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**COLLEGE OF EDUCATION AND BEHAVIORAL STUDIES**  
**DEPARTMENT OF SPECIAL NEEDS EDUCATION**

**School experiences for teaching Children with Visual  
Impairment in an integrated Classroom Setting: Case Study of  
Sebeta Secondary School**

**By**

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August, 2021

Addis Ababa, Ethiopia

**ADDIS ABABA UNIVERSITY**  
**College of Education and Behavioral Studies**  
**Department of Special Needs Education**

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## **Abbreviation**

EFA	Education for All
ICF	International Classification of Functioning
IE	Integrated Education
MoE	Ministry of Education
NETP	New Educational and Training Policy
SNE	Special Needs Education
SNEPS	Special Needs Educational Program Strategy
SwVI	Students with visual impairments

## **Abstract**

*The general objective of this study was to assess the Regular School preparedness for Teaching Children with Visual Impairment in integrated classroom setting. The study was conducted in Oromia regional state at Sebeta secondary school. The participants of the study were 58 students with visual impairment, 1 special needs educator, 1 school principal and 5 teachers. The study conducted using mixed research method, particularly sequential explanatory design. Interviews, observations and questionnaires were employed as instruments for data collection. The data collected through interview was qualitative and analyzed by thematic analysis. The dominant themes captured and presented through narratives. Data collected through questionnaires was both quantitative and qualitative nature. Descriptive statistics such as frequency, percentages, mean and standard deviation were used to analyze quantitative data. The showed that Sebeta secondary school is practicing integrated school and this practice created the opportunities for students with visual impairment to learn in an integrated classroom. However, the study found out that there are challenges that affect the education of students with visual impairment in an integrated school. Again, it was found out that educational challenges of students with visual impairment include lack of knowledge about the needs of students with visual impairments, computer application, optical aids, and braille writing materials, issues of mobility, funding, library resources, negative attitude towards students with visual impairment and physical infrastructural facilities. Finally, the researcher recommends that as long as the existing challenges to students with visual impairment are multi-dimensional, their solutions and interventions need comprehensive work of teachers, family and community efforts at Sebeta secondary school.*

Key words: integrated school, students with visual impairment, challenges, and opportunities.

# CHAPTER ONE

## 1. INTRODUCTION

### 1.1. Background of the study

Education is a fundamental human right that should be accessible to all citizens. It plays an important role in developing the talent of individuals in any society over the whole world. Since the United Nations Universal Declaration of Human Rights in 1948, the right to education is universally acknowledged. A program adopted by UNESCO in 1951 deals with the processes for valuing the right to free and compulsory education in the spirit of Article 26. Moreover, the education for All (EFA) movement is a universal obligation to give quality basic education for all children, youth and adults. Whether the child has disability or not, education is a fundamental right to every child.

Education is about enabling all children in line with their abilities, to live full and independent lives so that they can contribute to their communities, cooperative with other people and continue to learn throughout their lives. It is about supporting children to develop in different aspects such as moral, cognitive, emotional, social and physical lives. Hence, children with visual impairment also have a right to education that is appropriate to their needs.

In Ethiopia, students with visual impairment cannot learn based on their needs due to low access and opportunities to education (Tirussew, 2005). However, different scholars and governmental bodies suggest and accept the implementation of regular school for all students regardless of their disabilities to provide them with equal opportunity. For example, in Ethiopia, the growth and transformation plan I and II now leads a national planned implementation in education sector and highlights inclusive education as a priority, with the goal to provide all children with access to education (MoE, 1994). There is special emphasis on educational, social and moral issues related to children with special needs including students with visual impairment who are being educated in regular schools. But still there are challenges to implement the philosophy and practice of education for all. Without education, individuals with visual impairment will never be able to deal with the effects of their disabilities, improve their daily living skills, acquire independence, achieve a high level of knowledge and lead a decent life that every human being deserves (Chelsea, 2011). It was found that vision is fundamental to learning. Eyesight is the window to the world for individuals to see, to perceive, to comprehend, to express and to

communicate. When a child has visual impairment, the ability to receive information from the world around them would be limited, and this would have negative effects on the child's ability to understand concepts, learn language and move about freely with confidence (Ndungu'u, 2011).

Through vision, information about movement, form, depth, distance, space, color, texture, and shape acquired. The information gained is used to recognize objects, copy actions, build visual memories and develop spatial awareness. Therefore, lack or limited vision will affect a person's abilities in relation to all these functions (Suubi,2013).

Several challenges interfere with the provision of education to students with visual impairments in a regular classroom. Those challenges include lack of clear policies on integrated education, lack of knowledge, lack of resources and poor participation of parents, teaching methods, labeling and negative attitudes (Mitchell, D. 2008). Integrated and inclusive school has many advantages for students with visual impairment as well as parents, schools, teachers and society. It puts both students with disability (including SwVI) and students without disability in the same school and classroom with teaching approaches that benefit all of them (Mitchell, D. 2008).

Visual impairment is a low incidence disability and therefore affects a relatively small proportion of the world's population. Visual impairment is an umbrella term used to describe various eye disorders. These include common eye disorders that can easily be identified. For example, blindness, refractive errors, and many uncommon types of eye disorders such as cortical blindness, color blindness and night blindness among others.

Visual impairment is an impairment in vision that, even with correction, adversely affects a child's educational performance (WHO, 2012; Suubi, 2013). This includes partial sightedness and blindness. It is a significant loss of vision even though the person may wear corrective lenses. Visual impairment is the reduced vision caused by eye diseases, accidents or eye conditions present from birth. It was estimated that 19 million children worldwide have visual impairment (WHO, 2012). Twelve million children out of this number are a result of refractive errors. Regrettably, 1.4 million children are irreversibly blind. Visual impairment can be categorized into the blind and the low vision. In this study, visual impairments referred to both

blindness and low vision. Visual impairment can be defined legally and educationally. This study adopted educational definition of visual impairment, which considers the ability or degree of a person to use visual ability educationally. Educationally, a student with low vision is the one who has some vision, and therefore can read enlarged prints. On the other side, an educationally blind child is the one with very limited vision and thus relies on reading and writing by using the braille system or by using audio tapes (Mastropieri & Scruggs, 2010).

## **1.2. Statement of the Problem**

Students with visual impairment have their own opportunities and challenges in integrated school. These challenges include coordination difficulties, emotional stress, difficulty to learning in a regular school and organizational challenges (Chelsea, 2011). Children with visual impairments in Ethiopia were not receiving adequate attention educationally. Some of the challenges affecting the education of individuals with visual impairment were due to inadequate provision of essential facilities, equipment, materials and poor funding, found lack of adequate professional expertise at all levels, inadequate human resources, weak curriculum design, and lack of adequate information among others (Tirussew, 2005). Making changes with alternative forms of assessment, additional arrangements and adaptations to procedures can reduce some of the barriers that students with VI encounter in educational institutions (Pauline, 2008).

Integrated school is concerned clear that every school has its own unique set of challenges in relation to students with visual impairment. Successful solutions can only found if the local context investigated and taken into account. Students with visual impairment can also learn once if their problems are identified and if they get support in their effort to achieve desired outcomes. This research is therefore necessary for teachers and other concerned people to make a change on imposed barriers and develop ways of including all students addressing their disabilities. In this respect, many of the research works conducted on education, globally and nationally, as far as the researcher's knowledge is concerned, tended to focus on disabilities in general, without addressing each impairment and the subject to be taught. In Ethiopia though some studies (for example, Tirussew, T., 2005; Lakew, 2010; Beyene, G. and Tizazu, Y.2010) were conducted focusing on inclusion of children with disabilities, teachers' attitudes towards children with disabilities, they were far from addressing the needs of students with visually impairment in an integrated school.

This implies that challenges and opportunities associated with students with visual impairment in regular school preparedness for teaching children with visual impairment in integrated classroom setting have not yet got due research attention. This research was, therefore, intend to fill the gap of this widely ignored area, and make the problem plausible in the field of an integrated school instruction to students with visual impairment.

Based up on this, the study attempted to seek answers to the following basic questions.

1. What adaptive educational materials are made available in the school to meet the special educational needs of students with visual impairment?
2. How do students with visual impairment attend their study in inclusive setting in the context of Sebeta Secondary School?
3. What specialized adaptive teaching methods are applied to teach students with visual impairment in inclusive class setting of Sebeta Secondary School?
4. What opportunities do exist in the school against the challenges facing by students with visual impairment in attending their study in inclusive class setting?

### **1.3. Objectives of the study**

#### **1.3.1. General objective**

The general objective of the study was to assess the regular school preparedness for teaching children with visual impairment in integrated classroom setting, the case of Sebeta secondary school.

#### **1.3.2. Specific objectives**

1. To assess the adaptive educational materials made available in the school to meet the special educational needs of students with visual impairment.
2. Investigate the major challenges for students with visual impairment to attend their study in inclusive setting in the context of Sebeta Secondary School.
3. Assess specialized services including adaptive teaching methods have been applied to teach students with visual impairment in inclusive class setting of Sebeta Secondary School.
- ✓ To find out the opportunities exist in the school against the challenges facing by students with visual impairment in attending their study in inclusive class setting.

- ✓ Assess the improvement of the availability and quality of specialized services and adaptive educational materials/devices for students with visual impairment in the context of Sebeta Secondary School.

#### **1.4. Significance of the study**

The findings of this study might be significant in informing teachers, parents and school principals about the regular school preparedness for teaching children with visual impairment in integrated classroom setting. Further, it could also be used to inform the school personnel and special needs educators about how to improve their knowledge and skills of assisting students in order to scale up the educational condition of students with visual impairment in an integrated classroom. The study might also suggest possible solutions that could be used to scale up the practices of integrated education, as well as the academic achievements of students with visual impairment. Finally, this study can be used as a reference for further research of this kind.

#### **1.5. Scope of the study**

The study was delimited to students with visual impairment in Sebeta Secondary school in Sebeta administrative town found in Oromia region. More particularly, the study variables were delimited to the regular school preparedness for teaching children with visual impairment in integrated classroom setting in case of Sebeta secondary school. It was delimited in the assessment of regular school preparedness for teaching children with visual impairment in integrated classroom setting. Since all types of problems might not be manageable at once, the study focused only on students with visual impairments. Besides, the study did not consider factors that caused visual impairments to those students.

