learn using different senses such as visual, auditory, tactile and smell to enrich their learning in order for them to participate in classroom and improve their academic performance.

Collaborative teaching also called 'co-teaching' is one method of teaching in which the Expanded Core Curriculum areas can be implemented. This is an important aspect in implementing the Expanded Core Curriculum because a classroom contains students with diverse learning needs and no single teacher can have all the skills necessary to meet students' diverse needs (Lipsky and Gartner, 1997). Collaborative teaching therefore involves two teachers teaching the same class at the same time, a regular teacher taking the responsibility of the main teaching, and a special needs teacher, dealing with disability specific needs of students (Dalen, 1982; Scruggs *et al* (2010).

Kamionka (2002) declares that a special education teacher needs access to a qualified itinerant teacher if he or she is to effectively implement the Expanded Core Curriculum using collaborative teaching. The American Foundation for the Blind (2005) defines 'itinerant' as a teacher who has skills in providing access to the curriculum and in adapting materials and methodology so that learners with visual impairment can complete the same prescribed learning outcomes as their sighted peers. Kamionka (2002) and Pagliano (2005), point out that the itinerant teacher communicates with the classroom teacher and offers support in a manner that allows them to work collaboratively. The itinerant teacher can propose strategies to the classroom teacher to improve access to the curriculum and assist with devising appropriate lesson goals to ensure the needs of these students are being met.

Palmer (2005) deduces that teaching the Expanded Core Curriculum to learners with visual impairment and interfacing it with the regular curriculum are essential duties of the itinerant teacher. Similarly, Nagel (1998), points out that providing training in such areas as Braille, the use of existing vision , post-secondary and career education and independent living skills, the itinerant teacher increases learners with visual impairment independence, thus enhancing their self-concept, confidence and self-esteem, important factors that lead to successful inclusion. Kamionka (2002) and Pagliano (1998), have supported this method of teaching and points out that benefits of co-teaching include improved instructions and communication between a teacher and a learner and further increased enthusiasm for teaching.

As learners with visual impairment differ in their capabilities, the special education teacher can employ cooperative learning which involves learners working together in small learning groups. This helps students to help each other to carry out different tasks. It is a good strategy of teaching students with visual impairment, particularly in the mixed ability groups or in classes where learners are many (Mitchell, 2008). In these groups, students with low abilities should be paired with those with high abilities. Studies have shown that, cooperative learning has proved to be effective in promoting academic achievement, positive attitude towards the subject, and improving social interaction among students (Johnson and Johnson, 1986; Lypsky and Gartner, 1997; Mastropieri and Scruggs, 2010; Vygotsky, 1978; Wade, 2000).

Oral method of giving instructions and receiving responses from the students can also be a good option. Since learners with visual impairment do not see, it is therefore important for the teacher's voice to be pleasant that is producing relaxed tone, pitch speed of talking and volume. The use of other audio devices can also be incorporated to aid the teaching process with the use of audio cassettes and compact discs (Salisbury, 2008). A lesson can be tape recorded and given to learners with visual impairment for later playback at their convenient time (UNESCO, 2001). Moreover, if a videotape has to be shown, it is wise to show it to learners with visual impairment while a specialized

teacher or a classmate provides explanations. This means that, they must be aware of the visual concepts before the class watches it. For a film with sub titles, a teacher can read aloud to the class to help those with visual impairment understand the visual concept (Mastropieri and Scruggs, 2010).

In addition to the specific areas of the expanded core curriculum, learners with visual impairment may need accommodation to access the same assignments as their peers. Wade (2000) states that these accommodations may include extended time, specialized instruction, specialized materials and environmental adaptations to reach the same levels of performance as sighted students. Individualized instruction for certain skills that may be difficult to learn in a large group setting may be needed for concepts such as map skills, advanced mathematical concepts, and spatial concepts. Mastropieri and Scruggs (2010) add that, specialized equipment and materials may also be needed, such as a braillewriter, dark and/or raised line paper, a long cane, and abacus, specialized software for computers, low visual aids, and electronic equipment for auditory access to print material. For most students, accommodations should be designed so that success in the general curriculum can be attained without lowering expectations. Some students may also need modifications to the general curriculum to develop an appropriate individual program.

The American Foundation for the Blind (2005) and Pagliano (2005) state that much of the learning that occurs in regular schools relies on vision, putting learners with visual impairment at a disadvantage. According to Pagliano (2005), these individuals must be specifically taught concepts that their sighted peers learn effortlessly via vision . In order to achieve learning outcomes, adaptations to instruction, lesson delivery, materials, resources, assignment formats and classroom environment must occur (Palmer, 2005). Pauline (2008), suggests that these students should be given an opportunity to explore tactile diagrams. Tactile diagrams are very important to understand images and concepts which are difficult to explain and describe in words. Salisbury (2008), argues that tactile images or diagrams can be drawn on Braille papers using a special mat and stylus. This produces a relief image or diagram that can be easily felt.

Learners with visual impairment complete their work very slowly due to the nature of their impairment (Mastropieri & Scruggs, 2010). Therefore, extra time allowance is extremely important for them to process visual information, and complete their written assignments (Salisbury, 2008). For example, students with low vision take longer time to read a text than students with normal vision. Equally, reading and writing in Braille as well as getting information from tactile sources require a lot of time. Further, these learners need much time to integrate information coming through hearing (Best, 1992; Mastropieri and Scruggs, 2010). As such, Spungin (2002) recommends that it is generally acceptable to add half of the time for students with low vision, and twice as much for students with blindness.

Palmer (2005) notes that it is also necessary to consider the classroom environment of learners with visual impairment to help with successfully achieving positive learning outcomes. Suitably sized work stations, adjustable desktops to allow students to get as close to their work as possible, yet still remain comfortable and proximity to electrical outlets are factors to consider (Allan, 2002; Pagliano, 2005, 1998; Palmer, 2005a; Student Support Services, 2001). Learners with visual impairment need preferential seating so they can have appropriate access to the blackboard, windows, and overhead screens where needed (Pagliano, 2005; Student Support Services, 2001). Adjusting lighting in order to help complete assigned work is an important consideration, which can be achieved by adding extra lighting or dimming the lights, depending on the needs of the students (Allan, 2002; British Columbia Ministry of Education, 2008; Pagliano, 2005; Palmer, 2005; Student Support Services, 2001). Modifying the classroom environment maximizes the opportunity for these students to learn alongside their classmates (Palmer, 2005, Student Support Services, 2001)

2.3 Challenges faced by special educational teachers in implementing Expanded Core Curriculum

Several approaches for fitting the Expanded Core Curriculum into a normal education career have been suggested. However, currently no single, simple method has been developed that assures learners with visual impairment of accessing the Expanded Core

Curriculum within the same time frame as their sighted peers (Haggins and Hallaham et al. 2005). This is because learning additional skills contained in the Expanded Core Curriculum requires a lot of time to teach. For example Hatlen (2004, 2002) and Lueck (1999) note that there is often not enough time in the school day to effectively teach the expanded core curriculum. Bishop (1997) confirms that training in the Expanded Core Curriculum is challenging due to time constraints, but insists that it is too important to ignore.

Rosenblum (2000) noted that there is lack of understanding that the Expanded Core Curriculum interfaces with the Regular Curriculum. Some teachers dismiss it as an extra duty that they are unprepared and unqualified to carry out (Hatlen, 1997; Palmer, 2005). Palmer (2005) notes that some teachers do not comprehend the importance of the expanded core curriculum. According to Hatlen (1997), teachers either do not recognize that these students are different from their sighted peers, or they are unwilling to take on the responsibility of teaching the expanded core curriculum. Until teachers are fully informed about the importance of the expanded core curriculum, they will continue to view it as an unnecessary burden (Palmer, 2005).

Lack of assistive technology, may contribute to further isolation (Wolffe, 2000 as cited in Griffin-Shirley and Nes, 2005; Hatlen, 2004). Until social issues are dealt with, learners with visual impairment cannot truly experience successful inclusion (Hatlen, 2004). Hatlen (2004, 2002) states that learners with visual impairment are not experiencing successful social integration in inclusive regular school settings, despite social skills being a part of the expanded core curriculum. He claims that they do not learn social skills by imitation or observation, and there is often not enough time in the school day to teach them the necessary social skills (Hatlen, 2004, 2002). Hatlen (2004, 2002) believes that students who remain solely in regular schools are being set up for social isolation.

One of the key areas to special education provision is for governments to have facilities such as Braille transcription places. For example, Khoa (2006) indicates that when inclusive education was introduced in Vietnam, following the Salamanca conference in

Spain, the Vietnam government began with developing a Braille transcription centre so that learners with visually impairment could have access to teaching and learning aids before they could learn side by side with the able bodied peers in the ordinary classes. However, in some countries including Zambia, inclusive education was introduced without much consideration of the availability of teaching and learning aids. Learners in such schools do not normally benefit from the education system

Hearth in Kapinga (2012) comments that the inadequacy of books and other learning aids has affected the class performance of learners with visual impairment resulting in poor performance in the national examination at grade twelve. This leaves the special educational teachers with no option but to use local materials as teaching aids, a thing that is hard to achieve and time consuming. For example it is the duty of the teacher to transcribe all books in core subjects from print to Braille. The translation of these books does not only consume a lot of time but also creates overload on the part of the teacher who must transcribe on daily a basis. Usually, work overload leads to frustration that in most cases results in ineffective teaching. Patisi (1989) points out that the insufficiency of instructional materials reduces effective teaching which in turn makes learning difficult to learners with visual impairment. Similarly, Wendy (1996) acknowledges that low performance of the learners with visual impairment is primarily caused by inadequate teaching and learning materials.

In many Zambian schools, classes are overcrowded with over 45 learners per class in some cases. In such classes teachers have less time to attend to individual needs. There is more demand in teaching to the special education teacher than the ordinary teacher. This is because the special education teacher has to do more other work in addition to teaching (Kauffman, 1994). He or she has to teach orientation and mobility. In addition the teacher has to collaborate with other professionals such as health workers and children's parents. When we put all these functions together it is evident that handling one child with special educational needs is like handling eight to ten able bodied learners. A class of ten learners with special educational needs is therefore equivalent to

handling a class of about eighty to one hundred non disabled learners. Classes for these learners need to be small. Kirk (1997), recommends that two to four learners with visual impairment per class could be ideal if effective learning is to take place. He further states that smaller classes allows for one-to one interaction a concept that has being widely acknowledged by many scholars as a requirement in special education.

American Foundation for the Blind (2005) postulates that due to lack of understanding of visual impairment limit many teachers to understand how to accommodate their needs. Similarly Hatlen (2002) states that many educators generalize all disabilities and do not distinguish between them. As such, they treat different disabilities in the same way. for example teachers may fail to distinguish between blindness or cerebral palsy. therefore, Hatlen (2002) and Lewis (2002) comment on the disservice that a one-size-fits-all education system may not address specific and individual needs of learners with visual impairment.

Insufficient funding for specialized resources is another challenge that most learners with visual impairment face on a daily basis. One reason for this is that most of these specialized recourses are very expensive to purchase. For example, The American Foundation for the Blind (2005) states that in order to have equal access to the curriculum and to compete with their sighted peers, learners with visual impairment require books in appropriate media, materials, equipment and technology. However, these specialized materials are quite costly (American Foundation for the Blind, 2005; Bishop, 1997).

High pupil-teacher ratio has been accelerated by lack of qualified teachers to handle learners with visual impairment which is another factor that poses as a challenge in most special schools. The Ministry of Education policy document of 1996, Educating Our Future, has not provided guidelines to special education schools regarding the size of a special education class. When it comes to the problem of overcrowding in Zambian schools, the National Implementation Framework (MoE: 2007) only recognizes the need to reduce the pupil- teacher (PTR) ratio in ordinary schools while there is silence on

learners with visual impairment. For example this National Implementation Framework (MoE: 2007) targeted standards of PTR to be achieved by 2015 are 40:1 at Primary, 32:1 at Upper Basic, and 25.5:1 at High School. However, there is no mention of how a special education class should be. Special education issues are normally left to professionals in the field. As such, it is very difficult for the teachers to adequately prepare individualized work plan for children with special needs.

Normally, due to the nature of the disability, it is imperative that there be an appropriate number of teacher aides to assist the teachers with day to day activities. However, unlike other countries that have teacher aides in special schools, almost all the Zambian schools do not have these teacher aides, a thing that pose a challenge when planning for the services for children with special needs. This is supported by Magrab (1992:47), who stipulates that ‘‘most schools in developing nations have no provision in recruiting related service staff such as speech, physical, and occupational therapists.’’

In a situational analysis undertaken in 2005 by Kalabula in ten districts in Zambia where there was evidence of inclusive schooling, it was found that some teachers had negative attitudes towards special education (Kalabula, 2005). Special education is quite involving as noted from a paper presented in Kampala on teacher training (ICEVI, 2007). It was pointed out that a teacher for learners with exceptional needs is a teacher first, then a special educator later. This suggests that only in-service teachers should be going for special education. It was noted that most of the In-service teachers who decide to join special education had developed the love for teaching learners with exceptional needs, attributes that may be lacking in pre-service students.

The ECZ (2005), reports that the performance of the learners with visual impairment has not been impressive in the past years. It further states that the reason behind this performance is due to lack of good classroom and resource rooms where effective teaching can take place. Thus, poor infrastructure is another challenge for the special education teacher in the planning for services for children with visually impairment. One reason for this is due to the fact that very little or no expansion of special schools have

being done to adequately accommodate all the visually impaired. As such, this has led to overcrowding in classes, consequently affecting the performance of the learners with visual impairment negatively.

In trying to address this challenge, the Ministry of education brought inclusive education where the learners with visual impairment are incorporated with the sighted. For example, learners with low vision have been incorporated in regular classes posing a challenge for the teacher as most of these schools in Zambia are not disability friendly. Chapman and Stone (1989), suggests that the school environment needs to be modified in order to increase safety and access to buildings and classrooms. For example, the learners with visual impairment may be comfortable with lifts instead of stairs. Toilet facilities also need to be adapted to make them easily accessible. This is supported by Welsh and Blash, (1980:79) who state that ‘‘the physical buildings need to be constructed in such a way that they must allow easy access to learners with disabilities’’. This means that the floors must not be so shiny or slippery as they will make mobility very difficult. Rooms must have a good lighting system to help those with low vision.

