

**Addis Ababa University**

**School of Graduate Studies**

**College of Education and Behavioral Studies**

**Department of Special Needs Education**

**The Experience of Students with Visual Impairment in Higher Education**

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### **Abstract**

The major purpose of this study was to explore the experience of students with visual impairment in higher education. The method used was that of qualitative research approach with case study design and also the data were collected using semi-structured interview. To this end six students were the participants of the study. And also purposive and convenient sampling were the sampling techniques that are selected for this research. The data were analyzed thematically so as to respond to the research questions. The result of the study indicated that the issue of inaccessibility in terms of academic environment and the physical environment is still the problems that could not be solved. In addition to this, the negative attitude of the campus community is also the other serious challenge of the students with visual impairment. Due to these reasons different feelings were reflected; for example some students felt as pushed aside, being limited and hopeless. These feelings happened because of having accessibility gaps, these accessibility gaps also emerged because of not having accommodated facilities and support such as problem of getting readers, teaching method, inaccessible notice, inadequate exam time, non-conducive exam place, limited choice of department, inaccessible physical environment, negative attitude of campus community and inaccessible Braille materials. Finally, based on this findings possible recommendations have been provided.

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## **Chapter One**

### **Introduction**

This study is focused on the experience of students with visual impairment in higher education. This research paper is comprised of six different chapters each having diverse subject matters. The first chapter dealt with the background, objectives, scope, significance as well as statement of the problem and basic research questions while the 2nd chapter is entirely dedicated to review of related literatures, and theoretical framework. The third chapter deals with research paradigm, research design, source of data, sampling technique, data collection instrument and procedures of analysis. The fourth chapter would be utterly committed to data analysis and finding. The fifth chapter entirely given for discussion. The last, but not least, chapter would come up with summary, conclusions and recommendations. Relevant appendix is also attached at the very end of the study.

#### **1.1 Background of the study**

The students with visual impairment have different experience in their life of higher education institutions. According to Yohannis (2015) in the developing countries Students with visual impairment were admitted and registered at the same institution of higher education as those without disabilities despite the different problems and challenges they face.

In a traditional higher education, the classroom lecturing is a predominant instructional strategy, a large amount of information is delivered visually through the use of black boards, white boards, transparencies and power point slides. In such a situation, students with visual impairment may be at a significant disadvantage academically if adjustments are not made to make curriculum more accessible.



But according to George Washington university health resource center (2003) in the developed countries there are laws that oblige governments to ensure that all students with visual impairment in higher education can access their academic needs and activities, such access may require readers for classroom assignment and exams, assistance to obtain materials in alternative formats such as tape, Braille or computer disk.

Other accommodations may include allowing students extended time to read exams or assignments, permission to tape recording in class notes, allowing in the class use of a laptop computer or brailier for note taking purposes.

But attitude and academic culture are the major barriers to the successful implementation of accommodation for students with visual impairment. Faculties are often ignorant about their responsibility and about how to relate students with visual impairment. Among the barriers to students with visual Impairment in higher education the most obvious have been the physical barriers that exclude some from campus facilities. Because to give the direction for students with visual impairment the campus physical environment have no brail tactile maps. Getting around the university campus, locating buildings and accessing class room can be challenging (Richardson and Roy, 2002).

Some of these barriers can be overcome through the use of lifts, automatic door, appropriate signs, and other assistive technology (Kennel and Creaser, 2001). On the other hand, according to Tirussew (2005) In Ethiopia, the rate of participation in higher learning institutions is extremely low. Most of those who have the opportunity to join higher education institutions are usually placed and served at the Addis Ababa University (AAU). Indeed, the numbers of higher education institutions in Ethiopia that receive students with visual impairment are increasing from time to time. However, reports obtained from different national associations of

persons with disabilities (PWDS) indicate that there are still several higher education institutions that completely deny access for those with visual impairment. This is a critical human right issue, which needs to be addressed by the relevant institutions and the Ethiopian government.

Because, This has to include a consideration of overall visual impairment organization, curriculum, and classroom practice, support for learning and staff development (UNESCO, 1997). it does not mean that we should cease to identify and refer to the special needs of the learners, or to provide particular kind of support when and where needed. It does mean that we should cease perceiving learners as all being similar because they have the same diagnostic level. Therefore, the need to work out the necessary modifications and adaptations of educational materials, teaching methodologies, facilities or equipment's and environmental conditions remains extremely significant.

## **1.2 Statement of the problem**

There are some researches that illustrated the higher education experience of students with disability in general visual impairment in particular. But due to lack of researches that demonstrated the higher education experience of the students with visual impairment in depth, the researcher tried to focus on the experience of students with visual impairment in the Addis Ababa University.

According to Tirusew (2005) the experience of students with visual impairment in Addis Ababa University is not attractive. even though the Addis Ababa University show some commitment to establish association for students with disability, and make effort for students with visual impairment to have access to assistive technology to conduct research, educational problem, physical barrier, and attitudinal barrier remained to be the headache of students with visual impairment. These circumstances forced some students with visual impairment to be

victims of academic dismissal and other drop out from their study Yohannis(2015) also strengthened this idea. Students with visual impairment were not assigned to the department of their interest. There was limited use of assistive technology. The support they get from the institution is inadequate and disorganized. Generally the learning environment is less friendly to SWVI. According to the report of Ministry of Education (MOE, 2015) the number of newly opened higher education institutions has increased tremendously during the first period of the Millennium Development Goals (MDGs). Similarly, the enrollment of students into these institutions has grown every year. Consequently, the number of students with visual impairment who join higher education institutions also increased sharply. Compared with previous years, the number of higher education institutions which admit students with visual impairment has also shown significant increase (Yohannis, 2015)

However, according to the report of the national Education Sector Development Plan (ESDP IV), one of the challenges which the Ethiopian higher education sector has faced is the fact that the increase in enrollment was more rapid than increase in the quality of education(Ethiopian Ministry of Education (EMOE, 2010). This is mainly because the concept of quality education requires the fulfillment of different facilities and equipment's for all students in general and for students with visual impairment in particular. These facilities and equipments may include positive approach from university community, fulfilling facilities to conduct the teaching learning process, and creating both conducive and accessible physical environment. Therefore the researcher explore the existing experience of students with visual impairment in Addis Ababa University.

### **1.3 Research Questions**

The research is expected to come up with fitting answers for the following questions:

- What does the academic experience of SWVI at Addis Ababa university look like?
- What is the experience of Addis Ababa University (AAU) students with visual impairment regarding social interaction with the campus community?
- How accessible is the physical environment of Addis Ababa University for students with visual impairment?

### **1.4 Objectives of the Study**

The study attempted to achieve the following general and specific objectives.

#### **1.4.1 General Objective**

The overall objective of the study is to scrutinize challenges and opportunities that students with visual impairment are exposed in Addis Ababa University (AAU).

#### **1.4.2 Specific objectives**

The researcher addresses the following specific objectives of the study:

- ✓ To identify possible difficulties, in the teaching/learning process adopted by Addis Ababa University (AAU), poses on the academic achievement of students with visual Impairment;
- ✓ To pinpoint the accessibility level of libraries in Addis Ababa University (AAU) in terms of students with visual impairment;
- ✓ To figure out the challenges of examination system applied in Addis Ababa University (AAU) on academic achievement of visually impaired students;
- ✓ To show the social relationship of students with visual Impairment in their campus life;

- ✓ To discover the positive and negative side of physical environment of campus for students with visual Impairment;

### **1.5 Significance of the Study**

The researcher is highly convinced that conducting a study on the experience of students with visual impairment in higher education institutions is extremely significant. Such a conviction emanates from the fact that this particular study is expected:

- It helps to identify major academic problems of students with visual impairment in AAU and design pertinent intervention strategies;
- It helps to inform the readers about opportunity and challenges of social interaction between students with visual impairment and the rest of the campus community;
- It is important to show the magnitude of the physical and environmental challenges of students with visual impairment in AAU;

### **1.6 Scope of the Study**

This study is limited to the experience of students with visual impairment in Addis Ababa University (AAU). Addis Ababa University (AAU) is located in the northern part of the city at the heart of Sadist Kilo. It is the oldest palace of Emperor Hailelassie which was then called “Genete-Leul Palace”. Moreover, AAU is the first and the oldest higher education institution in Ethiopia. And also it was the first institution in receiving the students with visual impairment. Thus, the study will emphasize on the experience of a severe and profound students with visual impairment who do not use their eyes for the purpose of learning. These students are selected from different departments.

### **1.7 limitation of the study:**

Resources and time were the very limitation of this study when being carried out. Because of this it could not include the opinion of instructors, academic din and other concerned bodies. This research is made to consist of only the experience of students with visual impairment. Hence it included data gathered from only one side. Here it is also important to mention the fact that some students were not willing to be interviewed, which limit the study. The other limitation of this study can be mentioned is associated with the methodology employed by the research. Firstly, this study cannot be generalized for the whole population of the students with visual impairment. Secondly, there is no way to detect what all the respondents said is true. The scarcity of data on the experience of students with visual impairment is also the other limitation that can be cited.

## **Chapter Two**

### **Review of Related Literatures**

#### **2.1. Introduction**

This is the 2<sup>nd</sup> chapter of the study which is entirely dedicated to reviewing literatures on the experience of students with visual impairment in higher education institutions. While the chapter is divided into five different sections, three of these sections are again divided into different subsections with the aim of rendering deep analysis on each and every tiny aspect of the issue at hand which is examining the experience of students with visual impairment in higher education institutions.

The first section of the chapter deals with definitions and conceptual framework of three key terminologies which will be used very frequently throughout the study. This section will further be dissected in to three subsections and each of these subsections will be focusing on a particular terminology. The three key terminologies which will be discussed under this section are:

- Disability,
- Visual Impairment, and
- Higher Education/Institution.

The 2<sup>nd</sup> section of the chapter will discuss about the brief history of education in Ethiopia in general and higher education and higher education institutions in particular. In this part of the chapter, the researcher will examine the long journey of Ethiopian education system starting from its origin in different religious establishments to the emergence of secular education sector. The researcher will also allot reasonable space and attention to the evolution of higher education institutions in the country.

The third section of the chapter is all about the concept of inclusion in higher education institutions. Here the meaning of inclusion as presented in different international agreements will be included. Different modes of inclusion and their applicability in higher education institutions will be incorporated as well. To this end, the researcher will go through different literatures prepared by different authors who come from different professions.

The fourth section of the chapter will focus on challenges or barriers visually impaired students usually encounter in higher education institutions. This section will again be divided in to three subsections each dealing with specific challenge or barrier students with visual impairment cope with almost on daily basis. These three barriers are:

- ✓ Physical/Environmental Barriers,
- ✓ Attitudinal/Behavioral Barriers, and
- ✓ Academic/curriculum Related Barriers.

The fifth section of the chapter will be allocated to the discussion on the conception of curriculum and curriculum accommodation for students with visual impairment in higher education institutions. In this section of the chapter, the researcher will provide as much details on the concept of curriculum as possible starting from the origin of the term itself to the existing different modes of curriculum in the field of education. Moreover, the section will examine how a country or a higher education institution can adopt a more inclusive as well as effective higher education curriculum. In order to achieve this, the researcher will exert utmost effort so as to consult higher education experience of different countries which have succeeded in developing and applying higher education curriculum that meets the special needs of students with visual impairment.



## **2.2 definition and conceptual framework**

The concept of disability in general and visual impairment in particular is one of the less and contrarily defined notion in the area of special needs. This very fact makes the effort to figure out a single and clear-cut definition for the terms even more cumbersome. However challenging the task to give a clear enough connotations to these concept may be, the researcher has come up with relevant definitions and conceptual framework as provided by different scholars and international organizations.

### **2.2.1 “Disability”**

As mentioned above, different scholars and international organizations have defined the term disability pursuant to the disability model they advocate. These models include traditional, medical and social models of disability. Nonetheless, the latest as well as the widely accepted definition is the one provided by proponents of the newly emerging bio-Psychosocial disability model.

According to the bio-Psychosocial model Disability is the outcome of complex interactions between the functional limitations arising from a person’s physical, intellectual, or mental condition and the social and physical environment. This model sees the problems of disabled people from biological, individual and social perspectives (Kuno, 2008: 87; WHO, 2001: 20). According to this model, disability is created as a result of the interaction of individual and contextual factors, and is not formed exclusively either by impairments or by the social environment (Schneider, 2006: 9; Waddell & Aylward, 2010: 22). Thus, according to Schneider (2006: 8), “one must look at both the individual and the environment if one is to describe a person’s experience of disability accurately and comprehensively”.

### 2.2.2 Visual Impairment

We now revolve to the definition of visual impairment as used in this study. It is wise to note here that different definitions are provided for the concept of visual impairment by numerous international bodies and scholars. These different designations take diverse perspectives such as educational, medical, legal and social perspectives in to account. For the purpose of this research work, however, the researcher will attempt to go through meanings formulated in line with educational perspective.

UNESCO, 2001; Candido, 2008; Jones, Minogue, Oppewal, Cook, &Broadwell 2006; McKenzie, 2009) stated that educationally, visual impairment is classified in to three main categories. These major classifications are:

- Moderate,
- severe and
- Profound.

This classification is mainly based on the level of special support students require in order to learn in inclusive classrooms. The sight problems of those students with moderate visual disability can be almost entirely corrected with the help of visual devices such as eyeglasses. In the case of students with severe visual disability, only slight corrections can be made in their problems with visual devices. However they can still use vision as their primary channel for learning (Douglas &McLinden, 2005). A student with a profound visual disability cannot depend on his/her eyes during the educational process; his/her principal channels of learning are touch and hearing (Mnyanyi, 2008).In the context of this study, visual impairment refers to those students with profound visual disability and hence cannot depend on their eyes for learning.

Pieranglo and Jacoby (1996) describes a visual impairment as a “lack of vision or reduced vision that may result in delays or limitations in motor, cognitive and social development”. Visual impairment can be either congenital (present at birth) or acquired (occurring later in life as with injury or diabetes). The point at which the condition is acquired may have an influence on the acquisition of certain skills such as mobility or Braille skills. Individuals with visual impairments may also experience limitations in orientation, mobility, and socialization.