#### **1.6. Limitations of the study**

As they are far away from Sebeta town, parents of students with visual impairments were not included in the study. The absence of those parents might have limited the findings of this study to some extent. Since data was collected for the study during the outbreak of COVID-19, the study did not cover wider scope and participants. In turn this might have affected the findings of the study.

## 1.7. Operational definition of terms

- **Adaptation:** The principle of suitably adapted education in an inclusive school that requires teachers to change their teaching methods that will consider the needs of every student in the class individually.
- **Challenges:** Difficulties that students with visual impairments face in order to be successful in their education in an integrated classroom setting.
- **Education:** is a process of facilitating learning, or acquisition of knowledge, skills, values, beliefs and habits.
- **Integrated Education:** The principle of educating students with and without special needs together, interacting and sharing educational facilities that the school offer.
- **Opportunities:** The processes through which the various systems of society and the environment, such as services, activities, information, as well as documentation, are made available, particularly to students with visual impairments.
- **Visual Impairments:** Refers to both low vision that can read enlarged prints and educationally blind with very limited vision that relies on reading and writing by using the braille system or by using audio tapes.

## **CHAPTER TWO**

### **2. LITERATURE REVEIW**

#### **2.1. Integrated education programmes**

Examining previous educational views can help as basis for the development of new educational modality. The idea of "Education for all" and the educational concern for students with disabilities was an issue for the past many years. The limitations of the instruction presented by the special classes and movements that opposed the inappropriate use of tests in classifying students with disability have served as basis for the development of the idea of integration. Furthermore, the increasing concern about the social life of individuals with disability and the existence of different support systems intended for the regular teachers have also contributed to the emergence of the concept of integration as an educational modality (Tibebu, 1995, pp.18-19).

On the nature of education, it was argued that there is only one education for all children. This theory suggests that the difference between general and special education is an artificial one. It was further stated that there are not two distinctly different types of students, that is, those who are special and those who are regular. Rather, all students are unique individuals, each with his/her own set of physical, intellectual and psychological characteristics. This is to say that, irrespective of differences among individuals, every child has his/her own potential that can be cultivated and maximized through appropriate educational approach. Hence, though it may not be applicable to all individuals, isolating children due to their certain limitations appears to be denying their rights to grow up in an environment where they can learn from their "normal" peers.

#### **2.2. Theories of learning**

##### **2.2.1. Socio-cultural learning theory**

Social and cultural force from the socio-cultural theory plays an important role in human development. It also initiates the creation of fitting practices and interventions (Daniels, 2001). The basic requirement of pedagogies demand individualization. In learning and development, individualization suggests awareness to diversity rather than the burden of 'sameness'.

According to this theory, the creation of a learning environment can be explained as something that perceived as a shared problem space in which students invited to participate in a process of negotiation and co-construction of knowledge. The other basic principle of this theory is that learning takes place when the learner interacts with the socio-cultural environment. Different factors such as activities, partners, settings and materials can affect the frequency and quality of the interaction between the learner and peers. on the other hand, long-time socialization of learners can strongly be affected by of peer interaction. To produce positive interactions among students, educators need to understand the effects of these contextual factors on social exchanges of students (Daniels, 2001).

### **2.2.2. Mediated learning theory**

Learning and development are modeled as a mediated process. This model requires the interaction of individual and supra-individual factors such as social, cultural and historical factors. When learners with VI face difficulty to engage freely in social activities, they experience the social disadvantage. Their individual differences might also contribute to their being socially unacceptable to some extent. The discrimination against the learners with VI are among historic factors that is difficult to eradicate. Trying to understand the possibilities for mediation in human learning and development could help to identify where these factors actually lie (Daniels, 2001).

From research evidences, there are two types of mediations namely, mediation through another human being and mediation in the form of organized learning activities. As human mediators, teachers are responsible for establishing interactive instructional situations in the classrooms. Human mediation that does not involve tools does not help the learner to master more complex forms of reasoning and problem solving. In the present study, these tools include the electronic devices available to support learners with VI. Therefore, the combination of mediating learning and tools plays a crucial role in solving educational problems (Kozulin *et al.*, 2003:211). In this study, principles of mediation through human beings and tools were applied. This could help learners with VI to realize active learning, mutual interactions and social, cultural and historical factors.

To ease barriers to participation, Braille communications need to be set as alternative forms of participation. Hence, for the inclusion of students with VI, environmental factors that hinder inclusion and learners' social interaction should be addressed in a society and schools. Clearly, the social development and independence of learners with VI depend on the support and facilitation of peers, teachers and parents (Daniels, 2001).

### **2.3. Learning diversities and special needs**

The number of students with learning needs are currently increasing in integrated schools. Students with physical, sensory, emotional, behavioral and learning difficulties can be found in such schools. There is a growing number of students with diverse learning needs and visual impairment enrolled in integrated. Through modification and adaptation of the classroom environment, teachers can help students achieve their special educational needs (Johnson, B. H. 2001).

Like other students in an integrated and inclusive classroom, what students with learning difficulties require from the education system is what is called Special Educational Needs (Garner, P. & Davies, J.D. 2001). Services for the needs of learners are provided by Special Needs Education (SNE) providers such as teachers and other educational stakeholders. Furthermore, as it is at the heart of education for all, SNE considers ways that respect children as individuals.

EFA aims at sending all children to school and making them ready for a lesson in the class. It also addresses the educational needs of children with learning difficulties and differences. Therefore, these differences in learning needs and styles among students should be considered and tried best by teachers to meet them (Mangal, S. 2002).

### **2.4. Legal frameworks for education**

In order to meet the rights and privileges of people with impairments, Ethiopia has developed several national and international conventions. The needs and rights of individuals with impairments are protected in a range of international and local legislative and regulatory frameworks (Shepherd, I. 2001). During dealing with disability-related issues, legal frameworks were provided by international conventions (Peters, S. and Oliver, L. 2009).

### **2.4.1. International laws**

The international conventions of the 1940s promoted the viewpoint that focused on the prevention and rehabilitation of disability. The conventions 1960s and 1970s presented a shift towards a right based approach while that of the 1980s, 1990s and 2000s above all focused on equal opportunities, access, involvement, promotion, integration, inclusion and accommodation (Peters, S. and Oliver, L. 2009). For students with VI, the legal support on their educational needs was addressed in the legislative and regulatory framework of the 1990s (Shepherd, I. 2001). When formulation of local policies and legislation is needed for the protection of the rights of people with impairments, the Standard Rules of the 1993 UN on the Equalization of Opportunities for Persons with Disabilities and the Salamanca Statement of 1994 are used as vital sources.

#### **2.4.2.1. UN Standard Rules on the Equalization of Opportunities for People with Disabilities**

One of the international legal frameworks that is disability-specific and applicable to all people with impairments is the 1993 United Nations Standard Rules. It also contributes significantly to the worldwide effort to mobilize resources (United Nations, 2007).

The term equalization of opportunities is the process through which the various systems of society and the environment are made available to people with impairments. These various systems of the society and environment include services, activities, information and documentation (United Nations, 1994). This definition may agree with the principles of a social model of disability and inclusive approach. It also addresses the provision of equal education at all levels and ensures exercising the same rights and obligations to people with impairments as others (Peters, S. and Oliver, L. 2009). Furthermore, it can also be used as a tool for policy-making and measures to eliminate the obstacles that stop people with impairments from exercising their rights, as well as having full partaking in the activities of their societies and organizations.

Further again, it assists people with disabilities with issues such as awareness-raising, access to physical environment, information, equal tertiary educational opportunities, employment, social security and income maintenance, sports and so forth (United Nations, 1994).

### **2.4.3. The World Convention on Special Needs Education, Salamanca (1994)**

The policy issue for inclusive education is established and adopted on a global basis on the disability-specific issue of the 1994 Salamanca Statements (Peters, S. and Oliver, L. 2009). The statement also pulls on the national experience of Ethiopia, as well as on resolutions, recommendations and publications of the United Nations system. The 1994 world conference in Salamanca on Special Needs Education (SNE) brought the major motivations on inclusive education (UNESCO, 2003). Hence, the Salamanca Framework introduced the issue of inclusive education worldwide (Bromell, D. and Hyland, M. 2007). Regarding the inclusion issue, the Salamanca Framework meant to include everybody, celebrate differences, support learning, and respond to individual needs (UNESCO, 1994).

This framework informs the viewpoint which states that schools should accommodate all learners, irrespective of whatever conditions they have. The Salamanca Convention further explains the importance of making quality inclusive education accessible to all students with impairments. It also focuses in minimizing the school attrition rates and repetitions (Peters, S. and Oliver, L. 2009). In general, the framework signifies a worldwide consent on future directions and plans applicable at all levels.

According to this framework, inclusion needs the articulation of a clear and forceful policy and legislation, an extensive program of staff orientation and training, the delivery of the necessary services and sufficient resources.

### **2.5. National laws**

The UN conventions on the rights of people with impairments particularly to African countries provide new opportunities to reconsider their domestic legal laws relating to disability rights. One of the African countries, Ethiopia has endorsed the 1993 UN Standard Rules, the Salamanca Convention of 1994 and the UN Conventions on the Rights of People with Disabilities (Tirussew, T. 2005). Hence, Ethiopian Government has adopted a number of international legal frameworks related to the rights of people with impairments in its national constitution, Education Policy and Special Needs Education Program Strategy.

### **2.5.1. The Ethiopian constitution about disability**

It seen that the Constitution of the Federal Democratic Republic of clearly agrees with the role that international human rights law should play at domestic level. The 1995 constitution of Ethiopia provides legal frameworks for ensuring the overall rights and entitlements of its entire people. Article 9.4 provides the international agreements ratified by Ethiopia as an integral part of the country's law. Furthermore, Article 13.2 and other international instruments adopted by Ethiopia point out the fundamental rights and freedoms that conforms with the principles of the Universal Declaration of Human Rights (Reenen & Combrinck, 2012).

In the newly drafted constitution, Ethiopia has included general rights for individuals with disabilities, and incorporated disability within a broad non-discrimination guarantee. However, the constitution did not include specific legislation that encourages inclusive education. As a result, it has to supported by other mandatory laws and policies. To this effect, the new Education Policy and Special Needs Education Program Strategies have incorporated general as well as specific legislative statements regarding the education and inclusion of children and young people with impairments in schools and universities.