One important element in the provision of any service is legislation. At the moment the provision of special education is guided by the Ministry of Education policy guidelines not accompanied by any piece of legislation. The policy guidelines are: ensuring equality of educational opportunities for children with special educational needs. The other one is that of providing education of good quality to children with special needs. Another one talks of providing and strengthening supervision and management (MoE, 1996).These above policy guidelines sound good; however, there is no guarantee for commitment because they are not supported by legislation.

Closely related to early identification is the aspect of screening. In Zambia most of the learners with visual impairment do not undergo screening. Kirk (1997), postulate that, screening of children helps in categorizing learners so that it is possible to know which areas of the Expanded Core Curriculum must be taught. Screening can also help in determining one’s degree of disability, that is, whether the child is in a mild or moderate

or severe state. These measures help in attempting to find appropriate intervention strategies.

Lack of adequate assessment is another challenge. Presently most of the learners found in the class are not adequately assessed and as such, it becomes a challenge for the teacher to carry out intervention strategies or focus on areas of the expanded core curriculum. Placement of children with disabilities is not regulated by law or policy. It is usually up to the school to recommend to parents what is the appropriate placement for the child. As would be imagined this tends to create problems not only for the child, but also for the teacher. Further, apart from poor collaboration between professionals during early identification and placement this is also coupled with lack of professionals and other service providers like physiotherapists, psychologists,etc who must be present during assessment.

Thurlow (2000:85) indicates that, "many learners with special educational needs are left behind as teachers and administrators feel pressured to concentrate on those who have a greater likelihood of passing high-stakes assessments". This is more evident in inclusive schooling that has students across the educational and developmental spectrum, ranging from typically developing students to severe and profoundly disabled students. As such, limited time, few support resources, and growing public scrutiny, professionals feel compelled to perform academic triage abandoning sensitive areas found in the Expanded Core Curriculum with the most significant learning needs in favour of students who have a greater chance of academic survival in rigorous learning environments.

2.4 Summary of Literature Review

The literature has looked at the nature and implementation of the expanded core curriculum. It has been noted that there are nine additional sets of skills and these include; the social interaction skills, recreational and leisure skills, orientation and mobility skills, independent living skills, assistive technology skills, career education, sensory efficiency skills, compensatory skills and self-determination skills. The aim of these skills is to help the learners with visual impairment compensate on the loss of

sight. In terms of the teaching strategies used when implementing the expanded core curriculum, the literature has revealed that special education teachers can use the individualized, cooperative learning, oral method of giving instructions and collaboration teaching. Lastly, the literature has shown that many challenges faced by teachers include lack of materials for teaching, high pupil-teacher ratio, time limits, most of the content being examination oriented instead of skill development, lack of assessment and lack of involvement of parents and other professionals.

CHAPTER THREE

METHODOLOGY

Overview

This chapter outlines the methodology used in the study. The chapter is organised under the following sections: research design, population, sample and sampling procedure, instruments for data collection, procedure for data collection, data analysis and ethical considerations taken in the process of collecting data.

3.0 Research design

According to Kombo and Tromp (2006:71), "A research design can be thought of as the structure of research." In this case, a research design is a plan that guides the researcher in collecting, analyzing and interpreting data.

This study employed a descriptive survey design so as to explain and describe the phenomenon comprehensively as it was. The descriptive survey is a non-experimental research method that can be used when the researcher wants to gather data that may be directly observed.

3.1 Population

This study was conducted in selected schools for the learners with visual impairment of Lusaka and Chipata districts. The population consisted of all special education teachers, administrators (Head teachers and Deputy Head teachers) and learners with visual impairment from grades 8 to12.

3.2 Sample

The word 'sample' refers to a selected group of subjects or respondents who participate in a given study. Biklen and Bogden (1982) stated that in any research, a small group may be chosen to represent the population to which the results would be generalized. The sample therefore needs to be as representative of the population as possible.

The sample of this study consisted of fifty six (56) respondents that is, four administrators (Head teachers and Deputy Head teachers), twenty (20) special education teachers and thirty two (32) learners with visual impairment from grades eight to twelve in two selected special schools, that is, Munali secondary school for the learners with visual impairment in Lusaka District and Magwero secondary school for the learners with visual impairment in Chipata District.

3.3 Characteristics of sample

3.3.1. Learners

A total of 32 learners participated in this study. Of these, nineteen were male and thirteen were female. Table 1 below shows the total number of learners who participated from the two schools under study.

Table 1: Learner Respondents by School and Gender

Name of the School	Male	Female	Total
Munali school for the blind	11	7	**18**
Magwero school for the Blind	8	6	**14**
TOTAL	**19**	**13**	**32**

3.3.2: Teachers

Twenty special educational teachers from both schools participated in the study. Of the twenty teachers, twelve were male and eight were female.

3.3.3.: School Administrators (Head Teachers and Head of Departments)

Four administrators were drawn from the two schools to be part of the sample. Of the four administrators, two were female while the other two were male. In terms of qualifications, the three administrators possessed a degree as their highest qualification while one had a diploma but was studying for a first degree.

3.4 Sampling procedure

According to Kasonde ng'andu (2013) sampling technique is a research plan that explains how the respondents for the study are selected from the population**.** It is also a process that helps the researcher select respondents, places or things to study**.**

This study used purposive sampling to select all the four administrators. The reason for selecting these school administrators in this manner was that by virtue of their position they had rich information and experience for the study.

20 teachers were selected through a stratified random sampling to minimize bias. To have an equal representation from the selected schools two lists of males and females were created. From the list of males names were put in a chalk box then randomly names were picked to come up with the sample. The same was done for the female teacher respondents. The main reason for using this sampling procedure was that Munali alone had more than fourteen special education teachers while Magwero had more than 22 special education teachers.

32 learners participated in the study. All the 32 learners with visual impairment were purposefully selected by the time of the data collection. Some learners at both schools had gone home thus all the learners who were in school participated in the study.

3.5 Instruments for data collection

Research instruments are pieces of information that may be written, oral, pictorial or symbolic in nature (Kombo and Tromp, 2006). These instruments are also referred to as tools for data collection. A researcher carefully prepares them in order to solicit the required information. This study used three main research tools: questionnaires, face to face interview schedule and focus group discussions guide. The study largely used questionnaires, interviews and focus group discussions. The reason for using both methods was to triangulate. Triangulation in this case refers to the ascertaining of the collected information by ensuring that the information collected qualitatively tallies with

the information collected quantitatively, therefore having richer information from the collected data set.

3.5.1 Questionnaires

Questionnaires are a set of questions carefully and thoughtfully prepared by the researcher to solicit for information from the respondents (Kombo and Tromp, 2006). They provide an opportunity to respondents to think through the questionnaires and answer the questions without coercion. Depending on the audience or the subjects, questionnaires may have both open ended and closed ended questions. Cohen et al. (2000) stated that open ended questions are those questions which seek the opinion of the respondent by allowing him or her to freely express oneself. On the other hand, closed ended questions seek the opinion of the respondent by guiding them on what to choose.

In this study, questionnaires were administered to all the 20 special education teacher respondents and to 32 learners with visual impairment respondents from the two schools. Questionnaires were used to collect quantitative data. The inclusion of open ended questions was meant to elicit detailed responses.

3.5.2 Interviews schedule

Interviews are a qualitative research tool. They demand for close interaction between the researcher and the respondent. Face to face interviews provide an opportunity for a researcher to discuss with respondents. Cohen et al. (2006) indicated that during face to face interviews, a researcher asks respondents questions. As the respondent provides answers, the researcher can make follow up questions in order to clarify a point. Furthermore, the researcher makes observations in order to determine whether the respondent is telling the truth or not.

In this study, the four school administrators (Head teachers and Deputy Head teachers) were interviewed at different times. The idea behind face to face interviews was to

reveal many other issues that may not initially be captured in the questionnaires.

3.5.3 Focus Group Discussions guide

The other tool used in this study was a focus group discussion guide. Burke and Christenson (2004) explained that focus group discussions are important in research because the researcher interacts with the respondents. The researcher identifies some participants in the study. He or she asks the discussants questions. The respondents, as a group, are free to argue and share their independent views about the subject matter. The researcher can also clarify a number of other issues during the discussion. Focus group discussions provide an interactive event that stimulates participants which helps the researcher to obtain highly detailed and specific group data that meet the research objectives that cannot be acquired by questionnaires.

In this study, focus group discussions were held with eight learners at Munali secondary school for the learners with visual impairment in two separate groups of four each while at Magwero secondary school for the learners with visual impairment only one focus group discussion was held with four learner respondents.

Table 2: Summary of instruments by school and gender

Instruments	School	Respondents	Gender		Totals No of Respondent
			M	F	
Questionnaire	Munali	Teachers	5	5	**10**
		Visually Impaired	6	4	**10**
	Magwero	Teachers	7	3	**10**
		Visually Impaired	8	2	**10**
Interviews	Munali	Administrator	1	1	**2**
	Magwero	Administrator	1	1	**2**
Focus Group Discussion	Munali	Visually Impaired	3	5	**8**
	Magwero	Visually Impaired	1	3	**4**
		Total	**34**	**22**	**56**

3.6 Procedure for data collection

This sub section of data collection procedure explains how the researcher collected information in the two schools. Kombo and Tromp (2006) explained that under this subsection, a researcher needs to show what happened in the process of collecting information. It is important to explain the procedure because it helps anyone evaluating the study to understand what difficulties could have arisen during the research process and whether the challenges could have an effect on the results.

In this study, consent was obtained through a letter of introduction from the Directorate of Research and Graduate Studies of the University of Zambia that was presented to the two Head teachers at both Munali and Magwero School for the learners with visual impairment before making appointments on the days on which to collect data. On the appointed days, the researcher then distributed questionnaires to the teachers and pupils at Munali and Magwero School for the visually impaired. Further, focus group discussions involving learners per group were held on the agreed days at each school. Lastly, interviews were conducted with the school administrators at each school. The process took two months. With permission, a voice recorder was used to record the interviews and focus group discussions.

3.7 Data analysis

According to Kombo and Tromp (2006) data analysis is the stage when the researcher interprets the information collected from the respondents. This information is systematically presented. The information is coded and presented in order to help readers and the researcher himself/herself to easily map out the findings.

Quantitative information collected from the questionnaires was coded and presented using computer software called Microsoft excels to tabulate information using tables. On the other hand, information collected from qualitative data, that is, from interviews and focus group discussions, was grouped in themes to provide descriptions to explain what

was said by the respondents. Simple tables were used to help appreciate percentages and frequencies.

3.8 Ethical considerations

As indicated by Raudonis (1992) researchers have a clear responsibility to ensure that they recognize and protect the rights and general wellbeing of participants regardless of the nature of the research. To that effect, the study adhered to the following ethical issues; the study assured all participants confidentiality thereby instilling confidence and trust. For example, it was made very clear that whatever responses they would remain confidential by not including names of any participant in the study. The researcher further used questions that did not cause psychological harm to the respondents' emotions. For example, the researcher further got consent from all participants and assured them that they were free to discontinue with the study during data collection. Before administering any instruments, the researcher got permission from the head teachers of the selected schools. Thus, the study considered participants' right to participation, confidentiality and anonymity, privacy and self confidence.

CHAPTER FOUR

PRESENTATION OF FINDINGS

Overview

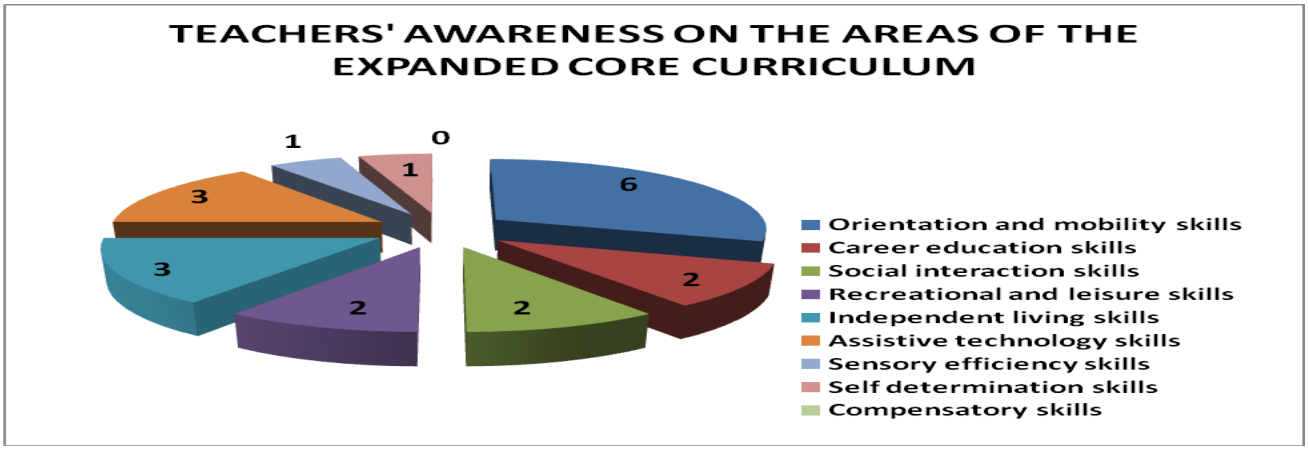
This chapter presents the findings of the study according to the following themes: establishment of the different areas of the Expanded Core Curriculum that are being implemented, ascertain teaching strategies used by the special education teachers in the delivery of areas of the Expanded Core Curriculum and the challenges faced by teachers in implementing the areas of the expanded core curriculum.

The administrators, special education teachers and learners were subjected to interviews, questionnaires and focused group discussions in order to get an understanding of the aforementioned areas.

4.1: Different Areas of the Expanded Core Curriculum being implemented

The Expanded Core Curriculum is one of the critical factors in ensuring effective acquisition of skills that help the learners with visual impairment. To determine the areas of the Expanded Core Curriculum being implemented, the researcher sought to examine teachers' knowledge on which areas are critical for the learners with visual impairment to acquire the needed skills to live independently after school. Below is a Pie Chart showing teachers' awareness of the Expanded Core Curriculum.

Figure 1: Pie Chart Showing Teachers' Awareness of the Areas of the ECC



The 20 teachers who participated in this study were able to identify areas of the expanded core curriculum. From the sample, six were able to identify Orientation and mobility skills, two identified Career education skills, Social interaction skills and Recreational and Leisure skills, three identified Independent Living skills and Assistive Technology skills , one indicated Sensory Efficiency skills and Self determination skills while no one mentioned Compensatory skills.