### **2.2.3 Higher Education (Institution)**

The other term which is highly related with the main concern of this study and that needs to be defined is “higher education (Institution)”. In this regard, the researcher chose to use the definition forwarded by national laws. As it is publicly known, the issue of higher education and higher education institutions in Ethiopia is governed by constitutive legislations.

As per these national laws, “higher education” means education in the arts and sciences offered to undergraduates and graduate students who attend degree programmes through any delivery modes”) Higher Education Institutions Proclamation No.650, 2009). Likewise, higher education institution means a public institution established and funded by federal or regional state governments; or private institution established and funded by individuals, non-profit organizations and foreign education institutions providing higher education. As one can easily understand from the letter of this provision, institutions under religious organizations and whose objectives and curricula are primarily religious and those institutions that offer only diploma and certificate programmes are not regarded as higher education’s under Ethiopian laws.

### **2.3 The evolution of Higher Education System in Ethiopia**

The history of modern education in general and higher education in Ethiopia is intrinsically associated with the advent of spiritual learning establishments many centuries ago mainly those of Christianity and Islam. As far as non-spiritual education is concerned, the establishment of the then named University College of Addis Ababa in 1950 marked a new chapter in the history of secular Western type higher education in Ethiopia. For two decades after the establishment of this institution, however, higher education did not experience significant development and was in need of major reforms. By 1970 there was still only one university and a few junior technical colleges. By the time the number of population were 34 miliyon(Saint, 2004: 84; Teshome, 2005: 1).

Nonetheless, the royal system was left with no enough time to undertake significant reform in the sector of higher education. Because, a major political change happened in the country. In 1974, the monarchy was overthrown by a military coup and a dictatorship was set up which stated to be a socialist government. Political shakiness, social catastrophes and economic decay predominantly characterized the nearly two-decade rule of this military tyranny. The military junta fundamentally concerted all political, social, economic and natural resources of the country on consolidating its power and winning the many armed conflicts waged in different parts of the country. It did not have either the determination or the aptitude to develop the higher education system of the country. Due to this, as Teshome (2005: 2) states, “there was —lack of clear direction, vision and commitment for the development of higher education in the country”.

The abolition of the military dictatorship and the subsequent setting up of a new political scheme in 1991 sparked a completely fresh prospect for the commencement of a new and innovative higher education system in Ethiopia. The new regime instigated a variety of legal and practical measures to develop the system. For instance, a New Education and Training Policy

was launched in 1994 with the aim of defining the country's educational goals and outlining the strategies for their attainment. Furthermore, a 20 year indicative plan known as Education Sector Development Program (ESDP)II was propelled in 1997 which was to provide a policy and implementation framework for the development of the education sector.

Regardless of these ingenuities and measures of the newly established administration, higher education in Ethiopia did not demonstrate significant evolvement either qualitatively or quantitatively up until the last decade of the 2<sup>nd</sup> millennium. Just to comprehend, there were only two universities and seventeen junior colleges that offered education at a diploma level with a total student enrollment of only 31,000 as early as 2000. During those years, almost all the attention and efforts of the government were exceedingly absorbed by the urgency of expanding primary education in the country. Consequently, even the first phase of the Education Sector Development Program (ESDP I) left higher education to the background (EMoE 1997). This is probably because of the influence of the then prevailing attitudes of the international community and especially that of the donor organizations like the World Bank regarding the roles and purposes of higher education in a country's development. During the 1980s and 1990s, African higher education was ignored by both African governments and international organizations because of the wrong belief that it has tiny role to play in the economic growth and poverty reduction of a country. World Bank's costs on higher education was very much reduced which severely affected the sub sector (Bloom *et al.* 2006).

In the course of the early years of the twenty-first century, however, Ethiopia started executing palpable actions designed at transforming its higher education system. Seemingly, the first Higher Education Proclamation was ratified In 2003 which served as a foundation for major reform of the education system (Teshome, 2005). Thus this proclamation, among other things,

- encouraged the establishment of private higher education institutions ,
- established a national quality assurance and relevance agency, and
- increased the share of budget to the higher education subsector (FDRE 2003).

ESDP II, the policy document which covered the period starting in 2002/03, also gave significant attention to this subsector by stating the intention to double undergraduate enrolments and quadruple graduate enrolments within a three year period (EMOE, 2001).

As a result of these measures, the HE subsector began to show radical changes, especially in terms of student enrolment and the extension of higher education institutions. Thus the total number of enrolment in HEIs increased from 42,132 in 1996/97 to 192,165 in 2004/05 in both public and private institutions. This enormous increase of 356% can be considered a remarkable development, although the gross enrolment rate was still very low (1.5%) and far behind the 3% average for sub-Saharan countries of Africa. The number of public universities also increased to eight during this period, with an intake capacity of nearly 32,000 for undergraduate studies (EMOE, 2005: 12).

During the ESDP III period (2005/2006 - 2009/10), the government energetically continued its hard work of increasing and civilizing the higher education system. thus, at the end of this planning period, the number of public universities developed to twenty-two with a important increase in their intake capacity; the overall enrolment reached 319,217 with a gross enrolment rate of 5.3% as compared to the African average at that time of 6%. One of the priority areas stipulated in ESDP III was the expansion of postgraduate education with the prime purpose of developing the capacity of HEIS' teaching staff. Thus the total enrolment of postgraduate programs by 2009/10 reached 10,125 although this figure is far below what was planned (EMoE, 2010: 62). It was also during this period that the Higher Education Proclamation

of 2003 was revised to include an article with the provision that higher education institutions should establish for students with disability(FDRE, 2009).

After the end of ESDP III, ESDP IV was launched which would last from 2010/11 – 2014/15. In addition to issues related to the increase of HE enrolment and the establishment of nine additional universities, ESDP IV outlined different strategies to improve the quality of education in these institutions. One important provision was related to inclusive education. This document appreciated the past problems and challenges in the development of inclusive education and outlined strategies to improve the situation. Targets were set to achieve at the end of the planning period an increase in the enrolment of students with special needs at the different levels of education, for HE the target being 946 (EMoE, 2010: 67).

## **2.4 Barriers/challenges Students with Visual Impairment Face in Higher Education Institutions**

### **2.4.1 Social and Attitudinal Barriers**

Different research works conducted in different countries have stated that friendship lies at the heart of the student experience and, when friendships are formed between SWDs in general and SWVI in particular and students without disabilities, the same create a sense of togetherness(Beauchamp and Pryor,2012;Taylor&PalFREman,2000). This form of friendship might further more build up the self-confidence of SWDs and influence their perseverance in higher education(Hodges&Keller,1999)and, on a broader level, challenge their exclusion (Beauchamp-Pryor,2012a).

However, as witnessed here and there, some SWVIs feared that confiding in others about their disability would lead to social barriers and exclusion, rather than a sense of belonging and togetherness. According to diverse studies conducted in some African countries, the experience of friendship, social encounters and level of acceptance were dependent on many

factors and sometimes differed from student to student and from one relationship to the next. In some instances, SWVIs have experienced stereotyping, labeling and pity from their nondisabled counterparts (Joshi, 2006; Low, 2009). For some students without disabilities, a visual impairment is equated to inability or being stupid (Dowrick et al., 2005; Low, 2009). It is therefore no wonder that some disabled students experienced social alienation and rejection (Goode, 2007; Joshi, 2006; Shevlin et al., 2004).

Variation also existed in the relationship SWVIs had with one another. Some of them found companionship and support in their friendship with visually impaired peers (Elliot & Wilson, 2008).

In contrast, some students deliberately distanced themselves from their visually impaired peers (Low, 2009). According to Low, this could be seen as an attempt to get or maintain a nondisabled identity. As she wrote, “Students distance themselves from their disabled identities by expressing dislike for, attributing negative attributes to, and/or keeping physical distance between themselves and other students with disabilities” (Low, 2009).

Some students with visual impairment have positive social experiences, and others also have negative social experiences. Some others also have both positive and negative social experiences. With regard to this there is no tangible cause. But different literatures showed their own suggestions.

The past experiences of both SWVIs and nondisabled students sometimes had an influence on whether they became friends (Beauchamp and Pryor, 2012). Social interactions between students with and without disabilities were sometimes awkward, because the latter did not have prior contact with disabled students and generally lacked awareness of disabilities



(Erten, 2011; Mullins &Preyde,2013; Shevelinet al., 2004). Goffman(1963) who postulated that, “in interactions with disabled people, those people without disabilities would become wise. However, the theory that nondisabled people simply know no better, may stretch even “deeper. Non disabledpersons fear and disgust (Hughes, 2012). Maystem belief that, because the disabled body does not measure up to the standard of a normal body, it does not deserve the same treatment and does not belong in a perfect and normal world (Loja et al., 2012).According to Beauchamp and Pryor (2012, 2013)theseattitudes towards SWVI reflect prevailing medical model thinking around disability within wider society; that SWVIs have deficits that need compensation and care. It is therefore no wonder that these reactions towards PWDs in general and SWVIs in particular often resulted in a distance between persons with and without disabilities (Hughes, 2012).

As stated in the previous paragraph, the previous experiences of SWVIs also sometimes had an influence on their interactions with peers without disabilities. If SWVIs experienced friendships during their school-going days, they seemed to be more likely to make friends in higher education (Beauchamp and Pryor, 2012, 2013). This stretched even further to include friendships with nondisabled friends. In other words, if SWVI attended a special school where he or she had only SWVI friends, he or she would be less likely to be friend peers without disabilities in higher education compared to those students who formed friendships in a mainstream school (Beauchamp and Pryor, 2013; Polat, Afroditi, Boyle, &Nelson, 2001).

As far as the student-instructor interaction is concerned, unlike students without disabilities, SWVIs have serious problem to have contact with their instructors because of the physical barriers to get access to their offices. As a result most of them forced to miss important consultation hours with their teachers. Generally, appreciating the assets and recognizing the

liabilities of the learners on the part of the instructors usually makes the students to feel at ease, be interactive and comfortable(Tirussew, 1994).

As one can easily understand, all this ends up in the general attitude towards students with disabilities in general and students with visual impairment in particular. Different writers have concluded that higher education institutions predominantly staffed with personnel having positive awareness regarding the meaning and special needs of persons with disabilities have found the duty to make their institution accessible to PWDs relatively easy. Thus, the researcher dedicated the next few paragraphs for the discussion on the meaning of attitude and the bearing it fetches on the experience of students with visual impairment in higher education institutions.

The first most essential question is what is attitude? Many researchers have exerted tremendous effort to give a clear-enough elucidation of the term attitude, and therefore, came up with different definitions. According to Allport(1935), "an attitude is a mental and neural state of readiness, organized through experience, exerting a directive and dynamic influence upon the individual's response to all objects and situations with which it is related". On the other hand (Sprinthall and Oja, 1994) described that an attitude is a predisposition to react favorably or unfavorably toward ideas, objects, persons and events or situations.

Likewise, Loft and Marshall(1985) concluded that, "an individual develops certain kind of attitude from his previous experiences in favor of or against, a particular idea, person and object etc. An attitude is not innate but it is learned. It persists relatively for a long period of time".

Fishbein and Ajzen(1975) correspondingly held the belief that attitude also motivates the individual to act, helping to shape, and direct his behavior.

Allport(1935) cited by Kuppuswamy(1984) identified four ways in which attitudes are developed. These are:

- The integration numerous specific responses of a similar type into a generalized response pattern.
- Through differentiations as in one's feelings and actions toward a group, favorable to some and unfavorable to others.
- Through a traumatic experience and
- Through imitation or identification. The comments of one person towards somebody or something may influence another person to develop favorable or unfavorable attitudes towards that object or person.

In a moderately analogous remark, Malin and Birch(1998); Insko and Schopler(1976) categorized attitude into three component parts. These are:

- Cognitive, which includes perceptions of objects and events or reports or beliefs about them.
- Affective, which includes feelings about and emotional response to objects and events.
- Behavior or cognitive refers intentions and predicts the way in which an individual may behave in relation to an object or events.

The next most significant question that begs for proper analysis is related with the barrier aspect of attitude. Numerous studies suggest that attitudinal barriers and good academic performance of students with visual impairment in higher education are negatively related. Different scholars tried to see the attitude of college faculty members towards students with

visual impairment from various perspectives. For example, Newman (2009) and Baggett (2004) indicated that many college faculty members hold negative attitudes toward blind, and some may feel that these students are incapable of benefiting from college training.

In a notable agreement with the findings of the Newman study, Burbach & Babbitt, (2011), reported “students experienced feelings of isolation, scorn, and ostracism.” It also stated that students who have experienced difficulty in establishing a rapport with their non-visual impaired peers felt that this could be due to preexisting attitudes commonly maintained by those attending institutions of higher education. Students interviewed in the study felt that they were subjected to discrimination, stereotyping, and/or prejudicial attitudes.

In sharp contrast to this highly generalized view, Other reference materials such as Vasek, (2005) and Skinner, (2007) have suggested that college faculty members are not negative toward these students; rather, they may “lack adequate knowledge of the nature of blindness and the accommodation needs of these students to serve them appropriately. Vasek (2005) also evaluated the knowledge, experience and attitudes of faculty members towards students with visual impairment. In a nutshell, the findings of these research works indicated that faculty members have relatively little contact with the students with visual impairment.

The other noteworthy research piece conducted on the relationship of positive attitude of faculty members and academic performance of students with visual impairment in higher education institutions (Roy (2012). This research conducted a study on a number of successful college students with blindness and visual impairment. These students reported positive attitudes on the whole. Some reported good experiences with all lecturers and others reported good experiences with most. Therefore, the research concluded that the positive attitude of their faculty members was indispensable and a contributing factor to their academic success.

The Newman study, conducted in 2009, was one of the first studies to look at issues such as the impact of faculty attitudes on serving students with blindness and other disabilities. The study intended to answer two basic questions: (1) have there been, or would there be problems in admission of students with disabilities in certain departments? And (2) what type of admissions policy would faculty prefer to see developed? Newman's results indicate that the overwhelming majority of the teaching members of faculty believed universities should have an unrestricted admission policy. However, only the simple majority favored an unrestricted admission policy in their department.

