

**ACADEMIC EXPERIENCES OF LEARNERS WITH LOW VISION IN LIGABA
INTEGRATED PRIMARY SCHOOL, ETHIOPIA.**

By

KEBEDE ABICHU KABETO

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DECLARATION

Student number: 47299231

I, Kebede Abichu Kabeto, declare that: **The academic experiences of learners with low vision in Ligaba Integrated Primary school, Ethiopia** is my own original work and has not previously been submitted to any other university for the award of a degree, either in part or in its entirety. All the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

.....

KA Kabeto

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Date

DEDICATION

This dissertation is dedicated to my daughter, Mekdelawit Kebede. May this work encourage her to further her education in order to contribute to the community.

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ABSTRACT

The purpose of this study was to explore the academic experiences of learners with low vision in integrated schools. Based on the findings from the study, recommendations were forwarded to the integrated primary school principal and teachers who are responsible for the support of learners with low vision. Ethical measures were adhered to as participants were told that their interview was voluntary and they were free to withdraw at any time if they felt uncomfortable. The researcher also kept strict confidentiality to protect identity of the participants.

The participants in this research work were seven learners with low vision, one principal and three teachers in one of the integrated primary schools. In this study the researcher used qualitative methodology with purposive sampling technique to select respondents and used descriptive design. It was found that in most cases the attitude of teachers and sighted learners towards learners with low vision was negative, social isolation and withdrawal of learners with low vision from sighted group were the main problems. During this research process respondents reported that there was lack of learning resource materials and modification of teaching materials to suit the needs of learners with low vision.

Therefore, the study recommends that learners with low vision should be included not only physically, but socially and psychologically. The teachers in the integrated schools should have a close relationship with these learners, give them support and the curriculum as well learning material or resources should be adapted to suit the need of the learners with low vision. The regular inclusive schools should know the importance of early acceptance and benefits of early identification and intervention to encourage social development of learners with low vision.

Key words: Low vision, visual impairment, integrated schools, inclusive education

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Acronyms

IDEA	Individual Disability Education Act
FMHE:	Federal Ministry of Health of Ethiopia
AFB:	American Foundation for the Blind
MOE:	Ministry of Education
SNE:	Special Needs Education
SNNPR:	South Nations Nationalities and peoples Region

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CHAPTER ONE

AN INTRODUCTORY ORIENTATION

1.1 INTRODUCTION

It is acknowledged that children and youth with disabilities require great attention. Historically or traditionally, it has been known that care, education and other activities for learners with disabilities used to be carried out exclusively and in isolation by the individual families and religious institutions or humanitarian organizations. In Ethiopia, a great number of children and youth with special needs are left without support due to lack of appropriate assessment and identification procedures. This poses a unique challenge to the teachers in general education classrooms as well as to the learners with special needs. Due to the limitation of the scope, this study focuses on learners with low vision.

1.2 BACKGROUND OF THE STUDY

Ethiopia is believed to have one of the world's highest rates of blindness and low vision. Based on the current estimated population size of Ethiopia, which is 75 million, overall there are 1.2 million blind people, 2.8 million people with low vision, and 9million children 1-9 years of age with active trachoma. Denier (2010: 456) states that including children with visual impairments in the classroom involves teaching children who wear eyeglasses, lenses, or corrective patches; helping to identify children whose visual impairments have not yet been diagnosed; and adapting classroom programme for

children who have non-correctable visual problems including limited vision and blindness. Vision is the major channel through which people perceive their environment and the relationship of themselves and objects within it. It is clear that people with low vision cannot function effectively and as a result they require more help. Chandra and Gilbert (2010: 1) found that almost three quarter (3/4) of a child's early learning comes through vision and that over one third (1/3) of adult visual cortex responds to visual stimuli. This tells us that vision is not only very important for early development in infancy, but also that visual information is used and processed by many different parts of the brain.

1.3 SIGNIFICANCE OF THE STUDY

This study is prompted by my long experience of working with visually impaired learners as an educator in a residential school. Within 28 years of my experience, I have observed that when learners with impaired or limited vision are with sighted learners they tend to act as if they can see. However, it should be pointed out that learners with partial sight are not blind or fully sighted, they are in between. Clearly, they have problems in physical and social adaptation. To change this, they require teaching of blind techniques for orientation and mobility. Deiner (2010: 469) stated that many social skills are learned through observation.

If a child cannot see others, s/he may need to be taught skills that other children learn from observation. Learners who have residual vision and who are attending their

lessons in regular schools are always complaining that the teachers are not giving them attention. These learners complain that sometimes regular school teachers even forget their existence in the classroom. Most of the learners with low vision complain that they cannot read the writing from the chalk board when they sit behind other learners, especially in a dim light. I, therefore, decided to study about the social and academic problems of learners with low vision or visual impairment, and to contribute towards the process of inclusive education in this area.

My study may lead to identifying specific needs and the extent of commitment of different stakeholders in implementing inclusive education. It is, therefore, my intention that the results of this study should:

- Provide a better understanding and awareness of the educational needs of learners with low vision;
- Provide useful information for schools to improve the provision of available educational material and facilities to solve barriers for learners with low vision;
- Serve as an additional information for other researchers who might be interested in investigations in this area;
- Provide basic information for curriculum designers about learning needs of children with low vision; and
- Motivate school teachers and leaders to accept and give appropriate services for these children.

1.4 STATEMENT OF THE PROBLEM

The progress towards accessibility of special needs education should be based on the opportunity of all learners with disability to avoid disparity among learners with special needs. Ethiopia is one of the countries that have ratified the International Convention on the Rights of Children in 1991. Accordingly the constitution of the Federal Democratic Republic of Ethiopia, Article 9:4, states that all international agreements ratified by Ethiopia are an integral part of the law of the land. According to the Ethiopian Education and Training Policy (1994), expansion of quality primary education to citizens is not only a right but also a guarantee for development.

Even today research findings are still somewhat controversial and one can find results for and against it, sometimes depending on the institution to which the research is linked. The fact that there are no convincing findings of successful inclusive education on comprehensive scale makes the situation even more problematic (Ministry of Education (MOE), 2006: 37).

Against this background, the study focuses on the following research questions and sub-questions:

Main Research Question

What are the academic experiences of learners with low vision in integrated primary schools of Ethiopia?

Sub Questions

- What are the academic and social challenges experienced by learners with low vision in integrated schools?
- What challenges are faced by regular schools after inclusion of learners with low vision?
- What intervention strategies can be implemented to ensure appropriate inclusion of learners with low vision?

1.5 AIMS OF THE STUDY

The aims of the study are to:

- explore the academic experiences of learners with low vision in integrated primary schools.
- investigate the academic and social challenges experienced by learners with low vision in integrated schools.
- identify challenges faced by regular schools after inclusion of learners with low vision.
- provide intervention strategies that can be implemented to ensure appropriate inclusion of learners with low vision

1.6 RESEARCH METHODOLOGY AND DESIGN

The study employed the qualitative approach and descriptive method to depict the academic experiences of learners with low vision. I used the descriptive method

because I wanted to describe- in detail-various aspects of the study such as setting, the academic experiences of the learners with low vision, the activities observed and the viewpoints of participants. The methodology is presented in more detail in Chapter three.

1.6.1 Population and Sampling

The study was conducted in an integrated primary school that caters for learners with low vision or with a visual impairment. It is the only school in the town where learners with visual impairment or low vision are integrated. Purposive sampling was used to select the participants. It is purposive because the target groups are learners with low vision between the ages of 10 and 17 years, and grade level from 1 to 8. In addition to these learners, teachers were included because they have a closer connection with these learners and can give more information regarding their performance and social interaction. A principal was also selected for open-ended interview. More detailed information is discussed in Chapter 3.

1.7 DATA COLLECTION

To collect data the following instruments were used: participatory observation, focused group discussion and open-ended interviews. The data from the interviews consisted of direct quotations from participants regarding their experiences, knowledge and opinion. The data from observations contained a detailed description of participants' activities, actions, and opinion. More detailed information is discussed in Chapter 3.

1.8 DATA ANALYSIS AND INTERPRETATION

I organised the data gained from observations, interviews and focus group discussions according to different individual responses. Observation results were considered individually or by grouping similar types of occurrences while seeing differences among individuals, time and setting. The data were interpreted, analysed and described so as to be understood by others. Chapter 3 has more details on data analysis

1.9 METHODS TO ENSURE TRUSTWORTHINESS

A common term used to describe validity in qualitative research is trustworthiness. Qualitative researchers can establish trustworthiness by addressing the credibility, transferability, dependability and conformability (Silverman 2000) cited in Best and Kahn (2006: 208). This study engaged all these techniques to demonstrate the credibility of the research. Appropriate questions were asked. All the terms were defined clearly for the participants. To validate the results, the same questions were asked in each interview. I used long periods of observation in a real social situation to gain authentic information. I made my data available to my professional peers in order to verify the accuracy of the results.

1.10 ETHICAL CONSIDERATIONS

The ethical issues should be given serious attention in research work. Gaining entry to the study population should be done in consultation and consent of relevant authorities as well as the targeted study population. The code of ethics for this study were:

- Participation in this study was on a voluntary basis. Participants were allowed to withdraw from the study at any time they want.
- The participants were given the honourable chance to ask about the study before participating.
- All the information collected from the participants was secured and remain confidential.
- The information gained from the participations was used for this research purpose.
- The participants' permission to tape record the discussion and also to edit in case participants change their minds about the discussion was requested. The participants' true names remained anonymous in order to protect their privacy.

The ethical guidelines adhered to are discussed broadly in Chapter 3.

1.11 DEFINITION OF CONCEPTS

1.11.1 Low Vision

Low vision can be referred to as partially sight. It is visual acuity between 20/70/ and 20/200 in their better. Educationally children with low vision have enough residual vision to read large print or regular print with special assistance such as magnification. Their limitations may be greater in their distance vision but they should not be referred as blind (Smith & Polloway 2008: 321). It can be understood as a significantly reduced vision, that is, visual acuity is less (worse) than 6/18 in better eye or visual fields are less than 20 degrees in diameter. After treatment or with refractive correction, vision can be corrected to normal. Learners with low vision can usually read when the print is enlarged sufficiently (Mastropier & Scruggs, 2010: 9).

1.11.2 Visual Impairment

According to Deiner, (2010: 457) visual impairment is defined in a variety of ways, the legal and medical definitions typically emphasize visual acuity, or how clearly the child can see. The term includes both partial sight and blindness. It may be mild or moderate to severe in nature. The educational definition emphasizes the extent to which the child can use his visual ability to read printed material for learning. According to Individual Disability Education Act (IDEA) (2004) the visual impairment that includes blindness is an impaired vision that, even with correction, adversely affects a child's educational performance. Learners who are blind are unable to read print and usually learn to read and write using Braille.

1.12 CHAPTER OUTLINE

Chapter One covers the background and significance of the study. It also contains the research problem, research question and aims of the research.

Chapter Two concentrates on literature review which covers both primary and secondary sources on the academic experiences of learners with low vision or visual impairment.

Chapter Three focuses on research design and methodology of the study as well as data collection.

Chapter Four presents data analysis and findings of the study.

Chapter Five provides an overview, interpretations and recommendations as well as suggestions of areas for further research.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

The main barriers to learning are lack of knowledge about diversity, rigid and poor teaching methods, inconvenient learning environment, with lack of identification process, and inadequate assessment procedures. As a result, schools and teachers find it difficult to accommodate learners with special educational needs and compel them to adapt to the school instead of adapting the school to the needs of the learners.

This chapter is designed to investigate the academic experiences of learners with low vision or vision impairment. The framework of the chapter contains the conceptualization of low vision, using the categorical terminologies of low vision like in those learners who have only light perception and light projection, knowing the coming direction of light (Kumsa 2006:7). Another point to be assessed is challenges of low vision; it gives concrete information about the barriers in social adjustment to inclusion and educational achievement of learners. It discusses how obstacles within the physical environment and social isolation can prevent free communication and independent movement of learners within the learning environment. It also touches on the lack of teachers' preparation and readiness to meet the special needs of learners appropriately, shortage of support and supplemental materials.

2.2 CONCEPTUALIZING LOW VISION

The terms "low vision, partially sighted, legally blind and totally blind" are used by schools, colleges, and other educational institutions to describe learners with visual impairments. They are defined by Kumsa (2006:7); Smith and Polloway (2008:321) as follow:

- *Low vision* generally refers to a severe visual impairment, not necessarily limited to distance vision. It applies to all individuals with sight who are unable to read the newspaper at a normal viewing distance, even with the aid of eyeglasses or contact lenses. People with low vision use a combination of vision and other senses to learn, although they may require adaptations in lighting or the size of print, and, sometimes, Braille. They can be categorized as:
- *Myopic* - unable to see distant objects clearly, commonly called near-sighted or short-sighted,
- *Hyperopic*- unable to see close objects clearly, commonly referred to as far-sighted or long-sighted,
- *Partially sighted* indicates some type of visual problem, which necessitates that a person receives special education in some cases,
- *Legally blind* indicates that a person has less than 20/20 vision in the better eye after best correction (contact lenses or glasses), or a field of vision less than 20 degrees in the better eye; and
- *Totally blind* learners learn via Braille or other non-visual media.

These definitions are classified as legal and educational. The educational definition emphasizes how individuals use their vision for learning whereas the legal definition depends on the measure of visual acuity (Kumsa 2006:7).