### **2.5.2. The New Education and Training Policy (NETP)**

It is obvious that the Ethiopian government policy of 1994 resolved the provision of Special Needs Education in particular (MoE, 2002). The Ethiopian NETP was explained in terms of objectives and overall strategies. For example, the policy addresses the entitlement of students with impairments within a general objective of education. Consequently, all Ethiopian educational institutions are responsible for achieving this objective. Regarding the education of people with impairments, the overall strategic section of the policy mentions the following implementation strategies:

- ✓ Special education and training are provided for people with special needs.
- ✓ Teacher training on special education are delivered in regular teacher training programs.
- ✓ Special concern is given to the preparation and utilization of support systems for special education
- ✓ Scholarships are given to deserving/outstanding students.

In order to coordinate and monitor the education of people with impairments, this policy developed and establish a specific section within the overall structure of educational organizations starting from Ministry of Education to District Education Offices. However, the 1994 education policy lacks clarity on the provision of support for students with impairments and does not encourage an inclusive approach for their education.

To resolve this deficit, the Ethiopian Ministry of Education has designed the Special Needs Education Program Strategy directing inclusive education and setting out a policy agenda with clear priorities aimed at upholding the inclusion of people with impairments.

### **2.5.3. Special Needs Education Program Strategy**

Ministry of Education developed the Special Needs Education Program Strategy (SNEPS) in 2006 with the aim of identifying and removing the prevailing barriers to the implementation of inclusive education. This strategy shows the direction for providing access to inclusive education to all learners by identifying and removing existing barriers at all levels of schooling and higher education (MoE, 2006). Consequently, higher education institutions established resource centers that support students with VI and their lecturers. They planned providing students with braille literature, reading and writing tools, and training on ICT applications. The SNEPS also helped to produce a Higher Education Proclamation in 2009 that provides particular frameworks and standards pertaining to physically challenged students in higher education. For example, Article 40 of the higher education proclamation states:

1. To the possible extent, institutions shall make their facilities and programs amenable to use with relative ease by physically challenged students.
2. As much as possible, institutions shall relocate classes, develop alternative testing procedures and provide different educational auxiliary aids in the interest of students with physical challenges.
3. Building designs, physical landscapes at campuses, computers and other infrastructures of institutions shall take into account the interests of physically challenged students.
4. To the necessary and feasible extent, institutions shall ensure that students with physical challenges get academic assistance, including tutorial sessions, exam time extensions and deadline extensions.

## **2.6. Visual impairment**

Visual impairment can be defined legally and educationally. The legal definition considers visual acuity of person which refers to one's ability to see fine details or clearly distinguished forms at varying distance (Mangal, S. 2007). It is usually measured by having people read letters or discriminate objects at a distance of 20 feet. Those who are able to read the letters correctly have normal vision. Visual acuity is usually expressed by using ratio that tells us how well the individual sees. As an example, the ratio 20/20 vision describes perfect (normal) vision indicating that the person can see at a 20 feet what people with normal vision see at 20 feet. By using optical devices, visual acuity for blind person can be expressed as a ratio of 20/200 or less. This shows that a person with blindness can see an object at 20 feet whereas a sighted person can see at 200 feet. For a person with low vision, the visual acuity can be represented as 20/70 indicating that a person with low vision can see an object at 20 feet whereas a person with normal vision can see at 70 feet (Spungin, S.J. 2002).

On the other hand, educational definition shows the impacts of visual impairments on the learning process of a student. Visual impairment can be congenital, occurring at or shortly after birth or acquired through other means later in life. Some of the congenital causes of visual impairments include conditions like retinopathy, glaucoma, cortical visual impairment, optical nerve hypoplasia etc. while visual impairment acquired later in life can be due to cancer, cataract, trauma, accidents, nutrition etc. (Kirk et al., 2011).

Visual information is crucial in helping children observe and interpret what happens in the environment. It is also a prerequisite for conceptual development in a students' learning. Hence, it is very important that a teacher knows how the loss in vision influence the learning process. Mal-formation and destruction of this part of the body brings about a reduced amount of sensory data to the learner, leading to deficit or delay in various skills learned through watching and imitation from others. This affects language development, reasoning skills, problem solving abilities and abstract thinking.

This finally causes great impact on the individual's learning and performance, because a student cannot observe and use visual information to interpret various learning situations happening in the environment (Fraser, W.& Maguvhe, M. 2008). If visual impairment occurs during early childhood, cognitive and language development is impaired. However, if the loss of vision is

after five years below which visual memories not be retained, then there will be some visual memories. This visual memory will be very helpful in the learning process through construction and formation of images and concepts, and later by relating new concepts and experience acquired earlier in life.

Students with visual impairments can get information from the environments through three ways, namely, verbal description, tactile method and self-exploration. Verbal description is the most important source of information to visually impaired students. However, verbal description provided by others is always incomplete and cannot satisfy the person's needs. Another way is the use tactile stimuli. However, a tactile method is also not effective, because a student needs to feel an object repeatedly in order to grasp the image of the object. Finally, students with visual impairments rely on self-exploration about the world. This way is limited in amount of information that can be accessible to students with visual impairments. Overall, these modalities together cannot effectively compensate visual stimuli. But, they are just to reduce the impacts to learning caused by lack of vision (Spungin, S.J. 2002).

## **2.7. The rights of students with visual impairment in regular school**

A variety of international and national inclusive frameworks across UN member countries express the need for students with visual impairment to have the right to equal and quality education. According to the United Nations Standard Rules of 1993, the definition of disability includes people with sensory impairments. All the rules specified in this convention can be applied to students with VI (United Nations, 1994). For this reason, the present study takes into account the theoretical and legal frameworks discussed above to outline the practical strategies for addressing the unique circumstances of students with VI in education.

If there is a need to address inclusion issues, it is reasonable to suggest that students with VI should be able to gain equal access to the learning process along with their sighted peers. In practical terms, reasonable adjustments can be made to admission and placement policies, curricular materials, teaching and learning arrangements, establishment of assessment standards, assurance of equal access to classroom resources (Shepherd, I. 2001). Barriers that students with VI encounter can be reduced through changes in teaching and learning strategies (Kirk, S., Gallagher, J., Coleman, M. and Anastasiow, N. 2010).

Traditional assessment procedures can put students with VI at a disadvantage. However, using alternative forms of assessment, additional engagements and adaptations to procedures can minimize some of the challenges that students with VI encounter in educational institutions (Pauline, D. 2008). In order to follow their progress, formative evaluation should also be incorporated into the assessment system so that the difficulties that students with VI face can be identified, thereby assisting them to overcome their problems (Grace, S. and Grave stock, P. 2009).

## **2.8. Integrating of students with visual impairments in to regular school**

Addressing the needs of all learners with and without disability in the regular school is the challenge to integrated classroom. It is a challenging process and requires a lot of struggle and commitment to overcome attitudinal and social barriers (Disability in Ethiopia, 2005). The challenge towards students with visual impairments could originate from different directions such as attitudinal factors, lack of knowledge, rigid school systems and learning environment, lack of clear policies, lack of instructional and learning materials and insufficient budget. Several challenges interfere with the provision of education to students with visual impairments in inclusive classrooms.

### **2.8.1. Absence of clear policies on integrated education**

Previous research evidences show that developing countries do not have specific policy on integrated education. Inclusive education was mentioned in some of the policy documents such as disability policy and education and training policy. But these policies do not state how inclusive education should be applied, monitored and evaluated showing that teaching and learning materials for students with special needs are lacking. In turn, this indicates that there are barriers to inclusive learning and participation in all aspects of local and national policies (Gronlund, A. Lim, N., & Larsson, H. 2010).

### **2.8.2. Insufficient knowledge**

It is important to determine the degree to which the professional standards for teachers of students with visual impairments addressed during pre-service training and that of in-service teachers of visual impairments implemented these professional standards. In literatures, it was shown that there is insufficient knowledge and skills among teachers regarding implementation

of inclusive teaching for students with visual impairments (Kesiktas, A.D.& Akcamete, A.G., 2011). Hence, inclusive education is a difficult concept to understand among teachers.

### **2.8.3. Lack of adaptive or assistive materials and technologies**

Integrated education for students with VI can be affected by physical environment and the inaccessibility of educational and adaptive materials. Students with VI experience educational barriers owing to the absence of curricular materials and handouts in accessible formats, especially materials printed in Braille or voice recorded on mobile devices (Sygall & Scheib, 2005:17). The absence of assistive technology, including information technology (IT) negatively affects the social and educational challenges that students with VI face every day. Further, note that some of the barriers to the use of IT for the education of students with VI include the unequal allocation of equipment as well as poor access to computers. These barriers attributed to the lack of specific programs for the use of IT in classrooms and the absence of a commitment to make IT available to teachers and students with impairments (Alves, 2009:149-150). Students with impairments also complained about the absence of adequate assistive technology and their inability to use the existing technology.

### **2.8.4. Teaching Methods**

A study with an intention of providing insight on the current situation of inclusive education showed that teachers are not educated enough in sign language, use of braille materials, preparation of hearing and aids, tactile diagrams and maps etc. to be able to face the challenges of inclusive teaching (Lewis & Little, 2007). Moreover, teacher education is insufficient in the components of inclusive education. By itself, curriculum is also a problem for implementation of inclusive education.

### **2.8.5. Labeling and Negative Attitudes**

Teachers were categorizing and labeling students into “bright and dull”. The “bright students” given more priority to answer questions unlike the “dull students” (Mangal, S. 2007). Therefore, teaching methods did not consider the needs of students with special needs. Students with visual impairments were present in the classes but teachers were teaching as if all students were sighted using “talk and chalk” strategy.

### **2.8.6. Lack of Teacher Collaboration, Rigid Curriculum and Poor Participation of Parents**

There is lack of collaboration among teachers to teach in integration/inclusive classrooms (Mangal, S. 2007). The nature of curriculum also does not allow collaboration (co-teaching) among teachers. Many schools do not have appropriate teaching and learning resources to help students with visual impairments learn better in inclusive classrooms (Simon, C. 2010). Additionally, there is a lack of collaboration and participation of parents in the educational affairs of their children. Moreover, teachers also do not have enough knowledge of inclusion and how to teach students with visual impairments in integrated classrooms.

## **2.9. Possible solutions for removing challenges to students with visual impairment**

Different researches explored some practical solutions from suggested in previous studies. They felt that this information could inform their investigation and that some ideas could be applied by different countries in order to reduce the wide spread challenges facing students with VI.