Using questionnaires, learners with visual impairment were asked which skills they considered important for independent living and positive contribution to society after school. Of the 20 learners with visual impairment, twelve indicated Assistive Technology skills, four cited Orientation and Mobility skills, two mentioned career Education skills, two alluded to Social Interaction skills, no one talked about Self-determination, Compensatory, Recreational and leisure, Independent living, and Sensory efficiency skills.

The study further sought to determine whether these skill areas were put on the school time-table. The study showed that only Orientation and Mobility skills were on the time-table for lower classes, while the other skill areas of the Expanded Core Curriculum were not on the school time-table.

The researcher also sought to find out if these areas were incorporated in other subjects within the school time-table. Of the 20 learner respondents eighteen indicated that most of these skills were incorporated within other subjects.

To substantiate the quantitative findings on examining teacher's knowledge on areas they felt were critical for the learners with visual impairment to acquire the needed skills to live independently after school, the researcher conducted semi structured interviews with the school administrators.

The findings from the interviews revealed that the administrators were able to identify some of the components found in the expanded core curriculum. For instance when they were asked which skills would help the learners with visual impairment to successfully get integrated in society and live meaningful lives, all administrators pointed out a number of areas which they felt would help. For example, one female administrator from Magwero Secondary School pointed out the following;

> *The acquiring of knowledge in orientation and mobility skill is very vital to the learners with visual impairment as they are equipped with needed skills to be able to move from one place to the other with less difficulties*.

Another male administrator from Munali Girls Secondary School added that;

> *The learners with visual impairment need to learn skills in activities for daily living (ADL). For example they need to learn how to wash their clothes, keep their surrounding clean and perform various tasks with less dependence on others.*

Additionally, another skill that was brought out by the school administrators was a career education skill which focuses on developing talents or the ability to focus on what they want to become in life. For instance, one female administrator from Munali Secondary School noted the following;

> *The learners with visual impairment have limited choices when it comes to choosing what they want to become after school. Hence if this is done from an early age most of them would develop high self esteem and then embark on a career of their choice.*

Assistive technology is yet another skill that was noted by the school administrators. Assistive technology emphasizes on the use of computers and other electronic equipment to help the learners with visual impairment function independently or access

needed information efficiently at school or home. With regard to assistive technology, for example one male administrator from Magwero School for the learners with visual impairment stated that;

> *In Zambia most special schools for the learners with visual impairment have few books in Braille. Hence, technology through use of computer helps the learners with visual impairment to access and store information from libraries around the world that may help in studying for tests, research and a variety of other academic usage.*

Apart from interviewing the administrators, the researcher held focus group discussions with the learners to get their views on areas they felt were critical for them to acquire the needed skills to live independently after school. A number of areas were mentioned and some of them included computer skills, business studies, art work, literacy skills, orientation and mobility skills and ability to speak well (public speaking). For example, one female learner (A) pointed out that;

> *If we gain knowledge in computer skills this would greatly assist us the learners with visual impairment to access any book or important information pertaining to our academic progression. Currently, most of the books that we use are not in Braille form as a result, we always depend on class notes that we write after classes from our friends who are sighted. To overcome this challenge, I feel knowledge in computer skills would help in accessing soft copies and downloading all vital information related to school work.*

Another male learner (B) highlighted orientation and mobility as another area that if taught adequately in schools would equip the learners with visual impairment with skills

to move with minimal assistance from one point to another. The learner submitted the following;

> *At this school, the road between the hostels and the class rooms are very far with a lot of pot holes which makes our movements very difficult and the only way to move is by help we get from the sighted. I strongly feel that acquiring skills in this area would empower us the learners with visual impairment to travel to both familiar and unfamiliar places without difficulty.*

Learning of business skills is another area that was noted to be vital for independent living after school. A male learner (C) from Magwero School for the learners with visual impairment noted that;

> *There are limited job opportunities for us when we finish School. Hence, gaining skills in business can provide a better opportunity to live independently and help others.*

Further, female learner (D) from Munali Secondary School postulated that;

> *Most of us the learners with visual impairment have been blessed with talents such as singing, playing instruments and public speaking. Thus career education is necessary if we are to have positive self concept/self esteem. For example if I am able to develop the talent of singing, I can earn a living and contribute positively to society*.

Having gotten views on the areas needed for the learners with visual impairment the study sought to ascertain the teachers' knowledge on whether they were aware of the Expanded Core Curriculum for the visually impaired. From the schools sampled, it was evident that most of the respondents had knowledge on different areas of the Expanded Core Curriculum however they did not have knowledge on the term "Expanded Core

Curriculum for the visually impaired''. For example data from the 20 questionnaires from both schools revealed that of the 20 teacher respondents, all were not aware of this type of curriculum.

Similarly, of the 4 administrators, the study revealed that all were not aware of the term "expanded core curriculum" but were able to replace the term Expanded Core Curriculum with terms like "disability-specific skills" and "visual -related skills.

4.2 Ascertain teaching strategies used by the special education teachers in the delivery of the areas of Expanded Core Curriculum

The chart below shows the strategies mostly used by teachers in implementing areas of the Expanded Core Curriculum.

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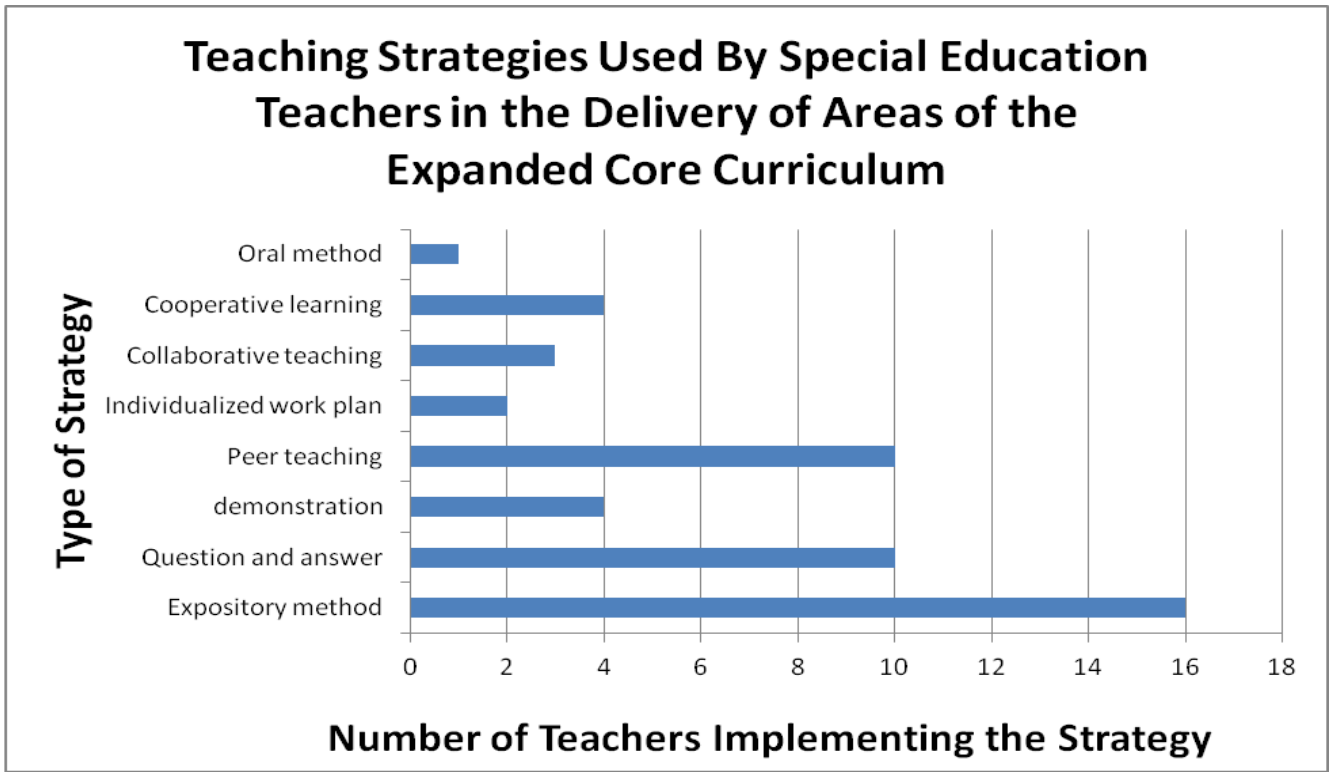
Figure 3: Bar chart showing strategies used by teachers in implementing the expanded core curriculum.



(Source: Primary Data)

The bar chart above revealed that most teachers, despite being specialists in special education, use the expository method in the teaching process. For instance, out of the 20 teachers who participated,16 teachers indicated expository methods, two indicated individual work plan, ten indicated peer teaching, four showed use of demonstration strategy, three indicated collaboration, ten indicated question and answer while four indicated cooperative strategy. To triangulate the data collected during questionnaires, the administrators were also interviewed.

The implementation of the different areas of the ECC requires that parents and significant others take part if the learners with visual impairment are to acquire the needed skills such as the Orientation and Mobility skills, activities for daily living as well as the Social Interaction skills.

In the process of the learners' acquisition of the different skills of the ECC, parents and significant others may be engaged to help monitor the adaptation to the needed skills by the visually impaired. The study indicated that 18 out of the 20 learner respondents contacted via the questionnaire showed that parents were not involved in the process of their acquiring the different skills of the ECC.

Further, concerning the strategies being used to impart the skills, 16 out of the 20 learners indicated that the expository method was used, two showed that the question and answer method was being used, one indicated demonstration methods while one indicated the peer teaching method being in use.

Additionally, the study revealed that most teachers used teacher centered approach. One male administrator stated that;

> *Currently the learners with visual impairment have been integrated with the sighted a thing that has increased the number of learners per class. For example, one class has more than fifty sighted learners with an addition of two to ten learners with*

visual impairment thus, it is practically impossible to use leaner centered approach with the current scenario.

Another administrator added that;

Due to large numbers most teachers explain concepts abstractly and provide notes on the black board then after lessons these notes are read out to the learners with visual impairment by their friends, the sighted.

Thus it is evident that the data collected through interviews from the administrators was also in tandem with the findings from the questionnaire administered to teachers and learners.

With regard to the learners, data was collected using questionnaires and focused group discussion. The learners were asked to describe how they learnt in class. The data collected from the learners indicated that they were only taught in class using expository methods and that question and answer strategy was used rarely, a situation they indicated as not very helpful in the learning process.

4.3: Challenges faced by special educational teachers in implementing areas of the Expanded Core Curriculum

Below is the table that provides a summary of the challenges that were highlighted by the respondents:

Table 3: Summary of challenges faced by special educational teachers in implementing areas of the Expanded Core Curriculum

No	Challenges
1	High Pupil-Teacher Ratio
2	Inadequate Teaching and Learning Materials
3	Non-availability of Specialised Equipment
4	Lack of Funds
5	Lack of Specialised Teachers
6	Environment not Disability-friendly
7	Lack of Parental Involvement

The study sought to determine the challenges faced by special education teachers in implementing the different areas of the expanded core curriculum. The current study revealed the following results:

On the pupil-teacher ratio in the process of teaching and learning for the visually impaired,19 teacher respondents indicated that the pupil-teacher ratio was not appropriate while one indicated that the ratio was appropriate.

Using open ended questions, of the 20 teachers,19 stated that due to high pupil-teacher ratio they had difficulties in delivering lessons to both the learners with visual impairment and the sighted at the same time. For example one male teacher from Munali indicated that;

> *Due to high-pupil-teacher ratio, I have difficulties in explaining the details of what is highlighted on the board and any pictorial materials to the sighted and the learners with visual impairment at the same time in understand drawings and pictures as they appear in reality.*

As for the challenges teachers faced when implementing various strategies to the learners, the data revealed that it was difficult for teachers to give individual attention to the learners with visual impairment due to the large numbers of learners per class. For example one male teacher from Magwero noted that;

> *Due to the high pupil-teacher ratio it is difficult to give individual attention to learners with visual impairment because they need more time than what has been officially stipulated if they have to learn any skill effectively. As such, it is a challenge to monitor learners with visual impairment and encourage them to be active.*

Additionally, teacher respondents stated that it was difficult to employ strategies that would require them to be on a one-to-one basis with learners. For example one male teacher from Munali indicated that;

> *Demonstration, peer teaching or group discussion require classes that have few learners. This is not the case with our classes here for example one class has two to five learners with visual impairment who are incorporated with more than fifty sighted learners.*

Concerning the availability of equipment and teaching materials, 18 out of the 20 teacher respondents indicated that their school had inadequate learning and teaching resources to cater for the learning needs of the learners with visual impairment. On the other hand, two of the teachers indicated that their school had adequate teaching and learning resources.

When teachers were asked to state the effect of inadequate materials on teaching areas of the expanded core curriculum, many stated that inadequacy of books and other learning aids had affected the class performance of the learners with visual impairment. This leaves the special educational teachers with no option but to use local materials as teaching aids a thing that is hard to achieve and time consuming. For example one female teacher from Magwero stated that;

> *Currently all the books are in print thus, on a daily basis I have to transcribe them for the learners with visual impairment to be able to read. This does not only consume a lot of time but also create an overload on the part of us teachers.*

Using questionnaires for learners, the researcher was able to rate how favourable the environment is for learners with visual impairment in the implementation of the areas of

the Expanded Core Curriculum. All the 20 learner respondents acknowledged that there was inadequate classroom space for a conducive learning environment.

The researcher also wanted to determine the effect of the prevailing pupil: teacher ratio in the learning process. 18 out of the 20 learner respondents indicated that the pupil: teacher ratio was uncomfortably high and as such it negatively affected the effective implementation of the different areas of the Expanded Core Curriculum.

To substantiate the quantitative finding from the teachers, the researcher conducted semi structured interviews with the school administrators and the following results were obtained.