As far as Ethiopia is concerned, According to tirusew(2005) "persons with visual impairment in general are perceived as weak, hopeless, dependent, and unable to learn and subject of charity". in Ethiopian context The misconceptions of causal attribution added to the misunderstandings of the capabilities of persons with visual impairment have contributed to the low social and economic statues of PWDs (Tirussew,2005) . This same researcher believes that PWDs belong to one of the poorest of the poor segments of society. Moreover, Tirusew (2005) concludes that their exclusion from accessing or having equal opportunity to basic social and economic opportunities (education, health, and employment) is aggravating their already desperate situation, making them more hopeless and voiceless.

Eventually, it is only wise to conclude that attitudes such as these are frequently constructed through cultural experiences. Discriminatory attitudes can be quite significant in a university environment that will generally include student and faculty members representing a diversity of cultural etiologies. Students' college experiences are affected by the cultural beliefs and values held by others within the university environment. For example, within the college community, there are still many misconceptions regarding the ability of students with

blindness to perform within the academic environment. Some instructors might presume that since a student is not able to visually conceptualize the graphic material presented during a lecture, then he/she must be incapable of satisfactorily fulfilling the course requirements (Hodge & Preston, 2007).

Therefore, it is not unusual for expectations regarding the competency of individuals with disabilities to be a product of those persons' cultural identities (Grant & Sleater, 1989; McDermott & Vareene, 1995). As best stated by Wistock (2008), "It is never easy to break with traditions, especially when they are so deeply rooted in our culture as the old stereotypes of blindness and blind persons". And "The perseverance of many individuals will be required before a transformation of values and beliefs will transpire."

#### **2.4.2 Academic experiences**

The need for studies that investigate students with blindness or visual impairments in higher education is a very demanding one. As programs and services for the blind and visually impaired increased, as well as attendance at colleges and universities, assessments revealed that many of these students with blindness and visual impairments had academic deficits. They graduated from secondary schools without the necessary academic skills to compete successfully in college (McBroom, 1997). This is one of the reasons regulations established guide lines and certified the rights of this population to an appropriate education using the proper testing and accommodations necessary to complete that education. However, some students were still admitted to college with sub-optimal academic backgrounds (Matson, 1990; McBroom, 1997; Vaughan, 1998).

It is important to note that even though the U.S.A Rehabilitation Act of 1973 presented a definition of blindness for post-secondary institutions along with a set of

concomitant accommodations in the effort to improve services for students, many college students with blindness and visual impairments still find academic work rather difficult, especially if it is accompanied with a sense of isolation and loneliness (Hodges & Keller, 1999; McBroom, 1997; McBroom, Sikka, & Jones, 1994).

According to Tirusew (1989), Inethiopian context, the major educational challenges faced by students with visual impairment at the Addis Ababa University may include the following:

- lack of adequate educational background,
- shortage of instructional materials, (text and reference books written in Braille or recorded cassettes),
- insensitive instruction,
- teachers' negative attitude,
- rigid curriculum and
- The nature of the course (some courses require field-work and a lot of reading).

Furthermore, the students expressed that the academic competition has been more frustrating for them than the non-disabled students. Some have been victims of circumstances such as academic dismissal and dropping-out from their studies. In addition to this, students expressed their concern about the choice of field of study to different departments. According to their opinion the good will of the heads of the departments or faculties is very critical. For instance, in spite of the interest shown by visually impaired and blind students, some departments are still closed in Addis Ababa University (Tirussew, 1989).

### **2.4.3 Adjustments**

Thesedays assistive technology has made it easier for disabled students, especially those with a visual impairment, to access written literatures (Burgstahler, 2005; Soorenian,

2014). “Assistive technology is a term used to refer to products that can help disabled students to carry out different aspects of their work” (Grace & Gravestock, 2009). For visually impaired students, one of these important products is called a screen-reader. With the Braille or voice output of a screen-reader, it became possible for visually impaired students to follow the entire content that was displayed on a computer screen (Cooper, 2003; Fichten, Asuncion Barile, Ferraro, & Wolforth, 2009). So, it became possible for visually impaired students to read notes and books, as long as it was in an electronic format (Scott & McGuire, 2005).

However, assistive technology should not be confused with general technology. Ironically, technological advances sometimes make it more difficult for visually impaired students to read electronic texts. For example, Lee (2014) pointed out that some Google applications and kindle e-readers are inaccessible to visually impaired students. Trends towards e-learning also posed some setbacks to the accessibility of the written word (Fichten et al., 2009). For example, some websites and text formats like Power point might be difficult, if not impossible, to read with the aid of a screen-reader (Fichten, et al., 2009).

So, assistive technology does not solve the hitch of inaccessible materials completely. Additionally, the conversion of printed materials into an easy to get to format often takes some time since publishing houses are sometimes reluctant to provide students with the electronic format of books. Ideally, students want these materials before classes started in order to follow class lectures effectively. And so, numerous studies reveals that the learning of students with disabilities in general and students with visual impairment in particular, is still stifled by limited and delayed access to course materials (Bishop and Rhind, 2011; Frank, McLinden and Douglas, 2014; Hanafinet al., 2007; Holloway, 2001; Joshi, 2006; Kilmurray & Faba, 2005; Klinkosz, Sekowski, and Brambring, 2006; Madriaga et al., 2010;



Reed and Curtis, 2012).

This intricacy with printed material extended beyond the classroom and was very evident when visually impaired students visited the library. Bolt (2010) estimated that only 20% of the materials in libraries across the U.S.A were accessible for students with visual impairment. Surrounded by books, articles and dissertations that they could not read, it is no surprise that going to the library could be stressful for these students (Elliot & Wilson, 2008; Fuller et al., 2004; Holloway, 2001; Scott, 2009). For instance, one student in a study by Scott (2009) emphasized that there was something inherently unequal about the library experiences of a visually impaired student compared to that of their sighted counterparts.

Apart from adaptations to written materials, it was often necessary for lecturers to adjust their teaching style. It was often difficult, if not impossible, for visually impaired students to see presentations, such as transparencies, as displayed by lecturers. This very often has a ripple effect on adequate note-taking (Mullins & Preyde, 2013; Roberts, 2012). Therefore, students prefer to read a variety of flexible teaching methods instead of a one-dimensional teaching style directed to one type of learner.

Finally, the students with visual impairment need reasonable accommodations at the time of assessments (Fuller & Healey, 2009; Vickerman & Blundell, 2010). These accommodations include extra time for the completion of examinations and changes to procedures like the conversion of test materials into an electronic format or writing in a separate room (Fernie & Henning, 2010; FOTIM, 2011; Mullins & Preyde, 2013). Paradoxically, even though these adjustments are considered significant way of including visually impaired students, it probably makes some feel like “outsiders” (Michalko, 2009). As different studies

show some visually impaired students think that such accommodative measures may potentially make them feel “extra-visible” and different from their nondisabled counterparts. For example, in the study conducted by Mullins and Preyde (2013), some students with different level of visual impairment found it awkward explaining to their fellow students why they wrote exams in another room (Fuller & Healey, 2009; Roberts et al., 2009). So the exact measures that were aimed at including disabled students may possibly serve to alienate and exclude them.

#### **2.4.4 Physical accessibility**

The United Nation’s Convention on the Rights of Persons with Disability (UNCRPD), 2006 regards accessibility, including the accessibility of the physical environment, as an important aspect of the ability to participate fully in all facets of life. To this end, the convention stipulated that state Parties shall take decent measures to ensure access, on an equal basis with others, to the physical environment so as to enable persons with disabilities to live independently and participate fully in all aspects of life. These measures, which shall include the identification and elimination of obstacles and barriers to accessibility, shall apply to, inter alia: buildings, roads, and other indoor and outdoor facilities.

However, as seen previously, most of the higher education institutions remain out of reach for students with visual impairment because of inaccessible physical lay-out. Once the students managed to join these higher education institutions, some of them may well encounter physical barriers (Hana Fin et al., 2007; Moswela & Mukhopadhyay, 2011; Redpath et al., 2013). For example, a study on South African universities which was carried out by FOTIM (2011) observed that partially sighted students mentioned that they were unable to read signs on the campus. It further underscores that visually impaired students who has no depth perception

also reported that stairs posed a particular challenge to them, as they could not know when the stairs ended.

As the UN(UNCRPD (, 2006)stipulation assumes, these physical barriers sometimes possibly will spilled over in to other areas of life; affecting disabled students ability for full participation. Inaccessible physical environments could also inhibit social participation of the students (Jacklinet al., 2006).

Riddell (1998) further noted the potential negative impact of inaccessible physical environment on the self-esteem of students with visual impairment. It is thus evident that, in some cases, visually impaired students particularly may well experience the physical lay-out of universities as non-inclusive. Firstly, inaccessible lay-outs trim down their scope of options regarding universities and, secondly, once they are there, their full participation could be subdued by physical barriers.

To bring solution for the above mentioned physical environment barriers, universal design strategies provided useful thinking around the physical environment. In fact, the concept of universal design, as coined by Robert Maceearlyinthe (1970s, (Scott &McGuire, 2005), originated from architecture and product design.It meant that products and the physical environment were designed, from the outset, so that they could be used optimally by everyone (McGuire, Scott, &Shaw, 2006;Scott& McGuire, 2005; Shaw, 2007). In short, universal design would mean that disability and an inclusive environment would become part of the taken-for-granted life world and natural common-sense attitudes of everyone.

## **2.5. The Concept of Inclusion in Higher Education Institutions**

Inclusive education is a very broad concept and different authorities in the literature have come up with different definitions. However, they do not agree on the components and scope of

inclusion. It refers to a process and situation where the diversity of learners' needs is addressed through increasing their participation in the learning process and reducing exclusion from and within education. It is an approach that focuses on transforming an education system in a way that it will respond to students' diversity.

Inclusion focuses on teaching and learning with the emphasis on the development of learning and teaching strategies that will benefit all learners. It is a process and practice that should be followed at all levels of the education system including higher education (Stodden *et al.*, 2010, P191). When the level of education increases for persons with disabilities, the level and quality of employment rise even more dramatically than for people without disabilities. Therefore, improving students with disabilities' access to higher education is an issue that requires urgent government attention.

Students with different types of disabilities are gaining access to higher education institutions. Especially in developed countries, governments have developed policies that encourage students with disabilities to better participate in the teaching-learning process. However, gaining access to higher education shouldn't be considered as an end by itself. Instead, it needs to be viewed as a means to the end.

There are a number of new challenges that students with disabilities face in higher education institutions which will create barriers from fully participating in their educational endeavors. Adams and Brown (2006: 15), based on different survey results, explain some key problems that students with disabilities face in their transition to higher education which can be summarized as follows:

- Firstly, adjusting to living away from close family members and friends, although a problem for all students, is a more serious challenge for students with disabilities since

they may not get the type of support they were provided by their family members or other assistants in the new environment.

- Secondly, students with disabilities may find it difficult to adapt themselves to the new learning styles they may face in higher education.
- Third, taking responsibility for organizing their equipment and support arrangements, which in previous educational levels was done by the educational institutions or the students' families, poses another challenge for students with disabilities.

Therefore, it is a requirement for any higher education institution that all possible measures are taken to ensure that students with impairments get opportunities equal to their non-disabled peers.

## **2.6 The concept of curriculum**

In order to explicate the status of a higher education system, or any level of education, having a good understanding of the curriculum is of utmost importance. Nevertheless, as different writings divulge there is no standardized conceptualization of curriculum. It is an amorphous notion that has been used with several gist and defined in different ways.

The term "curriculum" has its origins in Latin and plainly means "race course". When applied to education, this refers to a course or plan for learning (Taba, 1962, P11). The first person who presented an expanded version of this definition was John Dewey who, in the early 20th century, included learners' experience (Kridel 2010).

Later on, Bobbit (1918) further expanded this definition, still recognizing the importance of the learner experiences. Bobbitt defines curriculum as a series of things which children and youth must do and experience by way of developing abilities to do things that will make up the affairs of adult life; and to be in all respects of what adults should be|| . Ever since Bobbit's

definition, educators have been trying to determine a further or more precise definition of curriculum. Instead of converging towards an agreed meaning and definition of the concept, these efforts, as Schiro (1978: 24) claims, resulted in the formulation of more new definitions, more debate over the concept, and further criticisms of other inadequate definitions.

Some possible reasons as to why educators couldn't come up with a universal definition for curriculum may include factors such as the increasing demands of societies on the education system and the wide range of curriculum dimensions (Khan 2007: 1; Schiro, 1978: 4). This very challenge of devising a clear-cut definition compelled educators such as Oliva (1982) to analyze these multiplicities of definitions into three different categories. These categories are:

- intention or purpose of the curriculum based definitions: E.G, Popham and Baker (1970: 48) wrote that the concept refers to all planned learning outcomes for which the school is responsible.
- context of curriculum implementation based definitions: E.G, Shaver and Berlack (1968) defines curriculum as situations and activities arranged and brought into play by the instructor to effect student learning.
- instructional strategies or terminal objectives based definitions: E.G Krug, (2007) defines curriculum as all the means of instruction used by the school to provide opportunities for student learning experiences leading to desired learning outcomes.

For the purpose of this research work, however, the researcher decided to apply the taxonomy of the implications attached to the diverse curriculum designations coined by the well-versed scholar Khan. According to Khan (2007: 3), the meanings attached to the different curriculum definitions might be classified under one or more of the following categories:

- curriculum as subjects or subject-matter,

- curriculum as objectives,
- curriculum as program, and
- curriculum as personal experience of the learner.

The most important justification for going behind this categorization is the fact that these diverse definitions and classifications are not totally different from one another. However narrow or broad they might be, they all focus on the teaching and learning process and students' learning.