### **2.9.1. Enabling policies**

The inclusion of students with VI in education necessitates clear and enabling policies to ensure the provision of equal opportunities and full participation in all aspects of school life (Shepherd, 2001). To achieve this in academic and other activities that take place, there should be relevant and clear policy guidelines at institutional level (Shepherd, 2001:18). This is of particular importance because it affects students with VI, all teachers and others who are responsible for management, strategic planning and service provision. Ultimately, education institutions have to work on an access-to-success continuum by promoting policies that provide clear directions for addressing the diverse needs of learners with VI and providing solutions to their problems from admission to graduation (UNESCO, 2010). In addition, there should be the will to translate the directions of policies into concrete actions thereby successfully ensuring the full inclusion of students with VI (Amadio, 2009:293).

### **2.9.2. Accessing of the physical environment**

Unless the physical environment is accessible to students with VI, it is not possible to ensure their successful integration in education. If these students can have, easy access to the physical environment many barriers to learning that they experience can be reduced (Salisbury, 2008:8). Public buildings, and sanitation facilities should accessible to all students and the integration of

steps and other design features should not make movement difficult for students with impairments. Accessible housing as well as adjusted physical and recreational environments should be made available to promote the health, independence of students with VI and to encourage their participation in academic, cultural and social activities. More importantly, students with VI should be able to access physical facilities like cafes and other social spaces, as well as toilets without unnecessary difficulty (ECA, 2009:17). In order to make buildings welcoming, comfortable, accessible, attractive and functional, special attention should be given to the design and development of entrances and routes of travel, furniture and fixtures (Burgstahler, 2009:2). Classrooms should have clear directional signs for the partially sighted and doors with sensors that can open automatically for the blind (Burgstahler, 2009:2). Moreover, the provision of adaptive material and specialized technology is vital for students with VI in integration classrooms.

### **2.9.3. Modifying or adapting teaching methods**

From several international reviews, co-operative teaching (team teaching), co-operative learning (peer tutoring), individual planning, collaborative problem-solving and flexible instruction are the five approaches used in effective inclusive education.

The curricula create the most significant barriers to inclusive learning for many learners. Thus, it is reasonable to suggest that curricula should be flexible enough to accommodate different learning needs and styles. Flexible curricula that are accessible to all learners, irrespective of the nature of their learning style, should be central to any attempts to accommodate diversity at education institutions. Hence, curricula need to be adapted to remove the barriers experienced by learners with VI and to ensure their full inclusion (Ashman, 2010:67). To this effect, education institutions should consider the needs of students with VI when designing the curricula of various programs.

### **2.9.4. Adapting the assessment mechanisms**

Some of the barriers that students with VI encounter can be minimized by changing assessment procedures and implementing alternative methods of assessment. Students with VI need adapted curricula, instructional methodologies and assessment mechanisms to reach the same levels of performance as sighted students.

It was stated that students with visual impairments sometimes have limited natural learning experiences because they are not able to observe objects and interactions (Johnson-Jones, Kerri Janae, 2017). The areas of learning which are particularly affected due to visual limitation are: concept development, interpersonal communication skills, life skills, orientation and mobility skills, and academic development. Furthermore, it was stated that development of concepts is the basis of all learning. Spatial relationships, time, body awareness and self-awareness are just a few examples of fundamental concepts individuals need to make sense of their world. Hence, these concepts may need specifically to teach to students with visual impairments.

## **CHAPTER THREE**

### **3. RESEARCH DESIGN AND METHODOLOGY**

#### **3.1. Description of the study site**

The study was conducted in Sebeta Secondary School situated in Sebeta City Administration of Oromia Region. Sebeta is about 23 kilo meters from Addis Ababa. The City Administration is on the main road from Addis Abeba to Jimma. The school is located near this main road. This study school is selected as the school is known by its long term experience and practice in admitting and facilitating students with visual impairment to attend their study in integrating class settings. Moreover, the school was selected for the purpose of the study owing to the fact that Sebeta Secondary School is the only public school in the city where students with visual impairment are attending their study with their non-disabled peers in integrating class settings.

#### **3.2. Research design**

In this study a mixed methods was used. It involves collecting, analyzing, and interpreting qualitative and quantitative data. As a result, sequential exploratory design was employed considering its relevance to the nature of the research approach applied for the study, because this sequential exploratory method is a useful design for gaining background information on a particular topic and well-grounded picture of the situation practiced.

#### **3.3. Sources of data**

There exist two major types of data sources in research. One of them is primary source in which data is gathered directly from the source for purposes of the study while the other is secondary source in which information is gathered from the published works as books, articles, newspapers, and the internet (Mugenda, 2003; Wilson, 2010). The secondary data is important because it acts as a support arm of the primary data. It provides background information on the research topic and it serves as a check and standard for evaluating primary data. In this research both primary and secondary sources were used as sources data. Primary data sources were students with visual impairments while secondary data sources were different records, directives and minutes of the school regarding students with visual impairments.

### 3.4. Population of the study

Target population refers to all the members who meet the particular criterion specified for a research investigation (Mohsin Hassan Alvi, 2016). The target population of the study is all 2501 students who enrolled to learn in the regular program in 2019/2020 academic year in Sebeta secondary school and all 80 teachers who teach at Sebeta secondary school including principals and special needs educators selected due to their relevance to the research question. The total population was 2581. It can be summarized as in the in table below (Table 1).

Table 1: Target population and sample of the study

No.	Stakeholders (population)	Gender		Total population	Total sample
		M	F		
1	Principals	2	-	2	1
2	Regular classroom Teachers	58	18	76	5
3	SNE teachers	2	-	2	1
4	Students with visual impairment	33	28	61	58
5	Sighted students	1251	1189	2440	
<b>Total</b>		1346	1235	2581	65

### 3.5. Sampling techniques and sampling size

Sample is a finite part of statistical population whose properties are to be studied to gain information about the whole. When dealing with people it defined as a set of respondents or people selected from a larger for the purpose of a survey. Sampling is the act, process or technique of selecting a suitable representative part of the population for determining parameter or characteristics of the whole population (Mohsin Hassan Alvi, 2016).

For the purpose of this study, the researcher used purposive-sampling technique to select deliberately specific setting such as school and participants in order to solicit the needed information to understand the problem under investigation. Since, it is the only secondary school, which included students with visual impairment and implements inclusive school, and there are key informants to provide information in this study.

From the total of 2501 (2440 + 61) students the researcher purposively selected 58 students with visual impairments. Because directly the topic is concerned about the teaching-learning process in inclusive classroom setting and the materials that is provided for them and recognize the preparedness of the school in welcoming students with visual impairment in the school.

From the second category of target population, the researcher purposely-selected five regular teachers from a total of 76 teachers. Those five teachers have full day relationship with students with visual impairment, have a long experience in teaching students with visual impairment, have direct contact with them in their subjects and they provide sufficient and relevant information on the phenomenon under investigation. From two (2) principals, the vice director was purposely selected for provision of relevant information and to obtain detail information about the preparedness of the school for students with visual impairment in integrated classrooms. Since the head director is a new comer in that school, he cannot provide relevant information about the educational challenges and opportunities of students with visual impairment in an inclusive school. Again, from two (2) special needs educator one (1) purposely selected, since the other one is a new comer for that school so he cannot provide sufficient information. Total sample size was 65.

### **3.6. Instruments of data collection**

In this study three types of data collection tools were used to collect information from the study participants. These are face to face 012interview, questionnaire and systematic observation.

#### **3.6.1. Face to face interview**

Interview defined as the form of data collection that involves directs interaction between a researcher and the respondent. The interviewer used oral questions to gain responses from the respondents (Gall, M., Gall, J. & Borg, W. 2007). It allows respondents to speak out their opinions, feelings, beliefs, insights, attitudes and experiences about a phenomenon under investigation.

In this study, interviews with selected teachers, school principal, and SNE teachers were undertaken person-to-person. This interviews were used to obtained educational challenges and opportunities of students with visual impairment in an inclusive school. In addition to this, the attempts made to overcome the challenges of students with impairments in an inclusive school

were also included. Furthermore, detailed information about teaching students with visual impairments in an inclusive classroom and their educational challenges were obtained using the interview used in both closed ended and open-ended types sections of questions.

### **3.6.2. Questionnaire**

Questionnaire for students with VI were prepared by braille writing to reach directly to each student with VI to investigate adapted teaching-learning materials that were provided for them and obtain their opinion on inclusive school. This method of data collection ensures that all respondents answer questions almost at the same time and assumed to be an economical method of data collection in terms of time and coverage as well as being free of researcher bias to provide confidential information.

### **3.6.3. Classroom observation**

In this study a classroom observation was conducted using a checklist to assess the participation of SwVI, sound projection, school physical environment, extra time allowance and availability of adaptive teaching and learning materials in natural setting where inclusive school practiced. The school environment was observed to assess whether it is supportive or not to inclusive teaching-learning in addressing the needs of students with visual impairment.

### **3.7. Methods of data analysis**

Data collected through interview qualitative was analyzed thematically . The researcher used an inductive approach in which texts were transcribed in order to sort the data obtain during the interviews. These data were then code and categorize into themes.

Data collected through questionnaires were both quantitative and qualitative nature. Descriptive statistics such as mean, percentile, frequency and standard deviation were applied to describe the adapted teaching-learning material that provided to students with visual impairment. Qualitative data generated from the questionnaires were group according to themes and presented in narrative form.

### **3.8. Ethical consideration**

In this study, the researcher considered some of the ethical issues set out by the American Psychological Association based on the nature of the study and its participants. The researcher maintained the required principles which start from clarifying the nature and purpose of the study to the participants and legally authorized individuals and obtained their informed consent and permission that provide access to study the participants in the site selected. Participants were informed that their responses of interviews and questionnaires will be kept confidentially and used only for research purposes. Moreover, informing them that they can withdraw at any time when needed and changing the names of the respondents and use aliases or pseudonyms while organizing the data to preserve anonymity of participants or to protect them from any kind of harmful actions.

## CHAPTER FOUR

### 4. DATA ANALYSIS AND INTERPRETATIONS

#### 4.1. Demographic profile of the respondents

Under this chapter the demographic characteristics of the respondents included under study were analyzed in relation to their gender, age respectively.

Table 2: Demographic information of respondents' students with visual impairments

Gender	Frequency	Percent (%)
Male	35	60%
Female	23	40%
Total	58	100
Age of respondents		
14-16	8	13.8%
17-18	45	77.6%
19 and above	5	8.6%
Total	58	100

Table 2 shows that, 35 (60%) were male respondents and 23 (40%) were female respondents and with respect to the age of respondents it ranges from 14-19 & above years, with a mean of 15 years. In general, while 8 (13.8%) of the respondents' age was between 14-16 years. On the other hand, 45 (77.6%) participants were between 17-18 and 5 (8.6%) of respondents were in the age range was 19 and above years.