With respect to the availability of equipments and teaching materials all the administrators from the selected schools admitted that the resources were not adequate. All the administrators pointed to poor funds from the government as a major reason. For example one male administrator from Munali indicated that;

> *For school equipments and material such as Braille paper, stylus, thermoform, walking canes or writing frame, we depend on the funds from the government and nongovernmental organizations. Currently the ministry has not allocated enough funds to carter for all the needed equipments and materials. Hence, this has a negative impact on effective implementation for any skill acquisition.*

On the issue of adaptation and accommodation, all administrators from the selected schools expressed concern that not much had been done in their schools to alleviate, or at best, eliminate the challenge of inadequate accommodation. For example one female administrator from Magwero stated that;

> *Due to lack of funds and high pupil-teacher ratio adaptation and accommodation are difficult to achieve. For example a large number of*

> *pupils per class limit the learners with visual impairment in terms of movements. Similarly lack of funds prevents the schools from buying learning materials such as tactile diagrams, images or computers for the learners with visual impairment to use.*

To source for more data on challenges, the researcher included the learners in focus group discussions and a number of views were brought forth:

On the subject of the pupil-teacher ratio, many learners were of the view that it was not appropriate. For example, one learner with visual impairment pointed out that;

> *Currently, the pupil-teacher ratio is not good for example, in our grade eleven class we have 50 sighted learners with four of us the learners with visual impairment. Thus, it is very difficult for the teacher to effectively assist the learners with visual impairment during lessons.*

The study also established that some teachers who have not undergone training in special education are allowed to teach the visually impaired. For example one female learner respondent commented that;

> *At this school, some of the teachers are not trained to teach the learners with visual impairment and have a problem to read what we transcribe. For instance when it comes to marking, in most cases my work is not marked because our teacher cannot read Braille*.

Another male respondent added that;

> *Because our teacher cannot read Braille, he depends on other teachers to transcribe for him, a thing that makes us collect our results late in most cases. For others they award wrong marks for*

example in the last term test that I wrote, things that I got right were marked wrong.

4.4 Summary

From this study it can be concluded that many respondents were able to identify the different areas of the Expanded Core Curriculum but they were not aware of the term 'Expanded Core Curriculum'. Of the nine areas of the Expanded Core Curriculum only Orientation and Mobility skills were reflected on the time-table for lower classes. Further, the study deduced that there was no involvement of parents, professionals and significant others in the acquisition of skills of the areas of the Expanded Core Curriculum. In terms of strategies of teaching, it was observed that the teacher-centered method was mostly used. However, the Question and answer and Peer teaching methods were also prominent. In terms of challenges, the following were brought forth: high pupil-teacher ratio, inadequate teaching and learning materials, non-availability of specialised equipment, lack of funds, lack of specialised teachers, environment not disability-friendly and lack of parental involvement.

CHAPTER FIVE

DISCUSSION OF FINDINGS

Overview

Chapter five discusses the findings of the study, the purpose of which was to investigate the nature and implementation of the expanded curriculum in schools for the visually impaired. The findings were presented according to the following themes: establishment of the different areas of the Expanded Core Curriculum that are being implemented: the strategies used by the teachers in implementing the Expanded Core Curriculum and the challenges faced by teachers in implementing the areas of the expanded core curriculum.

5.1 Different areas of the Expanded Core Curriculum being implemented

The ability to use the Expanded Core Curriculum is one of the critical factors in ensuring effective teaching to learners with visual impairment. Further, an understanding of each of the nine different areas of the Expanded Core Curriculum is critical if the learners with visual impairment are to grasp the needed skills and leave meaningful lives after secondary education (Hatlen, 1996).

Out of the nine different areas found in the expanded core curriculum, the current study indicated that all the respondents were able to identify some areas of the Expanded Core Curriculum. For example, they were able to bring out the components such as orientation and mobility which is taught in the lower grades, computer skills under assistive technology and career education skills which are taught under guidance and counseling; self determination skills together with social interaction skills were found to be under the religious education.

This could be attributed to the fact that many skills have been incorporated in other subjects for example in geography students learn about map reading which involves the skills of orientation and mobility, learning about different jobs (careers education through career guidance and counselling), mathematics is also used in terms of

managing money which is found in independent living skills. Group work or team teaching also provides an avenue for promoting social skills.

One other reason revealed by the study was that some areas of the Expanded Core Curriculum were incorporated in other subjects due to the syllabi that put more emphasis on academic subjects than vocational ones. This was evident based on the way the school examination has been structured that focuses more on academic subjects than practical skills. This finding is in line with a direct evaluation carried out by Wolffe et al., (2002) on special education teachers, which indicated that most teachers spent much of their time on academic skills and limited time on other areas of the expanded core curriculum.

Regarding the awareness of the term ‘‘expanded core curriculum’’, the current study revealed that all the 20 teacher respondents and the four administrator respondents were not aware of the term ‘Expanded Core Curriculum’ for the visually impaired.

One reason for this could be attributed to the fact that the term has been replaced with other terms. For example, Kalabula (2007) points out that the general curriculum has been modified by the Curriculum Development Center (CDC). This modified curriculum is called supplementary curriculum which resembles part of the Expanded Core Curriculum in which components such as activities for daily living, orientation and mobility including Braille are found. In other ways, the term Expanded Core Curriculum may mean supplementary curriculum in the Zambian context.

Another reason could be that there are no documents in Zambia that bring out the term expanded core curriculum. In the current situation, the responsibility of modifying the curriculum to suit the individual learners’ needs lies in the hands of the special education teachers. This is shown by the MOE (2000) as cited by Ojala (2004) who argues that, in relation to special education, teachers are responsible for adapting the goals and the teaching Strategies in order to suit the learners’ strengths and weaknesses. Further, advice is given on how special educational needs can be detected in an ordinary classroom; however, the term Expanded Core Curriculum is not used.

Another factor could be attributed to lack of guidelines of teaching these specific areas of the Expanded Core Curriculum in classrooms. Many documents in Zambian education do not clearly spell out how these specific areas must be taught. Rather general statements are used in ensuring that teachers are responsible in augmenting the general curriculum to suit the individual child with disability. This finding is similar with the study done in Tanzania by Gronlund, Lim and Larsson (2010) who revealed that, there are no clear policies and documents to illustrate how the curriculum for the learners with visual impairment should be implemented in schools. Similarly a study conducted in Turkey and Spain, deduced that lack of knowledge among special education teachers hinder the effective implementing of specific areas of individual needs to the learners with visual impairment (Kesiktas and Akcamete, 2011; Simon, 2010).

In terms of the learners with visual impairment, the present study revealed that they were able to identify some areas of the Expanded Core Curriculum that are needed for them to live independently, namely Assistive technology skills, Orientation and Mobility skills, career Education skills and Social Interaction skills. It is not surprising that learners were able to identify Assistive technology skills because computers are in use in schools nowadays. In terms of orientation and mobility skills they were easily identifiable as they are reflected on the time-table for lower grades. Additionally, moving from one place to another independently is what every learner with visual impairments desire. Further, through guidance and counselling programmes incumbent in schools, learners were able to indicate career education as a necessary skill they needed in order to lead independent lives. The rest of the skills were not easily identified by learners because they have been incorporated in other subjects. For example, Recreation and Leisure skills are found under Physical Education subjects; Independent Living skills are incorporated in Civic Education, while self-determination skills may be found in Religious Education.

Hence, it is evident that proper handling of learners with visual impairment depends much on how teachers understand these different areas found in the expanded core

curriculum. Therefore, lack of knowledge on the Expanded Core Curriculum may hinder proper provision in the different areas that are critical to the visually impaired.

5.2 Strategies used by teachers in teaching the different areas of the Expanded Core Curriculum

With regard to the strategies used by teachers in teaching the different areas of the expanded core curriculum, data from administrators, special education teachers and learners revealed that a number of strategies are used that include, expository methods, question and answer, cooperative learning, peer teaching, and demonstration. However, the study deduced that most teachers use expository teaching strategy in the teaching process.

One reason given for this was that, currently on average one class has more than 50 sighted learners with an addition of two to ten learners with visual impairment thus making it practically impossible to use the learner-centered approach. As such, most teachers resort to explaining concepts in an abstract manner and provide notes on the black board which again does not favour the learners with visual impairment who must depend on sighted classmates to read for them orally after lessons. To a large extent this contradicts the recommendations made by Gallagher et al. (1998) who propose that a class for some severe disabilities ought to comprise between four to ten learners if they are to learn effectively. Similarly, a study conducted by Penda, Ndhlovu, and Kasonde ng'andu (2015) confirms that any teaching strategy to be effective, individual attention is cardinal and this is more effective to a small group of learners

Regarding whether integration is done when implementing different strategies to the expanded core curriculum; the study revealed that out of 56 respondents from teachers, administrators and the learners with visual impairment, 54 indicated that different areas of the Expanded Core Curriculum were integrated into other subjects. This was evident as the researcher through observation noted that apart from orientation and mobility that appears on lower grades, no specific areas of the Expanded Core Curriculum were

reflected on the secondary school time table. This would make one to conclude that most of the different areas are taught unconsciously within the academic subjects in the core curriculum.

Hatlen and Stryker (1996), argue that the curriculum for learners with visual impairment is not the same as for sighted students as it is much larger and more complex to accomplish. They further point out that the experiences and concepts in the expanded co-curriculum are casually and incidentally learned by sighted students yet to the learners with visual impairment they must be systematically and sequentially taught for a long period of time. As such, if the learners with visual impairment are to have equitable experiences, there must be specific instruction that expands beyond the core curriculum.

5.3: Challenges faced by special educational teachers in implementing areas of the Expanded Core Curriculum

There are several challenges that interfere with the implementation of any curriculum to learners with visual impairment in a classroom. The study revealed the following challenges: high pupil-teacher ratio, inadequate teaching and learning materials, non-availability of specialised equipment, lack of funds, lack of specialised teachers, environment not disability-friendly and lack of parental involvement.

With respect to the high pupil-teacher ratio, the current study of 56 respondents of four administrators, 20 teachers and 32 learners indicated that the pupil-teacher ratio, which averaged 50:1, was not appropriate in the two selected schools.

One reason attributed to this could be that the government policy supports the provision of inclusive education which allows the learners with visual impairment to learn together with the sighted, a thing that causes high pupil-teacher ratio. For example, in one school, four learners with visual impairment in a grade eleven class have been made to learn together with more than sixty sighted learners. While this may be seen as a positive step

towards reducing stigmatization and promoting interaction, it compromises the quality of education to be provided to learners with visual impairment.

Another reason could be that in Zambia there are no guidelines on the maximum number of learners with visual impairment per class. For example the Ministry of Education policy document of 1996-Educating Our Future, has not provided guidelines to special education schools regarding the size of a special education class when it comes to the problem of overcrowding in Zambian schools.

Apart from disadvantaging the learners with visual impairment, the high pupil-teacher ratio also has an impact on the teacher when it comes to work preparation. For example Thurlow (2000), indicates that many pupils with special educational needs are left behind as teachers and administrators feel pressured to concentrate on those who have a greater likelihood of passing high-stakes assessments. This is more evident in inclusive schooling that has students across the educational and developmental spectrum, ranging from typically developing students to severe and profoundly disabled students, As such, limited time, few support resources, and growing public scrutiny, professionals feel compelled to perform academic triage abandoning sensitive areas found in the Expanded Core Curriculum with the most significant learning needs in favour of students who have a greater chance of academic survival in rigorous learning environments.

Concerning the challenge of lack of specialist teachers, the current study further revealed that the learners with visual impairment are being taught by some teachers who are not trained in special education. One reason for this could be that in an attempt to address high pupil-teacher ratio, the government through the Ministry of Education has allowed teachers not trained in special education to take up the challenge of teaching these learners. The disadvantage with this whole situation is that these teachers who are not trained in special education cannot effectively help these learners. For example one female learner lamented that:

Whenever I write a class exercise my books are not marked as my subject teacher cannot read Braille, so my work is not marked, however

when my work is marked in most cases the correct answers are marked wrong.

Lack of specialist teachers contradicts with effective implementation of the Expanded Core Curriculum that requires that all the skills that are learnt in the Expanded Core Curriculum must be well structured and must be implemented by individuals possessing skills in those areas.

Thus, it can be stated that this finding is in line with the findings of Lohmeier et al. (2009) supported by Blankenship (2007), who states that much of the time the teachers spend on areas of the Expanded Core Curriculum occur in an unplanned and unstructured manner that limit their effective implementation.

Concerning the challenge of inadequate teaching and learning materials, the findings revealed that schools do not provide adequate and suitable learning materials for these children. For example, from the focus group discussions the findings from the pupils themselves indicated that they largely depended on materials donated by NGOs. Lack of suitable learning/teaching materials makes it difficult for the children to acquire and apply knowledge, to learn at their own pace and to assess their own progress in their studies. Due to these challenges, most children with visual impairment are considered to be severely disadvantaged in their studies and consequently perform poorly. Furthermore, lack of learning and teaching materials for these children may deny them opportunities to study a wide range of subjects such as science subjects and mathematics despite their mental ability.

Inadequate teaching and learning materials can also be seen through limited literature in terms of books that are provided to the visually impaired. For example, the schools under study revealed that there are no learners books in Braille form in all the subject at secondary level and that all the books were in print that learners can use for the suppose of studying. At national level, the study disclosed that Zambia has only one special library, the Zambia National Library and Cultural Centre for the Blind, situated in

Chilenje South, Lusaka. This means that only learners with visual impairment who live in Lusaka are the ones who make use of this library. As such, this has a negative effect on the acquisition of skills found in the expanded core curriculum.

In line with this Kapinga (2012) comments that the inadequacy of learning materials leaves the special educational teachers with no option but to transcribe that is converting work from print to Braille on daily basis. The transcription of these books does not only consume a lot of time but also create overload on the part of the teachers. Usually, work overload leads to frustration that in most cases results in ineffective teaching. This in the end translates in poor acquisition of skills found in the expanded core curriculum. Similarly, Mastropieri and Scruggs (2010), acknowledges that low performance of the learners with visual impairment is primarily caused by inadequate teaching and learning materials. Additionally, Sapp and Hatlen (2010), points out that the insufficiency of instructional materials reduces effective teaching and makes learning difficult to visually impaired.

The other challenge that emanated from the study was inadequate funding in schools by the government. From the interviews, all the school administrators alluded to the fact there is inadequate funding by the central government which makes acquisition of equipment and materials for the learners with visual impairment a difficult task.

In terms of knowledge of teaching specific areas found in the expanded core curriculum, the study revealed that most teachers do not have knowledge of teaching specific areas. One reason put forward was that in most cases teachers were using strategies common to all students. This emanate from colleges and universities where students are trained to handle all disabilities without going into details in each specific disability. This is supported by Peters (2003) who postulate that teaching learners with visual impairment in specific areas is a challenge as it requires dedication, time and experience in a particular skill.