## **2.7 Curriculum accommodation for students with visual impairment in higher education institutions**

Ensuring the accessibility of the curriculum necessitates an understanding of the learners' need and putting into practice all basic modifications in the curriculum in order to address those needs. so as to make the curriculum of any learning levels reachable to students with disabilities, various researchers argue that a number of modifications have to be made in the curriculum. Many higher education institutions of the developed world have also developed institutional policies as well as explicit strategies for making sensible and practical adjustments in their curriculum so as to make it more accessible to diverse learners (Healey *et al.*, 2006; Herrington, 2002; Teachability Project, 2000; The Quality Assurance Agency for Higher Education, 2010).

The renowned writer D'Andrea provides a Framework for developing an inclusive curriculum which can be of use for any educational level. Thus, according to this framework, the first thing that should be done towards developing an all-encompassing curriculum is to determine the course's core requirements and consider their accessibility to students with visual impairment. Once you have agreed on a course's key requirements, one can easily identify the possible strategies that can be used with students with visual impairment to address these

requirements. The second step is concerned with the identification of the individual needs of students with visual impairment through private deliberations with students concerned on what could be arranged to facilitate their full involvement in the learning process (Gravestock n.d.:16-21).

The next two steps of this framework call for instructors to devise and execute teaching and learning schemes and materials suitable for students having different needs in their classrooms (D'Andrea, 2003 P15). An all-encompassing curriculum requires instructors who vary their instruction in a way that all students, including those with visual impairment, will have various alternatives for attaining and processing information. differentiated instruction requires instructors to use bendable approaches of teaching and learning and adjust their lecture mode in line with the needs of students, rather than the students becoming accustomed themselves to the curriculum. Differentiated instruction is based on the assertion that instructional methods should differ and be modified with respect to individual and assorted students in classrooms (Tomlinson, 2003).

Different manuals and guidelines have suggested different strategies that can be used by instructors for making the instructional process accessible to students with visual impairment. The following are some of these strategies:

- making sure that what is visually displayed is verbally explained;
- providing students in advance with a printed outline of what is going to be presented;
- allowing students to take notes on their Braille, electronic Braille note taker, computer, or using a cassette recorder;



- making students touch tactile items being presented either during or before presentations;
- providing educational materials that students with visual impairment need in Braille format; and
- making sure that all directions or instructions are clearly communicated to students with visual impairment.

Similarly, Wolanin and Steele (2004: 38-39) have provided the following guidelines for adapting teaching strategies and the learning environment for students with visual impairments:

1. Agree adaptations with the student and, in small group situations such as tutorials, with the group itself; for example, initial consistency in seating location to assist a blind student to recognize group members' voices, group members initially agreeing to give their first name before speaking.
2. Provide material of a lecture or tutorial in advance in the student's preferred format, (in print, disk or Braille).
3. Encourage students with visual impairments to use paper/pen substitutes such as tape recorders or laptops during lectures.
4. Give thought to verbal and non-verbal communication, trying to eliminate background noise, speaking clearly, and avoiding inaccessible gestures such as a nod of the head and expressions such as 'it's over there'. Allow students with visual impairments additional time, if required, for assignments and examinations/assessments.
5. Substitute courses that do not pose disability-related barriers.
6. Lengthen the time of degree completion.

These strategies and guidelines are crucial in the effective implementation of inclusive education in higher education institutions.

As has been indicated in the previous guidelines, providing different types of technology, commonly known as assistive technology, for students with visual impairment that assist them in their learning is one important intervention towards making the curriculum more accessible. Assistive technology refers to a range of equipment that enables students with disabilities to interact with information. Sometimes this technology is referred to as access technology, enabling technology and adaptive technology.

Many researchers and educators (Hanafinet *al.* 2007; Hooker 2007; Zhou *et al.* 2011) write about the benefits of assistive technology in enhancing students with disabilities' abilities to perform to the best of their potential. Koganuramath and Choukimath (2009), based on experiences in India, also write of the importance of establishing a learning resource centre for students with visual impairments equipped with such assistive technologies as a crucial step forward towards the attainment of inclusive education and eventual integration into the society as whole.

Different educators and HEIs (Koganuramath & Choukimath 2009; Salisbury 2008; Shepherd 2006) have provided suggestions on the types of assistive technology that can be used in relation to SVI. They include the following:

- I. **Screen reader software:** This is an application uniquely designed to help students with visual impairment to access information displayed on computer screens by speaking aloud through computer screens; e.g: Job Access With Speech (JAWS), Window's Eye.
- II. **Scanner:** This is a device combining both hardware and software that helps to change print text into a digital text so that it could be read by a screen reader.

- III. **Braille display:** This is a lightweight electromechanical piece of equipment that is attached to a keyboard of a typical computer which displays the information on a computer as Braille.
- IV. **Braille note-taker:** This is a handy device through which text can be entered, edited and read back via speech or Braille and printed on Braille and on ink.

as per the above-discussed Framework for developing an inclusive curriculum of the writer D'Andrea, the last step that instructors are expected to address before evaluations are conducted on all the adjustments implemented in the curriculum is making sure that the assessment mechanisms are accessible to all students (Gravestockn.d.: 43). pertaining to the adjustment of evaluation strategies that could be made in response to the needs of students with visual impairment, Shepherd (2006) argues that students with visual impairment could have been underprivileged in some of the activities during the teaching and learning process and if the assessment instruments also are prejudiced towards activities that favor students without visual impairment, such as by making considerable use of graphics, they would be even more disadvantaged. Therefore, as the same author further puts forward the forms of assessment to be used in university classrooms should enable students with visual impairment to disclose the complete range of learning they have achieved. In situations where modifications are made in the learning outcomes, contents or learning activities, a corresponding variation has to be used in the assessment process as well.

Another distinguished educational Salisbury (2008) depicts the subsequent approaches that could be considered in comprehensive assessments for students with visual impairment:

- a. Modifying assessments:** This should enable students with visual impairment to have full access to the assessment without giving them any unfair advantage.
- b. Others' support:** students with visual impairment may need the support of others in certain assessment activities which they cannot do independently; e.g: they may require readers and scribes in written examinations; they may also need others' assistance in practical activities such as using equipment, locating materials, drawing and measuring.
- c. Time allowances:** students with visual impairment should be given additional time to complete their assessments to be decided by the individual instructor based on the purpose and nature of the assessment.
- d. Alternative methods of assessment:** In certain situations where formal methods of assessment may not be appropriate for students with visual impairment, the instructor should assess them using non- formal methods such as class work, portfolios, or oral presentations.

As Roy (2003: 41) claims, students with visual impairments have the capacity to access and succeed in almost all higher education curriculum areas; visual impairment should not have any significant negative effect on the level of attainment of students. Similarly, Jones and Hopkins (cited in Roy 2003: 52) justify the idea with the following quotation from Skill (1997) Many disabled people have successfully studied science and engineering at undergraduate and post-graduate levels and are now pursuing rewarding careers. Modern technology, flexibility and creative approaches have opened doors, which previously appeared to be locked shut.' In spite of this, certain subject areas have tended to attract more SVI than others.

The author further reiterates that some subject areas pose certain specific challenges to SVI and their instructors and underlines the need for overcoming them. Thus, considering the remarkable developments in the area of modern information communication technology that can help to facilitate students learning, it would not be very difficult to overcome these challenges if there is the commitment from the institutions to address the educational needs of SVI. There are different ways through which the teaching and learning could be adapted to the needs of SVI so that they can get access to information and learning. Some of these, as Roy (2003: 43) lists, include the use of discs, tape, Braille, e-text, accessible web sites, and tactile diagrams. The author further stresses that students with visual impairments should be consulted regarding their choice of the media for learning. Other studies have also expressed the need for the involvement of students with disabilities in the decisions of what provisions should be made in order to make appropriate and reasonable adjustments in the curriculum (Redpath *et al.* 2012: 14; Vickerman & Blundell 2010: 27).

Many educators, including Hadjidakou and Hartas (2008: 111), Madriaga, Hanson, Heaton, Kay, Newitt and Walker (2010: 651-52) and Roy (2003: 44-45), indicate that providing information to students with visual impairments in accessible formats is neither sufficient nor fair if they are to learn in an equitable manner with those who have no impairments. This implies for the need of considering the amount of time students with visual impairments require for different learning activities. SVI need more time to study, to do projects and assignments, and to complete tests. Roy (2003: 45) argues that HEIs should invest in the provision of assistive technology for students with visual impairments. He further recommends that libraries and other study centers should be equipped with computers

with appropriate software for SVI and that support staff in such centers should be well trained in the ways of providing necessary support for SVI.

Roy (2003: 47-48) also reiterates that, in spite of concerns by instructors, students with visual impairments can participate in courses that include practical activities such as laboratory work. He suggests some strategies of how to involve SVI in practical classes. One strategy is that SVI should be given enough time for preparation such as by providing them background reading on the planned activity and the nature of any equipment to be used. The author further explains how to proceed with the activity, writing that: ... procedures or skills demonstrated in their entirety should then be broken down into their constituent parts, so that each can be explained, demonstrated and worked through. ... Blind students should, where appropriate, be encouraged to feel different stages in a demonstration (Ibid).

Therefore, from the different institutional manuals and educators' suggestions, it can be concluded that students with visual impairments, in order to engage fully in the learning and teaching process, require accommodation in the curriculum such as the following:

- flexible teaching;
- appropriate seating arrangements;
- adaptations to school policies and procedures;
- access in all areas of the curriculum through specialist aids and assistive technologies;
- access to alternative or augmented forms of communication;
- provision of tactile or kinesthetic materials;
- time allowances; and
- Alternative assessments.

For these accommodations to be realized in higher education institutions, it is necessary that all concerned bodies have the awareness and commitment to addressing the

rights of students with visual impairments, and all students with disabilities in general. It is also important to clearly understand that it is the full right of students with disabilities to get education in the same way that their non-disabled peers do.

## **Chapter Three**

### **Research Method:**

This section of the study will deal with the research design including certain details such as background of participants of the study, the technique and procedures by which the sample is to be selected and ethical considerations.

#### **3.1 Research paradigm**

The plan of any research endeavor starts with a selection regarding the paradigm in which the study will be located and which, in turn, will influence the whole research process (Maxwell 2005: 37; Rubin & Bobbie 2010: 36). As in any research, it is very important to make model decisions before the specific research design and approach are developed. This helps the researcher to have a good understanding of the problem under investigation and guide decisions regarding the overall research process.

The merely selected paradigm for this study is also the constructivism Paradigm. From the point of view of the constructivist paradigm, there is no reality that can be understood universally; rather there will be multiple realities. Constructed by individuals or groups from their perspectives and which are unique to their situations (Hammerswey 2012: N.P.; Hatch 2002: 15; Neuman 2007: P43). In other words, the researcher's duty is to —understand how people see, think, and feel about their environment (Hammerswey 2012).

Therefore, since the current research undertaking focuses on reconstructing the personal experiences of students with visual impairments in the higher education, the constructivist



paradigm was found to be the most appropriate alternative which relates to the best way of understand in and interpret in the unique experiences of SWVI.

### **3.2 Research Design**

Qualitative research refers to a research method of collecting non numerical data. The focus is on capturing what people have to say in their own word and describe their experiences in depth.

For this study the qualitative approach with the exploratory case study research design is used. There are different justifications for the use of qualitative approach. As per some researchers, the quantitative research design has some limitations such as lack of depth in understanding about the situation. Since the main purpose of this study is to explore the experience of students with visual impairment in higher education institutions, the researcher is strongly persuaded that it would be wise to apply qualitative methods so as to put the findings in words and to have depth understanding. As indicated earlier, this research involved a case study design. Case study is a type of research that focuses on depicting the circumstances surrounding a particular situation in a very detailed way (Cohen et al. 2007). In this investigation a single case study design is used. Because this research is dealt about the current higher education experience of students with visual impairment. Addis Ababa University is selected as a research site.

### **3.3 Participants of the Study**

In this research, the participants of the in depth interview are 6 in number, 4 of whom were male and the remaining 2 were female. Regarding their educational level, all respondents are students with visual impairment who are learning in Addis Ababa University for the first degree program. Four of the respondents were fourth year students, whereas the rest are second

and fifth year students in the university. With regard to their field of study, one of the respondents is from Amharic language and literature, while the other one is from English language, the two are from social work, and the remaining two are from law school. 10 students were selected for the case study purpose. But, the numbers of students participated in the study were below the expected. Because the data reached the point of saturation. In interview studies, Boyd (2001, in Groenewald 2004) and Creswell (2009) recommend a maximum of 10 participants as sufficient for the interview process. This is because the interview process will reach a point of saturation at which the participants will not provide any fresh perspectives on the topic under discussion. While all the participants are above the age of eighteen, the gender composition is kept at balance.

In this study the researcher used the purposive sampling technique. The main reasons behind using purposive sampling technique in this study is the simple fact that all participants of the research are selected from the Addis Ababa University (AAU) main campus. Addis Ababa University (AAU) is also both prominent and legendary in receiving students with visual impairment. More importantly, as visual impairment is a generic term, this study is confined with those students with blindness, i.e. those who do not depend on their eyes for the purpose of learning. The other reason for the use of purposive sampling technique is, the departments are selected purposefully. Because, there are a large number of students with blindness in these departments.

On the other hand, the researcher used convenient sampling technique because of the fact that it is grounded on selected department of students with visual impairment who are accessible to participate in the study.

### **3.4 Instrument of Data Collection**

In the data collection process the instrument needs to answer the research questions and the method through which this data is collected. The researcher that used instrument to collect data is Interview.

Interview is used for collecting data that cannot be directly observed. It helps the researcher to understand people's feelings, thought and intention (Gray David 2010). Since the current study is to investigate and describe the higher education experience of students with visual impairment from their perspective, interview is the most appropriate method for this purpose. The type of interview is also semi structured interview. Six students are participated from different academic years and college of department for the interview purpose.

Digital recorder was also used so as to collect qualitatively significant data during the interview session. The interview questions were prepared in English, but to get elaborate explanation and for the sake of the participants it is translated in Amharic language.

### **3.5 Ethical Considerations**

The researcher took all considerations to protect the research participants from any kind of harm or loss. Greatest care also taken in order to preserve their psychological dignity when designing and implementing his research.