Table 3: Educational level of respondent students with visual impairment

Educational level	Gender		total	%
	Male	female		
Grade 9	17	11	28	48.3%
Grade 10	18	12	30	51.7%
Total	35	23	58	100

As can be seen in the table above 28 (48.3%) of respondents were grade 9 students whereas 30 (51.7%) of respondents were grade 10. Again, as we seen from the above table from grade 9 respondent's 11 (39.3%) respondents were female and 17 (60.7%) were male respondents. In addition, from grade, 10 respondents 18 (60%) respondents were male and 12 (40%) were female.

Table 4: The status of the impairment of respondent students

Status of the impairment	sex		total	%
	male	female		
Total Blind	25	17	42	72.5%
Low vision	10	6	16	27.5%
Total			58	100

As indicated on the table, 42 (72.5%) of respondents were total Blind while 16 (27.5%) of respondents were students with low vision and of the total of 42 (72.5%) Blind students 25 (59.5) respondents were male and the remaining 17 (40.5) respondents were female and among 16 (27.5%) respondents with low vision, 10 (62.5%) respondents were male whereas 6 (37.5%) were female

Table 5: Bio data of respondent teachers

Sex	Frequency	%
Male	5	71%
Female	2	29%
Total	7	100
Age of teachers respondents		
20-29	1	14.3%
30-39	3	42.8%
40-49	2	28.6%
50 and above	1	14.3%
Total	7	100

As per the information depicted on the table, 5 (71%) were male respondents and 2 (29%) were female respondents. With regard to the age range of respondents, the information shows that the age of respondents ranges from 20-51 & above years, with a mean of 45 years. In general, while 1 (14.3%) of the respondents' age was between 20-29 years. On the other hand, 3 (42.8%) subjects were 30-39. In addition, 2 (28.6%) of respondents age was between 40-49 and 1(14.3%) of respondents were in the age range was 50 and above years.

Table 6:Teaching Experience of teachers

Range of teaching experience	Frequency	%
1-10 years	1	14.3%
11-20 years	5	71.4%
21 and above years	1	14.3%
Total	7	100

In the table above 1 (14.3%) of the respondents had 1-10 years of teaching experience and the other 5 (71.4%) respondents had 11-20 years of teaching experience and 1 (14.3%) of respondents had 21 and above teaching experience.

#### **4.2. Results of the qualitative data**

The purpose of this topic is to represent and interpret the data obtained from various interviewees in this study. Data collected through interview was qualitative nature and analyzed by thematic analysis. These data coded and categorized into themes. The themes of this study was educational challenges of students with visual impairment in an integrated school, opportunities of students with visual impairment and the attempts made to overcome the challenges of students with visual impairment in an inclusive school.

#### **4.3. Educational challenges of students with visual impairments in an integrated school**

In accordance with the response of respondents, students with visual impairment have been facing various types of challenges while attending their study in integrated and or inclusive class settings.

#### **4.3.1. Shortage of resource**

Participants said Challenges to the integrated of students with VI linked to the shortage of resources, such as human, physical, material and financial resources, to be a serious challenge when dealing with the inclusion of students with VI in relation to the legal and theoretical principles. These findings agree with the opinions that relevant resource materials (lack of accessibility), to students with visual impairments, are not readily available. According to respondents' large class-size (crowded classes) is again the challenges, there were around 80 to 90 students in a classroom and this makes it difficult for teachers to attend to all students, especially students with visual impairment. There are different problems in connection to physical environment and facilities. There are no roads suitable to students with VI around the buildings. The physical design of the buildings and their paths are not suitable for students with VI. The responses of all participants demonstrate that the lack of adequate funding is one of the biggest barriers to the inclusion of students with VI at Sebeta secondary school.

#### **4.3.2. Lack of knowledge**

As participants said, there are lacks of knowledge about the needs of students with VI. Because of lack of knowledge teacher cannot use adapted teaching materials in Sebeta secondary school. As participants stated there are insufficient knowledge and skills among teachers regarding implementation of inclusive teaching learning for students with visual impairments. Teachers not have a good teaching approaches and relevant pedagogy to include students with VI and learn ways to handle students with VI in the classroom

#### **4.3.3. Labeling and negative attitude**

Labeling and negative attitude towards students with visual impairment are educational challenges of students with visual impairment at Sebeta secondary school. The study came up with the findings that, teachers were categorizing and labeling students with VI.

#### **4.3.4. Absence of clear policy**

All of interviewees in this study claimed that the inclusion of students with VI at Sebeta secondary school affected by the absence of clear and enabling policy. As respondents said, it is difficult for them to say there is a clear policy or law in school that enables students with VI to get different support and make adjustments on those things provided to students with VI.

#### **4.3.5. Lack of teacher collaboration and lack of teaching-learning method**

Participant said there are lacks of Adaptive Learning Methods, poor participation of parents and lack of teaching method. The study found that, there is a lack of collaboration and participation of parents in the educational affairs of their children

#### **4.4. Educational opportunity for students with visual impairment to access their study in regular class**

According to the responses of participants even though there are educational challenges of students with VI in an integrated school, due to non-availability and inaccessibility of adequate and adaptive material and skilled human power resources there are no opportunities for students with VI in learning in an integrated school. As participants said, it is better to learn in separate place, because they got different resources and opportunity when they learn in separate schools or boarding school. Study shows that in Sebeta secondary school students with visual impairment did not get any opportunities from learning in an integrated school.

#### **4.5. Attempts that made to overcome educational barriers of students with visual impairment in an integrated school**

Participants forwarded suggestions that they thought very important to alleviate the educational challenges to students with VI in an integrated school. According to the suggestions made by Teacher's participants, the school should have a clear policy or regulations that guide the inclusive services to be supplied to students with VI. According to respondents, to overcome educational challenges of students with visual impairment in an integrated school it requires cooperative work of all stakeholders. Participants thought that all teachers should be trained on issues such as how they teach, what they use to teach students with VI in an integrated school and training or orientation that should be given to the teachers on how to make accessible teaching, assignments etc. to the students with VI. In addition, there should be training for teachers and students with VI on how to use the facilities and technology effectively.

As they said school management should seek better opportunities to raise the financial capacity of the school so that they can support students with visual impairment with necessary materials and facilities, organize well-furnished resource centers, and enhance the teaching and learning process and have a plan to involve all school communities to bring attitudinal change towards

students with visual impairment. Finding shows that there are poor bilateral relations between teachers, parents, SNE teachers.

#### 4.6. Results of the quantitative data

The items in the students with VI questionnaire was compiled considering factors to measure how frequently teachers address the resources and adapted materials that are provided for students with visual impairment and opinion of students with visual impairment towards integrated school. In the following table, summary results were present.

Table 7: Responses of Students with visual impairment on adapted materials that are provide for them

No	statement	Level of agreement by frequency					Mean	S. Deviation
		Never	Rarely	Not sure	Some times	Always		
1	My teachers give materials to students with visual impairment to make us perform equally with other students.	58 (100%)	-	-	-	-	1	0
2	My teachers use multi-sensory approach while teaching.	55 (94.8%)		-	3 (5.2%)	-	1.15	0.66
3	I receive support from school administration like braille, slate and styles Dictaphone etc.	56 (96.5%)		-	2 (3.5%)	-	1.10	0.54
4	My teachers assign sighted students to help students with visual impairment to do different activities in class.	51 (87.9%)		-	7 (12.1%)	-	1.36	0.5
5	Teachers allow students with visual impairment in class to reflect what they have learned.	40 (69%)	-	-	18 (31%)	-	1.95	1.39
6	My teachers prepare alternative assignments/ activities to make students with visual impairment work better.	58 (100%)	-	-	-	-	1	0
7	Teachers allow low vision students to sit in front.	-		-	3 (5.2%)	55 (94.8%)	4.95	0.22
8	Teachers closely follow-up the	10(17%)	-	-	48	-	3.48	1.14

	participation of students with visual impairment in an integrated classroom.				(83%)			
9	Teachers use large font while writing on the chalkboard.	58 (100%)	-	-	-		1	0
10	Teachers use different concrete examples to facilitate the way students with visual impairment understand the concept	50 (86%)	-	-	8 (14%)	-	1.41	1.03
11	My Teachers adapt teaching material to accommodate students with visual impairment needs. For example using written descriptions instead of pictures	58 (100%)	-	-	-	-	1	0
12	My teachers make writing assignments adaptable to a Braillewriter.	58 (100%)	-	-	-	-	1	0
13	Teachers encourage cooperative learning to make all students support each other.	6 (10.4%)	-	-	52 (89.6%)	-	3.68	0.91
14	Teachers read what she/he have written on the board while teaching	-	-	-	9 (15.5%)	49 (84.5%)	4.84	0.36
15	My teachers have negative attitude and labeling students with VI in inclusive class?	2 (3.4%)	-	-	56 (96.6%)	-	3.89	0.54
16	Teachers are not educated enough in use of braille materials, tactile diagrams and maps etc. to be able to face the challenges of inclusive teaching.	-	-	-	-	58 (100%)	5	0
17	We learn by Using Assistive device in integrated classroom	58 (100%)	-	-	-	-	1	0
18	Our school environment is comfortable to move freely	58 (100%)	-	-	-	-	1	0
19	The voice of the teacher has to be pleasant, Speed of talking, volume and pitch are very important to make the voice interesting for students	-	-	-	56 (96.6%)	2 (3.4%)	4.03	0.18

The above table reveals that large number of participants 58 (100%) responded that their teachers did not provide available materials to students with visual impairment to perform them equally with other students in integrated school with the mean of =1.

A vast majority of respondents 55 (94.8%) answered that their teachers did not use multi-sensory approach while teaching. However, three (3.5%) respondents said that sometimes teachers use multi-sensory approach while teaching with the mean of 1.15.

The majority of teachers against the literature, because literature argued that using multi-sensory approach are very important to increase functionality of students with visual impairment with other sense (Simon, C. 2010). 56 (96.6%) of students with visual impairment were said that school administration was not providing support for them, but 2 (3.4%) respondents said that sometimes they got support from administration with the mean of 1.10. Majority of the respondents 51 (87.9%) said that teachers did not assign sighted students to help SwVI to do different activities in classroom, but different literature stated that cooperative learning among all students in an inclusive classroom has proved to be effective in promoting academic achievement. However, 7 (12.1%) respondents said that sometimes teachers assign sighted students to help SwVI to do different activities in class. 40 (69%) of participants responded that teachers did not allow SwVI's in class to reflect what they have learned. but 18 (31%) respondents said that sometime their teacher allowed them to reflect what they have learned in classroom with mean of 1.95).