Muwana (2012), argues that the current special education training in both universities and colleges require that students master all the disabilities by the time they graduate.
For example, at the Zambia Institute of Special Education, just like at UNZA, students are trained to handle all disabilities, suggesting that every special education teacher qualifies to teach learners of every disability. However, authors like Alur (2002), have argued that it is not possible to master all the skills required for all of the disabilities. He argues that in order to adequately teach any of the disability groups, one needs to spend more time in understanding that particular disability. These findings are consisted with those of Bunch (1997) who argued that inadequacy of qualified teaching stuff is due to the current special education training at the colleges and universities which is too general.

Similarly studies done in Temeke and Same districts, in Tanzania prove that teachers do not have enough knowledge of teaching in specific areas found in the Expanded Core Curriculum (Lewis & Little, 2007; Miles, 2003; Mmbaga,2002). Additionally, (Kesiktas and Akcamete, 2011; Simon *et al*, 2010) from the study done in Turkey and Spain point out that lack of knowledge among teachers seems to be a global problem. The study recorded that the majority of the teachers fail to modify most of the teaching and learning aids such as books, posters, figures or materials that show or depict the diverse images in real life situation.

In terms of the learning environment, the majority of the respondents (80%) that is 45 of the 56 respondents of four administrators, 20 teachers and 32 learners revealed that most of the learners with visual impairment do not have ample classroom space to access all the areas freely. Lack of class room space can be attributed to overcrowding, which ranges from sixty to seventy per class.

For example the study revealed that at one school there were four learners with visual impairment together with 50 sighted learners. This is contrarily to what UNICEF (2012) states that children with special needs learn best in an environment that has been adapted

to suit their individual needs. The findings of the current study are consistent with studies on the inclusive education in Zambia conducted by Kalabula (1991), Moberg and Kasonde-Ng'andu (2001) and Mandyata(2002) who clearly indicate that most schools do not have facilities or resources conducive for inclusive education thereby excluding a lot of children with disabilities from accessing education in schools. All in all it can be noted that most of the schools where the learners with visual impairment are, are not favorable for acquisition of skills in the areas of the expanded core curriculum.

Chapman and Stone (1989:621), suggests that the school environment needs to be modified in order to increase safety and access to buildings and classrooms. For example, the learners with visual impairment children may be comfortable with lifts instead of stairs; toilet facilities may be adapted to make them easily accessible to the learners with visual impairment. This is supported by Welsh and Blash, (1980:79) who state that ‘‘the physical buildings need to be constructed in such a way that they must allow easy access to pupils with disabilities’’. Thus, floors must not be so shiny or slippery as they will make mobility very difficult. Rooms must have a good lighting system to help those with low vision.

CHAPTER SIX

CONCLUSION, RECOMMENDATIONS AND SUGGESTION FOR FUTURE RESEARCH

This chapter provides a summary of this study. It also presents the conclusion and the recommendations of this study.

6.0 Conclusion

The aim of this study was to investigate the nature and implementation of the Expanded Core Curriculum in schools for the visually impaired. In investigating this curriculum, the following parameters have been discussed: establishment of the different areas of the Expanded Core Curriculum that are being implemented: ascertain teaching strategies used by the special education teachers in the delivery of the areas of Expanded Core Curriculum and the challenges faced by special education teachers in implementing the areas of the expanded core curriculum. The following conclusions have been drawn:

The study has concluded that respondents were able to identify some areas found in the Expanded Core Curriculum. However, all respondents were not aware of the term ‘Expanded Core Curriculum’ for the visually impaired.This could be attributed to the fact that this term has been replaced with other terms such “supplementary curriculum”, "disability-specific skills" or "visual -related skills." The others factor could be that there is lack of clarity in the syllabus on how these specific areas of the Expanded Core Curriculum in classrooms must be implemented. This can be justified by the study done in Tanzania by Larsson et al. (2010), who points out that in most developing countries, there are no clear policies and documents to guide the curriculum for the visually impaired.

Regarding the teaching strategies used by the special education teacher, the study revealed a number of strategies that are used which include expository methods, question and answer, cooperative learning, peer teaching, and demonstration. However, the study deduced that most teachers use expository teaching strategy in the teaching process. Many respondents cited high pupil-teacher ratio as being the contributing factor

in using teacher centred methods. This contradicts the recommendations made by Gallagher et al. (1998) who recommended that a class for the learners with visual impairment ought to comprise between two to four learners if they are to learn effectively.

The study also revealed a number of challenges that affect effective implementation of different areas of the Expanded Core Curriculum. These included: Lack of the syllabus guidelines on the implementation of the Expanded Core Curriculum, High learner-teacher ratio, Lack of teaching and learning materials, School environments not being disability friendly. These challenges were in line with studies carried out by (Sapp and Hatlen, 2010: Scruggs 2009) who have outlined similar challenges in their studies.

The study therefore, calls for urgent implementation of the Expanded Core Curriculum in all the schools for the learners with visual impairment a path to meeting the international education target in a timely and sustained manner. The implementation of this curriculum needs a corrective approach. If not, the education of learners with visual impairment will remain undeveloped and insignificant. For example the EFA Global monitoring report (2011) estimated that given current trends, nearly 72 million learners with visual impairment will not acquire the needed skills to help them live independently. It is evident that the Expanded Core Curriculum has the capacity to prepare learners with visual impairment by systematically providing them with an additional set of skills in nine critical areas to help them to compensate on their loss of sight.

6.1: Recommendations

In view of the above findings, the researcher recommends that;

(i) The government through the Ministry of General Education should create policies that will involve parents and other professionals in the learning of the learners with visual impairment in different areas of the expanded core curriculum.

(ii) The government through the Ministry of General Education should ensure that the syllabi clearly outline all the different areas that focus on the additional set of skills to learners which are found in the expanded core curriculum.

(iii) Ministry of General Education should ensure that schools for the learners with visual impairment implement the Expanded Core Curriculum that will be able to systematically equip the learners with an additional set of skills.

(iv) The government through the Ministry of General Education should provide teachers with adequate equipment and materials for the learners with visual impairment to learn all the different areas of the expanded core curriculum.

(v) The government through the Ministry of general Education should ensure that the Expanded Core Curriculum is used in all schools for the visually impaired.

(vi) Teachers should use teaching strategies that will effectively help learners acquire the needed skills. For example the use of learner-centered approach that includes peer teaching, cooperative learning and individualized teaching.

6.2 Suggestion for future research

In view of the above findings; there is need to conduct a similar study in other parts of the country in order to compare the finding of this study and what may be happening in other schools for the visually impaired.

REFERENCES

Adelson, E. (1983). *Precursors of early language development in children born blind from birth*.In A. Millis (ED.), Language acquisition in the blind child (pp. 1-12). San Diego College- Hill Press.

Agran, M., Hong, S. & Blankenship, K. (2007). *Promoting the self-determination of studentswith visual impairment:* Reducing the gap between knowledge and practice *Journal of Visual Impairment & Blindness, 101*, 453-464.

Allan, J. (2002). Environmental considerations for assistive technology. Retrieved May 7, 2014 from http://www.tsbvi.edu/technology/environment.htm

Allan, J., & Stiteley, J. (2006). Principles of assistive technology for learners with visual impairment. Retrieved May 7, 2014 from http://www.tsbvi.edu/technology/principles.htm

Als, H. (1982). *The unfolding of behavioral organisation in the face of a biological violation.*Tronick (Ed.), Social Interchange in Infancy: Affect, cognition, and communication (pp.125-160). Baltimore: University Park Press.

Alberta Education. (2010). Inspiring action on education. Retrieved from https://i\\deas.education.alberta.ca/media/2905/inspiringaction%20eng.pdf

Alur, M. (2002) *Special Needs Policy in India. Education and Children with Special Needs: From Segregation to Inclusion*, Sage Publications, New Delhi.

American Foundation for the Blind. (2008). Educating learners with visual impairment for inclusion in society.RetrievedAugust30,2014

American Foundation for the Blind. (2005). Educating learners with visual impairment for inclusion in Association to States for the Education of Children with Disabilities. (2006). 34 C.F.R. Part 300.

Baird, A. & Goldie, D. (1979). *Activities and Experiences develop Spatial and Sensory Understanding*. Teaching exceptional Children, 11(3), pp. 116-119

Barraga, N. & Erin, J. (1992). Visual Handicaps & Learning. Austin, Texas:Pro-ed.

Best,A.B. (1992).*Teaching Children with Visual Impairment.* Milton Keynes: Open University Press.

Bell, J. (2005). *Doing your research project: a guide for first-time researchers in education, health and social science*. Maidenhead: Open University Press.

Berk, L. E. (1992). *Scaffolding children's learning: Vygotsky and early childhood education* (Vol. vol. 7). Washington, D.C.: National Association for the Education of Young Children.

Bishop, V.E. (2004). Educational inclusion: Premise, practice, and promise. Retrieved August 30, 2014 from http://www.icevi.org/publications/icevix/wshops/0053.

Biklen, A.J. and Bogden, E.C. (1982). *Qualitative Research For Education: An Introduction To Theory And Methods.* Boston: Allyn and Bacon, Inc.

Blankenship,K. (2007). Iowa Expanded Core Curriculum resource guide. Iowa Department of Education.

Burke, J. and Christenson, J. (2004). *Education Research: Quantitative, Qualitative and Mixed Approaches.* London: Pearson.

Bunch, G. Lupart, Brown M. Resistance and Acceptance: Educator attitudes to inclusion of students with disabilities. Ontario: NewYork University, 1997

Brennan, W. (1987). *Curriculum for Special Needs*. Milton Keynes: The Open University Press.

British Columbia Ministry of Education. (2008). Students with visual impairment. Special Education. Retrieved April 14, 2014 from http://www.bced.gov.bc.ca/specialed/visimpair

Brown,C. and Beamish, W. (2012). Consensus about program quality: An Australian study in early childhood special education. Saarbrucken, Germany

Central Statistic Office (2010) *Zambia demographic health survey*, calvarton, Maryland: CSO and Maro international Inc

Central Statistical Office (2010), *Living Conditions Monitoring Survey III (LCMS III)*. Lusaka: Central Statistical Office.

Celeste, M. (2007). Social skills intervention for a child who is blind. Journal of Visual Impairment & Blindness, Sep 2007, v101, n9, Academic Research Library. Retrieved April 3, 2014 from

Chapman, E.K. and Stone. J.M. (1989*), The Special Needs in Ordinary Schools: The Visually Handicapped Child In Your Classroom.* London, Cassell Educational LTD

Charles, C.M and Malian, I.M (1980). The Special Student. St. Louis: CV. Mosby.

Chilufya, J. (2005). "Parents and teachers' attitudes towards inclusive education in selected schools of Kalulushi district". Unpublished MEd dissertation, University of Zambia.

Christopher (1998) Sports and Self-Confidence Relationship. Retrieved May 16,2014 from http://www.msp.sports.bn/ Cocurriculum/departments.htm

Cohen, D. (1999). *National transition networking conference for educators of the blind and visually impaired.* Howe's Now: Council of Schools for the Blind, 5, 10.

Cohen, L. and Manion, L., (2000) *Research Methods in Education*. 4th ed. London: Routledge.

Cohen, L., Manion, L. & Morrison, K. (2006). *Research Methods in Education.* London:Routledge: Taylor & Francis group.

Corn, A. L., & Koenig, A. J. (1996). *Foundations of low visual : Clinical and functional perspectives*. New York: American Foundation for the Blind.

Corn, A. L., De Priest, L. B., & Erin, J. N. (2000). Visual efficiency. In A. J. Koenig & M. C. Holbrook (Eds.), *Foundations of education: Instructional strategies for teaching children and youths with visual impairment* (2nd ed. Vol. 2, pp. 464-499). New York: AFB Press.

Curriculum Development Centre (2012), *Zambia education curriculum frame work.* Ministry of Education, Lusaka: Zambia.

Curriculum Development Centre (2013), *Zambia High School Education-Geography High School Syllabus, grade* 10-12, Lusaka, CDC.

D'Andrea, F.M. & Barnicle, K. (1997). Access to information: Technology and Braille. In D.P. Wormsley & F.M D'Andrea. Instructional strategies for braille literacy. New York: American Foundation for the Blind,

Dalen, M. (1982). *Focus on Co-Teaching as a Special Educational Provision . Granasen: National Post-Graduate College of Special Education.*

DeMario, N. C, & Caruso, M. B. (2001). *The Expansion of Outreach Services at Specialized Schools for Learners with visual impairment*. *Journal of Visual Impairment & Blindness, 95*,488-491.

DeMario, N., Rex, E, & Morreau, N. (1990). *The acquisition of elementary-level employment skills by learners with visual impairment*. Journal of Visual Impairment &Blindness, pp. 84, 456-460.

DeLaGarza, D. V. & Erin, J. N. (1993). *Employment Status and Quality of Life of* Graduates of a State Residential School. *Journal of Visual Impairment and Blindness,87,* 229-233.

Dimigen, G., Roy, A. W., Horn, J., & Swan, M. (2001). Integration of Visually Impaired Students Into Mainstream Education: Two Case Studies. [Electronic Version]. *Journal ofVisual Impairment & Blindness, 95*,161-164.

Dote-Kwan, J., Chen, D., & Hughes, M.(2001). *A national survey of service providers who work with young children with visual impairment*. *Journal of Visual Impairment & Blindness, 95,* 325–337.

ECZ, 2001-2010. Grade 9 And 12 School Examination Results. Lusaka: ECZ

Eric, W. (2009). *Research Methods In Education*. London: McMillan Publishers.

Erin, J. N. (1993). *Inclusion: What do we want it to mean to schools for students with visual disabilities?* Journal of Visual Impairment & Blindness, 87 (6), 224-226.

Erin, J. N. (1993). *The Road Less Traveled:* New Directions for Schools for Learners with visual impairment. *Journal of Visual Impairment & Blindness, 87,* 219-223

Erin, J. N. (2003). *Educating Learners with visual impairment.* (ERIC EC Digest E653). Council for Exceptional Children, Information Center on Disabilities and Gifted Education. Retrieved August 6, 2014, from <Http://ericec.org/digests/e653.html>.

Ferrell, K. A. (1985). *Parents as partners and advocates*. *Journal of Visual Impairment and Blindness, 79,* 423-427.