Accordingly, permission is obtained from the participants regarding their participation in the study. He explained the objectives and procedures of the research to the participants as well as informs them that they have the right to refuse or to discontinue the study at any time. He also informed the research participants how the information they give is going to be used and stored.

Doing so ensured that the privacy of the participants and confidentiality of the information they give is assured (FraenkelWallen 2009). The researcher also asked for their consent to be audio recorded during the interview schedule. The anonymity of the research participants is guaranteed as well (Bourke 2008; Willig 2008). In the research report, the researcher used assigned codes rather than real names for identification purposes. And finally, every care is made so as to ensure that the information obtained from participants would not make them directly or by implication identifiable.

### **3.6 Data analysis method**

After collecting the data, the interview made is transcribed and note do na paper. Next, codes are assigned for each segment of concept based on each interviews. After that, code families are organized gathering similar codes together from each segment of concept. Then, the matic contents are formulated. These themes are derived from the code families. Subsequently, in the memoing process the information gathered in different ways and places come together and analyze under each thematic content and demonstrate their relationship. Finally, discussed with the finding so father related studies.

## **Chapter Four**

### **Results**

In this study, all ideas that are written on the paper are derived from the data. In addition to this the findings are divided into themes in order to elucidate the data. The themes reflect about the research questions.

#### **4.1. Having accessibility gaps**

Having accessibility gaps refers to failure to fulfill the needs of students equally. The responses of the participants ascertain that accessibility gaps can occur when notices do not take the students with visual impairment into account, if the class buildings are not accessible, provided that students cannot get the basic Braille materials to actively engage in the learning process, on condition that the physical environment is uncomfortable, or if the teaching learning process does not consider the students with visual impairment with regard to accessibility.

##### **(a) Inaccessible notices**

As the participants ascertain the notices that are posted on the university notice board do not consider the students with visual impairment because all announcements are not prepared in Braille. Due to this reason, the students with visual impairment are losing track of recent developments. The respondents said that they often have difficulty finding their classroom, as a result of which they are usually forced to miss classes. They added that if they fail to attend class regularly, many teachers do not understand their problems which in turn will have negative

influence on their achievement. In addition, the respondents underlined that the inaccessible nature of the notices result in wide information gap. They said that there are times they remain unaware of essential information such as student's scholarship, or may be informed after it is outdated. As a result, they are denied the opportunity to compete with their sighted counterparts.

### **(b) Inaccessibility in the teaching and learning process**

As the respondents assured there are many challenges that students with visual impairment face in the teaching and learning process. One of these challenges is the teacher's way of teaching. A respondent said "When a number of teachers teach in class, they do not often take the students' needs into account". In addition to this the participants explained that teachers demonstrate pictures for students without describing verbally for students with visual impairment. They do not give elaborate explanations in order to create better understanding for them. Thus, the students with visual impairment feel discriminated. They added that some instructors do not give soft copy materials and handout for students with visual impairment.

The respondents mentioned that another challenge that students with visual impairment encounter is taking exam at an inappropriate place. They assured that most of the students with visual impairment take exam at corridors just outside the class room, where there is a lot of noise coming from people passing by, and therefore, makes them unable to concentrate on their duty.

As most of the participants described Inadequate exam time is also the other headache of the students with visual impairment. They explained that When student take exam, they need extra time, for they use readers, who are supposed to read each questions as many times as the student wants to make sure that each question is understood well. However, teachers do not seem to take this into consideration.

On the other hand, the participants ascertain that Braille materials are necessary to conduct the learning process. But as they assured the students with visual impairment are suffering because of lack of Braille materials. A respondent said that “There are in fact, few limited Braille materials that the law school students get access to. But most of students with visual impairment who attend in other departments cannot get adequate materials. It appears that the institution does not give due attention to provide basic educational needs”. The respondents remarked that even though they seek to read Braille materials, they could not get these materials adequately. They are restricted to extend their knowledge. This is also very serious challenge to conduct their study and to get good result. But they further added that even though there are limited Braille materials, the students with visual impairment are trying to compete with sighted peers by recording lecture and students note.

As the participants assured Lacking separate space in library is also the other problem in their academic life. They remarked that a good studying place is very decisive. Because they need adequate space in library to discuss with each other. As interviewee said, “When the readers read to students with visual impairment, other students who are reading around may face problem of disturbance”.

On the other hand, the participants said that the students with visual impairment cannot join in the department of their own choice because of their blindness.

### **c) Physical Inaccessibility**

As the response of the participants ascertain the class buildings are not comfortable for students with visual impairment. A participant said “The classrooms do not also have numbers that is written in Braille. In addition to this class buildings are old. There is no permanent class to

conduct the teaching and learning process. Due to this reason it is very difficult to locate the classrooms”.

They explained that the physical environment also poses very serious challenge for students with visual impairment especially for new comers because it has no appropriate signs and Braille map for students with visual impairment. Due to this reason it takes more time to practice moving around. As a participant said “I lost my sight when I joined university. Then when I move from place to place, I had an accident. Since blindness is a new phenomenon, I started to hate my life. I was forced to withdraw from the class but with the help of my friends I passed these challenges”. These accessibility gaps occur because of not having accommodating facilities.

#### **4.2. Having accommodating facilities**

Having accommodating facilities means fulfilling once basic needs. As the respondents clarified, accommodating facilities can emerge if instructors have positive attitude, provided there is accommodated exam situation, and there is extra time on exam, if Braille materials are available, and there is facilitated assistive technology, if students have reserved place in library, when the physical environment are comfortable for students with visual impairment, when they take exam in a conducive place, if there are adequate library workers, and if students have joined in the department of their own choice. They ascertain that Accommodating facilities are important to fill the gap that occurred because of their blindness. They underlined that one of the ways of accommodating facilities is also developing the positive attitude of instructors. Because the instructors have great role in accommodating facilities for students with visual impairment. The first is allowing students to record lectures. Some instructors are not willing to be recorded which will have negative impact on their success. A participant particularly said, “There is a



teacher who forbade students to record his lecture saying that he would give us the material in soft copy but failed to do so. Instead, he wasted our time giving us endless appointments that would never materialize”.He underlined that On the contrary, other instructors also accommodate situations to be recorded. This helps students to have good result.

The respondents remarked that giving soft copy materials for blind students who have access to computer is also the other accommodation that is done by instructors. Because most of the students with visual impairment do their study using soft copy. They underlined that so the instructors have an obligation to fulfill their demands.

As the participants said the other crucial point that needs accommodation is also allotment of exam time. They remarked that the students with visual impairment take exam using readers. In order to get the readers it takes more time. Due to this reason the students with visual impairment face problems. But the instructors can simplify the problem in accommodating exam time. However some instructors are not doing this. A participant mentioned that “some instructors announce to the class that there would be a test the following day, and they order blind students to come with their readers, without taking into account the difficulties they have to undergo in finding one within such a short period of time”.

Another important point that most of the students mentioned is that students with visual impairment need extra time on exam. When students take exam, they face many problems because of the quality of readers. This also forced them to need additional time. But some instructors do not take their problem in to consideration. An interviewee said, “There is an instructor who does not give us extra time during exam. He collects our exam papers with the sighted classmate at the same time. When we tell him that we have additional time, he is not willing to listen to what we say”.

In addition, the students added that giving exam in a conducive place is the other key role of instructors in the accommodation process. As they said Most of the students with visual impairment take exam in places which are not conducive as a result of which they face problems of disturbance and sheer distraction. It has negative influence on their achievement. But some role model instructors are doing their own effort in accommodating exam place. A participant revealed that “when comparing from other departments the law school instructors are better in accommodating facilities for students with visual impairment”. He further added that they have good awareness in the capacity of blind students.

On the other hand, the participants said that there are reserved places in the library for students with visual impairment. However given the number of students and their demands, they appear to be inadequate. Furthermore, they added that there are inadequate Braille materials in this library. There are some Braille materials on specific subjects especially in the law school. A respondent remarked that “in comparison to other departments, the law school can be thought of as role model in accommodating facilities for students with visual impairment. Of course, there are many blind students who are learning in law school, most of whom are believed by their instructors to have all what it takes to be a competitive student. Due to this reason they try to accommodate facilities and treat them equally”. But other participants assured that in the other department there are no Braille materials. In this case most of the students with visual impairment have been forgotten by the institutions. This forces them to drop out of the class. Some others also try to search solution by their own using other options.

As the participants ascertain yet there is no denying that in accommodating physical environment of the institution, the university has played key role. But still there are problems that have not yet been solved. An interviewee said, “The institution has no appropriate sign or

Braille maps that in particular help new comer blind students find ways and directions. For this reason we face accident when we move from place to place”.

Another problem that is remarked by the participants is many of the students with visual impairment are not joining in the department of their own choice. Because the institution do not accommodate facilities in order to support students with visual impairment to join in the department of their own interest. Consequently, they fail to achieve their dream. Their result will be low. Due to this reason they feel hopeless. The accommodation problem emerges on account of absence of the required support by the concerned bodies.

#### **4.3. Support**

Support means some kind of help obtained from others. . According to description of participants, support can be in the form of material, financial, training, and psychological. As they said the students with visual impairment need support in order to have full participation in their academic life. This support is also driven from different bodies, for example from departments, classmate, administrations of institution, disability center and campus community.

##### **a) Materials support**

As the respondents mentioned the students with visual impairment needs different kind of materials support to have equal participation in the institution. These include, among other things, Braille books, screen reader loaded computers, white cane, and Braille paper. But the institution is not providing these supports adequately and sustainably. They further added that there are limited Braille materials on specific course. Given the number of students, the computers available are inadequate. Other material supports are also unsustainable. These

insufficient supports have to a great extent restricted the performance and effectiveness of students with visual impairment.

### **b) Financial support**

A respondent ascertain that “The university has been providing students with visual impairment with a financial support, pocket-money of Birr 120 per month since 1997 E.C. which in fact does not take into account the current monetary value and the living conditions of the students”.

As participants said the institution also gives some amount of money to the students which they can pay for exam readers. The participants reported that they are not usually paid at the proper time, and so they will be obliged to pay the readers out of their own pocket.

### **c) Providing training**

The respondents assured that To enhance the capacity of students with visual impairment, it is paramount importance to provide them with various types of trainings such as mobility training, computer training, life skill training, etc. they underlined that Besides, it is imperative that the university design special trainings for instructors in order to develop their awareness about, and concern to students with visual impairment. This will inevitably produce a positive consequence in the productivity of the students. Nevertheless, most of the participants explained that the institution is not doing what it is expected to do as a result of which they are often prone to challenges that they could overcome if otherwise. They mentioned that new comer blind students do not get mobility training, and hence, have difficulty moving in and out of the campus freely, independently and confidently. They added that absence of training on computer and

assistive technology has denied them the access to up-to-date knowledge and information and also left them dependent on sighted students particularly during exams.

On the other hand as the participants said although life skill training enables students with visual impairment to communicate with the university community, to manage their time appropriately, to actively handle their learning, and to stand up to challenges that they face, it appears that the university is not working in this direction. An interviewee said that “there is a disability center whose objective and practical works are barely beyond provision of material support, and as yet, has done nothing to equip students with visual impairment with life skills. Due to this reason, some students are observed to have troubles to maintain good relation with the community and thus opt to remain isolated”.

#### **d) Other types of support**

As participants mentioned other types of support which students with visual impairment require include reading of exam paper and other hard copies, getting assistance to move from place to place and the like. Of course, as many of them agreed the campus community is willing to give help in this respect but a participant disclosed that it is quite unsustainable as some students expect to get paid for any kind of help they have done. He further added that “some responsible bodies are giving support considering it as a charity and not as the right of students with visual impairment. They do not want to accomplish the interest of students with visual impairment from perspectives of right”. This restricts them from enjoying their rights freely and may even cause a feeling of being pushed aside.

#### **4.4 Feeling of being pushed aside**

Feeling of being pushed aside refers to situations when people develop a sense that they are not wanted by a group, so they prefer to remain isolated. As it is mentioned by the respondents, this feeling occurs when they are considered incapable, if they are neglected or forgotten by others, if their ideas are rejected, when they are not given attention and instead are discriminated, when instructors have the wrong idea about students with visual impairment and doubt their capacity, and if instructors interfere in the department choice of the students with visual impairment.

As the participants said Students with visual impairment are pushed aside from their academic life for a number of reasons. One of these is when they are denied admission to particular departments and fields of study that they are interested to join. A respondent said “Instead of trying to facilitate the conditions, to suit these students, they consider them as incapable”. These departments doubt their capability without any reasons.

As the participants said the curriculum design in itself discriminated the students with visual impairment from joining in the department of their own choice. There are many departments those students with visual impairment. Are not allowed to join.

The other is as interviewees said the interference of instructors in the department choice of blind students is one of the reasons that lead students to feel as push aside. As the respondents said some instructors who teach in certain departments have negative attitude toward blind students and close all doors on them simply out of prejudice. An interviewee said “They give such excuses that do not hold water, as they have never enrolled blind students, and therefore,

they cannot receive these students in their department, there is no conducive academic environment for these students for logistic reason and so forth”.

Another reason is as the participants remarked when instructors doubt the student’s capability only because of their blindness. A participant tried to make out, “even though we accurately answer questions, actively participate in the class, or score good result in our exam, they have no tendency to acknowledge our capacity. Instead they prefer to believe that there is someone else who does everything for us. This is merely attributable to ill attitude of the instructors”.

According to these respondents Negligence of different responsible bodies to students with visual impairment and their needs is another reason that is contributing to their feeling of being pushed aside. Some responsible bodies do not give them much attention; instead they turn a blind eye and a deaf ear to their needs. Similarly some sighted students also neglect the students with visual impairment because of doubting their capability. The participants pointed out that when there is a group assignment, the group members are usually reluctant to get them involved and make their presence felt in doing the assignment for such reasons as overprotection, that is, they regard it as troubling them. As a result, they said that they will not get the chance of acquiring new knowledge and information through group discussions. A respondent clarified that “they consider us incapable whose presence or absence in the group do not matter at all. Consequently, we lose a lot of things”.