All 58(100%) participants answered that they not provided with alternative assignments/ activities to make SwVI work better with the mean of one. A large number of SwVI's 55 (94.8%) responded that teachers allow low vision students to sit in front of classroom, but the other 3 (5.2%) respondents said that sometimes teachers allow low vision students to sit in front of classroom with the mean of 4.95. 10 (17%) respondents said that teachers never closely follow-up the participation of VIS in classroom. However, a vast majority of respondents 48 (83%) opined that sometimes teachers closely follow-up the participation of VIS in classroom with the mean of 3.48.

All participants 58 (100%) reported that teachers never use large font while writing on the chalk board with mean of 1, however, literature stated that using large font is very important to

students with low vision, but according to respondents all teachers at Sebeta secondary school did not writing large font while writing. A large number of respondents 50 (86%) reported that teachers never use different concrete examples to facilitate the way SwVI understand the concept. However, 8 (14%) respondents said that sometimes teachers use different concrete examples to facilitate the way VIS's understand the concept with the mean of 1.41. All 58 (100%) students with visual impairment responded that teachers are never adapted teaching materials to accommodate SwVI needs with the mean of 1. Teachers had not making writing assignments adaptable to a braillewriter, not educated how use of braille materials and how use of tactile diagrams and maps, all respondents respond that always the school do not have appropriate teaching and learning resources to help SwVI. Again all respondents said that they never learned by using Assistive device like audio device, tape recorder and adaptive written text in inclusive classroom and the school environment is uncomfortable to move freely.

Six (10.4%) of the respondents reported that teachers never encouraged cooperative learning to make all students support each other. However, 52 (89.6%) respondents said that sometimes teachers encouraged cooperative learning to make all students support each other with the mean of 3.68. In addition, a small number of participants 9 (15.5%) reported that sometimes teachers read what he/she have written on the board while teaching but the majority of respondents 49 (84.5%) said that always teacher read what he/she have written on the board while teaching with the mean of 3.89.

A large number of participants 56 (96.6%) responded that sometimes teachers have negative attitude and labeling SwVI in an integrated classroom. However, two (3.4%) respondents said that teachers never have negative attitude and labeling SwVI in an integrated classroom with the mean of 3.89. Again a large number of participants 56 (96.6%) responded that sometimes these voice of teachers has pleasant, speed of talking, volume and pitch are very important to make the voice interesting for students. However, two (3.4%) respondents said that always the voice of teachers has pleasant, speed of talking, volume and pitch are very important to make the voice interesting for students.

Table 8: Opinion of Students with visual impairment towards integrated school

No	Students' Opinion	Level of agreement by frequency					Mean	S. Deviation
		S. Agree	Agree	Un- decided	Dis - agree	S. Disagree		
1	I am comfortable when I do activities in a group.		4(7%)	10 (17.2%)	44 (75.8%)		2.3	0.55
2	I like cooperative work to improve my participation.	58 (100%)					5	0
3	Inclusive learning is a better one for students with visual impairment.	45 (77.6%)			13 (22.4%)		4.32	1.25
4	I develop confidence when I learn with sighted students.		40 (68.9%)		18 (31.1%)		3.37	0.92
5	I feel that students with visual impairment perform equally with other students without disabilities in education.		45 (77.6%)		13 (22.4%)		3.55	0.83
6	I can work any activity independently effectively in classroom					58 (100%)	1	0
7	I am encouraged by teachers to reflect what I have learned and answer questions in class.		7 (12%)			51 (88%)	1.36	0.97
8	I get enough time during examination and when I do activities.		17 (29.3%)			41 (70.7%)	1.87	1.36
9	I have regular contact with my teachers to get support		4 (6.8%)		54 (93.2%)		2.13	0.51
10	I am encouraged by teachers to participate in school		7 (12%)			51 (88%)	1.36	0.98

	activities like clubs							
11	I get explanation from my teachers when he/she is writing on the board in class.		55 (94.8%)		3 (5.2%)		3.89	0.43
12	I get clear instructions when taking exams		58 (100%)				4	0
13	I openly ask my classmates for help in and out of class		6 (10.3%)		52 (89.7%)		2.20	0.6
14	The school administration is cooperative to solve my problem					58 (100%)	1	0

The above table indicates that: A large number of participants 44 (75.8%) responded that they are uncomfortable when they do activities in a group in the classroom. 10 (17.2%), respondents said that they did not decide either comfortable or not when they do activities in a group in the classroom. On the other way, around four (7%) respondents agree that they feel comfortable when they do activities in a group in the classroom with the mean of 2.3. All respondents 58 (100%) answered that they like cooperative work to improve their participation and they believe that every child with disabilities has the right to be educated in the regular class with the mean of 5. 45 (77.6%) of students with visual impairment strongly agree that inclusive teaching is a better one for SwVI. However, the other 13 (22.4%) respondents disagree on the above issues with the mean of 4.32.

Majority of the respondents 40 (68.9%) opined that they develop confidence when they learn within regular students; however, 18 (31.1%) respondents disagree, as they said they do not develop confidence when they learn within regular students with the mean of 3.37. 45 (77.6%) of participants agree that they perform equally with other students in education. However, 13 (22.4%) participants disagree on the issues; they do not perform equally with other students in education because of lack of adaptive teaching materials with the mean of 3.55. All students with visual impairment 58 (100%) were of the view that they had face great difficulty in working any activity alone effectively in classroom because of adaptive materials. 46 (79.3%) participants

disagree that they do not get good marks as compared to other students, 12 (20.7%) respondents agree that they get good marks as compared to others with the mean of 1.36.

A large number of students with visual impairment 55 (94.8%) agree that they got explanation from their teachers when he/she is writing on the black board. However, 3 (5.2%) respondents disagree, as they said they do not have explanation from their teachers when he/she is writing on the black board with the mean of 1.87. 7 (12%) of respondents said that their teachers encouraged them to reflect what they have learned and answer question in classroom. However, around 51 (88%) respondents strongly disagree on the above issues, as they said teacher do not encourage them to reflect what they have learned and answer question in classroom with the mean of 2.13. A small number of respondents 17 (29%) opined that they had got enough time during examination and when they do activities, but around 41 (71%) respondents strongly disagree, as they said they do not get enough time during examination and when they do activities with the mean of 1.36.

Only 4 (6.8%) participants reported that they have regular contact with teachers to get support, but a large number of respondents 54 (93.2%) disagree, as they reported they have no regular contact with teachers to get support with the mean of 2.17, because of the teacher's negative attitude towards SwVI. All of the participants 58 (100%) agree that they got clear instruction when taking exam with the mean of 4. 3 (5%) of the respondents reported that they got support from their family to improve their academic performance. However, the majority of respondents 55 (95%) strongly disagree because they are far from their family, so they do not get support from their family to improve their academic performance with the mean of 2.20. All of the participants 58 (100%) strongly agree that the school administration is not cooperative to solve the problem of students with visual impairments in sebeta secondary school with the mean of 1.

Generally, the presented study has many anticipated results. Some of the major findings reflect that students with visual impairment are encountering educational challenges in an integrated school. The results revealed that there are no necessary tools such as equipment, materials, facilities and teaching approaches to support their inclusion in sebeta secondary school. Some of the subjects of the present study reported that they also found lack of knowledge regarding the needs of SwVI's.

#### **4.7. Results of observation**

This part includes the results of observation conducted with the intention of assessing the adapted materials targeting the needs of visually impaired students. Five teachers observed based on their willingness. The observation conducted using lesson observation checklist, which mainly focused on adapted materials which including sound projection, school physical environment, extra time allowance and Availability of adaptive teaching - learning materials, and the participation of Students with VI.

Students with VI observed to withdraw from participation due to lack of enough support to do any given task. In this case, they not have seen raising their hands for participation like other students. This may indicate that unless teachers are aware of this situation, the mere physical presence of students with VI does not bring any kind of change in the process of learning. It could have a devastating effect on the process of their learning. Since students with visual impairments do not see, they rely on the voice of the teacher as one of the main source of information for learning, so researcher observed that the teachers Speed of talking, volume and pitch are good to make the voice interesting for students with visual impairment in classroom. When researcher observed Sebeta secondary school the physical environment of the school is not comfortable to move freely, the door, furniture, seating, space in classroom to movement, organization of chair and number of students in classroom are a big challenges/ barriers of students with visual impairments.

The study reveals that students with visual impairment complete their work very slowly due to the nature of their impairment. In Sebeta, secondary school teachers do not allow extra time for students with visual impairments. when researcher observed in the school there are no availability of adapted materials which include braille writing, increasing the font size or bolding size, using equipment's (slate, styles), audio device, tactile materials.

## CHAPTER FIVE

### 5. DISCUSSIONS OF FINDINGS

#### 5.1. Educational challenges of students with visual impairments in an integrated school

##### 5.1.1. Shortage of resource

In Sebeta secondary school results shows that there are different educational challenges that faced when Students with VI learn in an integrated school. As the results shows that Challenges to the integration of students with VI are linked to the shortage of resources, such as human, physical environment, material and financial resources, to be a serious challenge when dealing with the integration of students with VI in relation to the legal and theoretical principles.

This finding agree with the opinions that relevant resource materials (lack of accessibility), to students with visual impairments, are not readily available due to lack of enough funds. The physical design of the buildings and their paths are not suitable for students with VI. The roads on the school is full of obstacles, they cause physical injuries to students with VI and impede their movement when they walk between the rooms and buildings. There are also no comfortable chairs in the classroom. As armchairs disorganized in the classroom, their mobility is very limited. It is very difficult for students with VI to use in the toilet because it is not suitable for them.

The school does not allocate adequate budget for students with VI. This situation said to hinder inclusive practices in this school. Considering the importance of different resources, the lack of available resource to teach students with visual impairments in integrated classrooms, suggests a big gap between the needs of students with visual impairments, and what actually achieved by these teachers in an integrated classroom. This situation makes the quality of education to these students to be questionable. Under this theme the findings are totally against the literature, because literature said that everybody should get appropriate resources in an integrated school (Fraser, W. and Maguvhe, M. 2008), but at Sebeta secondary school students with visual impairment did not got appropriate resources in their school. As there are many children in one classroom, it is difficult for the teacher to take care of all and this makes the practice of integrated education a challenge. Therefore, it is important for the government to provide more

facilities and support to accommodate fewer students in the classroom for teachers to handle all students (Shepherd, 2001).