Ferrell, K.A. & Spungin, S.J. (2007). *The Role and Function of the Teacher of Students withVisualImpairment*(CECpositionpaper)http://community.cec.sped.org/DVI/resourcesportal/positionpapers

Friedman, C.T. (1986). *Interaction and Attachment*: Determinants of individual differences in a sample of learners with visual impairment one-and two-year-olds and their mothers. Unpublished doctoral dissertation, University of California, Berkeley

Gallagher, J., Kirk, S., Coleman, M. & Anastasiow.N.(1998). *Educating Exceptional Children*. Houghton: Mifflin Harcant Publishing Company.

Goudiras, Dimitrios B. Papadopoulos, Konstantinos S. Koutsoklenis, Athanasios Ch. Papageorgiou, Virginia E. Stergiou, Maria S. (2009): *Factors affecting the reading media used by learners with visual impairment adults*. In: British Journal of Visual Impairment. 2/2009, 111-127.

Griffin-Shirley, N. & Nes, S. L. (2005). Self-esteem and empathy in sighted and learners with visual impairment preadolescents. Journal of Visual Impairment & Blindness. 99 (5), 276- 285.

Gronlund, A., Lim, N., & Larsson, H., (2010). *Effective Use of Assistive Technologies for Inclusive Education in Developing Countries: Issues and challenges from two case studies.* International Journal of Education and Development using Information and Communication Technology (IJEDICT), 2010, Vol. 6, Issue 4, pp.5-26.

Haggins J. M. & Hallahan, D. P. (2005). Special education: What it is and why we need it. Boston, MA: Pearson Education, Inc.

Haibach, P., Lieberman, L.J., & Pritchett, J. (2011), Balance in adolescents with and without visual impairment, *Insight Journal, 4*, 112-121.

Hallahan, D. and Kauffman, M (1991) '*Exceptional Children, Introduction to Special Education'.*Allyn and Bacon: Boston.

Hatlen, P. (1990). Meeting the unique needs of pupils Us with visual impairment. *RE.view 22(2),* 79-82.

Hatlen, P.H. (1993). *A Personal Odyssey on Schools for Blind Children*. Journal of Visual Impairment & Blindness, 87 (6), pp. 171-173.

Hatlen, P. (1996). *The Core Curriculum for Blind and Learners with visual impairment Students,* Including Those with Additional Disabilities. Rehabilitation and Education for Blindness and Visual Impairment, 28 (1), 175-182.

Hatlen, P. (1996). The core curriculum for blind and learners with visual impairment students, including those with additional disabilities. RE:view, 28(1), 25-32.

Hatlen & Stryker (1996). National Agenda for the Education of Children and Youths with Visual Impairment, Including Those with Multible Disabilities. Orientation and Mobility in the Public Schools. *New York*

Hatlen, P. and Stryker (1996). *The Core Curriculum for Blind and Learners with visual impairment students, Including those with Additional Disabilities.* Retrieved November 29, 2014, fromhttp://www.tsbvi.edu/Education/corecurric.htm

Hatlen, P. (1997). The core curriculum for blind and learners with visual impairment students, including those with additional disabilities. ANZAEVH Conference Staying ahead in changing times. Adelaide. Keynote Addresses: 1-10

Hatlen, P. (2000). Historical perspectives. In A. J. Koenig & M. C. Holbrook (Eds.), Foundations of education: Vol. 1. History and theory of teaching children and youths with visual impairment (2nd ed., pp. 1-54). New York: AFB Press.

Hatlen, P. (2002). *The Most Difficult Decision: How to Share Responsibility Between Local Schools and Schools for the Blind*. [Electronic Version]. *Journal of Visual Impairment & Blindness, 96.*

Hatlen,P.(2003).*Evolution of Schools for the Blind in the21stCentury*. Electronic Version]. *Journal of Visual Impairment & Blindness.*

Hatlen, P. (2004). *Is Social Isolation a Predictable Outcome of Inclusive Education*? [Electronic Version]. *Journal of Visual Impairment & Blindness, 98.*

Harley, R. K. & English, W. H. (1989). *Support Services for Learners with visual impairment Children in Local Day Schools*: Residential Schools as a Resource. *Journal of Visual Impairment and Blindness, 83*, 403-406.

Hill, E. (1986). *Orientation and Mobility. In G. School (Ed.), Foundations of Education for Blind and Visually Impaired Children and Youth, New York*; American Foundation for the Blind.

Healy, (1982). Developing personal strengths, choosing more effective behaviors: Control theory, reality therapy and quality management. In R. Conway & J. Izard (Eds.),*Student behaviour outcomes: Choosing appropriate paths* (pp. 1-10). Melbourne, VIC:Australian Council for Educational Research

Hebbeler, K. (1993,). Traversing the Mainstream: Regular Education and Students With Disabilities in Secondary School. A Special Topic Report From the National Longitudinal Transition Study of Special Education Students. SRI International. Menlo Park: CA

Holbrooke, M. C., & Koenig, A. J. (Eds.). (2000), *Foundations of education, second edition*. New York: American Foundation for the Blind Press.!

Huebner, K. M., Merk-Adams, B., Stryker, D., & Wolffe, K. E. (2004). *The national agenda for the education of children and youths with visual impairment, including those with multiple disabilities--Revised.* New York: AFB Press.

Houwen, S., Hartman, E., Jonker, L., and Visscher, C. (2010) Reliability and validity of the TGMD-2 in primary-school-age children with visual impairment. Adapt Phys Activ Q. 2010;27:143-59.

Hudson, L. J. (1997). Classroom collaboration. Watertown, MA: Perkins School for the Blind.

ICEVI *Africa Region in collaboration with SSI and CBM*. Africa regional preparation workshop (3-5 December, 2007). "Curriculum for learners with visual impairment". Kampala: Uganda Institute for Special Education.

Johnsen, B. H. (2001). *Curricula for the Plurality of Individual Learning Needs*: Some Thoughts concerning Practical Innovation towards an Inclusive Class and School. In B. H.

Johnsen & M. D.() Skjørten, (Eds.), *Education – Special Needs Education: An Introduction*. Oslo: Unipub.

Johnson, R. T., & Johnson, D. W. (1986). *Action research: Cooperative learning in the Science Classroom.* Science and Children, 24, 31-32.

Kalabula, D. M. (1991). *A pilot of socio metric survey of friendships among visually handicapped and sighted pupils in an integrated secondary school in Zambia*. *The British Journal of Visual Impairment, 9*, 52-54.

Kalabula, D.M (1991) *Integrating visually handicapped children into ordinary secondary schools.* Birmingham University. (Unpublished Ph.D. Thesis)

Kalabula, D.M. (2000). *Inclusive Education In Africa: A Myth Or Reality? Zambian Case Study.* Manchester: International Special Education Congress.

Kalabula, D. M. and Mandyata, J. M. (2003). *Inclusive Education Practices in Zambia.* htt://www.icevi.org/publications/icevi_wc

Kalabula, D.M. (2005) '*Inclusive Education for children with visual impairment:* Situational Analysis. University of Zambia

Kalabula, D. M. (2007).Special Education In Zambia:Musumali Press. Lusaka

Kamionka, M. (2002). 8 Report on theme 3: Classroom management. 3rd Workshop on Training of Teachers of the Visually Impaired in Europe. ICEVI, Europe. Retrieved April 16, 2014 from http://www.icevi-europe.org/tt/ttw3/topic8.html

Kapinga, O. (2012). *Professional Development among Educators Pursuing a B. Ed. Program in Special Education in Tanzania.* A Study of Motives and Perceived Outcomes. Åbo Akademi University Press.

Kasonde-Ngandu, S. & Moberg, S. (2001). Moving Towards Inclusive Education. A Baseline Study on the Special Educational Needs in the North -Western and Western Provinces of Zambia. Basic Education Sub-Sector Investment Programme BESSIP.

Kasonde-Ngandu, S. N. (2013). *Writing a research proposal in educational research.* Lusaka: UNZA press.

Kasonde-Ngandu, S. N. Ndhlovu, D., and Phiri, J. T. (2009). Impact of guidance and counseling services on high school pupils in Zambia. Un published Research. University of Zambia.

Kauffman, M and Hallahan, D. (1994). *Exceptional children, introduction to special education.* Boston: Allyn and Bacon.

Katsiyannis and Maag (2001).Americans With Disabilities Act and the Supreme Court: Implications for practice. [Electronic Version].

Kelly, J. (1981). *Recreation Programming for Visually Impaired Children and Youth*. New York: American Foundation for The Blind.

Kelly, M.J. (1991). Education in a Declining Economy: The case of Zambia, 1975 – 1985. Washington D.C. World Bank.

Kelly, M, J. (1999). Origin and Development of education in Zambia from pre-colonial times to1996. Lusaka: Image Publishers limited

Kesiktas, A.D. & Akcamete, A.G. (2011). *The relationship of Personnel Preparation to the Competence of Teachers of Learners with visual impairment in Turkey.* AFB.

Khoa, (2006) N.V. '*Paper Building* a *Cost- Effective Braille Book Production System* in *Vietnam'*Khoang@yahoo. Com.

Kirk, J. & Miller, M. L. (1997). *Reliability and Validity in Qualitative Research.* Beverly Hills: Sage Publications.

Kirk,S., Gallagher, J., Coleman, M. & Anastasiow, N. (2009). *Educating Exceptional Children (13th ed)* Beverly Hills: Hougthon Mifflin Company.

Kirchner, C., Johnson, G., & Harkins, D. (1997). Research to improve vocational rehabilitation: Employment barriers and strategies for clients who are blind or visually impaired. *Journal of Visual Impairment and Blindness, 91*, 377-392.

Koenig, A. J., & Holbrook, M. C. (2000). *Planning instruction in unique skills*. In A. J. Koenig & M. C. Holbrook (Eds.), *Foundations of education: Instructional strategies for teaching children and youths with visual impairment*

Koga, N. & Hall, T. (2004). *Curriculum Modification.* Wakefield: NCAGC.

Kombo, D.K. And Tromp, D.L.A. (2006). *Proposal and Thesis Writing. An Introduction*.Nairobi: Pauline's Publications Africa.

Krebs, C. S. (2002). *Self-Advocacy Skills*: A Portfolio Approach. [Electronic Version].*RE:view, 33,* 160-164.

Lahav, O. Mioduser, D.,&(2003). *Conference Proceedings; Spelling Difficulties, "Pupil" System: Computer Adaptive Remedial-Treatment Of Low-Visual* Children. Tel Aviv: School Of Education Tel Aviv University Israel.

Larsson, H., & Gronlund, A., Lim, N., (2010). Effective Use of Assistive Technologies for Inclusive Education in Developing Countries: *Issues and challenges from two case studies.* International Journal of Education and Development using Information and Communication Technology (IJEDICT), 2010, Vol. 6, Issue 4, pp.5-26.

Lewis, I. & Little, D. (2007). *Report to Norad on Desk Review of Inclusive Education Policies and Plans in Nepal, Tanzania, Vietnam and Zambia*. Retrieved from:http://www.eenet.org.uk/resources/docs/Policy_review_for_NORAD.pdf

Lewis, S. (2002). Some thoughts on inclusion, alienation, and meeting the needs of children with visual impairment. (Editorial). RE:view 34.3 (Fall 2002): p99(3). Retrieved April 18, 2014

Lincoln, Y.S. & Guba, E.G. (1985).Naturalistic inquiry. London: Sage.

Lipsky, D.K. & Gartner, A. (1997). *Inclusion and School Reform: Transforming America's Classrooms.* Baltimore: Paul Brookes Publishing Co. Marsh, C.J. (2001) *Perspectives: Key Concepts for Understanding Curriculum.* London: Falmer Press

Lohmeier T. E. (2003) Neurohypophysial hormones. Am. J. Physiol. Regul. Integr. Comp. Physiol. 285, R715–R717

Lohmeier L.K.(2005) *an analysis of disability specific curriculum in a specialized school for the blind: a case study the university of Arizona a dissertation submitted to the faculty of the* Department Of Special Education, Rehabilitation And School Psychology

Lohmeier, K., Blankenship, K. E., & Hatlen, P. (2009). Expanded Core Curriculum: Twelve years later. Journal of Visual Impairment & Blindness, 103, 103-112.

Lueck, A.H. (1999). Setting curricular priorities for learners with visual impairment. RE:view, 31 (2): 54-66.

MacCuspie, P.A. (1996). 'Implications of visual impairment for social interaction.' In P.A. MacCuspie, Promoting acceptance of children with disabilities: From tolerance to inclusion. Halifax, Nova Scotia: APSEA.

Mandyata J M (2002) *Teachers' Views on Inclusive Practices: A case study on Basic schools in Kasama District,* Zambia (Unpublished M Ed dissertation, University of Zambia).

Mandyata, J.M. (2003). Teachers' views on inclusive Practices: A case of basic schools in Kasama District, Zambia: University of Zambia (Unpublished MEd Dissertation. – UNZA)

Martin and Jane (1983). "What Should We Do with a Hidden Curriculum When We Find One?" The Hidden Curriculum and Moral Education. Ed.California: McCutchan Publishing Corporation,

Marsh, C. J. and Willis, G. (2003). *Curriculum.* Alternative Approach. Ongoing Issues. Merrill: Prentice Hall. New.

Marsh, C., & Willis, G. (2008). Curriculum: Alternative Approaches, Ongoing Issues. New Jersey: Prentice Hall.

Marsh, C.J. (2007) *Perspectives: Key Concepts for Understanding Curriculum.* London: Falmer Press.

Mastropieri, M.A. & Scruggs, T.E. (2010). *The Inclusive Classroom: Strategies for Effective differentiated Instruction.* New Jersey: Upper Saddle River.*A study of Motives and Perceived Outcomes*. Abo: Abo Academi University Press.

Martin (1983). "What Should We Do with a Hidden Curriculum When We Find One?" The Hidden Curriculum and Moral Education. Ed. Giroux, Henry and David Purpel. Berkeley, California: McCutchan Publishing Corporation, 122–139.

Martin and Jane (1983). Impact of graduate class on attitudes toward inclusion, perceived teaching efficacy and knowledge about adapting instruction for children with disabilities in inclusive settings. *Teacher Development, 7*, 473-494.

McBroom, L. W., & Tedder, N. E. (1993). Transitional services for youths who are visually impaired. *Journal of Visual Impairment and Blindness, 87*, 69-72

McLoughlin, J.A. & Lewis, R.B. (2005). *Assessing Students with Special Needs (6th Ed).* New Jersey: Pearson Education, Inc.