Deiner (2010:45) explains that a low vision individual is one who is visually impaired after optical correction, but who may increase visual functioning through the use of optical devices, non-optical devices environmental modification and or techniques. Low vision training can be recommended to prepare learners to become active learners, and enable them to access information from a variety of sources. Low vision is poorly understood by the majority of teachers, including those who have learners who experience low vision in their class rooms. This causes a family to feel left on its own to figure out how to raise a child with low vision. As pointed out in 11.1 of Chapter 1, educationally learners with low vision have enough residual vision to read large print or regular print with special assistance such as magnification. Their limitations may be greater in their distance vision. These learners should not be referred to as blind.

Low vision is usually seen as visual acuity of 6/18. This means that a child is able to see on object clearly at one third of the distance at which a child with normal sight can see. Low vision is sufficient to allow a child to read large print or possibly regular 12print under special conditions. Most children with low vision can use many school learning activities including visual reading and writing (Allen, 2009:157).The normal and near normal can perform tasks without special aids but moderate can perform tasks using social material aids. The levels of low vision are also categorized into two, namely,

severe and profound. The severe low vision can perform visual tasks at a reduced level of speed, endurance and precision even with aid whereas the profoundly low vision has difficulty with gross visual tasks and cannot perform most detailed visual tasks (Kumsa, 2006:10).

In the screening of children with visual impairments there are five different groups that we can classify for educational purposes. These are those who do not have light perception (blind), those who have light perception without projection, those who have light perception with projection and those who have ability to form perception with visual acuity (VA) < 3/60 (Hyvarinen 1997:5-7).

A number of the different terms that are associated with visual impairment are confusing because the exact meaning of visual terminology is often a problem. Learners with low vision are capable of handling the demands of most classroom settings. However, they will need some modifications to perform successfully. The extent of visual disability depends upon the physical sensory impairment of the learners' eyes, the age of the learners at the onset of vision impairment and the way in which that impairment occurred. Vision also may fluctuate or may be influenced by factors such as inappropriate lighting, light glare, or fatigue (Garzia& Ralph 2008:33-36).

Learners with low vision are usually print users but may require special equipment and materials. They may read regular or large print and/or use Braille and may learn through visual channels in addition to tactile methods. They may travel with or without a

cane/white stick. It is important to note that these learners require the services of the itinerant teacher and require an individualized support services plan. They require supports such as special seating, large print materials, taped materials, lighting considerations, provision of low vision aids, mobility skill training and other supports or accommodations/adaptations based on the nature and severity of the visual impairment. Learners who are blind will need major accommodations to be successful in orientation in general education settings. To place children with visual impairments in the appropriate educational programme, the presence of proper definitions and classifications of blind and low vision that are used for educational purposes are very crucial. Learners who are blind require instruction in Braille, independent living skills, as well as orientation and mobility skill training. They may also require counselling to help them adjust to blindness, especially those with adventitious blindness that is acquired after birth (Kirk & Gallagher 1983: 209).

2.2.1 Prevalence of low vision

In 1995, the World Health Organization (WHO) Task Force on data on blindness and low vision estimated that there were 37.1 million people with low vision and blindness worldwide, indicating a global prevalence of 0.7 percent. It is generally known that Africa has a high rate of blindness. It has been estimated that approximately 1% of Africa's population is visually impaired and a higher prevalence has been estimated for Sub-Saharan Africa. The most common causes of low vision and blindness among adults are cataract, corneal and retinal diseases (Oduntan2005:44-45). There are over 1.4 million visually impaired children who are under 14 years of age. The vast majority of

visually impaired children with low vision conditions in developing countries like Ethiopia that are sent to residential schools for the blind despite having usable vision. The reason for this is that they do not have access to or cannot afford vision enhancement or vision rehabilitation services that could help to integrate them into regular schools (Khan, 2008:1).

The national prevalence of blindness in Ethiopia is 1.6% (1.1% for urban and 1.6% for rural population) and low vision is 3.7% (2.6% for urban and 3.8% for rural population). Blindness and low vision are more prevalent among females as estimated to 1.9% versus 1.2% for blindness, and 4.1% versus 3.1% for low vision. The prevalence of childhood blindness is 0.1% and accounts for over 6% of the total blindness burden in Ethiopia (Federal Ministry of Health of Ethiopia, 2006: 4). The existing special needs education services in Ethiopia are provided either by the government or non-governmental and charity organizations. The government has established special needs education classes attached to ordinary schools. All of them are under resourced (W/Michael 2006:7). The existing special classes and units are located in urban areas, and most of them have long waiting lists. Consequently, a significant number of children and learners are still excluded from all education.

According to the 2010 annual report by the Ministry of Education of Ethiopia, the enrolment of learners with visual impairment (including low vision and blind) in a special needs education programme are fluctuating from high to low depending on different grade levels. In primary (grade 1-8) =7016, secondary (grades 9-10) =640 and senior

secondary (grades 11=12) =255 which gives a total of 7911 (Ministry of Education 2010).

2.2.2 Signs of low vision

Hospitals have an eye unit where severe problems with vision are easily detected. There are many functionally observable possible indications of low vision. In Ethiopia the detection of vision *problems* is done by a doctor or by parents. Other care problems are also detected by teachers in general class rooms using functional and behavioural characteristics that may indicate visual function problems.

Tefera (2002:22) and Deiner (2010:462) point out that learners with vision problems have these characteristics:

- Turn their head, body or eye in an unusual manner.
- Hold reading material extremely close to the face,
- Rub their eyes excessively
- Have watery eyes.
- Experience eye pain and fatigue.
- Move clumsily moving from place to place,
- Have poor posture in both standing and sitting,
- Consistently tilt head to one side or the other and
- Inability to recognize familiar faces from a distance.

Refraction of errors occurs because of the shape of the eyeball or cornea or the strength of the lens. The most common refractive error of child hood is hyperopic or far

sightedness (Deiner 2010:458). Refractive errors are often straight forward and corrected by spectacles or contact lenses worn for a specified purpose. A child is considered to have visual impairment only if the best corrected vision is significantly outside the normal range for near vision American Foundation for the Blind (AFB) (2002:12). It is an unaccommodated eye in which the rays of light from a distant object are focused on to the retina. The cornea is an unchanging refractive surface. Lenses are a variable refractive body which can accommodate (focus) to increase its power (Mayer 2005:4).

Rays of light are focused behind the eye when the eye is unaccommodated. This can be due to the eye being too short or the refractive components of the eye too weak (Gear heart 2003:22). According to Alonge (2005:2), learners come to school with different characteristics, background knowledge, cognitive and academic skills, language, attitudes, and values. These differences are so well pronounced that no single curricular exposure or one type of instructional method can be equally suitable for all, and similarly no one assessment can equally be appropriate for all. Conversely, Polloway (2010:322), states that the most educationally relevant characteristics of learners who have visually impairments is the extent of their visually efficiency. More specific characteristics can be categorized as psychological, communication, academic, social and emotional. Ayvazogulu, Oh, and Kozub (2006) cited in Smith and Polloway (2010:322) conducted a study on the physical activity level of learners with visual impairment, they determined, through this study, that this group of learners have low levels of physical activity for a variety of reasons.

It is stated that visually impaired learners can be easily identified if their visual loss is severe. Their concept development can depend on tactile experiences (i.e. synthetic and analytic touch), unable to use sight to assist in the development of integrated concepts. They may display repetitive, movements (for example, unusual rocking or rubbing of the eyes). There is a distinct disadvantage in using spatial information, visual imagery and memory problems with functional implications. They are unable to see distant things clearly, dizziness, headaches, or nausea following close eye work are some of the observable behaviours of impaired vision which can affect the academic performance of learners with low vision (Tefera, 2012: 24-25).

2.3 CHALLENGES OF LOW VISION

Many people with visual impairments are rejected people possibly because they might not have been regarded as normal in social instances. For instance, many blind children and youngsters tend to lack play skills, ask too many irrelevant questions, and engage in inappropriate acts of affection. Some of these individuals may exhibit other inappropriate anti-social behaviours, like rock moving their heads and hands strangely in space, and eye pock while sitting, walking and standing (Tirago 2012:5).

Cognition is largely a matter of developing concepts. Thus, many concepts are learned through visual means, learners with visual impairments have difficulty learning some concepts. Blind learners tend to be more passive and less inclined to go in search of new experiences, they develop few learning experience than sighted learners do. Learners with low vision may have restricted mobility and consequently limited

experiences which may cause passivity and dependency and a learned helplessness. One aspect of psychological functioning that may affect these learners is self-esteem. Self-esteem is related to a person's feeling of self-worth and value. It is a critical ingredient for lifelong happiness, success, and better life (Scott & Murry, 2001:287).

Many children with special needs have adjustment problems because some of them become inward looking and attach too much importance to their disabling condition. They are not like better adjusted children who are less likely to be annoyed or upset by what they see as unfair treatment or tactless behaviour. Better adjusted ones are more able to tolerate uncertain or ambiguous situations where they are unsure of others reactions to them (Tekle 2004:33). The social and affective needs of visually impaired learners are unique because of the effects that loss of vision may have on the formation of their self-concept. Opportunities for appropriate modelling in social situations, involvement in recreational activities development of concepts about human sexuality, understanding and awareness of one's visual impairment may be lacking (AFB, 2003:9).

The above challenges affect the self-adjustment to disability. Self-adjustment to disability is defined as becoming aware of the limitations associated with it and accepting without dismay. In this regard, Tefera (2002:23) says "this doesn't mean any easy acceptance of handicap, where achievement is set at low level by static and conventional targets." This means self-confidence and developing the right concept of self-acceptance of one's self, which is an important instrument for adjustment and well-being, may be hampered.

2.3.1 Challenges in educational achievement

Engelbrecht, Oswald and Forlin(2006:121) points out the barriers to learning and participation. In school for the visually impaired caused by different factors including:

- A rigid curriculum,
- Socio-economic deprivation,
- Communication problem,
- Negative attitudes towards the disable
- Inaccessible and unsafe built environment,
- Inappropriate and inadequate support services,
- Inadequate policies,
- Non-recognition and the non-involvement of parents,
- Inadequately and inappropriately trained teachers

Purdue (2009:807) explains that the challenge regarding their educational achievement is brought about by exclusion, the barriers that get in the way of full acceptance and participation in education activities. These may include socio-cultural barriers such as physical and material barriers, for example poor building design, insufficient finances and lack of adequate awareness about surrounding environment. These may cause discrimination towards some individuals and groups to occur. The Ministry of Education (MOE) (2002:14) and Ministry of Labour and Social Affairs (MOLSA) (2004:16) emphasize that the quality of education for students with disability may be affected by

several variables that are observed in the school and out of the school, such as inflexible curriculum, inconvenient classroom, and physical facilities like seating arrangement, furniture and lack of teaching aids. In addition UNESCO (2007:8) elaborates on the inability of the curriculum to cater for the needs of these learners, insufficient preparation of teachers and education leaders, rigid and poor teaching methods and inadequate assessment procedures. As a result, schools and teachers find it difficult to accommodate learners with special needs and they try to make them to adapt to the school, instead of adapting schools to the needs of the learners.

On the other hand, USAID/Ethiopia (2011-2015:2) explains that stigma often leads to a denial of access to services such as education, employment and health care. Many factors determine how visual impairments affect a child's learning experience. Age of onset and severity of vision loss as well as presence of multiple disabilities are some of the factors that make each child's situation unique. The causes of visual impairment and overall functioning level of a child also determine how the visual impairment affects a child's development. In general, visual impairments have cognitive, academic, social emotional and behavioural effects.

2.3.2 CHALLENGES IN ADJUSTMENT TO INCLUSION

There are many social and environmental barriers that learners with low vision experience, including people's lack of knowledge about diversity. Tefera (2002:13) assert that these barriers adversely affect the socio emotional development of children with visual impairment. Some of those are the environment, attitude of others and lack

of acceptance by others. The environment is a factor that significantly affects the psychological functioning of children with visual impairment. The development is affected by different kinds of environment, including educational placement. During the formative years school is the main place for the social experience of these learners that puts a great deal of influence on their social development. It is, therefore, important to examine school arrangements based on how well they enhance social and emotional development.

2.3.3 Challenges in physical locomotion

Allen (2009:23) expresses the view that the greater the vision loss, the greater the delays in the reaching, crawling and walking. A child with limited vision does not develop the ability to localize sound and move towards it until the end of the first year. Motor development is further delayed by the child's inability to learn skills related to judging distance, direction, body position and object position in space. The children often develop strange ways of walking and positioning themselves because they have no visual reference points or models.

Andrea and Farrent (2000:11) state that children with low vision can experience many negative consequences such as feeling like an outsider because they cannot take part fully in activities, feel less than capable because they do not understand visual concepts fully and feel clumsy because they drop things or bump into objects. All of these consequences can have the effects of lowering their self-esteem. Restricted movement within the environment, particularly for children with congenital visual impairment, can

affect a child's development. Children with visual impairment often have limited interactions with their environment, less reason to explore interesting objects and as a result miss opportunities to learn (The Gale Group 2009:3).

Shapiro, Moffett, Lieberman and Dummer (2005:16) explain how the perception of competence, or the ways in which a person thinks about himself or herself, influence initiation and mastery attempt in various domains of achievement including social acceptance and physical appearance. Learners who have difficulty in performing sport and physical activity skills, often have lower self-perceptions. These poor self-perceptions are likely to lead to a reduction in confidence in movement and often extend beyond the athletic domain, resulting in adverse psychological and social consequences.

2.4 ATTITUDES TOWARDS LEARNERS WITH LOW VISION

2.4.1 Attitude of teachers

The regular classroom teacher is the primary educator of the visually impaired child who is enrolled in his/her classroom. It is the teacher's responsibility to teach all the children in the class room including the blind or child with low vision. Mastropier and Scruggs (2010:27) stress that one of the most important determinants of inclusion success is the attitude of the general education teacher towards accommodating learners with disabilities. Although most teachers are positive about inclusion, some general education teachers become stressed by the need for individual planning time, additional

training for inclusive teaching, and additional resources, in the form of personnel and specialized instructional materials.