### **5.1.2. Insufficient knowledge about the needs of SwVI**

As participants said, there are lacks of knowledge about the needs of students with VI. Because of lack of knowledge teacher cannot use adapted teaching materials in Sebeta secondary school. As participants stated there are insufficient knowledge and skills among teachers regarding implementation of inclusive teaching- learning for students with visual impairments. Responses given by participants show that, teaching students with visual impairments in integrated classroom are not easy for all teachers. It is a challenge since there is lack of adequate training on integrated school to have clear theoretical bases for addressing students with visual impairment in an integrated setting. It observed from the teachers, that teaching and meeting the needs of students with visual impairment in integrated classroom is impossible, because most of the time teachers were using methods common to all students. Teachers cannot read and write braille because of this they cannot support students with visual impairment in this area.

Consequently, it is necessary for teacher's development programs to provide to enable teachers to gain the appropriate capacity through a series of continuing professional development activities that will enable them to contribute towards an institutional culture that is fully inclusive (Shepherd, 2001).

### **5.1.3. Labeling and negative attitude**

Labeling and negative attitude towards students with visual impairment are educational challenges of students with visual impairment at Sebeta secondary school. The study came up with the findings that, teachers were categorizing and labeling students with VI. Teachers may not have a good and positive attitude towards students with VI. It requires teachers training on education on teaching approaches and relevant pedagogy to include students with VI and learn ways to handle them in the classroom (Shepherd, 2001).

#### **5.1.4. Absence of clear policy**

All of interviewees in this study claimed that the integration of students with VI at Sebeta secondary school affected by the absence of clear and enabling policy. However, the inclusion of students with VI in school necessitates clear and enabling policies to ensure the provision of equal opportunities and full participation in all aspects of school life (Shepherd, 2001). Again, respondents said, it is difficult for them to say there is a clear policy or law in school that enables students with VI to get different support and make adjustments on those things provided to students with VI. Traditional assessment procedures can put students with VI at a disadvantage. However, making changes with alternative forms of assessment, additional arrangements and adaptations to procedures can reduce some of the barriers that students with VI encounter in educational institutions (Pauline, D. 2008). In addition, there should be the will to translate the directions of policies into concrete actions thereby successfully ensuring the full integration of students with VI.

#### **5.1.5. Lack of teaching-learning method and lack of teacher collaboration**

Lack of resources or limited provision of materials such as JAWS, laptop, compact disk and braille papers was a common problem that hampers the teaching and learning process at Sebeta secondary school. The above results are totally against the literature, because as literature said if one school implementing integrated school teacher should aware about the need of students with visual impairment to accommodate all students according to their needs (Pauline, D. 2008), but at Sebeta secondary school teachers did not consider the needs of students with visual impairment. Pauline, D. (2008) claims that, the use and adaptations of teaching materials to suit the needs of students with visual impairments in an integrated classroom are very important. For instance, the use and adaptation of printed text through enlargement, increasing the font sizes, bolding the printed materials, increasing contrast is very important for students with low vision.

Moreover, teachers said that they are not using teaching materials, because teaching materials are not available. These findings agree with the opinions that relevant teaching materials, to students with visual impairments, are not readily available due to lack of enough funds. Apart from lack of these teaching materials teachers acknowledged that, they lack the knowledge and skills of adapting these teaching materials to become relevant to the needs of students with visual impairment. It has become very important to allow students with VI to take advantage of choices

available in terms of instructional strategies or multiple methods and tools for inclusive learning (D`Andrea, 2012). The study found that, there is a lack of collaboration and participation of parents in the educational affairs of their children. Parents offer a big contribution to the education of their children, and are potential sources of information about the academic ability of students with visual impairments (Garner, P. and Davies, J.D. 2001). Parents know their children better, they know what their interests are and what things are good for them. They also know their educational needs, and can plan for the future on behalf of their children. They will also provide necessary information about social, physical and emotional development (Garner, P. and Davies, J.D. 2001). Having this information, a teacher will strive to structure and modify his or her teaching to help student with visual impairments in the class.

## **5.2. Educational opportunity for students with visual impairment to access their study in regular class**

Findings reveal that students with visual impairment faced different challenges in an integrated school at Sebeta secondary school rather than getting opportunities. This study shows that at Sebeta secondary school students with visual impairment did not get any opportunities from learning in an integrated school. However, literature argued that learning in an integrated school creates opportunities not only for students with visual impairment, but it also builds or provides more facilities to benefit simultaneously for students with VI, students with different disability, students without disabilities, teachers, parents and society in general (Fraser, W. and Maguvhe, M. 2008). Building and providing more facilities encourage more students to attend school and helps prevent students from dropping out. Building more facilities encourages more students to be in schools because a lack of facilities becomes the barrier for many children who find themselves out of the school system. As more facilities provided, Parents are encouraged to send their children to schools as they can rely on that facilities are being provide to support their students learning and safety in the school.

Integrated school promote social development for students with VI, it leads them to participate in activities and work to develop the society. As they had better situate themselves in society, it generates people to accept, appreciate and respect them (Mastropieri, M. A. & Scruggs, T.E. 2010). Integrated school puts both students with disability and students without disability in the same school and classroom with teaching approaches that benefit all of them. If it is properly,

implemented integrated school increases social inclusion, builds relationships, encourages networking and gives opportunities for people to interact among themselves. However, as the result revealed that at Sebeta secondary school students with visual impairment did not get different opportunities (such as adaptive learning method, assistive materials etc.) from an integrated school.

### **5.3. Attempts that made to overcome educational challenges of students with visual impairment in an inclusive school**

Result shows; if every individual should show a commitment to implement the principle of integrated school to increase the participation of students with visual impairment in integrated school. If every individual involved in this way, it is easy to fulfill the gap that may see in terms of financial and material resources as participant said. In addition to the above, if the school community prepare different project by making contact with NGO's and other individuals the school may got support to realize integrated school for students with visual impairments. Again, to realize integrated school it requires attitudinal change of all community unless it is very difficult to overcome educational challenges of students with visual impairment in integrated school. More over SNE department should struggle the negative attitude towards students with disability to realize integrated school.

In another way, quantitative data show that, all 58(100%) participants answered that their teachers did not provided with alternative assignments/ activities to make SwVI work better. However, this idea is totally against the literature. Because as (Mastropieri, M.A. & Scruggs, T.E. 2010) argued if the assignments given for students with visual impairment are based on vision it is difficult for them, so teacher should provide alternative assignments for students with visual impairment.

All 58 (100%) students with visual impairment responded that teachers are never adapted teaching materials to accommodate SwVI needs. Teachers had not making writing assignments adaptable to a braillewriter, not educated how use of braille materials and how use of tactile diagrams and maps, all respondents respond that always the school do not have appropriate teaching and learning resources to help SwVI. Since integrated education insists on adaptive teaching, a quality teacher should be the one who considers these adaptations for students' learning. Although we talk of these modifications and adaptations of teaching and learning

environment, in some instances adaptation is not necessary, meaning that, teaching strategies and other practices applied to sighted students applied to students with visual impairment (Spungin, S.J. 2002). Again all respondents said that they never learned by using Assistive device like audio device, tape recorder and adaptive written text in integrated classroom and the school environment is uncomfortable to move freely. However, literature shows that students with visual impairment teaching materials need to be adapted (Mastropieri, M.A. & Scruggs, T.E. 2010).

To help students with visual impairment, teaching materials need to be adapted. For example, printed text can be adapted through increasing the font size, bolding the text, increasing contrast, adding color, and adjusting spaces between characters. However, the extent of these adaptations depends solely on the severity of visual defects and the needs of the student concerned (Mastropieri, M.A. & Scruggs, T.E. 2010). Therefore, it is important to consult a specialist teacher on preparation of materials prior to the lesson, because different students use different materials depending on the degree of their visual impairment.

## CHAPTER SIX

### 6. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### 6.1. Summary

The study conducted to investigate regular School preparedness for Teaching Children with Visual Impairment in integrated classroom setting. In order to achieve these aims, three instruments of data collection used. These were, interview (for teachers), questionnaire (for students with VI) and observation. Particularly, the study aimed to assess the School preparedness for Teaching Children with Visual Impairment, educational challenges, the provision of education for students with visual impairment and to find out the opportunities that students with visual impairment get learning in an integrated school and to find out the way students with visual impairment uses adapted learning methods.

The study conducted using mixed methods research, particularly the study design was sequential explanatory design. Findings reveal that Most of the challenges to the integrated of students with VI linked to the shortage of resources, such as human, physical/material and financial resources, to be a serious challenge when dealing with the integration of students with VI in Sebeta secondary school. All teachers who participated in the study stated that Sebeta secondary school was practicing integrated classroom, by the name of integrated school they teach all students together without considering their needs.

These findings agree with the opinions that relevant resource materials (lack of accessibility), to students with visual impairments, are not readily available due to lack of enough funds. The physical design of the buildings and their paths are not suitable for students with VI. Large class-size is again the challenges, there were around 80 to 90 students in a classroom and this makes it difficult for teachers to attend to all students, especially students with visual impairment. Again, as they said lack of Adaptive Teaching Methods, Lack of resources for Students with Visual Impairment is educational challenges of students with VI in Sebeta secondary school. Because of lack of knowledge teacher cannot use adapted teaching materials in Sebeta secondary school. According to participants, there is no clear policy to implement inclusive method, the school and government should decide clearly, what should be done for them as citizens, not by the

willingness of individuals. Generally, the finding reveals that the Sebeta secondary school was not prepared to provide education for students with visual impairments according to their needs

## **6.2. Conclusions**

Based on the findings, the following conclusion derived: This study focused on assessing the regular School preparedness for Teaching Children with Visual Impairment in integrated classroom setting. Integrated school is a process or idea whose main concern is to include children with special needs in regular schools where they not discriminated against and considered able to learn. However, because of different things students with visual impairment cannot get adaptive materials that are very important for educational success of them. Finding reveal that Sebeta secondary Schools cannot provide the necessary tools such as equipment, materials, facilities and teaching approaches to support the inclusion of students with visual impairments. In addition to this, there are factors that prevent the integration of students with visual impairment into the schools.