Apart from this, other respondents remarked that some responsible bodies do not give attention for students with visual impairment because of not knowing how to render services. Due to this reason the students with visual impairment are pushed aside. If students feel pushed aside, they are restricted from doing anything.

#### **4.5. Feeling of being limited**

Feeling of being limited means being constrained from doing something without being given any option. As it is ascertained by the respondents, feeling of being limited can happen when a person's needs cannot be satisfied, for example: if a person can not join in his choice of department, when they do not get readers, if they do not get access to assistive technology, , if there is lack of resources, if there is negative attitude of instructors, if the person is taking exam at an inappropriate place, if the students with visual impairment cannot get extra time on exam, if lacking separate space in library, if there is the problem of getting better note for the recording purpose, if there is negative attitude of classmate, if things are being done on the goodwill of individuals, when there is inadequacy in the provision of Braille materials, if the teaching learning process is not conducive, and if there is inaccessible physical environment.

##### **a) limited choice of department**

As participants ascertain Limited choice of department has negative influence on students with visual impairment from different perspectives. The first is from the result of students with visual impairment. As respondents underlined that when students cannot join in the department of their own choice, they will not be interested to read the course. They will not be active in studying hard. Even though they read the course, they will not have well developed understanding. Due to this reason their result will be low.

The second adverse consequence has to do with the students' future career. As interviewees said when students with visual impairment join in the department out of their interest, it has negative psychological effect on them because all persons have their own dream and ambition to realize. As they conclude if they cannot achieve their ambition, they face problem of frustration. It has negative impact on student's success.



The participants mentioned that different reasons are put forward for students with visual impairment to have a limited opportunity in their choice of department. The first reason is absence of adapted curriculum that considered the students with visual impairment. The second is lack of awareness by institutions. The third is the existence of very limited resources which students with visual impairment can utilize. As interviewees revealed many departments have closed their doors for students with visual impairment. For example: computer science, engineering, health science, accounting, physics, mathematics, business management extra. A respondent, for instance, explained that by the mere fact that “I am blind, I could not able to join the field of study, (software engineering) which I need to learn, and instead I forced to join a department that I had never thought of”. As respondents stated some departments are not conducive for students with visual impairment they added that yet if curriculum is adapted that takes them into account, blind students can learn in many department equally.

As various Interviewees supposed the other reason is the institution’s lack of awareness. The institution is not ready to take the experience of other countries in order to increase the enrolment of students in many departments by adapting curriculum. A participant remarked that “students with visual impairment are not allowed to attend in natural science field of studies whereas this is possible in developed countries”. She added that this is, of course, attributable to institutions’ lack of awareness as to whether they can manage successfully if given the opportunity to attend in these streams.

In addition to this according to some of the respondents the institution does not know how to render services for students with visual impairment. Things are done because of individual’s goodwill. Some participants said that they were not given adequate orientation during choice of department and stressed that it posed a great challenge to them. They further added that some

instructors are not willing to accept the students with visual impairment as capable individuals. A participant also mentioned that “the Yared Music School did not entertain and had no room for students with visual impairment until very recent time. Even though blind students have listening capability and talents, some members of this institution are not willing to receive the students with visual impairment”.

The other is considering it as not conducive for students with visual impairment. The respondents underlined that some instructors keep interfering in their choices of department without taking the capacity of the students into consideration.

Lacking Braille materials also forced the students with visual impairment not to join in the department of their own choice. According to the explanation of individual respondent, “when I was grade 12 there was no Braille materials as a result of which my grade 12 score was very low. Due to this reason when I join to university I forced to join in the department of my second choice”.

Another participant also said that “I feared to join in the department of my choice due to the existence of very limited Braille materials”.

#### **b) Problem of getting readers**

As the respondents ascertain Students with visual impairment are dependent on readers to take exam, to record note, to read the hard copy. They stated that when the students take exam, finding a good reader is very serious challenge. One of the problems is the inability of readers to pronounce words accurately. If students cannot hear words clearly, it will be very difficult to do exam, it will have negative impact on their exam result. The response of individual participant revealed that “when I took a Logic exam, I had come across a reader who could hardly read the

instructions properly, and because I had no option, I had to finish the exam making the reader spell each and every word. There are times when I could not finish exams due to time constraint, and hence, I did not manage to score as good grades as I wished”.

As participants stated another problem is the issue of payment. Most of the readers ask high payment to read exam or note instead of reading voluntarily, Apart from this, a interviewee mentioned that “though religious fellowships try to minimize the problem by providing volunteers, the question of quality readers still remain unsolved”.

The other challenge is as the participants remarked most of exam readers are recruited from university students but after they made agreement to read exam, they are often observed to lack in the patience and endurance to keep reading exams for longer time. In addition, they may have their own exam in similar time.

The respondents further disclosed that they quite often had difficulty getting concentration while they studied due to fear of not finding exam readers.

Another problem concerning readers is failure of some readers to turn up at the exam place after they have arranged to read for students with visual impairment. An interviewee said, “After he agreed to read the exam for me, he switched off his phone when only five minutes were left. I was stressed. Finally I was forced to beg another person from the street. Then I took the exam without any concentration”.

On the other hand as respondents mentioned the students with visual impairment face problem of getting readers when they need to read reference book, papers, and to record lecture note.

### **c) Negative attitude of instructors**

Interviewees ascertain that the negative attitude of instructors is one of the problems that limit students with visual impairment from actively engaging in their own learning. One of the manifestations of the negative attitude of instructors is not allowing students to record lecture note. A respondent said that “some instructors are not willing to be recorded. This poses a very serious challenge for us. Because, our study is heavily dependent on recorded lecture”.

As the participants revealed the negative attitude of instructors is also often manifested in that they are usually reluctant to give students with visual impairment reading materials in soft copy. According to respondents this particularly has negative impact on the success of students who have access to assistive technology in their study.

The other problem is giving inadequate time on exam. As the participants assured some instructors are not willing to give extra time for students with visual impairment. A respondent clarified that “the instructors considered giving the extra time on exam as a charity rather than the right of the students with visual impairment”.

As the interviewee stated Doubting the capability of students with visual impairment is also the other negative attitude of instructors. If instructors considered them as incapable, even though the students score high grade, their result will be low. The participants assured that when they score high grade, the instructors believe as there is something behind the result they obtained. It has negative psychological effect on students with visual impairment. This would force them to frustrate in their academic life.

Taking exam in non conducive place is also the other problem that hinders students from gaining good result on their exam. The interviewees said that they are taking exam outside the

classroom on the corridor. Due to this reason they are exposed to disturbance and rain and it has burden in their result.

#### **d) Lack of resources**

Respondents ascertain that the students with visual impairment face lack of resources to conduct their learning properly. These resources are: computers, Braille books, and soft copy. These forced them to feel as being limited.

As a participant assured not having knowledge in assistive technology is also one of the problems that limit students from their study. As she said “most of the instructors give soft copy by email but because I cannot use computer properly, I often have difficulty getting access to it”.

The participants revealed that getting better note is also the other very serious problem in their learning process. As it is remarked a number of students with visual impairment cannot get better note that will be recorded, they cannot grasp the knowledge properly. In addition to this some sighted students may not be willing to record their note. And also as the respondents said some students may not have good hand writing. This is very difficult to record their note.

The other problem is lack of separate space in library. As the respondents assured there is reserved place in library for students with visual impairment. But in order to record hard copy and to have a group discussion, there is not enough space in library. This is very serious challenge.

#### **e) Inaccessible physical environment**

Interviewees stated that if the physical environment is not conducive for students with visual impairment, they will feel restricted. When the buildings are not accessible for students

with visual impairment, they will face problem to locate their class. A respondent said that “I took more time to locate my class because of inaccessible building due to this reason I missed class”.

The other is also a participant explained that If they cannot get mobility training, they cannot move from place to place. She said that “after I joined university when I move from place to place, I faced accident because of not knowing the place”.

#### **f) Teaching method**

The participants clarified that Teacher’s way of teaching is the most crucial point for students with visual impairment. When teachers demonstrate visual instructions without expressing by word, the students with visual impairment will be limited. They cannot get the lesson equally. As the respondents said the most serious challenge that they face in their teaching and learning process is when the instructors demonstrate visual instruction without verbal expression. This has influenced them from competing with classmate equally. If students are limited by others, they feel hopeless. .

#### **4.6 Feeling hopeless**

Feeling hopeless means being frustrated to get once own interest. As the participants concluded, feeling hopeless can happen, if students with visual impairment cannot join in the university and department of their own choice, when one does not get one’s own demands, If the attitude of the university community is not positive, when they are considered as incapable, if students do not get attention from concerned bodies, if students conclude by themselves as incapable, and when the students are being neglected.

As respondents ascertain there are different things that make the students with visual impairment hopeless. They stated that when the students with visual impairment cannot join in the university and department of their own choice, this makes them hopeless. Because this hinders them from achieving their own dream.

According to the participants they are learning out of their interest and capability, their result is also very low comparing from others. Due to this reason the students feel hopeless. They further added that the students do not get Braille materials that are necessary for them, they cannot compete with others. So this makes them hopeless. The other is as the respondents ascertain some instructors consider the students with visual impairment as incapable, as a result of this they feel hopeless.

The other is also as they remarked the students do not get attention from the concerned bodies, this makes them hopeless. In addition to this the students with visual impairment consider themselves as incapable, due to this reason they feel hopeless. This feeling leads to stress. This stress also creates negative psychological problems.

But some students also when they are challenged by others instead of feeling hopeless they prefer to develop mental readiness to accept challenges.

#### **4.7 Developing mental readiness to accept challenges**

Developing mental readiness to accept challenges means having readiness to resist challenges they face in their own mentality. According to description of respondents, developing mental readiness can occur when they face challenges after they joined in the department of their own choice. When they face problems after they joined in the University of their Own Interest. If they have a plan that they want to accomplish in their mind, If students with visual impairment

accept all bad things that happened in their life as their own weakness, If the students believe as it will not be solved, When students expect as something will happen in their life, When students take the problems easy, they will develop mental readiness.

Developing mental readiness in the choice of department and university: as the participants pointed out Since they have joined in the department of their own interest, they convince themselves to face whatever challenges they might encounter in the course of their career. They do effort to be successful instead of contemplating the challenges. These students with visual impairment take responsibility for all challenges that happen in their life because the department that they choose to join is relatively better than other departments that students with visual impairment are allowed to join. As a respondent said, “when I compare from departments that are allowed for us I have joined in the department that have better accommodation”. He further clarified that they develop mental readiness to do all things taking risks. In addition to this others also remarked that they are joined in the university of their own choice, even though they face challenges, they develop mental readiness.

On the other hand they explained that the students have plans that they want to accomplish joining in this university, in order to accomplish their plan they are forced to take responsibility of all challenges. As a participant said “besides learning in the law school I had plan to learn journalism and to work in that direction. To accomplish this plan, I preferred Addis Ababa University”. Therefore he developed mental readiness to accept all challenges.

The other also as the participants revealed the students with visual impairment consider all problems that happen in their life by their own weakness. They do not want to take the problems on the others. Doing this make the students with visual impairment strong. It helps them to develop mental readiness. They further added that the students with visual impairment try to



solve problems they face in coordination with the concerned bodies as much as possible. If the things cannot be solved, instead of stressed they develop mental readiness. They feel as part of their life. One of the interviewees said “since I cannot solve the problem, I am obliged to accept the challenges. I feel that it is part of my life”. If students have such kind of mental readiness, it enables them to develop self confidence.

#### **4.8. Developing self confidence**

Developing self confidence means ruling with one's own knowledge to accomplish one's demand. As the respondents ascertain developing self confidence can emerge if a person does not believe in the high value of sight, when students make effort to do something by themselves, if student claimed freedom of oneself, if a person is not surprised in the challenges that happened in his or her life, when a student feel competent with others, and if students have commitment to rule oneself.

As a few interviewees ascertain the students with visual impairment can develop self confidence because of different reasons. They remarked that the first is students do not believe in the high value of sight. Instead, they try to replace it using options. This also enables them to develop self confidence.

The other is as the respondents assured these students do not surprise in the challenges that happen in their life. When the students face challenges since they developed mental readiness they develop self confidence.

The other is as the participants explained students make effort to do something by themselves, this enable them to develop self confidence. Otherwise they become dependent on

others. Due to this reason the students lose their confidence. As a participant said “I feel like a competent with others, this enables me to develop self confidence”.

The other is the participants mentioned that students show commitment to rule themselves, this enables them to develop self confidence. As the respondents said, when students with visual impairment join in the university, they live off their parents. During this time the students start managing themselves. This also helps to develop self confidence. So when students develop self confidence also, they become solution centered rather than problem centered.

#### **4.9. Preferring to be solution center rather than problem center**

This means trying to solve problems by oneself instead of magnifying the problems. The students become more solution center rather than problem centered, when they face challenges. As the participants mentioned, if they have lack of Braille materials, when they faced problems in the teaching learning process, if they faced attitudinal problems, and if the physical environment is not comfortable, they tried to solve the problems by themselves. As they revealed the students with visual impairment face challenges because of different things. . This challenge can happen because of lack of awareness of institution, the countries poverty, and because of the negative attitude of community. However most of the time they try to find solution to the problems.

When students faced problem of Braille materials, they took different measures to solve the problems. According to respondents the first solution is recording lectures in the class room. When the teachers teach in the class, the students record lectures. If teachers use inaccessible visual instructions, they try to know by asking from their classmate. The second solution is paying for the readers. When students want to read hard copy, they use readers by giving them

money. The third solution is using soft copy. They read soft copy materials by listening using computer. By doing this they try to solve their problems.

On the other hand, as respondents remarked Attitudinal problem is the headache of the students with visual impairment. Therefore to solve this problem the students exert their own effort. For example, they give informal advice. As an interviewee said “when the persons assist me, most of the time we rapport each other. After we discuss about their attitude regarding the students with visual impairment if it is mistaken, I try to give informal advise as much as possible”.