Smith and Polloway(2008:328) acknowledge that teachers working with learners with visual impairment need to understand the nature of a particular student's vision problem to be able to choose appropriate accommodative tactics. These teachers need basic information related to the following categories:

- Fundamental concepts of vision,
- Visual impairment signs on possible visual problem,
- Typical characteristics of learners with visual impairment and
- Specific accommodative techniques for meeting these learners needs.

The attitudes of teachers toward inclusion are significantly influenced by their own perceived level of efficiency particularly in the teaching of children with disabilities in their class room. Several studies have shown that positive teacher attitudes towards inclusion are influenced by a myriad of factors such as the overriding policies on inclusion, school ethos, available resources, and level of support in catering for the needs of children with disabilities (Hsien, 2007:14).

To explore regular classroom teachers' experiences and perspectives toward inclusive education, Wu Wu-TIEN (2007:85) collected data through in-depth interviews with twelve regular classroom teachers at elementary schools. Teachers reported observation of positive efforts of inclusive education on both learners with disabilities

and their peers without disabilities. Some teachers themselves reported the experience of gaining a sense of achievement, learning more teaching strategies, and having a better understanding of the rights and needs of learners with disabilities and the meaning of equality. However, some also reported having a sense of incompetence, helplessness, or guilt and, expressed different reactions about having learners with disabilities in the class.

Beyene and Yinebeb (2010:18) found that most teachers reject the admission of learners with disabilities into their schools. Also they refuse the placement of learners with disabilities in their classes. Engelbrecht 2003:49) gives a detailed description on how many attitude problems occur through human interaction in the school community. This includes relations between teachers including principal, teacher relations, relations between teacher and learners, teachers and parents, and between psycho-social environment and within learners themselves.

The psycho-social environment of a school can act either as a barrier to or opportunity for learning and development. The psycho-social environment of the school is strongly affected by the style and manner of leadership and management practices. Teachers' attitudes influence effective use of resources in the classroom and implementation of interventions to improve children's mental health in schools, their level of stress and burnout, and their learners' achievement and social emotional out comes (Wiener and Corrium 2010:128).

Teachers and principals engaged in mainstream schools also hold differing attitudes towards inclusive education, which vary according to their educational beliefs, teaching attitudes, and experience. Many teachers are concerned that inclusive education will have negative effects on the learners' studies and performance. Principals are worried that their schools' position in ranking lists will decline as a result of inclusive education (Norwich 2008: 50).

In another survey study, Wu Wu- TIEN (2005b:2) found that teachers generally have a positive attitude towards and a good understanding of inclusive education. They believe that the main purpose of inclusive education is to teach children to accept and respect individual difference, to build a supportive learning community to help develop independent social problem solving skills, and to implement a wide range of curriculum content, including the promotion of social understanding. Subban and Umesh (2007:2) point out that if teachers leave from the university with negative attitudes then those attitudes are difficult to change. Consequently, positive attitudes can and need to be fostered through both training and positive experiences with learners with disabilities. In preparing teachers for inclusive classrooms their attitudes, beliefs, expectations and acceptance of people with diverse needs may well be challenged.

In several studies it is also indicated that teachers are often not prepared to meet the needs of learners with significant disabilities. There are common concerns like teachers' time taken away from the rest of the learners, class size, lack of training and resource material is not given. The content validity is not assessed by teachers and experts in the

field of special needs education (Deiner 2010:466). Forlin, Douglas, Hattie (1996) cited in Wolman and Dupoux (2006:25) also explained that one of the most important factors affecting teachers' attitudes towards integration or inclusion is the type and severity of disabilities. Research has revealed that, irrespective of teaching experience, severity of disability shows an inverse relationship with positive attitudes, if such perceptions of severity increase, teachers' positive attitudes decreases.

Ocloo and Subbey (2008:642) explain, in addition, that most of the head teachers reject the admission of learners with disabilities into their schools for the reason that such learners with disabilities will lower the academic standard of the school. Moreover, most teachers refuse the placement of the disable in their classes with the notion that this may be unrewarding and burdensome. The rejection is stronger with those children with severe disabilities than for those with less severe disabilities. Negative school experiences of children with visual impairment have been linked to teachers' low level of knowledge of disabilities and intervention techniques and in- sufficient special education support (Scott and Murry2001:288).

Children who have been exposed to bad experiences and stressful circumstances are considered at risk to develop bad attitude and behaviour. Resilience is an individual's ability to cope with stressful situations and it can be learned or developed in school, in the family or in the community. Teachers can make a difference in the life of their learners by teaching them how to deal with stress and strengthen them so they can

bounce back from disappointment, fear or anger (P.Cuhrko, personal communication, August 16, 2012).

When children enter school, their self-concept is already substantially formed, primarily through the influence of family. The impact of the school environment cannot be overlooked. It is a combination of school factors, family and innate intelligence that appears to be an essential ingredient to increasing learners' self-esteem during the academic years (Dustin, 2012: 451-457). Shapiro, Moffett, Lieberman and Dummer(2005:1) report that research results indicate that teacher support and encouragement of student's autonomy are associated with higher student self-esteem. The amount of teacher control over learners was inversely associated with student's academic self-esteem.

2.4.2 Attitude of parents

NaiKwai-Lo (2007:49) explains that parents of children with special needs believe that inclusive education can bring both the pleasure of increased options and difficulties of heterogeneous learning. As a result of the decentralization trend in education, reforms on education administration, and development of the education market, parents' choices have already become a factor that can determine the orientation of school operations. Many parents, who either wish to improve their children's learning standards in mainstream schools or want to avoid the stigma of enrolling them in special schools, prefer to send them to mainstream schools when they are given the choice.

Attitudes of parents are well known to influence the self-concept of visually impaired children. In turn, the self-concept of the child will determine his/her school performance. Therefore, counselling has to be a twin process of counselling the parents and encouraging the visually impaired to perform better. Gearheart (2003:51-52) draws attention to the fact that research has pointed towards parental reactions such as over protection, which is the phenomenon most commonly seen in affluent parents. The parent experiences guilt and shame and does everything for the child thus destroying his/her initiative and autonomy. Brothers and sisters may have negative reactions. They may not play with the child, read to him/her or take him/her out. All this gives rise to open and distinct resentment, which may occasionally explode into outburst of anger or protest.

On the other side Tanzila (2012:51) emphasizes that parent involvement is extremely important to maintain a productive educational programme for blind and visually impaired children. All professionals working with disabled persons are advised to establish a good parent- professional partnership for the welfare of the children. Parents should be involved in every stage of the programme such as planning individualized educational programmes for their children in homes and evaluating progress of their children. Studies have shown a clear connection between the qualities of parent-child to harness social- intellectual development. Being together implies not only physical closeness but social, emotional contact and transmission, guided perception of meaning in the form of concepts, language and thoughts. It means understanding of the world

around shared procedures to analyse and solve problems as well as the perspective and communication of experiences with relation to the other people.

A major problem in trying to assess vision is that children with impaired vision have no idea what they are supposed to be seeing; in other words, they really do not know that what they see is imperfect or different from what others are seeing. Parents and early childhood teachers often are the first to suspect possible vision problems in young children.

2.4.3 Attitude of sighted learners

Many sighted learners in mainstream society are afraid of their blind and visually impaired peers and do not want to get acquainted with children with visual impairments. NaiKwai-Lo (2007:48) argues that among the various groups of mainstream learners, elementary-school learners and female learners adopt a more positive attitude towards fellow learners with special educational needs than secondary-school learners and male learners.

A study conducted in the United States by the American Foundation for the Blind (AFB) (2006:6) found that learners with learning difficulties saying in mainstream school up them and to receive guidance on principal courses given to them by expert. Regarding studies of other courses, they prefer to attend classes in main stream class rooms and in this way they strike up friendships with other school mates.

Bekele (2003:43) indicates that children with disabilities were regarded in a negative light by the sighted children. They were less likely to be selected as best friends or play mates, however, children in segregated classes had high levels of peer-relationship satisfaction. While the results may indicate inaccurate self-observations by the children, they emphasize the positive view that children had about themselves and their world, when they were in segregated classes.

Dunst's (2012:451-457) findings show that misunderstandings and negative attitudes towards individuals with disabilities often interfere with their acceptance and full inclusion into school and society. Attitudes of people, in general and children more specifically, towards individuals with disabilities have been the focus of description and investigation for many years. UNESCO (1984) as cited in Daniel (2002:6) reveals that integrating learners with visual impairment into regular classes has important advantages. At school, children acquire not only academic skills, but social skills as well. They learn to adapt their behaviour to others. On the hand maladaptive behaviour is common among children with disabilities brought up with an insufficient contact with their non-disabled peers. Van HingeVoort (2002) cited in Fraser and Maguvhe (2008:35) adds that people are limited not only by physical barriers, but by the attitudes of others. Prejudices may put blind learners at risk of isolation, possession of few friends and inadequate social skills.

2.4.4 Attitude of Learners with Low Vision towards themselves

The National Federation of the Blind (NFB), (1999) indicates that attitudes towards people who are disabled, in general tend not to be too positive. Negative attitudes, perceptions and prejudices are some of the factors that cause poor public policies. They often affect the kind of rehabilitation and job training blind people receive.

Low vision and blindness have a significant impact on the physical and mental well-being of the affected individual. Individuals with impaired vision are less able to perform activities of daily living, less mobile, more isolated, suffer higher rates of depression, and consequently they have a reduced overall quality of life when compared to their sighted counterparts. In addition, patients with visual impairments have higher mortality rates, and are more prone to accidents and falls. As a consequence, elderly individuals with low vision are more prone to injuries than their sighted counterparts. For example, low vision is a well-documented risk factor for hip fractures in the elderly resulting from falls. Because of these consequences and lack of encouragement they feel that they are incompetent in different activities (Rockville 2004: 24-26).

2.5 ACADEMIC CHALLENGES IN REGULAR SCHOOLS

Many factors determine how visual impairments affect a child's learning experience. Age of onset and severity of vision loss, as well as presence of multiple disabilities are some of the factors that affect their learning. Children with visual impairments often have limited interactions with their environments, less reason to explore interesting objects, and as a result miss opportunities to learn.

2.5.1 Reading and writing difficulties

Teaching visually impaired children requires an open heart and a tremendous capacity to empathise and communicate. You need various teaching techniques to teach the type of reading a disabled person must learn. Learning to read a book, for example, demands a different form of instruction than learning math. Generally, visually impaired learners are able to read and use large print versions of text books. They cannot read normal size alphabets in the text book or in a manual. Most learners with sight problem show excessive head movements while looking at pictures or reading. While reading and writing most of the time they lose place. They have a problem with writing in a straight line and they write in a zigzag manner(Teaching Students with Special Needs in Inclusive setting, 2012:37).

The majority of learners with visual impairments will require slightly more time than other learners to perform certain tasks. For example, given their low vision, they may be unable to quickly find an item or the first line on a page. It will often take them longer to completely make out what they are seeing or understand what is being discussed. Some learners with a visual impairment gain an overall image from fragments they perceive whereas sighted learners gain this insight “at a glance”. In addition, they will often be required to use specialized equipment (telescope, magnifiers text enlarger), which is more time-consuming. Partially sighted learners normally write using the standard graphic code. Corrective eye wear or lenses can at times provide sufficient support. Reading printed characters is also made possible through optical instruments, such as a hand-held or eye-wear –mounted telescope, magnifier and closed circuit

television (CCTV) magnifiers. It should be noted, however, that in most cases, their pace of reading will be slower (Savard 2008:5).

As for writing, learners with partial sight will occasionally use paper with larger grid lines, markers and large-tipped pens. The posture required to read and write with partial sight may sometimes lead to physical discomfort. The use of a book holder (slanted stand) and supplementary lighting can be helpful (Savard 2008:6). Learners with low vision and cortical visual impairments may require change in the print size and type face. Some learners may use a combination of media-visual, tactile, audio or electronic (e-text) to enhance or support the primary reading mode (Wiazowski, 2009:16). Bossmall, Gomple Vervlned and Van bon (2006) cited in Smith and Polloway (2008:323-324) indicate that even though learners with visual impairment learn similarly to their sighted peers their inability to process visual information efficiently results in their needing specific curricular and instructional modifications. For learners with low vision, these modifications may simply mean enlarging printed materials to sufficient size so that the student can see them. For learners with little vision the support must be more extensive.

Many materials found in general education class rooms may pose difficulties for learners with vision problems. For example, the size and contrast of printed materials that have a real effect on learners with visual problems. Special material and equipment can enhance the education of learners who have visual impairments. Some materials, for example, large printed materials are not appropriate for all and must be considered in light of individual needs (Smith and Polloway2008:326). According to the United

States of American National centre for individuals with disabilities, it is important for educational organizations and institutions to consider the need of people/learners with visual impairments. Learners with visual impairments often deal with challenges in the classroom as well as getting to the classroom. For example, a student with low vision may not be able to read a text on a board and they could miss the funny faces or expressions that often accompany a lively classroom discussion (Candido 2008:3).

2.5.2 Inaccessibility of teaching and learning materials

Inclusion has its own challenges, which include lack of services for early identification, inadequately trained teachers and inadequate allocation of resources. Teachers are not trained to accommodate learners with disabilities appropriately, support and supplemental materials are lacking and in addition, learners with disability have requested to go back to segregated programmes because the instructors were not prepared to meet their needs appropriately (USAID/ Ethiopia 2011-2015:3). The majority of schools in Ethiopia are poorly designed and are not equipped to meet the unique needs of learners with disabilities. The lack of accessible buildings, social prejudice and negative attitudes are considered as big problems which can prevent successful implementation of interactive practices in schools (Winter 2005:3).