Ministry of Education (1992). Focus on Learning. Lusaka: MOE. In Kasonde- Ngandu, S. &Moberg, S. Moving Towards Inclusive Education. A Baseline Study on the Special

McNeil, J.M. (1993). Americans with disabilities; 1991-1992. Current Population Reports, (Series 70, No.33). Washington, DC: U.S. Government Printing Office.

Miles, M.B. & Huberman, A.B. (1994).*Qualitative Data Analysis: An Expanded Source Book (2nd Ed.).*Thousand Oaks, CA: SAGE.

Miles, S. (2003). *Learning from Differences: Understanding Community Initiatives to Improve Access to Education.* Retrievefromwww.eenet.org.uk/

Miller, G. (1993). Expanding vocational options. *RE:view, 25*, 27-31.

Ministry Of Education (1996). *Educating Our Future.* Lusaka: Government Printers.

Ministry Of Education (1997). *The National Reading Committee*. Lusaka: GovernmentPrinters.

Ministry of Education (MOE) 2000. *The Basic School Curriculum Framework*.Lusaka: Curriculum Development Centre.

Ministry of Education (MOE) (2001). *Primary School Enrolments by Province by Gender*. Lusaka: MOE Planning Unit. In Kasonde-Ngandu, S. & Moberg, S. Moving Towards Inclusive Education. A Baseline Study on the Special Educational Needs in the North -Western and Western Provinces of Zambia. Basic Education Sub-Sector Investment Programme BESSIP, p.6

Ministry Of Education, (2008). *National Statistical Bulletin*. Lusaka: Government Printers.

Ministry of Education, (2009). *Braille Syllabus. Lusaka*: Curriculum Development Center.

Educational Needs in the North -Western and Western Provinces of Zambia. Basic Education Sub-Sector Investment Programme BESSIP, pp.7-8.

Ministry of Education (MOE) (1996) Educating Our Future. National Policy on Education. Lusaka: MOE.

Ministry of Education (MOE) (2000).The Basic School Curriculum Framework. Lusaka: Curriculum Development Centre.

Ministry of Education (2001). *Teachers Curriculum Manual. Lusaka:* Curriculum Development Centre.

Ministry of Education (2013). *The Zambia education curriculum framework. Lusaka:* Curriculum Development Centre.

Ministry of Education (2006). *Educational statistical bulletin.* Lusaka: Ministry of Education.

Ministry of Education (MOE) (2012).The Basic School Curriculum Framework. Lusaka: Curriculum Development Centre.

Ministry of Education (2009) *Educational Statistical Bulletin 2009* (Preliminary Edition). Lusaka: Ministry of Education.

Ministry of Finance and Planning (2005) *Fifth National Development Plan (FNDP) 2006 to 2010*. Lusaka: Ministry of Finance.

Ministry of Finance and National Development, (2013) *Revised Sixth National Development Plan*, Republic of Zambia.

Mitchell, D. (2008).*What Really Works in Special and Inclusive Education: Using Evidence Based Teaching Strategies.* London: Routledge: Taylor & Francis Group.

Mmbaga, D. R. (2002). *The inclusive classroom in Tanzania: Dream or reality?* Institute of International Education, Stockholm University.

Moberg, S. & Kasonde-Ngandu, S. (2001). *Moving Towards Inclusive Education.A Baseline Study on the Special Educational Needs in the North -Western and Western Provinces ofZambia*. Basic Education Sub-Sector Investment Programme BESSIP.

Mulenga, P. (2007). Relationship between Social Environment of Persons with Visual Impairment and their Desire to Work. A Case of Lusaka and Ndola. Lusaka

Muwana F .(2012). Zambian Student Teachers` Attitudes toward including students with disabilities in General Education Classrooms.PhD thesis, University of Illinois at Urbana-Champaign.

Nagle K. (2001). Transition to employment and community life for youths with visual impairment: Current status and future directions. Journal of Visual Impairment and Blindness 95(12)

Ndhlovu, D., Kasonde-Ngandu, S.,& Phiri, J. T., (2012). 'Relevance of Guidance and Counseling Services Offered to Pupils in Selected Schools in Zambia.' Journal of Education, 3, (2).

Ndhlovu, D., (2012). "Research methods in special education –EPS 301". University of Zambia.

Ndhlovu, D., (2014). Theory and Practice of Guidance and Counselling. Lusaka: (in press)

Ndhlovu, D. and Kasonde-N, S. (2015). *The challenges in teaching learners with visual impairment in Zambia* Kwame NkrumahUniversity Kabwe –Zambia

Oluoch, G. P. (1982). *Essentials of Curriculum Development*. Nairobi: Elimu Bookshop Ltd.

Pagliano, P. (2005). Using the senses. In Ahsman, A. & Elkins, J. Educating Children with Diverse Abilities (2nd ed.). Frenchs Forest, NSW: Pearson Education Australia, 2004. P. 320-359 63 Pagliano, P. (1998). Students with visual impairment. In A. Ashman, and J Elkins, Educating students with special needs. (3rd ed). Sydney: Prentice Hall: 383- 416.

Palmer, C.D. (2005). Issues and challenges in the interface between the regular school curriculum and the Expanded Core Curriculum Visual 2005, London . International Congress Series 1282 ,www.ics-elsevier.com: 913-916.

Palmer, C.D. (1998). 'Social skills.' In P. Kelly & G. Gale (Eds.), Towards excellence: Effective education for students with visual impairment. Sydney: The Royal New South Wales Institute for Deaf and Blind Children.

Pauline, D. (2008). *Including Children with Visual Impairment in Mainstream Schools: A practical Guide.* London: David Fulton Publishers.

Paula, O. (2004). Aims of Education and Curriculum Planning in Special Education Units and Schools in Lusaka, Zambia.A Qualitative Study of Special Education Teachers' Views and Classroom Practice. Unpublished thesis, University of Jyvaskyla

Penda, A., Ndhlovu, D. and Kasonde-Ng'andu,S. (2015) *The challenges in teaching learners with visual impairment in Zambia.* International Journal of Multidisciplinary Research and Development Volume:2, Issue:4, 157-166

Peters, S.J. (2003). *Achieving Education for All by Including those with Disability and Special Educational Needs.* World Bank.

Pratt, D. (1994). *Curriculum planning: A handbook for professionals*. Fort Worth: Harcourt Brace College Publishers.

Pugh, G.S., & Erin, J. (Eds.). (1999). Blind and Visually Impaired Students: Educational Service Guidelines. Watertown, MA: Perkins School for the Blind.

Raudonis, B.M. (1992). Ethical considerations in qualitative research with hospice patients. Qualitative Health Research**, 2(2)**, 238-249.

Reys, R., Lapan, R., Holliday, G., Wasman, D, (2003). "Assessing the Impact of Standards-Based Middle Grades Mathematics Curriculum Materials on Student Achievement". *Journal for Research in Mathematics Education*: 74–95.

Robinson, W.S. (1951). The logical structure of analytic induction. American Sociological Review 16: 812-818.

Rosenblum. L. P. (2000). Perceptions of the impact of visual impairment on the lives of adolescents. Journal of Visual Impairment & Blindness, July 2000 v94

Roy, A. W. N., Dimigen, G., & Taylor, M. (1998). The relationship between social networks and the employment of visually impaired college graduates. *Journal of Visual Impairment and Blindness, 92*, 423-432.

Sabrine VS, van Willigenburg-van Dijl E, van Houdt K (2009). *Extracurricular Activities at School: The Relationship Between Specialisation in Subject Areas and Exit Level and the Extra-curricular Activities of High School Students.* A Case Study at State College Area High School. State College, Pennsylvania (U.S.A). Utrecht University

Sacks, S. Z. & Silberman, R. K. (1997). Educating Students Who Have Visual Impairment With Other Disabilities. Baltimore: Paul H. Brookes Publishing Co., Inc.

Sacks, S. Z., & Pruett, K. M. (1992). *Summer transition training project for professionals who work with adolescents and young adults*. *Journal of Visual Impairment and Blindness, 86,* 211-214.

Sacks, S. Z., & Wolffe, K. E. (1998). *Lifestyles of adolescents with visual impairment: An ethnographic analysis. Journal of Visual Impairment and Blindness, 92,* 7-17.

Sacks, S. Z., Wolffe, K. E., & Tierney, D (1998). *Lifestyles of learners with visual impairment: Preliminary studies of social networks. Exceptional Children, 64,* 463-478.

Sacks, S. Z., (2010). Psychological and social implications of low visual . In A. L. Corn & J. Erin (Eds.), *Foundations of low visual* : *Clinical and functional perspectives* (2nd ed., pp. 67-96). New York: AFB Press.

Salisbury, R. (2008). *Teaching Pupils with Visual Impairment: A guide to making the School Curriculum Accessible.* London: Routledge: Taylor & Francis Group.

Santrock, J.W. (2010). *Educational Psychology.5th edition.* New york: McGraw Hill.

Sapp,W., & Hatlen, P. (2007). Perceptions of teachers of learners with visual impairment on their preparation to teach the Expanded Core Curriculum. Unpublished manuscript.

Schneekloth, L.H. (1989). Play environments for visually impaired children. *Journal of Visual Impairment & Blindness,83,* 196-201.

Scruggs, T.E., Mastropieri, M.A, & Mc Duffie, K.A. (2010). *Co-teaching in Inclusive Classrooms: A meta-synthesis of Qualitative Research. Exceptional Children*, 73, 392-416.

Silberman, R. K., & Sacks, S. Z. (2007). *Expansion of the role and function of the teacher of learners with visual impairment for students who also have severe/multiple disabilities.* Arlington, VA: Council for Exceptional Children, Divisual on Visual Impairment.

Sightsavers (2010) *Zambia Country Strategy Paper 2009–2013*. Lusaka: Sightsavers.
Zambia Ministry of Education (1996) *Educating Our Future: National Policy on Education*. Lusaka: Ministry of Education.

Simon, C., Echeita, G.,Sandoval, M. & Lopez, M. (2010).*The Inclusive Educational Process of Learners with visual impairment in Spain*: An Analysis from the Perspective of Organization.

Smidt, S. (2009).*Introducing Vygotsky: A guide for Practitioners and Students in Early Years Education.* London: Routledge: Taylor & Francis Group.

Smith, D. W., Kelley, P., Maushak, N. J., Griffin-Shirley, N., & Lan, W. Y. (2010). *Assistive technology competencies for teachers of learners with visual impairment*. *Journal of Visual Impairment & Blindness, 103*, 457-469.

Steinback, S. &Steinback, W. (1996). Inclusion: A guide for Educators. Baltimore: Paul H. Brookes Publishing C

Stone, J. (1995): *Mobility for Special Needs,* London:Cassell

Stryker (1996).National Agenda for the Education of Children and Youths with Visual Impairment, Including Those with Multible Disabilities.

Snyder, G. (2005). *Telephone Interview on Educational Placement Options for Blind and Visually-Impaired Students,* October 6, 2005.(2nd ed., Vol. II, pp. 173-195). New York: American Foundation for the Blind.

Spungin, S.J. & Ferrell, K.A. (2007). *The Role and Function of the Teacher of Learners with visual impairment* (CEC position paper)

Spungin, S.J. (2008). *When You Have a Visually Impaired Student in Your Classroom: A Guide for Teachers. New York : AFB Press*.

Stainback, W., Stainback, S. (1996). Controversial Issues Confronting Special Education: Divergen Perspectives. Needham Heights, MA: Allyn & Bacon.

Student Support Services. (2001). Programming for individual needs: Teaching children Who are blind or visually impaired. Government of Newfoundland and Labrador – Canada. Department of Education

Switlick, D. M. (1997). *Curriculum Modifications and Adaptations*. Needham: Ally and Bacon. National Agenda for the Education of Children and Youths with Visual.

Tan D.L, Pope M.L (2007). Participation in co-curricular activities: Non-traditional student perspectives. College and University: The Journal of the American Association of Collegiate Registrars, 83(1): 2–11

Taylor, D. (2005, March). A Review of Rehabilitation in America: Reflections of the Past,
Observations of the Present, and Speculations about the Future. *The Braille Monitor*.

Thomas and Morrison (1995).Characteristics of Leadership.Retrieved September 3 7,2015 fromhttp://www.redlands.nsw.edu.au./ df/leadership/preparatory_school.pdf.html.

Thurlow, M. (2000). *Standards-based reform and students with disabilities: Reflections on adecade of change.* Focus on Exceptional Children, 32(1). Retrieved March 8, 2002,from Expanded Academic ASAP database

Trief, E., & Feeney, R (2003). Guidelines for a pre-college curriculum for students with blindness and visual impairment. *RE:view, 35*, 137-143.

UNESCO (1994). The Salamanca Statement and Framework for Action. Paper presented at the World Conference on Special Needs Education: Access and Quality, Salamanca, Spain

UNESCO (2001).*Understanding and Responding to Children Needs in Inclusive Classrooms: A guide for Teachers*. Paris: UNESCO.

UNICEF (2003). Examples of Inclusive Education India. Nepal: UNICEF.

UNESCO (2013) "Monitoring progress towards the EFA goals". EFA Global Monitoring Report 2013/14. UNESCO, Paris,

United Nations. (1990). *Conventions on the rights of the child. New York*: Author. Retrieved from http://www2ohchr.org/english/law/pdf/crc.pdf.

United Nations Millennium Declaration. (1990). *Adapted by the General Assembly*, Fifty-Fifth session United Nations. [online] Available from.

United Nations (2006). *The Convention On The Rights Of People With Disabilities*. NewYork: United Nations' Organization.

Urebvu, A. (1985). *Curriculum Studies.* UK. Longman Group.

Vygotsky, L. (1978). *Mind in Society.* London: Harvard University Press

Ward, M. J. (1988). *The many facets of self-determination*. In National Information Center for Children and Youth with Handicaps (Ed.).

Wade, S.E. (2000). *Inclusive Education: A Casebook and Readings for Prospective and Practicing Teachers.New Jersey*: Lawrence Erlbaum Associates, Publishers.

Wagner, Haibach, and Lieberman (2013), *Gross motor skill performance in children with and without visual impairment--research to* practice national Center for Biotechnology Information, U.S. National Library of Medicine

Welsh R. L. & Blash, B. (1980). *Foundations of orientation and mobility*. New York: American Foundation for the Blind,

Webster, A., & Roe, J. (1998). *Children with visual impairment: Social interaction, language and learning*. London: Routledge

Wendy, G. (1996). The Informability manual: Making information more accessible in the light of the Disability Discrimination Act. London: HMSO.