The other solution is demonstrating their capacity to change the attitude of community, not isolating themselves from the societies. They believe that if the students isolate themselves, the communities will have no opportunity to know the behavior of students with visual impairment. So according to one of the respondents “in order to change the attitude of community in a good manner, we have to give place for ourselves”.

The other is they mentioned that not giving attention for the problems that they face. This is also one of the solutions to solve the problem.

Regarding the physical environment inaccessibility some respondents took different solutions. When students move from class to class or from place to place they face challenges because of different things. The first is because of not having appropriate signs that helps to know accurate place. The second is if class buildings have no lift. For all these problems they try to find solution. As they clarified the first solution is creating their own signs to know the place appropriately. The second solution is practicing to ascend stairs without lift that means trying to know the number of level, or having good understanding about the arrangement of floor. The

other solution is asking the assistance of others. If the students do not know the accurate place that they want to go, they try to solve the problem by asking others. Then, they grasp the location of the place in their mind. Because as a respondent said “the communities have no problem in terms of charity. All things that they are doing is to get blessing”.

As the respondents assured establishing friendship is one of the solutions that is taken by the students. They pointed out that the students with visual impairment establish friendship in university for different purposes. The first is to get something from someone. There are different things that make the students with visual impairment dependent on others. One of these is taking exam using readers. When students take exam they need readers. To get these readers in addition to paying money establishing friendship is inevitable. The other is to get assistance when they move from place to place. Some students with visual impairment are not active in mobility. Therefore to move from place to place they need assistance, to get these assistance also establishing friendship is very necessary. The other reason why establishing friendship is very important is to create conducive atmosphere in their academic life. Because when they establish friendship it helps to get information that are translated in the notice. It helps to study each others. In addition to this it helps to change the attitude of others.

They further added that establishing friendship is also of paramount importance to be free from loneliness. To that end, they try to make friends when they learn in the classroom, when they attend church fellowship programs, or when they participate in different clubs.

On the contrary, according to participants there are a lot of students with visual impairment who do not want to interact with others. These students prefer to be alone instead of establishing friendship. Because as an interviewee said “many sighted people have no positive attitude for us. They neglect us. They are not willing to help us. Therefore I preferred to be

alone”. As a result of this they lose many things. As the participants ascertain the students do not change their image that is given by others. They do not get support. They will be discriminated by others. This also create negative impact in their academic life. So establishing friendship is one of the solutions to solve this problem. When students use the above mentioned solution, they become independent.

#### **4.10. Becoming independent**

Becoming independent means capable of doing anything by oneself. The students become independent because of different things. As the respondents clarified if students move from place to place without assistance, If students gain assistive technology, when students take exam by themselves, and if students do assignment by themselves.

As interviewees revealed the students with visual impairment who are learning in the university are living off their parents. This helps them to decide all things by themselves. This also paved the way to struggle challenges by themselves. They are accustomed to different behavior of students establishing friendship. This helped to develop their mental understanding about different things. This enable them to develop their knowledge. But when they live with their parents, they become dependent. This restrict them from doing many things. As the respondents said when they joined university they began managing themselves. This helped them to see the challenges and opportunities that they face.

On the other hand as respondents remarked the students become independent because of gaining assistive technology. Assistive technology makes life easy for students with visual impairment. If the students have access to assistive technology like computer, the dependence on other’s assistance would be reduced to a larger degree. For example they can do exams,

assignment, on their own, can read soft copy materials, and can take note by themselves. Generally, computer made the students with visual impairment competent with other sighted students. As a law school student said “we are now feeling as superior to other students because of assistive technology like computer. Sighted students are dependent upon us in order to get better note”.

The other is also the participants mentioned that When students with visual impairment move from place to place without assistance they accustomed to the environment by themselves. Finally they become independent. On the contrary, also the inaccessible physical environment makes them dependant. When students become independent, they often become successful.

#### **4.11 Feeling successful**

Feeling successful means satisfying in the achievement that obtained by oneself. The Respondents ascertain that feeling successful can happen if student become independent, when student achieves one’s own dream, when student is accustomed to the physical environment, when student can rule oneself, and when students join in the department of their own choice.

As the interviewees said the students with visual impairment feel successful because of different reasons. One of these reasons is when they achieve their own dream. For example when the students show high commitment and their result improves, they feel successful. In addition to this if students become successful in the department that is not their choice, they feel successful. As a participant said, “Even though I did not join in the department of my choice, I scored 3.7.5 grade. This is the highest point in our class”.

The other is the respondents remarked that changing the attitude of some sighted students, and it enabled to make friends with them. As a participant said “when I become second year student, I got some friends who have good attitude”.

As the respondents mentioned they joined in the department and university of their own choice, this makes them feel content. Because many students are not joining in the university and department of their own choice. In addition to this joining in the university by itself make them happy. As a participants said “I felt proud to be learning in university because of different reasons. The first is university is the collection of better students. The second is having qualified instructors in university. The third is to get job opportunity”. But in the contrary some students are not happy. As the respondents said they were curious to join university. But after they joined in this university, they could not get it in their expectation.

The other is also as the participants ascertain when students become independent, they feel successful. Most of the time the students with visual impairment are dependent on others because of not having accommodated facilities. But some students relieved of being dependent through assistive technology. Their independence also led to success.

On the other hand interviewees ascertain that when students are accustomed to the physical environment, they feel successful. The new comer blind students face challenges in the university because of not knowing the place or because of inaccessible environment. Later on by doing practice the students are accustomed to the environment. This is also another success of the students with visual impairment.

## **Chapter five**

### **Discussion**

#### **Introduction**

The main objective of this study was to investigate the higher education experience of students with visual impairment. As it is indicated above by the finding of the study, different higher education experiences of students with visual impairment reflected based on the research questions regarding the attitude, the physical environment, and academic environment of university. Based on the finding that obtained from the data, the following discussions are presented below.

The discussion emphasizes on the things that limit students from doing anything and on the issues that lead them to success.

#### **5.1 Feeling of being limited**

As it is mentioned from the above data, Feeling of being limited can happen when a person restrict from his or her needs. One of the problems that bound students from their needs is also limited choice of department.

It is remarked that Limited choice of department has negative influence on students with visual impairment from different perspectives. The first is from the result of students with visual impairment. When students do not join in the department of their own choice, they will not be interested to read the course. They will not be active in studying hard. Even though they read the course, they will not have well developed understanding. Due to this reason their result will be low. The second is on their futurity. When students join in the department out of their interest, it



may have negative psychological effect on students with visual impairment. Because all persons have their own dream from the childhood. All persons have ambition to contribute in their own knowledge. If they cannot achieve their ambition, they may face problem of frustration. It will have negative impact on student's success. Different justifications are put for having limited choice of department. The first reason is not having adapted curriculum that considered the students with visual impairment. The second is lacking awareness of institution. The third is also having limited materials. Many departments have closed their doors for students with visual impairment. For example: computer science, engineering, health science, accounting, physics, mathematics, business management extra. Some departments are not conducive for students with visual impairment because of their blindness. But, if curriculum is adapted that consider the students with visual impairment, blind students can learn in many department equally. As Roy (2003: 41) claims, students with visual impairments have the ability to admission and succeed in almost all HE field of study. Visual impairment should not have any considerable negative effect on the level of achievement of students. Similarly, Jones and Hopkins (cited in Roy 2003: 52) justify the idea that many disabled people have successfully studied science and engineering at undergraduate and post-graduate levels. In spite of this, certain subject areas have tended to be a magnet for more SVI than others. The author further repeats that some subject areas pose certain specific challenges to SVI and their instructors and emphasizes the need for overcoming them. Thus, considering the important developments in the area of modern information communication technology that can help to facilitate students learning, it would not be very tricky to overcome these challenges if there is the commitment from the institutions to address the educational needs of SVI. The other reason is lack of awareness of institution. The institution is not ready to take the experience of other countries in order to increase the enrolment of students in many

departments adapting curriculum. The study revealed that joining in the natural science field is forbidden for students with visual impairment. But in the developed countries the students with visual impairment learn in the natural science fields. This is emanated from lack of awareness of institution. Because the institution do not check whether they are qualified or not. In addition to this the institution does not know how to render services for students with visual impairment. All Things are done because of individual's goodwill.

On the other hand some instructors are not willing to receive the students with visual impairment. One of these reasons also considering the students with visual impairment as incapable. The respondent described that the yared music school is not allowed for students with visual impairment for many years. Even though blind students have listening capability and talents, they cannot get opportunity to be supported in education. There are many influential persons who have great contribution in music even in Ethiopia. But the institution is not willing to receive the students with visual impairment. This is also the negative attitude of instructors. However recently, adapting curriculum, the institution began providing training in the yared music school with a struggle of other concerned bodies.

The other reason for limited choice of department is also considering as it is non-conducive for students with visual impairment. As it is remarked from the above data, some instructors interrupt in their choice of department. Without asking their capacity they conclude as it is not conducive for students with visual impairment.

As it is pointed out from the above findings, the other crucial point that limits the students with visual impairment is negligence. The students with visual impairment being neglected by different bodies because of different things. But most of the time their negligence emanated from doubting students capability. They considered the students with visual impairment as incapable.

According to one of the respondents Even though the students perfectly answer the questions, or even though they actively participate in the class, even though they score good result in their exam, the responsible bodies have no tendency to encourage their capacity. Instead of this they doubt student's capability. They believe as there is something behind the result. Due to this reason some responsible bodies do not give their attention. They listen to the student's problem in careless way. We can simply assure that the students with visual impairment are forgotten. Similarly some sighted students also neglect the students with visual impairment because of doubting their capability. As the participants said in the group assignment their group members do not allow them to participate in doing assignment because of different reasons. The first is over protecting. They don't call them when they do assignment. Because these sighted students feel as suffering them. As a result of this the students with visual impairment lose knowledge that they gain through group discussion. The second is, doubting their capability. Whether they call them or not they think as it has no change. Because these sighted students considered them as incapable. Due to this reason they lost many things. The other also some sighted students do not give attention for students with visual impairment because of not knowing how to render services. Due to this reason the students with visual impairment are pushed aside. If they pushed aside also the students with visual impairment feel of being limited from doing anything. This also makes them hopeless.

Lacking Braille materials is also the other reason that limits the students with visual impairment not to join in the department of their own choice. A Participant clarified that because of lack of Braille materials the result of his grade 12 entrance exam was very low which intern, influenced in his choice of department. It indicates that in addition to limited Braille materials

the result of students score in entrance exam has great influence on their department choice. Others also fear to join in the department of their own choice because of limited materials.

The other is the students with visual impairment are depended on readers to do different things in university. For example: to take exam, to record note, to read the hard copy. But to do these things, finding quality of reader is very serious problem. The study revealed that the first problem that occurred on readers is inability to pronounce words accurately. If students cannot hear words clearly, it will be very difficult to do exam, it will have negative impact on their exam result. But because of not having options by the time, the students will be forced to finish exam by non qualified reader. Some time they may not finish exam because of time. As a result of this they score grade below their expectation. The second problem is the issue of payment. Most of the readers ask more payment to read exam or not instead of reading voluntarily. This is also very serious challenge for students with visual impairment. On the other hand also some students get readers from the church fellowship without payment. However, some readers who came from the church also have problem of quality.

The other is most of exam readers recruit from university students. But after they made agreement to read exam, they may have problem of endurance to keep reading in exam for a long time. In addition to this they may have their own exam in similar time. This is one of the serious challenges for students with visual impairment. Because they lose concentration in their study thinking about getting exam readers. The other is also the absence of exam readers. After they made agreement some readers left from exam place. As an interviewee said “after he agreed to read exam for me, he switched of his phone when only five minutes were left before exam. I was stressed. Finally I was forced to beg another person from the street. Then I took the exam without any concentration”. Generally, the students with visual impairment face problem of

finding readers when they need to read reference book, papers, to take exam and to record lecture note. But according to George Washington university health resource center 2003) in the developed countries there are laws that compel governments to ensure that all students in all post-secondary programs can access their academic extracurricular programs and activities. For students with visual impairment such access may require readers for classroom assignment and exams, assistance to obtain materials in alternative formats such as tape, braille or computer disk. Other accommodations may include allowing students extra time to read exams or assignments, permission to tape recording in class notes, allowing in the class use of a laptop computer or braille for note taking purposes.

As the study revealed The negative attitude of instructors is one of the problems that limit students with visual impairment from doing different things. One of the problems that faced students because of the negative attitude of instructors is not being allowed to record lecture. as the interviewees said Some instructors are not willing to be recorded. This is very serious challenge for students with visual impairment. Because, most of the time their study is depended on recorded lecture.

The other problem that occurred because of negative attitude of instructors is not being allowed to give soft copy. For students who have access computer in their study, soft copy materials enable them to become independent. But some instructors do not facilitate this. It also has negative impact on the student's success.

The other problem is giving inadequate time on exam. This also can be because of the negative attitude of instructors. Some instructors are not allowed to give extra time on exam for students with visual impairment. the participants described that the instructors considered giving the extra time on exam as a charity rather than the right of oneself. Which intern unable the

students to concentrate on exam. Because they become worried whether they finish their exam in the given time or not. the adjustment of assessment strategies that could be made in response to the needs of SVI, Shepherd (2006: 50) argues that SVI could have been underprivileged in some of the activities during the teaching and learning process and the assessment instruments also are biased towards activities that favor sighted students.

Doubting the capability of students with visual impairment is also the other negative attitude of instructors. As the study manifested if instructors considered them as incapable, even though the students score high grade, their result will be low. As the participants said, when they score high grade, the instructors believe as there is something behind the result. Newman (2009) and Baggett (2004) indicated that many college faculty members hold negative attitudes toward blind, and some may feel that these students are incapable of benefiting from college training. within the college community, there are still many misconceptions regarding the ability of students with blindness to perform within the academic environment. Some instructors might assume that since a student is not able to visually conceptualize the graphic material presented during a lecture, then he/she must be incapable of satisfactorily fulfilling the course requirements (Hodge & Preston, (2007). Due to this reason the students with visual impairment affect psychologically. This would force them to frustrate in their academic life.