Studies have shown that much of the learning that occurs in classrooms around the world is superficial learning. Facts rules and formulas are memorized but often this information is not connected in a coherent frame work that would allow learners to make sense of it and to use it in new situations simply to acquire facts. (Alonge 2005: 9).

Thomazet (2009:559-560) indicate that really inclusive education depends on the capacity of the school, and on the capacity of the teachers, to innovate and put differentiation in place. Most often these criteria are imposed in schools and pupils are grouped or helped according to disability.

According to Garzia and Ralph (2008:61-64), visual defects, such as a restriction in the visual field, can have a substantial impact on reading performance. Eye strain and double vision resulting from convergence insufficiency can also be a significant handicap to learning. There are more subtle visual defects that influence learning, affecting different people to different degrees. Vision is a multifaceted process and its relationships to reading and learning are complex. Each area of visual function must be considered in the evaluation of people who are experiencing reading or other learning problems. Likewise, treatment programmes for learning-related vision problems must be designed individually to meet each person's unique needs.

2.5.3 Lack of assistive technology

There are numerous assistive technology devices that can assist with severe disabilities, ranging from very simple to very complex. Candido (2008:25) expresses the opinion that the current research shows that we have come a long way in using technology and particularly the internet for education. As outlined above, online classes continue to grow in number and variety. It is also true that technology has enhanced the lives of people with disabilities in a variety of ways. We have discovered that people with a disability such as a visual impairment can be served in effective ways by enrolling

in online classes, yet online classes are not all designed in a way that best suits this particular group of people. The audience of adult learners with disabilities, particularly people with visual impairments, could perhaps be an untapped audience for institutions of higher education.

While access to the internet is relatively easy for learners with sight, many learners with visual impairment may have difficulty if included without special support (Polloway 2008:319). Barraga and Erin (1992) cited in Kumsa (2006:36) explain that the environment can be made accessible for the individual with low vision in three ways, by increasing the size of the material itself, by bringing the image on the material closest to the eye and by using a device or protection to magnify the size of the material. Special materials and equipment can enhance the education of learners with visual impairment. But according to the oral report of school principal, (personal communication, September 2012) who is vice principal of Ligaba Beyene Primary Integrated School, these materials which can be used by learners with low vision, like magnifying lenses for distant and near vision, Closed Circuit Television (CCTV), adjustable reading tables and even the facility of bright light, according to the need of learners, are not available. For the legally blind learners Braille reading and writing materials like:- slate and stylus, Braille paper, thermoforms, guiding white sticks and Braille typing machines are not appropriately available. Specialized lighting-lamp and lights with various type of illumination may enhance the visibility of the working surface, material positioning devices like page holder or book stands and slant boards which can enable better

positioning of material to decrease the distance, angle or glare and others are needed in the above-mentioned integrated primary school.

There are also varieties of low vision devices that children with low vision are supposed to use to learn visually. In addition, there are optical and non-optical services enabling them to read and write print visually using their functional vision (Government of New Found Land and Labrador, 2001:196).

2.5.4 Factors affecting learners' success

The academic factors that are identified in the literature as affecting student success and retention as stipulated by Cleyle and Phipostt, (2011: 28) include:

- Learners ' academic readiness,
- Lack of support and encouragement of the family,
- Their past and present academic success and failures,
- Their understanding of their institution's and teachers' expectations and
- The connection between student expectations and what they experience.

It is important that all academic evaluation be the same for all learners, whether or not they have impairment. If a student with visual impairment fails an exam, despite the implementation of reasonable accommodations, it stands to reason that this student did not sufficiently master the material to pass (Savard, 2008:8). Teachers may use variety of textures, model, shapes, foods, ingredients, etcetera to replace visual material. It is recommended that a combination of simple self-made material and ready-made commercially produced teaching aids should be utilized (Wiazowski, 2009:15).

2.6 LACK OF COORDINATION IN SERVICE PROVISION

Education is viewed as the shared responsibility of the home and the school. Parents should be included as active members of the support team as early in the process as possible. Educational priorities identified by family members should be a primary consideration. To develop a high quality visual learning environment, each school's community members, teachers, support staff, parents and learners with disability must work together in a consistent, coordinated and corporative manner. Kumsa (2006:20) also stated that it is the responsibility of the whole school/community to act as a unified team to minimize visual ability problems and to maximize child participation. Studies conducted by Sharma and Furlonger (2010:295) have found that within the field of mentoring collaboration with colleagues and administrative support can increase new general education teacher commitment. Furthermore, collaboration among general and special educators has been found to be the only factors that relate to teachers' positive response towards inclusion. In the past years it has been shown that, educational policies tend to support the integration of children with disability into regular schools. Although this argument is accepted by some literatures there are some other evidences that indicate that the benefits to integration may not be as great as expected.

Earleharma, Sharma and Loreman (2009: 195—209) have found that a growing number of family support specialists and urban educators are moving away from the terminology of "parent involvement". This is because in reality, many parents and families still feel isolated and are not getting enough support through care, education and training for their disabled children. Persons with disabilities are still side-lined in

mainstreaming decision making in most societies. Quality education is fostered by collaboration between educators and families. Coordination of all team members, including family members, helps to assure a shared focus on learners' success. An appropriate service provision should be a collaborative process involving the child, the parent and relevant service providers from the departments of education, health, and community services. Human Resources and Employment, Justice and other relevant agencies should also play a big role.

Preparing teachers for regular class teaching has undergone a major pedagogical shift in recent years. Training institutions are now required to ensure that pre-service teachers are competent to cater for the needs of an increasing range of diverse learners. The teachers of learners with visual impairment must be able to provide support and collaborate with family members and other members of the instructional team who work with learners. They must be able to convey professional opinions in a diplomatic, collaborative manner in order to ensure that appropriate programmes are recommended for the student with a visual impairment (Hamzeh 2008:2).

Most educational discussions on inclusion concentrate on the efficiency of practical matters, educational organization and practice, such as the curriculum, teaching methods and attitudes in the school or individual systems, without taking into account the broader dimension to inclusion which transcends these narrow school or individual based considerations (Engelbrecht 2003:5). Comprehensive low vision services can rarely be offered by a single service provider. It is more often a team approach which

requires the skills of appropriately trained ophthalmologists, optometrists, ophthalmic nurses and rehabilitation workers. (Truitt & Suvak 2001:23-30).

2.7 CONCLUSION

Children with visual impairments often have limited interactions with their environments, less reason to explore interesting objects, and as a result missed opportunities to learn. The main challenges to learning are lack of knowledge about differences, rigid and poor teaching methods, inconvenient learning environment, with lack of identification process, and inadequate assessment procedures. Learners with low vision are limited in interaction with the physical and social environment. They have difficulty in moving from place to place in familiar and unfamiliar environment especially in a dim light. This can considerably affect social communication and educational achievement of learners with low vision.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

The main objective of this chapter is to talk about the design and methodology selected for this study. The focus is on the sample selection and methods that were used to collect, evaluate and present data. Finally, the ethical points appropriate to this study were discussed.

The primary purpose of this study was to explore the experiences of learners with low vision in a specific integrated primary school and more further in the Ethiopian primary schools. The current situation of service provision was also explored through the interviews of different stakeholders. In an attempt to increase the extent and clarity of the study, a qualitative method design and exploration approach was applied.

3.2 THE RESEARCH DESIGN

The Research design provides a plan according to which the research will be conducted. A research design ensures that the study fulfils a particular purpose, and the research can be completed with available resources (Babbie& Mouton, 2001). In addition, Human(2010:57) describes the research design as a combination of four dimensions: the purpose of the research, the design informing the research, the environment within which the research is conducted and the applicable research techniques design were used for data collection and analysis. The study employed qualitative approach and descriptive method to show the educational experiences of

learners with low vision. I explored the experiences and opinions from participants by using descriptive method of data collection instruments. I used the descriptive method because I wanted to describe in detail the various aspects regarding the viewpoints of participants.

3.2.1 Research Site

The study was conducted in an integrated primary school at Wolayta Soddo town, which is 349 kilometres to the South of Addis Ababa, in Southern Nations, Nationalities Peoples' Region (SNNPR) in Ethiopia (See map in Fig. 1). In 2014 the selected school had a total number of 3000 learners, there were 2967 learners with full sight, 26 blind and 7 with low vision or visual impairment. There are 84 teachers who teach in the school, among these 1 of them is the principal who is responsible for all academic activities in the school.

Fig.1: Administrative map of Wolayta zone



3.2.2 Selection criteria and sampling

Purposive sampling was used in this study which simply means that participants were selected because of some defining characteristic that distinguishes them for the data needed for the study. Creswell (2014:188) explained that purposeful sampling is when a researcher selects participants or sites or documents that will help in understanding the problem and the research question. According to McMillan and Schumacher (1997:171) purposive sampling (sometimes referred to as purposive judgment sampling) is when the researcher selects particular elements from the population that will be

representative or informative about the topic of interest on the basis of the researcher's knowledge of the population. An adjustment is made about which subject should be selected to provide the best information to address the purpose of the research. In addition Dawson (2006:48) elaborates that purposive sampling is used if description rather than generalization is the goal. The primary consideration is the judgment of the researcher as to who can provide the best information to achieve the objectives of the study. The researcher goes to the people who, in his/her opinion, are likely to provide the required information and willing to share it.

This study falls under purposive sampling because the target group was learners with low vision between the ages of 13 and 17 years, and grade level from 2 to 8. Among many primary schools, this particular school is the only school in the town where learners with visual impairment are integrated. The participants were seven learners with low vision and three teachers. The teachers were selected because they have a closer day-to-day connection with learners and can give more information regarding learner's behaviour, presence, academic performance, behaviour and social interaction with other learners, teachers and co-workers in the school. In addition to these, one principal of the school who is well trained in Special Needs Education was selected for an open-ended interview which allows the participant to fully and completely explain his point of views.

3.3 DATA COLLECTION

Data collection is the techniques or process used to gather and analyse data related to some research question or hypothesis. All of the data collection techniques have strengths and weaknesses. One way to emphasize the strength and minimize the weaknesses is to use more than one method in a study. Qualitative research uses different forms of data collection than those used in traditional research methods. Best and Kahn (2006:184-203) state that qualitative methods consist of three kinds of data collection: (1) in-depth, open-ended and close ended interviews; (2) direct observations and (3) non-participatory focus group interview discussion. The data from interviews consists of direct quotations from people about their experiences opinions, feelings, and knowledge. The data from observations consists of detailed descriptions of people's activities, actions and the full range of interpersonal interactions and organizational processes that are part of observable human experiences.

In this qualitative research with a descriptive approach he used the data collecting instruments to find adequate information for different methods. He used a number of instruments, namely open-ended and close ended- interviews, non-participatory observation and focus group interview discussions to gather data. The data from the interviews consists of direct quotations from participants regarding their experiences, knowledge attitude and opinion. The techniques used in this study are outlined below.

3.3.1 One-on-one interviews

As Patton (1990) cited in Human, (2006:199) stated that the purpose of interviewing is to find out what is in someone else's mind. This was used to obtain more in-depth information for the qualitative component of the present study. The interview study was an in-depth analysis of the current situation of experiences of learners with low vision, service provision in academic area and social relation of learners with low vision at this particular integrated primary school. This is confirmed by Human (2010:66) and he said that qualitative interviews can be used to yield descriptive and explanatory data. Thus, the interview study was used to generate explanatory information for the study. He further explains that interviewing allows the researcher to enter another person's world, to understand a person's inner perspective to outward behaviours. Interviews also complement observation by adding meaning and elaboration.

In social research there are many types of interviews. Patton (2002) cited in Best and Kahn (2006:185) and point out that interviews simply serve as a basic checklist during the interview to make sure that all relevant topics are covered. In this study the researcher used the semi-structured interview and non- structured interview, which was purposefully determined by the need to explore as intensely as possible into the individual's subjective experiences of the observable facts in question.

The active participants who were involved in this one-on - one interview were one school principal who is trained in special needs education and who has long experience of teaching learners with visual impairment, one unit leader who has awareness towards

people with disability and experience of teaching learners with visual impairment and three home-room teachers. In total, they were 5 respondents involved in this interview process. The main reason of using one-on- one interview was to encourage openness and to gain real contextual information separately from each individual without any interference and fear of risk. When each respondent is alone, he or she talked freely, emotionally and honestly about his/her experience.

The semi-structured interview has a list of questions or issues that are to be explored in the course of an interview. It provides topics or subject areas which the interviewer is free to examine, and ask questions that would clarify exacting issue. In this interview, he wanted to obtain information which can be compared and contrasted with information gained in an unstructured interview. To do this, the same questions were asked in each interview. The researcher also wanted the interview to remain flexible so that other important information could still arise. This researcher was very attentive to the responses of participants, so that he could identify new, emerging lines of question that were directly related to the experience being studied and explored. The information obtained from this interview hopefully would sensitize all the integrated primary schools and encourage them to take appropriate action to secure equal support and access for all learners.

3.3.2 Observation

Observation is a research tool that can be a supplement when careful preparation has been done and the data are thoroughly and carefully described. The description must

be factual, accurate and thorough. Like interviews, observation is also a primary source of data collection in qualitative research. Observation can be distinguished from interviews in two ways. Firstly, observation takes place in the natural field setting instead of a location designated for the purpose of interviewing. Secondly, observational data represents a first-hand encounter with the phenomenon of interest rather than a second hand account of the world obtained in an interview. The data are collected in the field, where the action is, and as it happens (Merriam 1998 cited in Human 2010).