The research considered the negative attitudes of teachers and community of the school sometimes prevent these children from going to integrated schools. So teachers should change their attitude, they need to be informed about integrated school and how important it is for them to embrace students with visual impairment and encourage them to stay in schools.

Another factor mentioned was teachers not trained in how to handle students with visual impairment in the classroom; they may develop a negative attitude towards them. Moreover, they need to train in teaching approaches, strategies, and styles as well as classroom management to include all children in their teaching methods. As teachers trained and supported with inclusion in mind, they develop a positive attitude towards students with VI that makes integrated education to be effective. Furthermore, lack of facilities was another challenge for the implementation and practice of integrated school. If facilities not provided to support teachers and students with visual impairments, it becomes a challenge for both teachers and students. Providing facilities needs proper organization for everyone to feel included in the school, both in the aspect of teaching and learning processes as well as the regular school environment. Despite the challenges, there are also great opportunities in the practice of integrated school for students with visual impairments. Integrated school creates many opportunities that include making the

government builds or provides more facilities to benefit simultaneously students with visual impairments and all students without disabilities, teachers, parents and society in general.

Building and providing more facilities encourage more children to attend school and helps prevent children from dropping out. As more facilities provided, it engages more teachers to be train and support. Parents are encouraged to send their children to schools as they can rely on that facilities being provide to support their children's learning and safety in the school. This encourages collaborative work between parents and teachers. As parents support their children to attend school, society embraces them and they get the chance to obtain an education in order to develop themselves and therefore their society.

Generally, Integrated school is a process that requires everyone to contribute to its full effectiveness and processing. Families, communities and schools need to change and accept students with Visual impairments to be part of the system and refrain from expecting the children to adjust and conform to what the system provides.

### **6.3. Recommendations**

As long as the existing challenges to students with VI are multi-dimensional to integrated SwVI in regular classroom setting, their solutions and interventions need comprehensive and integrated efforts from all stakeholders at Sebeta secondary school. It is believing that the remedial actions will fully address the challenges if they are incorporate into the action/strategic plan of the school and implemented by all concerned bodies at Sebeta secondary school. To integrate and unify the works of teachers in the SNE units and teachers in integrated classes a collaborative and coordinated work should be in place. The researcher recommends that:

- The school should take measures to provide enough pre-service and in-service training concerning special needs education and integrated education to teachers. They should be educated on how to make the classrooms inclusive to learners with special needs, and visual impairments in particular, through adaptations of teaching and learning environments.
- The school provides appropriate materials: such as transforming textbooks and other supplementary materials into Braille, designing a project to get recording materials like tapes, cassettes, Braille and assessor materials like paper and styles.
- Teachers have to vary their method of teaching to meet different learning styles such as visual, auditory and kinesthetic type of learners.

- The School should organize/ strengthen resource centers to accommodate the diverse needs of learners.
- The Government and the school Search for budget allocations or funding to run inclusive program in a better way: Since schools are deficient on this, special attention given to search various options. This requires joint efforts from government bodies, donors that support SNE/IE and schools, which run inclusive program.

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**APPENDIXES**  
**ADDIS ABABA UNIVERSITY**  
**COLLEGE OF EDUCATION AND BEHAVIORAL STUDIES**  
**DEPARTMENT OF SPECIAL NEEDS EDUCATION**

**Appendix-A: interview guide for principal and sne teachers**

Dear principal and SNE Teachers:

This questionnaire is prepared to gather information about Regular Schools Preparedness for Teaching Children with Visual Impairment in Integrated class setting.

Specifically, it is intended to study how integrated class setting is implemented in Sebeta secondary school to addressing visually impaired students' needs and related issues that directly or indirectly affect their learning. The purpose of this question is to collect data on Regular Schools Preparedness for Teaching Children with Visual Impairment in Integrated class setting at sebeta secondary school in partial fulfillment for the requirements for Master of Arts degree in special needs education. There is no need to write your name. Your genuine responses to all items of this question contribute a lot to the successful completion of this study. You are therefore kindly requested to provide genuine information.

I thank you very much for taking your time in filling in this question.

**Part one: - Demographic data of respondents**

Age: .....

Sex: - .....

Years of Experience: .....

Educational Status: .....

**Part two:-Interview Questions for principal and special need educator teacher:**

1. What are adaptive educational materials made available in the school to meet the special educational needs of students with visual impairment?
2. What are the major challenges for students with visual impairment to attend their study in inclusive setting in the context of Sebeta Secondary School?

3. What specialized services including adaptive teaching methods have been applied to teach students with visual impairment in inclusive class setting of Sebeta Secondary School?
4. What opportunities did exist in the school against the challenges facing by students with visual impairment in attending their study in inclusive class setting?
5. What should be done for the improvement of the availability and quality of specialized services and adaptive educational materials/devices for students with visual impairment in the context of Sebeta Secondary School

**Part two:-Interview Questions for regular classroom Teachers**

1. What challenges do you face when teaching students with Visual impairments in integrated class setting?
2. What are the opportunities of students with visual impairment in learning in integrated class setting?
3. What adapted teaching-learning methods you use in order to meet the needs of students with visual impairments in integrated class setting?
4. What attempts are made to overcome educational challenges of students with visual impairment integrated class setting?

THANK YOU FOR YOUR PARTICIPATION!!

**ADDIS ABABA UNIVERSITY**  
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**DEPARTMENT OF SPECIAL NEEDS EDUCATION**

**Appendix-B: questionnaire for students with visual impairment**

Dear Students:

This questionnaire is prepared to gather information about Regular Schools Preparedness for Teaching Children with Visual Impairment in Integrated class setting.

Specifically, it is intended to study how integrated class setting is implemented in Sebeta secondary school to addressing visually impaired students' needs and related issues that directly or indirectly affect their learning. The purpose of this questionnaire is to collect data on Regular Schools Preparedness for Teaching Children with Visual Impairment in Integrated class setting at sebeta secondary school in partial fulfillment for the requirements for Master of Arts degree in special needs education. There is no need to write your name. Your genuine responses to all items of this questionnaire contribute a lot to the successful completion of this study. You are therefore kindly requested to provide genuine information.

I thank you very much for taking your time in filling in this questionnaire.

**PART ONE**

Instruction: Please show your responses by putting a tick mark ( ✓ ) in the appropriate box which represents your choice and by writing the necessary information.

1. Sex: Male  Female
2. Age: - 14-16  17-19  19 above
3. Name of the school.....
4. Grade: - 9  10
5. Type and Degree of the impairment: a) low vision  b) Total blind

## PART TWO

For each of the statements below, please indicate the extent of your agreement or disagreement by putting a tick mark (✓) in the most appropriate answer box. Your choice should be based on your actual experience of learning in the integrated class setting at the moment.

The response scale is as follows:

5. Always            3. Not sure            1. Never

4. Sometimes            2. Rarely

No	statement	scale				
		1	2	3	4	5
1	My teachers give materials to students with visual impairment to make us perform equally with other students.					
2	My teachers use multi-sensory approach while teaching.					
3	I receive support from school administration (such as braille paper, Dictaphone etc.).					
4	My teachers assign sighted students to help students with visual impairment to do different activities in class.					
5	Teachers allow students with visual impairment in class to reflect what they have learned.					
6	My teachers prepare alternative assignments/ activities to make students with visual impairment work better.					
7	Teachers allow low vision students to sit in front.					
8	Teachers closely follow-up the participation of students with visual impairment in an integrated classroom.					
9	Teachers use large font while writing on the chalkboard.					
10	Teachers use different concrete examples to facilitate the way VISs understand the concept					
11	My Teachers adapt teaching material to accommodate students with visual impairment needs. For example using written descriptions instead of pictures					

12	My teachers make writing assignments adaptable to a Braille writer.					
13	Teachers encourage cooperative learning to make all students support each other.					
14	Teachers read what she/he have written on the board while teaching					
15	My teachers have negative attitude and labeling students with students with visual impairment in integrated class setting.					
16	Teachers are not educated enough in use of braille materials, preparation of teaching aids, tactile diagrams and maps etc. to be able to face the challenges of inclusive teaching.					
17	We learn by Using Assistive device in integrated class setting					
18	Our school environment is comfortable to move freely					
19	The voice of the teacher has to be pleasant, Speed of talking, volume and pitch are very important to make the voice interesting for students					

20. What are the most challenging issues that you usually experience?.....  
.....

21. What do you suggest all concerned bodies should do to facilitate situations for visually impaired students in learning in integrated school?  
.....  
.....  
.....

**PART THREE**

For each of the statements below, please indicate the extent of your agreement or disagreement by placing a tick in the appropriate box.

The response scale is as follows:

5. Strongly Agree                      3. Undecided                      1. Strongly Disagree  
 4. Agree                                      2. Disagree

No.	Students' Opinion	Level of agreement				
		5	4	3	2	1
1	I am comfortable when I do activities in a group					
2	I like cooperative work to improve my participation					
3	Inclusive learning is a better one for students with visual impairment					
4	I develop confidence when I learn with sighted students.					
5	I feel that students with visual impairment perform equally with other students without disability in education.					
6	I can work any activity independently effectively in class.					
7	I am encouraged by teachers to reflect what I have learned and answer questions in class.					
8	I get enough time during examination and when I do activities.					
9	I have regular contact with my teacher to get support.					
10	I am encouraged by teachers to participate in school activities like clubs					
11	I get explanation from my teachers when he/she is writing on the board in classroom.					
12	I get clear instructions when taking exams.					
13	I openly ask my classmates for help in and out of class					
14	The school administration is cooperative to solve my problem					

15. What are your suggestions to overcome the challenges that hinder the active participation of students with visual impairment in integrated class setting?

.....  
.....  
.....

16. What are the opportunities that you get from learning in integrated class setting?

.....  
.....  
.....  
.....  
.....

**Thank you for spending your time to complete this questionnaire.**

**Appendix-C: observation check list**

The following are check list for classroom observation

1. Availability of Adaptive teaching and learning materials e.g. Audio devices, equipment, tactile materials, braille writing, increasing the font size, bolding the text.

.....  
.....

2. The applicability of time extension and appropriate attention to students with visual impairment from teachers during exam & assignments.

.....  
.....

3. School Physical environment (Seating, Noise, furniture, equipment, space, movement, accessibility, organization of class room and doors)

.....  
.....

4. Sound projection e.g. Speed of talking, volume and sound of teachers either teacher loudly speaking or not

.....  
.....

5. Students participation in classroom (Using group discussion/ Collaborative learning)

.....  
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