Warren, D. H. (1984). *Blindness and early childhood development* (2nd ed.). New York: American Foundation for the Blind.

Wilson, L. O. (2005). Curriculum: Different types. Retrieved from http://www.uwsp.edu/Education/ lwilson/curric/curtyp.htm

Wolffe, K. (1999). *Addressing transportation concerns of potential employers of people who are visually impaired*. *Journal of Visual Impairment and Blindness, 93*, 252-259.

Wolffe, K., & Johnson, G. (1999). *Teaching job placement techniques to visual rehabilitation professionals*: A working model. *Journal of Visual Impairment and Blindness, 93*, 531-533.

Wolffe, K., & Sacks, S. Z. (1997). *The lifestyles of blind, low visual , and sighted youths: A quantitative comparison*. *Journal of Visual Impairment and Blindness, 91*, 245-257.

Wolffe, K., Sacks, S. Z., Corn, A. L., Erin, J. N., Huebner, K. M., & Lewis, S. (2002). *Teachers of learners with visual impairment:* What are they teaching? *Journal of Visual Impairment and Blindness, 96*, 293-304.

Wolffe, K. E. (1996). *Career education for learners with visual impairment*. *RE:view, 28*, 89-93.

Wolffe, K. E., Roessler, R. T., & Schriner, K. F. (1992). Employment concerns of people with blindness or visual impairment. *Journal of Visual Impairment and Blindness, 86*, 185-187.

Wood, J. (1991). Adapting Instruction for Mainstreamed and at-risk students. (2nd ed.), Toronto: Maxwell MacMillan Limited

Woolfolk, Anita. (2010). *Educational Psychology (11th Edition).* Upper Saddle River, New Jersey: Pearson.

Zambia Agency for Persons with Disabilities (2009). *Research Report On The ConditionsOf Living By Persons With Disabilities In Zambia.* Lusaka: Ministry of CommunityDevelopment and Social Services

APPENDIX 1

THE UNIVERSITY OF ZAMBIA

SCHOOL OF EDUCATION

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY, SOCIOLOGY, AND SPECIAL EDUCATION

APPENDIX 1

FOCUS GROUP DISCUSSION GUIDE FOR THE LEARNERS WITH VISUAL IMPAIRMENT

DIFFERENT AREAS OF THE EXPANDED CORE CURRICULUM THAT ARE BEING IMPLEMENTED

1. (a) what are areas that you need to learn in order to live independently after you complete school?
   (b) Give reasons to the answer in question 1

2. (a) Do you know what the Expanded Core Curriculum for the visually impaired learners is?

   (b) Mention the areas that are found in the expanded core curriculum.

   (c) If you are not aware of the Expanded Core Curriculum what areas must be added for you to acquire skills that will you live independently after school complete?

TEACHING STRATEGIES USED BY THE TEACHERS IN TEACHING THE EXPANDED CORE CURRICULUM

3. Identify the areas of the Expanded Core Curriculum on the school time table?

4. Explain the teaching strategies used by the teacher to teach the Expanded Core Curriculum

5. Are parents and other professionals involved in helping you to learn these areas of the expanded core curriculum?

CHALLENGES FACED BY SPECIAL EDUCATIONAL TEACHERS IN IMPLEMENTING EXPANDED CORE CURRICULUM.

6. What criteria is used to allocate the learners with visual impairment to classes?

7. Is the teacher learner's ratio appropriate in learning these different areas of the expanded core curriculum?

8. Is the school environment conducive for learning these different skills? If not what should be done?

APPENDIX 2

QUESTIONNAIRE FOR TEACHERS

Dear respondents,

I am a post graduate student at the University of Zambia carrying out a research on the nature and implementation of the Expanded Core Curriculum to the learners with visual impairment. You have been selected to participate in this research. The information you will provide is purely for academic use and will be treated with highest degree of

confidentiality. You are therefore required to be as objective as you can possibly be in your responses. You need not to give the details of your identity.

Your cooperation will be highly appreciated, as your contributions to this study will help to improve the implementation of the Expanded Core Curriculum to the visually impaired.

Instructions: Please indicate your response/answer to each question or statement by ticking or filing in the appropriate bank spaces provided

SECTION A: PERSONAL DETAILS

1. Gender (a) Male [ ] (b) Female [ ]

2. Years in service (a) less than 10 years [ ]
(b) Between 11 and 15 years [ ]
(c) Between 16 and 20 years [ ]
(d) Above 21 years [ ]

3. Level of education

a) Ordinary college [ ]
b) College in special education [ ]
c) Special education at university level [ ]
(d) Have degree but not in special education [ ]

SECTION B: Answer the following question
DIFFERENT AREAS OF THE EXPANDED CORE CURRICULUM IMPLEMENTED

4. Below are the different areas of the expanded core curriculum, **tick** the areas that you teach in your class.

A) Social interaction skills	
B) Recreational and leisure skills	
C) Orientation and mobility skills	
D) Independent living skill,	
E) Assistive technology skills	
F) Career education skills	
G) Sensory efficiency skills	
H) Compensatory skills	
I) Self-determination skills	

5. Are these areas important to the visually impaired? Yes [ ] No [ ]

6. If the answer is yes give reasons
(a)…..……..……
(b)……..

7. Are you aware of the Expanded Core Curriculum for the learners with visual impairment?

(a) Yes [ ] (b) No [ ]

8. If the answer is **YES** please outline the different areas of focus for the expanded core curriculum……
…….
…….

9. If the answer is **NO** for question **7,** are these areas necessary in the education of visually impaired?

(a) Very much necessary [ ] (b) Necessary [ ] (c)Not necessary[ ]

TEACHING STRATEGIES USED BY THE TEACHERS IN TEACHING THE EXPANDED CORE CURRICULUM

10. do you evaluate the learners before implementing these areas of the expanded core curriculum? (a) Yes [ ] (b) No [ ]

11. If the answer is **yes** for question **10** at what stage are the learners evaluated?

a) Before they begin learning [ ] b) After they have started learning [ ]
c) They are never assessed [ ]

13. Are these areas of the Expanded Core Curriculum put on the school time table?

Yes [ ] No [ ]

14. If they are indicating on the school time table, how many hours per day do you teach these areas found in the expanded core curriculum?

(a) 40 minutes [ ]

(b) 80 minutes [ ]

(c) 2 hours [ ]

15. To teach these areas do you use an individualized educational plan?

(a) Yes [ ] (b) No [ ] (c) I don't know [ ]

16. Are parents and other professionals involved when teaching these areas of the expanded core curriculum?

(a) Both parents and professionals are involved [ ]
(b) only parents involved [ ]
(c) Both parents and professionals are involved [ ]

17. What teaching strategies do you use in teaching these areas found in the expanded core curriculum?

a) expository [ ]
b) Group work [ ]
c) Peer teaching [ ]
d) collaboration [ ]

18. Do you integrate these areas of the Expanded Core Curriculum or you teach them on their own as separate subject areas?

(a) Yes they are integrated [ ]
(b) No they are taught separately [ ]
(c) they are never taught [ ]

19. List down any materials that you require if you are to effective teach areas of the expanded core curriculum?

a)……..
(d)…….…….
b)…….…….
(e)…….…….……
c)……..
(f)…….…….

20. Are the material in your school adequate in the implementation of the expanded core curriculum?

a) Yes [ ] b) No [ ]

21 If the answer is **NO** what must the school do to ensure that adequate materials and equipment are provided at your school?.....
……...

CHALLENGES FACED BY SPECIAL EDUCATIONAL TEACHERS IN IMPLEMENTING EXPANDED CORE CURRICULUM.

22. Are these areas of the Expanded Core Curriculum examined by the examination council of Zambia at the end of the year?

a) Yes [ ] b) No [ ]

23. Do teachers have teacher group meetings or work shops in school to equip teachers on the areas of the expanded core curriculum?

a) Yes [ ] b) No [ ]

24. How many learners do you have in class …….

25. Is the pupil-teacher ratio appropriate in the implementation of these different areas of the Expanded core curriculum?

(a)Very appropriate (b) appropriate (c) not appropriate

26. If not suggest ways on how the learner teacher ratio can be overcome

……
……
……

27. What challenges do you face in implementing the expanded core curriculum?
……..…..

……..

28. How best can you overcome these challenges?
……..…….
……..
……..
…….

THANK YOU FOR YOUR COOPERATION

APPENDIX 3

QUESTIONNAIRE FOR LEANERS

Dear respondents,

I am a post graduate student at the University of Zambia carrying out a research on the nature and implementation of the Expanded Core Curriculum to the learners with visual

impairment. You have been selected to participate in this research. The information you will provide is purely for academic use and will be treated with highest degree of confidentiality. You are therefore required to be as objective as you can possibly be in your responses. You need not to give the details of your identity.

Your cooperation will be highly appreciated, as your contributions to this study will help to improve the implementation of the Expanded Core Curriculum to the visually impaired.

Instructions: Please indicate your response/answer to each question or statement by ticking or filing in the appropriate bank spaces provided

SECTION A: PERSONAL DETAILS

1. Gender (a) Male [ ] (b) Female [ ]

2. Grade
(a) 8 [ ]
(b) 9 [ ]
(c) 10 [ ]
(d) 11 [ ]
(e) 12 [ ]

3. How old were you at the time you became blind or visually impaired?

a) Since birth [ ]
b) Before the age of five [ ]
c) After the age of five [ ]

SECTION B: DIFFERENT AREAS OF THE EXPANDED CORE CURRICULUM THATARE BEING IMPLEMENTED

(a) what are areas that you need to learn in order to live independently after you complete school?

TEACHING STRATEGIES USED BY THE TEACHERS IN TEACHING THE EXPANDED CORE CURRICULUM

What teaching strategies do you use in teaching these areas found in the expanded core curriculum?

a) expository [ ]

b) Group work [ ]

c) Peer teaching [ ]

d) collabolation [ ]

13. What materials and equipment are used during lessons

(a)……..…

(d)…….

(b)……...…

(e)…….…… ….

(c)……..…

(f)……..……

14. Are these materials adequate in the implementation of the expanded core curriculum?.... if not what is the administration doing to help the situation?

(a)…..……..……

(b)……

(c)……

CHALLENGES FACED BY SPECIAL EDUCATIONAL TEACHERS IN IMPLEMENTING EXPANDED CORE CURRICULUM

How many learners do you have in class …….

Is the pupil-teacher ratio appropriate in your class?

(a)Very appropriate (b) appropriate (c) not appropriate

26. If not suggest ways on how the learner teacher ratio can be overcome

……
……
……

27. What challenges do you face in the process of learning

Yes [ ]

No [ ]

28. If yes what must be done to overcome these challenges?

……..…….

……..

……..

…….

THANK YOU FOR YOUR COOPERATION

APPENDIX 4

INTERVIEW FOR ADMINISTRATORS

Your school has been picked to help in establishing the nature and implementation of Expanded Core Curriculum to the learners with visual impairment.

Instructions: Please indicate your response/answer to each question or statement by ticking or filing in the appropriate bank spaces provided

SECTION A: BACK GROUND INFORMATION

1. Gender (a) Male [ ] (b) Female [ ]

2. Years in service (a) less than 10 years [ ]
(b) Between 11 and 15 years [ ]
(c) Between 16 and 20 years [ ]
(d) Above 21 years [ ]

3. Number of years as an administrator
(a) less than 10 years [ ]
(b) Between 11 and 15 years [ ]
(c) Between 16 and 20 years [ ]
(d) Above 21 years [ ]

SECTION B: DIFFERENT AREAS OF THE EXPANDED CORE CURRICULUM THATARE BEING IMPLEMENTED

4. Is your school implementing any of the areas found on the expanded core curriculum?…….if yes

(a)……
(e)…….
(b)……..……..
(f)…….……..……
(c)……
(g)……..……
(d)……
(h)……

5. Are these areas important to the visually impaired?..... If yes what are the reasons?

(a)…..……..……
(b)……
(c)……

6. (a) if your answer is no for question 4 and 5 what areas are you implementing in order to develop skills that will allow the learners with visual impairmentlive independently

after they complete their secondary education?…..……..……

……..

(b) if you are no Implementing any, what must be added on your school programme to develop these areas?

TEACHING STRATEGIES USED BY THE TEACHERS IN TEACHING THE EXPANDED CORE CURRICULUM

7. Are there assessments that are done when implementing these areas of the expanded core Curriculum? ……. If yes at what stage?

…..……..……
……..…

8. Is there a syllabus that has been created to categorically show how these areas of the Expanded Core Curriculum must be taught?.....

9. Are these areas of the Expanded Core Curriculum put on the school time table?
…… if not how are they taught

10. Do teachers use the individualized educational plan to implement these areas?.....

(a) Yes [ ] (b) No [ ] (c) I don't know [ ]

11. Are parents and other professionals involved in the implementation of these areas of the expanded Core curriculum? ……if yes how is this done?

(a)…..……

(b)……

(c)……

12. What teaching strategies do you use in teaching these areas found in the expanded core curriculum?

(a)…..……

(b)……

(c)……

13. What materials and equipment are used in teaching the areas of the expanded core curriculum?

(a)……..…

(d)…….

(b)……...…

(e)…….…… ….

(c)……..…

(f)…….……

14. Are these materials adequate in the implementation of the expanded core curriculum?.... if not what is the administration doing to help the situation?

(a)…..…….……

(b)……

(c)……

CHALLENGES FACED BY SPECIAL EDUCATIONAL TEACHERS IN IMPLEMENTING EXPANDED CORE CURRICULUM.

15. Are these areas of the Expanded Core Curriculum examined by the examination council of Zambia at the end of the year?..... if not what measures is the school undertaking to help?

(a)…..…….……

(b)……

(c)……

16. Is the school conducting any teacher group meetings or work shops to emphase the

need for these areas to the visually impaired? …….. If yes how is this done?

(a)…..……..……

(b)……

(c)……

17. How is the teacher learners ratio when it comes to the implementation of these different areas of the expanded core curriculum?..... if not appropriate what is the administration doing about it?

(a)…..……..……

(b)……

(c)……

18. Is the school environment conducive for learning the different areas of the expanded core Curriculum?……..….

19. If not what improvement must be made to overcome these challenges……..……..…….

THANK YOU FOR YOUR COOPERATION