Observation is the systematic process of recording the behavioural patterns of participants, objects and occurrences without necessarily questioning or communicating with them. Observation is an everyday activity where we use our senses (seeing, hearing, touching, smelling, tasting) but also our intuition to gather bits of data. As a qualitative data gathering technique, observation is used to enable the researcher to gain a deeper insight into and understanding of the experience observed (Best and Kahn 2006:198). The data from observations consisted of detailed description of participants' comfort, discomfort and opinion. Different data collection instruments have their own wittiness and strength, to improve this problem I used multi methods of data collection. For example, open and close ended interviews as well as non-participatory observation and focus group discussion. This helped me to compliment interview information with observed events.

3.3.3 Focus group interviews

Focus groups interviews may be called discussion groups or group interviews. A number of people are asked to come together in a group to discuss a certain issue. The discussion is led by a researcher who introduced the discussion topic and asks specific questions, controls deviations and stops break-away conversations. The researcher makes sure that no one person dominates the discussion while trying to ensure that each of the participants makes a contribution. During focus group discussions the researcher can receive a wide range of responses during one meeting. Participants can ask questions of each other, lessening the impact of researcher's bias. It helps people to remember issues they might otherwise have forgotten. It also helps the participants to overcome inhibitions, especially if they know other people in the group. The group effect is a useful resource in data collection. For example, this could be a discussion centred in social research to discuss student's experiences of school (Dawson 2006:29).

The focus group discussion in this study involved seven participants (3 female and 4 male learners) with low vision. The main reason for arranging this focus group discussion was to encourage participants to learn from one another as they exchange and build on one another's views. The focus groups discussion in this study was recorded by using a walk man tape recorder as well as pen and paper.

3.4 DATA ANALYSIS AND INTERPRETATION

After data were collected from the participants through one-on-one interviews, observations and focus group discussion, it was organised in accordance with Best and

Kahn's(2006:203) contention that the first step in analysing qualitative research involves organizing the data. They also confirm that qualitative research often results in voluminous notes from observations, interviews and/or documents. The methods of organizing these data usually differ, depending upon the research strategies and data collection techniques used. Interview data, for instance, may be organized according to individual respondents. Similarly, observations may be considered individually or by grouping similar types of occurrences together while also looking for differences among individual settings or times. Tuckman (1994) cited in Human (2010:70) state that once the data have been organized, the researcher describes the various pertinent aspects of the study, including the setting both temporally and physically; the individuals being studied; the purpose of any activities examined as well as the viewpoints of participants. It uses all the data collected to answer the questions the research set out to answer. Data analysis is conducted so that the researcher can detect consistent patterns within the data.

In this study, the interview transcripts were organised chronologically. The analysis of each interview began with transcription. After the transcription process, the interview was re-read several times to identify the major categories and themes contained in the transcript. Appropriate notes, comments, observations and queries were made. After this process the data was interpreted, analysed and described so as to be understood by others. Information gained from the interview, observation and focus group discussions were analysed according to different individual responses. The consistent patterns were labelled with codes. Similar codes were grouped together in order to

reduce overlapping and redundancy of codes. Then the codes were collapsed to themes, which are also called categories. Thematic analysis while grouping similar types of occurrences was followed. This whole process allowed me to interpret data which involves the writing of a final report about my research findings.

3.5 METHODS TO ENSURE TRUSTWORTHINESS

A common term used to describe validity in qualitative research is trustworthiness. Qualitative researchers can establish trustworthiness by addressing the credibility, transferability, dependability and conformability (Silverman, 2000) cited in Best and Kahn (2006: 208).

Credibility relates to the degree of confidence in the findings of the research, or how believable the findings are. Believability is made easier when the researcher provides a rich, thick description regarding the setting, participants, procedures and interaction (DeVos, 2005:346). Babbie and Mouton (2001:277) point out that credibility includes triangulation, referential adequacy and member checks. This study engaged all these techniques to demonstrate the credibility of the research. Particularly during the second visit of three days in the integrated primary school, I observed on several occasions while one learner with low vision was guiding one blind learner when he wanted to go from one place to another. This provided multiple sources of data. I also included parts from the interviews and provided background on each participant.

Credibility was also achieved by asking the relevant and clear questions. I defined all terms clearly for the respondents. To validate, the same question was asked in each interview. I used much time of the day in observing for long periods in a real social situation to gain real information. I made my data available to my professional peers, so that they could verify the accuracy of the results. Generally, I did my best to ensure anonymity and confidentiality as discussed in the section below.

3.6 ETHICAL ISSUES

In planning for a research project that involves human beings, it is important to consider the ethical guidelines designed to protect the respondents. Without some restraints, experimental practices may cause serious injury and infringe upon human rights (Best & Kahn, 2006:43-46). Furthermore, Cohen, Manion and Morrison (2005: 56) state that social scientists generally have a responsibility to protect their participants. Whatever the specific nature of their work, social researchers should take into account the effects of the research on participants and act in such a way as to preserve their dignity as human beings.

Ethical issues should be given serious attention in research work. Gaining entry to the study population should be done in consultation and with the consent of relevant authorities as well as the targeted study population. In view of that, in order to gain formal permission, the present study has been connected with the Institute of Education and Behavioural Sciences, at Dilla University, which has a bilateral agreement with the Ligaba Primary Integrated School at Wolayta Soddo. This connection was made

possible through the support letter and the assignment of a local advisor by the study institution of the investigator. They first contracted and made an agreement with the school principal to get permission after that the interview, observation and focus group discussion made with respondents. Before starting the interview, observation and focused interview discussion learners were informed about the objective of the study, specific place of discussion, time of meeting and assured that their identify will be kept confidential. Based on their consents all interviews are recorded. The interview for learners with low vision lasted approximately thirty to forty five minutes for each respondent.

It is important to inform the participants about the purpose of research and discuss with them before starting the data collection process. Participation of respondents in this study was on a voluntary basis. Participants were allowed to withdraw from the study at any time they want. The researcher gave the participants a chance to ask about the study before participating. He told the participants that information gained from them can be used only for research purposes. He also requested participants' permission to tape record the discussion and also to edit in case participants change their minds on the discussion. All the information collected from the participants was secured and remain confidential. The researcher did not use participants' true names in order to protect their privacy.

3.7 CONCLUSION

In this chapter the research design and methodology of the study were discussed. Methods 'used for gathering and analysing data were clarified. Ethical considerations related to the practice were emphasized. The findings of this research will be discussed in the next chapter.

CHAPTER 4

PRESENTATION AND DISCUSSION OF FINDINGS

4.1 INTRODUCTION

This chapter focuses on the findings that were obtained through one-on-one interviews, focus group discussion and observation with the selected participants. The specific research questions of the study are answered by using the opinions, experience, attitude, feeling and perceptions of respondents namely learners with low vision, the principal of the school, and the home room teachers of integrated regular school. The explanation of the research findings is presented in this chapter in a form of themes and sub-themes that emerged from the data analysis and supported by the recurring extracts from the participants' utterances and literature.

4.2 BIOGRAPHICAL PROFILES OF THE PARTICIPANTS

4.2.1 School personnel

Sex	Age	Qualification	Work experience	Present position
Male	55 years	Diploma in formal education	37 years	Teacher
Female	56 years	Diploma informal education	35 years	Teacher
Male	51 years	Diploma informal education	33 years	Teacher
Male	46 years	B.A in SNIE	30 years	Principal

4.2.2Learners

	Male	Female
Age	15-18	14-16
Grade	4-8	4-7
Number of learners	4	3

4.3 FINDINGS AND DISCUSSION

In this section the results obtained from the participants will be presented and the themes emanating from the interviews will be outlined under the following sub topics: admission of learners to the school, academic challenges, social adjustment and social skills of children with visual impairment in integrated school as perceived by respondents.

4.3.1 The views of the principal regarding learners with low vision

A number of themes emerged in this section such as the participants' training in administration of special needs education, criteria of accepting learners with low vision and availability of resources to cater for the needs of learners with low vision.

4.3.1.1 The training in administration of special needs education

Regarding the training in administration of special needs education the participant revealed that, "... *I am the only one who is trained in Special Needs Education in the school. I am the only one assigned for programme arrangement and controlling the process of teaching and learning. There is no other trained professional in*

administration of Special Needs Education, not even the supervisors from zonal or regional education bureau.... It is common for regular primary schools to be visited by the supervisors from zonal or regional education bureau at least twice in one academic year. When supervisors come to our school they observe and give comments for regular classroom teachers' performance, regular curriculum content, method of approach. But they do not say anything about inclusive education, how learners with Special Needs are treated by their educators and school administration. ... Because supervisors themselves do not have even awareness about learners with disability and their inclusion into regular classroom and about what is expected from educators, most of time without giving any comment on inclusive education they go back...".

Bryan (2007:20) proposes that teachers of learners with visual impairments must be able to provide support and collaborate with family members and other members of the instructional team who work with learners. They must be able to convey professional opinions in a diplomatic, collaborative manner in order to ensure that appropriate programmes are recommended for the learners with a visual impairment.

4.3.1.2 The criteria of accepting learners with visual impairment or low vision

Regarding the criteria of accepting learners with visual impairment or low vision, the participant reported that "*... there is no age restriction for female and male new comers with visual impairment (blind and low vision) to be accepted in our school. We only require medical certificate from known hospital, ensuring that the child could not read and write print, did not have any type of additional disability except visual impairment,*

need Braille to read and write and official letter which indicates from where she or he is...”.

This is in contrast with Agengehu’s (2000:1) study, in which he found that most teachers do not like the admission of learners with disabilities into their schools. The same source indicates that teachers also refuse the placement of learners with disability in their classes with the notion that this could be unrewarding and burdensome. The rejection is stronger with those children with severe disabilities than those with less severe disabilities. Whatever the case may be, attitudes of teachers towards inclusive education must be given the due attention it deserves if inclusive education is to be favoured and practiced as educational modality.

In addition, Ocloo and Subbey (2008:642) explained that, most of the head teachers reject the admission of learners with disabilities into their schools with the reason that such learners with disabilities will lower the academic standard of the school. Many teachers are concerned that inclusive education will have negative effects on the learners’ studies and performance. Principals are worried that their schools’ position in ranking lists will decline as a result of inclusive education. The researcher also have an experience of observing many schools sending back to their home the visually impaired learners because of their age (most of the time when they are below 7 or above 13 years of age). As it has been pointed out by my participant, the researcher appreciate the school administration for taking/accepting all learners with visual impairment who come to school without age restriction.

4.3.1.3 The resources to cater for the needs of learners with low vision

Regarding the resources to cater for the needs of learners with low vision, I observed that the resource room or pedagogical centre is situated in the main building upstairs and that the steps are very narrow made up of wood. It is not convenient for both learners with visual impairment and the sighted learners. When I went into the room, I saw very old materials which were prepared by the teachers. There was no considerable material which can be used by teachers for learners with low vision. To support my observation, one participant, stated that: “... *I do not know how to prepare and use the material for learners with visual impairment. When I want to use the material I use it for sighted learners I think the same is true for other teachers...*” In addition, the participant stated that: “... *most of the teachers who are assigned to this school in regular inclusive class room could not read and write in Braille, and could not make educational assessment to identify learning needs of children with special needs. I have already applied repeatedly to zonal and regional education office in order to assign teachers who are trained in SNIE. He said, but for a long time there is no positive reply from the offices...*” In support, New Found Land and Lbradr (2001: 24) pointed out that teachers who are not trained in different types of skills in functional vision screening, identification and assessment have major challenges of planning for age appropriate skills and will also be unable to predict the prognosis of learners.

Mastropier and Scruggs (2010:27) stressed that one of the most important determinants of inclusion success is the attitude of the general education teacher towards

accommodating learners with disabilities. Although most teachers are positive about inclusion, but some general education teachers become stressed by a need for individual planning time, additional training for inclusive teaching, and additional resources, in the form of personnel and specialized instructional materials. The Ministry of Education (MOE) (2002:14) and Ministry of Labour and Social Affairs (MOLSA) (2004:16) emphasize that the quality of education for students with disability may be affected by several variables that are observed in the school and out of the school, such as inflexible curriculum, inconvenient classroom, and physical facilities like seating arrangement, furniture and lack of teaching aids.

4.3.1.4 The availability of material and human resources to cater for the needs of learners with visual impairment or low vision

The table below gives a sketchy picture regarding the availability of material and human resources to cater for the needs of learners with visual impairment or low vision in this particular school.

Category	Components	This particular school
Availability of	Material Resources	The school has magnifying lenses
Availability of	Human Resources	The school has good human resources for regular or formal education
Availability of	Financial support	Financial support is gained from SNNPR (government

		finance)
Suitability of	Working Environment	The school has suitable working environment for sighted learners
Training of	Teachers	There was an attempt and planning to train teachers and to gain material resource

As it is shown in the above table, the school is convenient for sighted and able-bodied learners. This is because in the beginning it was designed and teachers were trained without considering the acceptance and education of learners with disability. New Found Land and Lbradr (2001: 24) contend that learners with low vision may require support such as special seating, large print materials, taped materials, lighting considerations, provision of low vision aids, orientation and mobility and other supports or accommodations/adaptations based on the nature and severity of the visual impairment. In relation to evaluation of the strength and weakness of education of learners with low vision the participant stated that “... *there is no difference between preparing and presenting the educational programme for learners with low vision...*” So far teachers in regular classes prepare and teach both learners with low vision and sighted in the same method. However, in relation to evaluation, teachers are evaluating the materials and the methodologies they prepared. There was no external or internal supervision to evaluate the educational programme of the school.

4.3.1.5 The co-operation of the government, non- government organizations and local community for implementation of inclusive education for children with low vision

Regarding the co-operation of the government, non- government organizations and local community for implementation of inclusive education for children with low vision, the participant reported that: “... *we have prepared proposal and asked non- government and government organizations to support the learners with visual impairment in the school. Accordingly nongovernment organizations have provided Braille materials, such as slate, stylus and Braille paper...*” This is confirmed by W/Michael (2006:7) when saying the existing special needs education services in Ethiopia are provided either by the government or non- governmental and charity organizations. The government has established special needs education classes attached to ordinary schools. But all of them are under resourced.

The participant further explained that:“... *regional administration is providing monthly some pocket money for learners with visual impairment individually (from grade 1--4, monthly 80 birr and from grade 5-8, birr 280) per-month for each. As he explained, learners use this money for house rent and for cleanness. Learners with low vision who are integrated in regulars school (grade 2-8) when they attend in the class with 60-70 able bodied learners they participate in any activity in the class and outside. Learners with visual impairment have good characteristics. They work co-operatively and have acceptance by most of the sighted learners...*”

4.3.1.6 The suggestions to improve academic and social challenges of learners with partial sight and low vision

Regarding the suggestions to improve academic and social challenges of learners with partial sight and low vision, the participant acknowledged that “... *when the learners with visual impairment come to our school, the teachers do not want to make an effort to accept and treat them positively, they carried on like sighted learners...*”. He suggested that the teachers had to take all the learners into consideration and had to teach at the same speed and carry on with the curriculum but, with modification. He also suggested the need and importance of “... *arrangement of awareness raising seminar programme for school community including sighted learners, parents, representatives of government and non-government organizations of disability and people with disability in general...*”. He further suggested to school administration to discuss with government and non-government organizations to provide “... *needed materials such as books in print, and transcribed Braille books and magnifiers in order to read and write print and Braille materials such as slate, stylus and Braille papers...*”.

In addition, the participant highlighted that, “... *usually the school administration writes a letter at list three times in one year, for each family including for the families of sighted learners to come to school and participate in common discussions on how to contribute to improve the social and educational challenges of their children with visual impairment in the school...*”. This is also echoed by Adelman and Taylor’s (2007: 22) research findings when stressing that the impact of family and community involvement is undercut in the absence of effective classroom and school wide interventions. All

parents of non-disabled learners and parents of learners in another category of disability area can further share feelings and experience to help each other. Learners with low vision and their parents can be more psychologically and socially adjusted.

4.3.2 The views of the teachers regarding learners with low vision

A number of themes emerged in this section such as the participants' training on special needs education including the use of magnifying lenses and identification methods of visual problems, social interaction and cooperation between learners with low vision and sighted while they are learning as well as the facility of learning environment and teaching material for learners with low vision.

4.3.2.1 The training on special needs education or inclusive education

Regarding the training on special needs education or inclusive education some of the participants reported having a sense of incompetence, helplessness, or guilt and, expressed different reactions about having learners with disabilities in the class. Hsien (2007: 50) reveals that several studies have shown that positive teacher attitudes toward inclusion are influenced by a myriad of factors, such as the overriding policies on inclusion, school ethos, available resources, and level of support in catering for the needs of children with disabilities. Apart from the above-mentioned factors, of particular interest to this paper are the attitudes of teachers toward their perceived levels of teacher efficacy and training, affected by the traditionally separate tracks of general and special education teacher preparation. In several studies repeatedly it is also indicated that teachers are often not prepared to meet the needs of learners with significant

disabilities. There are common concerns like teachers' time taken away from the rest of the learners, class size, lack of training and resource material is not given. The validity of the content is not assessed by educators and experts in the field of special needs education (Deiner 2010:466).

4.3.2.2 The rechecking of the level of functional vision

Regarding the training on special needs education, including the use of magnifying lenses and identification methods of sight problem, Alonge (2005:2) elaborates that learners come to school with different characteristics, background knowledge, cognitive and academic skills, language, attitudes, and values. These differences are well pronounced, thus no single curricular exposure or one type of instructional method can equally be suitable for all, and similarly no one assessment can equally be appropriate for all. Residual vision is poorly understood by the majority of teachers including those who have learners who experience low vision in their class rooms. This causes a family to feel left on its own to figure out how to raise a child with low vision. Educationally learners with low vision have enough residual vision to read large print or regular print with special assistance such as magnification. Their limitations may be greater in their distance vision. These learners should not be referred to as blind (Deiner 2010:45).

During the interview the participants also indicated the absence of the rechecking of the level of functional vision. The information obtained from the interview items is strengthening the idea obtained in the qualitative data in this school in relation to the

use of magnifier, large print, use of residual sight for learning and rechecking of useable vision. But the Government of New Found Land and Labrador (2001: 55) identified and suggested the low vision aids include magnifying glasses and telescopic aids. The magnifiers may be hand-held, sitting on the material or attached to eyeglasses. These magnifiers help the student complete near distance tasks such as reading or writing. Telescopic aids are used for seeing material at a distance. They may be either hand-held or attached to eyeglasses.

4.3.2.3 The social interaction and cooperation between learners with low vision and sighted while they are learning

Regarding the social interaction and cooperation between learners with low vision and sighted while they are learning, it is indicated that friendships are the key aspect of school life and that negative peer attitudes are generally recognized as being a major barrier to full social inclusion at school for learners with disabilities. Furthermore, the most important role players for making social inclusion a success are identified as the teachers. Therefore, teachers play one of the most important roles in implementing and successfully maintaining inclusive education in schools. The reason for this is because they are in direct contact with the learners and closely interact with them on a daily basis.

In this study, the participants indicated positive efforts of inclusive education on both learners with disabilities and non-disabled peers. Some of the participants reported, “... *the experience of gaining a sense of achievement, learning more teaching strategies,*

and having a better understanding of the rights and needs of learners with disabilities and the meaning of equality...”. Other participants explained that, “... most of the time learners with visual impairment express their feeling freely depending on the approach, treatment and openness of the other sighted people including teachers...”

Although learners would like to be in inclusive schools, some parents have a contrary way about the educational placement of his child. This participant revealed that one parent said to him: “... *I want my child to be and learn at ‘Otona’ school for the blind...*” (‘Otona’ is the name of one sub- part of the town in the Western direction where there is residential school for visual impaired). It is run and owned by the Ethiopian National Association of the Blind and funded by non-government foreign organisation, Chrstofel Blinden Mission (CBM).

4.3.2.4 The social interaction and adjustment of learners

The table below gives a sketchy picture regarding the social Interaction and adjustment of learners in this particular integrated primary school.

Activities	Elements	Learners with low vision in the integrated school
Social interaction and approach of learners	Socially they are interactive and have good relation with	Have good relationship with each other and with the sighted children; no teasing and rejection except in some rare

	sighted peer friends	cases
	Asking help from others	They ask help from their peers and teachers. But some of them, particularly those who are mildly impaired male and female learners act as if they can do, they are not free to ask for help from others.
	Being alone	They do not feel lonely.
	Making friendship	Make friends easily and play together. But most of the time they tend to be with visually impaired learners.

As indicated in the above table, the participants agreed that both categories of learners have good relationship to one another. Most of the time sighted learners prefer to be and play with sighted. Because of the restricted movement learners with visual impairment also like to be and discuss in one place. But in another situation, during activities almost all learners with low vision are socially interactive and adjusted with sighted. Learners have a good relationship with each other, they are not hesitant in asking for help from others, they can make friends easily and they do not feel loneliness at school. NaiKwai-Lo (2007:48) argues that among the various groups of mainstream

learners, elementary–school learners and female learners take a more positive attitude towards fellow learners with special educational needs than secondary- school learners and male learners.

All respondents clarified that very few sighted learners in some situations, during break time, when playing together tease one another by referring to the way they move or run from place to place. This is insignificant because most of the time learners with low vision themselves and sighted learners regard this as a joke. But we cannot say that there is no teasing and rejection in the school. Because, one participant said: “... *during break time everybody runs out to the field to play, I remain behind alone in my classroom. Nobody wants to talk and to go with me, even female student underestimate and leave me alone. Then I feel that they hate me because of my sight problem...*” It is also noticed that many sighted learners in mainstream society are afraid of their blind and visually impaired peers and do not want to get acquainted with children with visually impairments.

4.3.2.5 The facility of learning environment and teaching material for learners with low vision

Regarding the facility of learning environment and teaching material for learners with low vision, it should be acknowledged that learners with low vision may require supports such as special seating, large print materials, taped materials, lighting considerations, provision of low vision aids, orientation and mobility (travel training) and other supports or accommodations/adaptations based on the nature and severity of the visual

impairment. One participant, who has long experience in teaching regular classroom learners, stressed that “... *there is no enough light in the class rooms for learners with low vision and sitting arrangement is not convenient even for sighted learners. Usually three learners sit on one bench. To put their materials and to write on at the same time it is not enough for three learners...*” Garzia and Ralph (2008:33-36) pointed out that learners with low vision need some modification of learning environment to perform successfully. Vision also may fluctuate or may be influenced by factors such as inappropriate lighting, light glare, or fatigue. The majority of learners with visual impairment require bright light and slightly more time and space than sighted learners to perform certain tasks. For example, given their low vision, they may be unable to quickly find an item or the first line on a page. It will often take them longer to completely make out what they are seeing or understand what is being discussed (Savard 2008: 5).

4.3.2.6 The suggestions to improve the academic and social challenge of learners with low vision

Regarding the suggestions to improve the academic and social challenge of learners with low vision, the participants suggested for other teachers to give attention for learners, take and use an extra time after class and during break time to answer their questions. (Savard 2008:5) points out that the majority of learners with visual impairment require slightly more time than other learners to perform certain tasks. For example, given their low vision, they may be unable to quickly find an item or the first line or a page. It will often take them longer time to completely make out what they are

seeing what is being discussed. Some participants said, “... *Regular and special teachers must work together to solve the problems of the learners...*”

They also reported that school community members, teachers, support staff, parents and learners with disability are not working in a consistent, coordinated and corporative manner for the education of learners with visual impairment. The challenge of overcrowding was also outlined as the most significant barrier as in most classes there are from 48-60 learners in one class room, within this allocated one period (45 minutes). The participants said that it is impossible to address the special needs of learners with low vision in the class room within this short time.

4.3.3 Experiences of learners with low vision

A number of themes emerged in this section, such as the participants’ expression of feelings about their sight problems and the treatment they were subjected to, their experience of being teased or bullied by class mates while reading and walking in the presence of the teacher, special preparation of the curriculum as well as the suggestions regarding how the stakeholders can help them.

4.3.3.1 The expression of feelings about their sight problem and the treatment

Regarding the expression of feelings about their sight problem and the treatment, one participant stated that, “... *we don’t need sighted learners to read and write for us. We can do it for ourselves, the only thing what we need to have is Braille books and printed books in block letters, magnifying glasses and bright light...*”. On the contrary, another

participant said, *“...To have an acceptance and support from sighted people I have to show socially acceptable good conduct. I like to work and live peacefully everyday with others...”*

Andrea and Farrent(2000:11) state that children with low vision can experience many negative consequences such as feeling like an outsider because they cannot take part fully in activities, feel less than capable because they do not understand visual concepts fully and feel clumsy because they drop things or bump into objects. But another participant showed some determination, *“... I know that even if the sighted people are not educated, they can have different alternatives to be able to lead their future life independently. For me and for other persons with visual impairment the only means for better life is to be educated. So even if I face different types of obstacles, which can interfere with my learning, I hope that I will continue my studies...”*

4.3.3.2 The experience of being teased or bullied by class mates while reading and walking in the presence of the teacher

Regarding the experience of being teased or bullied by class mates while reading and walking in the presence of the teacher, some of the participants said *“... not all sighted learners' approach is good to learners with visual impairment and that, sometimes emotionally they are being teased by some very young, sighted learners particularly during break time and after classes while they are playing together in the sports field...”*.On this point of social inclusion, Llewellyn (2000) cited in Human(2010) argues that mainstream schools are not always the best option because, in their current state,

they are discriminatory and do not allow full access to the curriculum, resources and, perhaps most importantly, friendship networks. Research indicates that learners with disabilities are likely to be perceived as different, they are more likely to be ostracized, to lack friends, and to be bullied when compared with their classmates.

4.3.3.3 The special preparation of the curriculum

Regarding the special preparation of the curriculum, one participant said,“... *I like teachers to give me special attention during classes, but there is no support from teachers and from other surrounding people. During the class there is no special material provision, or preparation for me and for others. The only alternative for me is using my ears, to listen while the teachers are teaching or explaining orally in the class room...*”.Polloway (2008:323-324) indicates that even though learners with visual impairment learn similarly to their sighted peers their inability to process visual information efficiently results in their needing specific curricular and instructional modifications. For learners with low vision, these modifications may simply mean enlarging printed materials to a sufficient size so that the student can see them. In relation to this, making instructional modifications and providing special material training on how to use it, environmental intervention and doing different activities are crucial elements of intervention measures. Accordingly, an educator of learners with low vision should consider important components in the learning environment such as that teaching visually impaired children requires an open mindedness and a tremendous capacity to empathise and communicate. You need various teaching techniques to teach the type of reading a disabled person must learn.

4.3.3.4 The expression of social acceptance, interaction or integration

Regarding the expression of social acceptance, interaction or integration one participant indicated that *“... My friends in the school do not isolate and underestimate me. But because of my own inability to see clearly, personally I feel that I am unable in certain situation and activities when I compare myself with my sighted peers. Some of my friends treat me equally without neglecting...”*

Other participants said they prefer to have relationships with the sighted than with those who have visual impairments because they can help them in their studies. In addition, another participant stated that, *“... my classmates who are sighted are helping me in what I need from them. But at the same time others are underestimating me, they do not want to be with me, the classes are very big, overcrowded and it is hard for me to find my classes on this big school ground...”* The other participants explained the situation at home, *“... When I was at home with my parents there was no equal treatment and order for me to do things, for example, my parents don't allow me to go and collect fire wood from the field, while my brothers and peers are doing that and playing. When I compare myself with others I feel that I am not able to do things. Before I came to this school I thought that I am the only person with visual impairment in the village and I felt hopeless. After coming to this school still I am thinking about my future. My parent cannot help me in buying educational materials food and clothes. I believe that I will be beneficial only if my family supports me when I face difficulty...”*

4.3.3.5 The non-participation in school activities

Most of the participants felt strongly about their non-participation in school activities, this was captured when they say: “... no, we do not participate in sport activities”. *During this period, we sit somewhere in or around the class. Most of the time sighted learners do not come to discuss or to play with us...* Shapiro *et al.*(2005:16) explain that learners, who have difficulty performing sport and physical activity skill, often have lower self-perceptions. These poor self-perceptions are likely to lead to a reduction in confidence in movement and often extend beyond the athletic domain, resulting in adverse psychological and social consequences.

The Individuals with Disabilities Education Improvement Act (IDEA, 2004) indicates that learners' Individual Education Programmes (IEPs) must address their functional performance and meet their educational needs resulting from their disability, along with supporting their academic achievement. The children should be integrated not only physically but also socially and intellectually. This is to mean that their physical presence in the school compound is not enough rather they should learn and interact with their non-disabled peers. Human (2010:52) confirms that learners who experience visual impairments are a heterogeneous group ranging from those who are totally blind to those with a slight visual impairment. Learners who are blind and learners who have low vision are distinguished because their needs differ. It is indicated that learners with low vision are at greater risk of social isolation than their blind or sighted peers. They also have less self-esteem and self-determination, and more potential for depression. Learners with low vision often appear sighted and that is why peers, family members

and teachers may not understand why many of these learners appear physically awkward, overtly shy, and easily frustrated. They may miss or misinterpret social cues given by peers, family, or teachers, because they are unable to accurately see them. These learners do not have an identity as a blind person, nor are they considered fully sighted.

4.3.3.6 Challenges in the learning environment

Regarding the challenges in the learning environment, one participant said, *“... there is no enough bright light in the classrooms to read during clouding days, I cannot see and read clearly. Because in our class the front part of the walls does not have wide windows at the lower level of the wall which can allow natural light to enter. Walls of the classroom and corridor around the classroom are painted with blue and brown colour. So that I am forced to read and write in a dim- light...”*In addition most of the participants said, *“... we have problem not only in reading and writing clearly and also we have problem in free and independent movement around the classrooms. Because we cannot see walls clearly particularly during day time when there is dim-light in around the classrooms and corridors. Also there are tree behind the classrooms in which learners can bump and hit themselves while playing in the field...”*They also said: *“... some teachers don't like to be asked certain questions when asked they say “ask me this and do not ask me that...”*

Tirusew (2002:9) indicates that if the environment (for example, the school) is a rejecting, insensitive, hostile and degrading type, this will not only complicate the

adjustment of persons with disabilities but also have a negative bearing on their development. He further says that, this in turn adversely affects their self-esteem which is usually characterized by lack of trust and confidence in one self and the surrounding, low self-esteem and a feeling of hopelessness.

Furthermore, one participant's aid: "... some teachers just write on board and tell to learners to do a class or home work, they do not read for me. In such a case I ask sighted learners to read for me from chalk board. Sometimes I feel sorry, that I am not considered by the teacher in the classroom. I think if the school gives me magnifying eye glass it will help me to read print. Because the doctor told to my father to buy for me and use it..." All respondents expressed their feeling by saying that they do not like the existing method of teaching which is mostly accompanied by writing and drawing on the chalk board without considering their learning needs and seeing ability differences in the classroom.

Douglas and Sue (2009:147-151) state that the majority of visually impaired children have some remaining or "residual" vision. It is recommended that specialist services should carry out regular functional visual assessments on visually impaired children to enable professionals to design appropriate educational intervention. Such assessments should draw upon the views, expertise and assessments of a broad range of stakeholders, including optometrists, ophthalmologists, teachers, and parents. When low-vision aids have been prescribed, appropriate training should be provided for staff and pupils.

I observed that learners with low vision in this school are not provided with magnifying lenses, and /or large printed materials and special devices. This means they cannot learn visually by read and write ink print. Another participant reported despondently that, *“... My parents couldn't buy for me what I need for my education like Braille writing materials such as: slate, stylus, Braille paper, Braille books, money for food, cleanness and for house rent. When I realize that I cannot fulfil these necessities then I feel bad that I am dependent on others...”*

For the legally blind learners Braille reading and writing materials like:- slate and stylus, Braille paper, thermoforms, guiding white sticks and Braille typing machines are needed but unfortunately in this school these are not appropriately available. As it was indicated previously in chapter two, according to the oral report of school principal, (personal communication, September 2012) who is principal of this primary integrated school, materials which can be used by learners with low vision, like magnifying lenses for distant and near vision, Closed Circuit Tele Vision (CCTV), adjustable reading tables and facility of bright light according to the needs of the learners are not available in the school.

4.3.3.7 Suggestions on how the stakeholders can help

To resolve this situation the participants were required to provide suggestions on how the stakeholders can help them. Some of the participants explained that, *“... We need all teachers to give us attention and encouragement in order to participate in the classroom activities, particularly when they write on the chalkboard and explain. We*

need them to consider and help us to sit in front of the learners, near the chalkboard and in a place where there is better light...”They suggested strongly to the school principal to improve and facilitate the classroom (learning environment). By considering aspects such as: sitting arrangements, providing enough spaces to put personal materials, and providing bright light in order for them to be able to read and write. Tefera (2002:13) mentions that barriers in the learning environment adversely affect the socio-emotional development of children with visual impairment.

The environment is a factor that significantly affects the psychological functioning of children with visual impairment. Their development is affected by different kinds of environmental factors, including educational placement, attitude of others and lack of acceptance by others.

Furthermore, the participants suggested that, “... while teaching in the class room teachers need to give attention for learners with low vision...”.There was common understanding that the learning environment is not conducive. Teaching Students with Special Needs in Inclusive setting (2012:37) suggested that teaching visually impaired children requires an open heart and a tremendous capacity to empathise and communicate. You need various teaching techniques to teach the type of reading a disabled person must learn. Generally visually impaired learners are able to read and use large print versions of text books. They cannot read normal size of alphabets in the text book or in a manual. Teachers can make a difference in the life of their learners by teaching them how to deal with stress and strengthen them so they can bounce back

from disappointment, fear or anger (P. Cuhrko, a teacher with low vision in Ligaba integrated primary school (personal communication August 16, 2012).

During my observation period I did not see teachers encouraging sighted learners to help the visually impaired learners in certain activities. During the examination I observed while the teachers were reading exam questions from hand held, ink printed paper and the learners were writing the answers from multiple choices in Braille. It was not surprising when the participants suggested that while teaching in the class room teachers need to encourage and give attention. I also recommend that regular classroom teachers need to advise sighted learners in order to help in reading from chalk board and to discuss with them a about the subject. Regular classroom teachers should have a close relationship with learners and treat them in a nurturing and caring manner. The teachers in the integrated school should have a close relationship with special education teachers, share working experiences and work together to solve academic and social problems of the learners with special needs.

One participant also said “... *My parents are poor they do not encourage me to go to school, but still they are giving me very little support. I am still struggling to continue my study and I need the school director to discuss with my parents about my education...*” Human (2010:39) pointed out that parents are one of the key elements in inclusive education. The contribution they can make to successfully implement and maintain inclusive education, is precious. Parents make major contributions to the political movement for inclusive education. Attitudes of parents are well known to

influence the self-concept of the visually impaired. In turn, the self-concept of the child will determine his/her school performance. In addition, Simi (2008: 14) indicated that parents of children with educational issues and needs who opposed inclusion were concerned that children with special needs may not be receiving adequate attention in the way that they would in special education settings. Tanzila, (2012:51) suggests that parents should be involved in every stage of the programme such as placement planning Individualized Educational Programmes(IEPs) for their children in homes and evaluating progress of their children.

Regarding my observations during the research process, there are some situations and factors which may upset learners with low vision while learning in the class room. For example, a teacher said to learners while teaching in the class room forgetting the existence of learners with visual impairment: “... *please learners look to the chalk board...*” Previously during the interview session the participants some said loudly: “... *we do not have books in ink print and in Braille no enough space to keep our personal materials near to us...*”.

This was confirmed by my observation of the situation in the classroom and outside the class room. I did not see a learner with low vision holding a book and in the class room there is not enough space to keep personal materials near to them. I also observed in the same day, both male and female teachers, reading exam questions for both learners with total blindness and low vision. They were reading each question at least two times for all learners at the same time. Both categories of learners were writing the

answers by choosing from the given alternative multiple choices in Braille alphabets. For the exam the time allowed was 0.45 minutes, from the beginning up to the end both teachers were serious.

During the interview I noticed that the classroom environment is not conducive, particularly for learners with low vision. Usually one bench is allowed for three learners to sit on and to put personal materials. The space is not enough to keep personal equipment to write and read on it. The windows of the class room on the front side of the wall are very narrow, which means that there is always dim- light in one side of the class room. In addition to this almost all class room walls are painted with blue and brown colours. Learners with limited/ low vision cannot see materials clearly and cannot move freely in and around their class room. Sitting arrangement is not convenient even for sighted, the rows between benches are very narrow to pass through and sit on. Outside the classes there were trees and stones around the classes and sports field that could be an obstacle to learners with visual impairment. There are corridors between the class room walls on the walking line, which means that they can hit themselves or bump into walls. The second big road of the town which runs from North to South to the bus station is passing in front of the main gate of the school which is too busy with different types of vehicles. There is pavement on both sides of the road for people to walk and zebra on the road for school community and for others to cross the road from West to East and vice versa.

4.4 CONCLUSION

The result from the observation, interviews and focus interview discussion during the research process have showed that the learners with low vision like to learn in an integrated school. They sense that they can reach more in this school and can develop their full talent there. The learners with low vision prefer to be surrounded by sighted learners and, although emotional teasing does not come about and if it happens they considered it to be as a joke, they accept it and acknowledge that it can happen everywhere, in any school. If learners with low vision get necessary support from integrated schools, there will be social interaction instead of social isolation in the school.

CHAPTER 5

OVERVIEW, INTERPRETATIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

This chapter serves as a wrap-up of the entire study. It provides an overview, interpretations and recommendations. It also brings closing statements on the main findings of the research and makes suggestions for further research. The chapter will conclude with the researcher's final reflection.

5.2 OVERVIEW OF THE LITERATURE

This study was prompted by the concerns that continued to bug me when I witness the challenges experiences by learners with low vision in integrated primary schools. In this particular primary integrated school there are many social and environmental barriers that learners with low vision experience. Among these, the main barrier is people's lack of knowledge about diversity. Tefera (2002:13) mentioned in Chapter 2 that these barriers adversely affect the socio-emotional development of learners with visual impairment. Some of those are the environment, attitude of others and lack of acceptance by others. The environment is a factor that significantly affects the psychological functioning of learners with visual impairment. Smith and Pollway (2008) in Chapter 2 also state that learners with visual impairments present a variety of needs. Those who are capable of reading print, with modifications often require minimal curricular changes; those who must read using Braille require significant changes.

The majority of schools in Ethiopia are poorly designed and are not equipped to meet the unique needs of learners with disabilities. The lack of accessible buildings, social prejudice and negative attitudes are considered as big problems which can prevent successful implementation of interactive practices in schools. Many people with visual impairments are rejected by able-bodied people possibly because they might not have been regarded as normal in social instances. For instance, many children with low vision and youngsters tend to lack play skills with sighted peers, ask many irrelevant questions, and engage in inappropriate acts of affection. Some of these individuals with severe impairment end up involved in inappropriate anti-social behaviours. The collective and emotional needs of learners with low vision are unique because the effects of the vision failure sometimes hamper the formation of their self-concept. Schools and teachers find it difficult to accommodate learners with special educational needs and compel learners to adapt instead of adapting the school environment and material to the learners. This was confirmed in Chapter 2 by Deiner (2010:45) when explaining that low vision is poorly understood by majority of teachers including those who have learners who experience low vision in their classrooms. This causes a family to feel left on its own to figure out how to raise a child with low vision educationally.

It was mentioned in the previous chapter that teachers' attitudes influence their learners' achievement and social-emotional outcomes. They also affect the implementation of interventions to improve children's mental health in schools. It has been discussed more extensively that learners with low vision may have restricted mobility and consequently limited experiences which may cause passivity and dependency and a learned helplessness. One aspect of psychological functioning that may affect these learners is

self-esteem. Self-esteem is related to a person's feeling of self-worth and value. Scott and Murry (2001:287) highlight in chapter 2 that self-esteem is a critical ingredient for lifelong happiness, success and better life. In addition, Andrea and Farrent (2000:11) project a very important point when stating that children with low vision can experience many negative consequences such as feeling like an outsider because they cannot take part fully in activities, feel less than capable because they do not understand visual concepts fully and feel clumsy because they drop things or bump into objects. As a form of intervention, they point out that low vision training can be recommended to prepare learners to become active learners and enable them to access information from a variety of sources.

5.3 OVERVIEW OF THE FINDINGS

Negative school experiences of children with visual impairment have been linked to teachers' low level of knowledge of disabilities and intervention techniques and insufficient special education support. This research has revealed that learners and teachers do not have adequate knowledge about the importance of integrated education. This has negative implications for the social integration of the learners with low vision. It is not clear for the school community about the needs of learners with special need. There was no previous awareness raising program in school that took place for preparing both the learners to work friendly together. Social interaction between learners with low vision and sighted learners is very limited. Increasing awareness is a decisive element and contributing factor in the social interaction of learners with visual impairment.

The observations emanating from respondents in this research were that awareness-raising did not happen at all in this particular integrated primary school and even up to that point communication was still not up to a normal level. There was no discussion between teachers and students to minimize the educational challenges of these learners for many years. By now placing them together bodily without awareness and other necessary facility will not solve the problem. It should be considered that social inclusion will not happen immediately. It cannot be assumed that learners would readily accept inclusion.

Another crucial challenge highlighted in the findings is that there is not enough learning material support given from the family or from the school for learners with visual impairment (blind and low vision). As it was previously reported materials which can be used by learners with low vision, like magnifying lenses for distance vision, ink printed text books or Braille transcribed books, slate, stylus Braille books, Braille paper, magnifying lens and block letter are not provided for these learners. For near vision, Closed Circuit Tele Vision (CCTV), adjustable reading tables, bright light and conducive classroom environment for free physical locomotion according to the needs of the learners are not available in the school.

Barriers like teasing or bullying and undermining are reported at the school, but the learners with low vision do not consider this as their biggest hazard. These learners are more concerned with the training of the teachers and having the right equipment to help

them to learn more independently and perform better in school. Some teachers themselves reported the need for gaining more information about different types of needs of learners with special needs. In contrast, some also reported having a sense of incompetence, helplessness, or guilt and, expressed different reactions about having learners with disabilities in the class.

From the investigation it became clear that the learners with low vision prefer an inclusive school. The integrated primary school offers them more opportunities to be with other sighted peers in different types of social situations. For example, when walking from home to school and from school to home, in class and group activities, during break time so that they can discuss or play with friends. They view the social aspects of their inclusion as positive and they prefer being a part of the integrated school. From the views of the participants in this research it seems as if it is equally hard for the learners with disabilities to adapt to a new situation than it is for the able-bodied to adapt, while the learners with disabilities actually have to make the bigger move towards cooperation and interaction. As it has been discussed in chapter 4 learners with visual impairment might still sit alone or only with one another during break times, but it is the friends that they choose. They do feel that they have freedom in a mainstream school and can make their own choices.

5.4 LIMITATIONS OF THE STUDY

This study has some limitations that need to be explained in order to help other researchers in their future studies. The first limitation concerns with the number of participants in the process of providing information. In the beginning of this research I

planned to involve two regular schools that are admitting learners with low vision in the same classes as sighted learners. But, unfortunately, at that time when I was ready to collect data from the participants, I discovered that one selected school had taken all the learners with visual impairment (totally blindness and low vision) in to one separate special class. Then I was forced to continue my study in one remaining integrated primary school. The second limitation was the distance of study area from my working place and the shifting work system of the school and unexpected continuous assessment and examination schedule of the school.

5.5 RECOMMENDATIONS

The literature reviewed, as well as the findings of this study, shows less positive and more negative attitudes towards inclusion of learners with disability. It is clear that a lot of work needs to be done at regional, zonal and at school level. Based on the results obtained and the conclusions drawn from this study the following recommendations are suggested:

- Before accepting or admitting learners with visual impairment the regular schools should fulfil some requirements, like preparing sighted learners and teachers, by equipping them with the necessary awareness about the wide range of special needs of learners with disability including learners with visual impairments.
- Before accepting these learners the school should train teachers in special needs education, particularly in skill areas like in Braille reading and writing, orientation and mobility skill training and on how to make a visual assessment on functional vision.

- The regular inclusive schools should know the importance of early acceptance and benefit of early identification and intervention to encourage social development of learners with low vision.
- In addition to this the learning environment, both class room and school compound should be adapted and equipped for free physical locomotion from place to place during break time.
- Learners with low vision should be included not only physically, but socially and psychologically.
- Services should identify learners with low vision as soon as possible after diagnosis of their visual impairment and offer support and advice to care-givers in relation to encouraging communication and early development.
- But the main important decisive thing is that the school should facilitate the situation for learners to interact with sighted learners, teachers and co-workers (school community) in different types of social situations and activities.
- The regular and special education teachers must work cooperatively together to solve the problems of learners with low vision.
- Counselling services should be provided to the learners in an integrated setting to help them to know the difference between sighted learners and learners with low vision and in general to develop their psychosocial functioning.
- Schools, parents and peers must play their role in enhancing the social interaction of learners with visual impairment. This will further help them to be more adept at social adjustment.

- Schools, parents, peers, neighbours must play their role in enhancing the positive self-esteem and confidence of learners with low vision.
- Furthermore, this study suggests the importance of strict association and common understanding of general and special education teachers' preparation programmes at pre-service and in-service level to better supply according the needs of learners with low vision.
- It is recommended that services can be provided to support self-confidence training and communication skills, as well as the training of sighted peer to improve the attitude towards learners with low vision.

5.6 RECOMMENDATIONS FOR FURTHER RESEARCH

Even though this study was conducted in one school and transferability is not possible, the findings of this study provide insight into the observable fact of how learners with low vision experience social isolation in an integrated school. This implies that further researchers need to work on a larger sample population in different integrated schools. Furthermore, the research on ways of social inclusion for learners with low vision in integrated schools would be valuable. From a study like this, concrete and practical strategies and guidelines might be developed for the teachers dealing with these learners every day.

5.7 CONCLUSION

The literature and the research findings of this study have made it apparent that the physical presence of learners with low vision in the classroom does not by itself ensure a learner's social inclusion. Whether or not a learner feels truly included depends on their participation beyond

being physically included in activity, school, work or relationships. It has been noted that individuals with impaired vision are less able to perform activities of daily living, less mobile, more isolated, suffer higher rates of depression and they have a reduced overall quality of life when compared to their sighted counterparts. Challenges regarding their educational achievement are brought by exclusion, these barriers get into their way of full acceptance and participation in education activities.

The research in this study has revealed that teachers and sighted learners do not have adequate knowledge about the importance of inclusive education or inclusion of learners with low vision. Regarding the special preparation of the curriculum, respondents in this research study reported that during the class there is no special material provision, or modification of the learning material to suit the needs of learners with low vision. Therefore, the recommendations that are outlined in this study are crucial.

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APPENDICES

APPENDIX A- INTERVIEW SCHEDULE FOR PRINCIPAL

- Sex _____
 - Age _____
 - Qualification _____
 - Years of Service at integrated school -----
1. Have you taken training in administration of special needs education or any school administrative courses which is related to the support of learners with diverse needs?
 2. Does the school have resource room/pedagogical centre to support learners with low vision? In question '2' If you say 'yes', elaborate and give kinds of supports this resource room is providing for the learners with low vision? If 'no', explain to me how do you support learners with low vision?
 3. Are there any efforts made to produce professional human resources and to generate the necessary material resources in the areas of education of learners with low vision?
 4. Do you have any cooperation and discussion with government, non-government organizations and local community for implementation of inclusive education for learners with low vision? In what other additional matters do you have co-operation?
 5. Can you provide me with more information or ideas that can help to improve social and academic challenges of learners with low vision?

APPENDIX B- INTERVIEW SCHEDULE FOR TEACHERS

- Sex _____
 - Age _____
 - Qualification _____
 - Study area-----
 - Types of service you are providing now _____
 - Years of Service at integrated school _____
1. Have you taken training on special needs education including the use of magnifying lenses and identification methods of sight problem?
 2. If 'yes', to identify sight problem of learners what type of methods and materials do you use now?
 3. If 'no', why the training has not been offered to you?
 4. How do you explain social interaction and co-operation between learners with low vision and learners who are fully sighted while they are learning?
 5. Briefly explain the learning environment and teaching materials that are used to cater for learners with low vision?
 6. Can you provide me with more information or ideas that can help to improve social and academic challenges of learners with low vision

APPENDIX C- INTERVIEW SCHEDULE FOR LEARNERS

- Sex _____
 - Age _____
 - Grade _____
1. Do you like to express your feeling about your sight problem and how people treat you? In question '1' if 'yes', with whom and how often do you like to talk about it?
 2. Tell me about your experience (if any) of being teased by your class mates while you are reading in the presence of the teacher?
 3. How do you specify your needs when you are in the classroom while the teaching and learning process is taking place?
 4. Is there a special preparation of curriculum for you or you are learning the same regular school content?
 5. Do you feel that you are socially isolated? In question '5' If you say 'yes' when and how often do you feel this way?
 6. Tell me more about the attitude of teachers and other learners towards learners with low vision.
 7. Can you provide me with more information or ideas to improve the inclusion process of learners with low vision in integrated schools?

APPENDIX D- OBSERVATION CHECKLIST

No	Activities	Comments
1	Is the classroom environment conducive for all learners?	
2	Is there smooth interaction between learners with low vision and those with full sight?	
3	Do all teachers teaching in the school have smooth interaction with all the learners?	
4	Do students with special needs participate in asking and answering questions?	
5	Do teachers' methods of teaching encourage all the learners to participate?	
6	Is there any annoying condition in the classroom for learners with low vision?	
7	Do all learners have their own books and enough space to keep personal materials near them?	
8	Do teachers show smiling faces for all learners?	
9	Is the school environment conducive for learners with low vision?	
10	Do learners with low vision attend classes regularly?	

APPENDIX E- LETTER TO THE SCHOOL

Dear Sir/Madam

REQUEST FOR PERMISSION TO CONDUCT RESEARCH IN YOUR SCHOOL

I am a student at University of South Africa doing Masters Degree in Education, specializing in Inclusive Education. My research title is '**Experiences of learners with low vision in Ligaba Integrated Primary School of Ethiopia**'. The purpose of this study is to explore the academic experiences of learners with low vision in integrated school.

I am required to conduct research as part of the requirements for my degree and I cannot do what is required of me without your permission. Therefore, I hereby request permission to conduct research in your school. The participants:

- Will not be obliged to partake.
- They can withdraw any time.
- Their identity as well as the schools will not be revealed.
- There will be no compensation offered
- Research outcome will be shared with you and the Ministry of Education.

My credentials can be verified with Prof VG Gasa who is my supervisor at the University of South Africa (UNISA). Her contact details will be availed to you on request.

Thank you

Kebede Abichu Kabeto (Mr)

Cell: 0913287352

Email: kebeabichu@gmail.com

Permission to conduct the study

We have read the above letter and we became agree that he can conduct the study in our school as described.

Principal signature _____ Date_____

APPENDIX F- CONSENT LETTER FOR PARTICIPANTS

Dear Participant

I am a student at University of South Africa doing Masters Degree in Education, specializing in Inclusive Education. My research title is '**Experiences of learners with low vision in Ligaba Integrated Primary School of Ethiopia**'. The purpose of this study is to explore the academic experiences of learners with low vision in integrated school.

I hereby request your participation in an interview which will help me to satisfy the requirements of this degree. If you agree to participate, take note of the following:

- Your identity will not be revealed.
- You are not compelled to participate.
- You are free to withdraw at any time.
- The participation is voluntarily and no compensation will be offered.

My credentials can be verified with Prof VG Gasa who is my supervisor at the University of South Africa (UNISA). Her contact details will be availed to you on request.

Thank you

Kebede Abichu Kabeto (Mr)

Cell: 0913287352

Email: kebeabichu@gmail.com

Agreement to participate

I have read the above letter and I agree to participate in the study as described.

Date

Participant's signature

Date

Witness's signature

APPENDIX G- CONSENT LETTER (PARENT/GUARDIAN)

Dear Parent/Guardian

I am a student at University of South Africa doing Masters Degree in Education, specializing in Inclusive Education. My research title is '**Experiences of learners with low vision in Ligaba Integrated Primary School of Ethiopia**'. The purpose of this study is to explore the academic experiences of learners with low vision in integrated school.

I hereby request the participation of your son/daughter in an interview which will help me to satisfy the requirements of this degree.

If you grant permission for your son/daughter to participate, take note of the following:

- His/her identity will not be revealed.
- He/she is not compelled to participate.
- He/she is free to withdraw at any time.
- The participation is voluntarily and no compensation will be offered.

My credentials can be verified with Prof VG Gasa who is my supervisor at the University of South Africa (UNISA). Her contact details will be availed to you on request.

Thank you _____

Kebede Abichu Kabeto (Mr)

Cell: 0913287352

Email: kebeabichu@gmail.com

Agreement for my son/daughter to participate

I have read the above letter and I agree that my son/daughter can participate in the study as described.

Date

Participant's signature

Date

Witness's signature

APPENDIX H- ASSENT LETTER

Dear Participant

I am a student at University of South Africa doing Masters Degree in Education, specializing in Inclusive Education. My research title is '**Experiences of learners with low vision in Ligaba Integrated Primary School of Ethiopia**'. The purpose of this study is to explore the academic experiences of learners with low vision in integrated school.

I hereby request your participation in an interview which will help me to satisfy the requirements of this degree. Your parent or guardian has been requested to sign the consent form and you are also requested to discuss the assent letter with your parent or guardian before signing.

If you agree to participate, take note of the following:

- Your identity will not be revealed.
- You are not compelled to participate.
- You are free to withdraw at any time.
- The participation is voluntarily and no compensation will be offered.

Thank you

Kebede Abichu Kabeto (Mr)

Cell: 0913287352

Email: kebeabichu@gmail.com

Agreement to participate

I have read the above letter together with my parent/guardian and I agree to participate in the study as described.

Date

Participant's signature

Date

Witness's signature