It is clarified that Taking exam in Non conducive place is also the other problem that hinders students from gaining good result on their exam. This can also happen because of the negative attitude of instructors. As the interviewees said the students with visual impairment are taking exam outside the class room on the corridor. Due to this reason they expose to back ground noise and rain which intern limit students not to do exam properly.

The study ascertains that the students with visual impairment face lack of resources to take place their learning process properly. These resources are: computers, Braille books, soft copy and other assistive technology. This also limits the students with visual impairment from achieving good result and competing with others. It made students to have inadequate knowledge on that course. As Tirusew (2005) mentioned shortage of instructional materials, text and reference books (written in Braille or recorded cassettes), and insensitive instruction are the major problems for swvi. As result of this the academic competition has been more frustrating for them than the non-disabled students. Some students are also exposed to academic dismissal others to dropping-out from their studies.

Not having knowledge in assistive technology is also the other problems that limit students from their success. A participant ascertains that most of the instructors give soft copy by email. But many students cannot use computer properly. This becomes challenge for them. “Assistive technology refers to a variety of equipment that enables students with visual impairment to interact with information. Sometimes this technology is referred to as access technology‘, enabling technology and adaptive technology”(Hanafinet *al.* 2007; Hooker 2007; Zhou *et al.* 2011).

As it is mentioned from the above data, getting better note is also the other very serious problem in their learning process. If students with visual impairment cannot get better note that will be recorded, they cannot listen and develop their knowledge properly. In addition to this some sighted students may not be willing to be recorded their note. And also as the respondents assured some sighted students may not have good hand writing. This is very difficult to record their note.

The other problem is lack of separate space in library. As participants assured there is reserved place in library for students with visual impairment. But in order to record hard copy by the digital recorder and for discussion purpose, there is no enough space in library. This is very serious challenge.

On the other hand, as the research revealed, If the physical environment is not conducive for students with visual impairment, they will feel of being limited. When the buildings are not accessible for students with visual impairment, they will face problem to locate their class. unlike students without disabilities, SWVI have serious problem to make contact with their instructors because of the physical barriers to get access to their offices. As a result most of them forced to miss important consultation hours with their teachers. Thus, appreciating the assets and recognizing the liabilities of the learners on the part of the instructors usually makes the students to feel that ease, be interactive and comfortable(Tirussew, 1994).As the respondents clarified because of inaccessible buildings they take more time to locate their class. Due to this reason they missed their class. This problem also emerged because of not having numbers or sign that are prepared in Braille.

The other is also if they do not get mobility training, they cannot move from place to place. As a respondent said “after I joined university when I move from place to place, I faced accident because of not knowing the place”. This problem also emanated because of having accessibility gaps.

As it is manifested from the data, the teaching and learning process in the classroom by itself do not consider the needs of students with visual impairment. When teachers demonstrate visual instructions without expressing by word, the students with visual impairment will feel of being limited. They cannot get the lesson equally. Inclusive curriculum also require instructors to



design and implement teaching and learning methods and materials appropriate for diverse students in their classrooms (Ibid: 23, 32). Differentiated instruction requires instructors to use flexible approaches of teaching and learning and adjust their presentation styles in accordance with the needs of students, rather than the students adapting themselves to the curriculum (Tomlinson 2003). As respondents ascertain that some instructors are not explaining verbally that are visually displayed materials. This hindered them not to compete with classmate equally. If students are limited by others also they feel hopeless.

As the finding indicated above, the other problem that limits students from doing their needs is notice. The notices that are posted on the university notice board do not consider the students with visual impairment because all announcements are not prepared in Braille. Due to this reason, the students with visual impairment are losing track of recent developments. the respondents said that they often have difficulty finding their classroom, as a result of which they are usually forced to miss classes. They added that If they fail to attend class regularly, many teachers do not understand their problems which in turn will have negative influence on their achievement. In addition, the respondents underlined that the inaccessible nature of the notices result in wide information gap. They said that there are times they remain unaware of essential information such as student's scholarship, or may be informed after it is outdated. As a result, they are denied the opportunity to compete with their sighted counterparts.

Hence, based on the finding, the students with visual impairment feel of being limited when they pushed aside. Feeling of pushed aside can also emerge, if students remain not having support. The reason that hindered the students not to get support is also having accessibility gaps. This accessibility gaps also emerge because of not having accommodated facilities. All these

conditions also lead to feeling of hopeless. Feeling hopeless happen, when students do not get their dream. As a result of this the students dropped out of the class.

## **5.2 Feeling Successful**

As it is revealed from the above data, the students with visual impairment feel successful because of different reasons. One of these reasons is when they achieve their own dream. For example if students score good result in the department out of their choice, they feel successful. The Other also if students join in the university and department of their own choice even though they face challenges since the students have plans that they want to accomplish in order to accomplish their plan they will be forced to take responsibility of all challenges. A participant said that beyond learning in the law school he had planned to learn journalism and to work in journalism. To accomplish this plan he preferred Addis Ababa University. In addition to this As the respondents said compare from department that allowed joining for students with visual impairment, they joined in the department that has better accommodation. this enables them to feel as successful. On the other hand, joining in the university by itself make them happy. The study revealed that some students feel proud to be university students because of different reasons. The first is university is the collection of better students. The second is having qualified instructors in University. The third is to get job opportunity. Therefore this is one of their successes. The other also some students with visual impairment consider all problems that happen in their life by their own weakness. They don't want to take the problems on the others. Doing this it made the students with visual impairment strong. It helps them to develop mental readiness. In addition to this the students with visual impairment try to solve problems they face with the concerned bodies as much as they can. If the things cannot be solved, instead of stress

they develop mental readiness. They feel as part of their life. If students have such kind of mental readiness, it enables them to develop self confidence.

The other is the research showed that students with visual impairment do not give value for their sight. Instead of this they try to replace it using options. This also enables them to develop self confidence.

In addition to this the data indicated that the students become independent because of different things. “independence (strength) which is linked to perceptions of normality and dependence (weakness) which is linked to perceptions of ‘abnormality’ such as impairment or disability”. (Barnes, 2000). Most of the time the students with visual impairment are depended on others because of not having accommodated facilities. But some students relief of their independence through assistive technology. Assistive technology makes life easy for students with visual impairment. If the students use assistive technology like computer, they will minimize their needs of assistance from others. For example they can do exam by themselves, they can do assignment by themselves, they can read soft copy materials by themselves, and they can take note by themselves. Generally computer makes the students with visual impairment near to equal with other sighted students. As a law school student said “we are now feeling as superior to other students because of assistive technology like computer. Sighted students are depended upon us in order to get better note”.

On the other hand, the study revealed that when students accustomed to the physical environment, they feel successful. The new comer blind students face challenges in the university because of not knowing the place or because of inaccessible environment. Later on by doing practice the students accustomed to the environment. This is also the other success of the

students with visual impairment. When students become independent, this enables them to feel as successful.

The other is the students with visual impairment who are learning in the university are living out of their parents. This helps them to decide all things by themselves. This also paved the way to struggle challenges by themselves. They accustom to different behavior of students establishing friendship. This helped to develop their mental understanding about different things. but when they live with their parents, they become dependent. This also limits them from doing many things.

The other is The study disclosed that The students with visual impairment face challenges because of lack of awareness of institution, the countries' poverty, and because of the negative attitude of campus community. However most of the time they try to find solution to the problems.

For example when students face problem of Braille materials, they took different measures to solve the problems. The first solution is recording lectures in the class room. When the teachers teach in the class, the students record lectures. If teachers use inaccessible visual instructions, they try to know by asking from their class mate. The second solution is paying for the readers. When students want to read hard copy, they use readers by giving them money. The third solution is using soft copy. They read soft copy materials by listening using computer. By doing this they try to solve their problems.

As it is manifested from the data, Attitudinal problem is also the other headache of the students with visual impairment. Therefore to solve this problem the students exert their own effort For example giving informal advice. As a interviewee said "when the persons assist me,

most of the time we report each other. When they tell me their attitude if it is mistaken, I try to give advice as much as possible”. The other solution is demonstrating their capacity to change the attitude of community. they believe that if the students isolate themselves, the communities will have no opportunity to know the behavior of students with visual impairment. So in order to change the attitude of community in a good manner, the students with visual impairment have to offer place for themselves. The other also not giving attention for the problems that they face. This is also one of the solution to solve the problem.

On the other hand, The finding revealed that When students move from class to class or from place to place they face challenges because of different things. The first is because of not having appropriate signs that helps to know accurate place. The second is if class buildings have no lift. For all these problems they try to find solution. the first solution is creating their own signs to know the place appropriately. The second solution is practicing to ascend ranks without lift that means trying to know the number of level, or having good understanding about the arrangement of floor. The other solution is asking the assistance of others. If the students do not know the accurate place that they want to go, they try to solve the problem by asking others. Then after, they grasp the location of the place in their mind.

Establishing friendship is the other solution that leads students with visual impairment to success. As it is remarked from the above data, The students with visual impairment establish friendship in university for different purposes. The first is to get something from someone. There are different things that make the students with visual impairment dependant on others. One of these is taking exam using readers. When students take exam they need readers. To get these readers in addition paying money establishing friendship is inevitable. The other is to get assistance when they move from place to place. Some students with visual impairment are not

active in mobility. Therefore to move from place to place they need assistance, to get these assistance also establishing friendship is very necessary. The other is also establishing friendship is very important to create conducive atmosphere in their academic life. Because when they establish friendship it helps to get information's that is translated in the announcement. It helps to study each others. In addition to this it helps to change the attitude of others. The other also establishing friendship is very important to be free from loneliness. To get these friends They communicate from church believers, from members of different clubs, and from class mate. In the contrary there are different students with visual impairment who do not want to interact with others. These students prefer to be alone instead of establishing friendship. This problem emanated from judging that sighted persons have no positive attitude for them. Therefore they preferred to be alone. Due to this reason they lose many things. For example these students could not change their image that is given by others. They do not get support. They will be discriminated by others. This also create negative impact in their academic life.

The previous experiences of SWVIs also sometimes had an influence on their interactions with peers without disabilities. If SWVIs experienced friendships during their school-going days, they seemed to be more likely to make friends in higher education (Beauchamp and Pryor, 2012, 2013). This stretched even further to include friendships with nondisabled friends. In other words, if SWVI attended a special school where he or she had only SWVI friends, he or she would be less likely to be friend peers without disabilities in higher education compared to those students who formed friendships in a mainstream school (Beauchamp and Pryor, 2013; Polat, Afroditi, Boyle, & Nelson, 2001). So establishing friendship is one of the solutions to solve this problem. When students use the above mentioned solution, they become successful.

## **Chapter Six**

### **Summary, Conclusion and Recommendations**

#### **6.1. Summary**

The purpose of this study was to examine the experience of students with visual impairment in higher education. More importantly, this study tried to come up with feeding answer for the following basic research questions;

- What does the academic experience of students with visual impairment at Addis Ababa university look like?
- What is the experience of Addis Ababa university (AAU) students with visual impairment regarding social interaction with the campus community?
- how accessible is the physical environment of Addis Ababa university for students with visual impairment?
- To get answer for the above basic questions, the researcher used in depth interview. Six students were the participants of the study. Qualitative approach with case study design is also applied in the research method. On the other hand, the data is analyzed thematically.

In the experience of students with visual impairment different feelings are reflected; such as: feeling of being limited, feeling of being pushed aside, and feeling hopeless. These feelings also happened because of having accessibility gaps. This accessibility gaps also emerged because of not having accommodated facilities and support. For example: problem of getting readers, teaching method, inaccessible notice, inaccessible Braille materials, inadequate exam time, non-conducive exam place, negative attitude of campus community, and inaccessible physical environment. But, some students also when they face these accessibility gaps instead of feeling hopeless they develop mental readiness. This also enables them to develop self confidence and to search solution by their own. Finding solution by themselves, they become independent. This made them to feel as successful.

## 6.2 Conclusion

The following conclusion is derived from the findings:

- The students with visual impairment who are learning in the higher education experience serious challenges with regard to lack of awareness and negative attitude among the university community included instructors, head of departments, sighted students, and other concerned bodies. For example as the study remarked the negative attitude of instructors is one of the problems that lead the students with visual impairment to experience serious challenge in their academic life. Because, some instructors are not willing to give soft copy materials and to be recorded their lectures. In addition to this some instructors also considered the students with visual impairment as incapable. Even though the students perfectly answer the questions, they actively participate in the class, and they score high grade on their exam, a number of instructors believe as there is something behind their result. As the study revealed some departments are not willing to receive the students with visual impairment because of different reasons. The first doubts their capability, the second is because of lacking awareness, not having adapted curriculum, and because of lacking materials that are appropriate for students with visual impairment.
- The teaching and learning process is also not conducive for students with visual impairment because of not having adequate Braille materials, inaccessible visual instruction, inadequate exam time, and non conducive exam place. As a result of this they feel as being limited.
- The physical environment inaccessibility strongly affects the students learning and achievement in higher education institution. As it is mentioned from the above data, the



campus physical environments have no appropriate signs or Braille map. As result of this it is very difficult to move from place to place especially for the new comer students. These problems also limited the students with visual impairment, due to this reason they feel as hopeless.

- In the contrary, developing mental readiness and self confidence, the students with visual impairment try to solve the problem that they face by themselves instead of magnifying them. The study pointed that the students with visual impairment take different solutions to solve the problems that they face. For example not believing in the high value of sight, the other is also when they move from place to place creating their own sign to know the place accurately, demonstrating their capacity, giving value for themselves, not giving attention to the problems and establishing friendship are also the other solutions to solve their problems. On the other hand, when students face problem of Braille materials, they took different measures to solve the problems. The first solution is recording lectures in the class room. When the teachers teach in the class, the students record lectures. If teachers use inaccessible visual instructions, they try to know by asking from their class mate. The second solution is paying for the readers. When students want to read hard copy, they use readers by giving them money. The third solution is using soft copy. They read soft copy materials by listening using computer. By doing this they try to solve their problems. This enabled them to become independent, Due to this reasons they feel as successful.

### 6.3 Recommendation

The following recommendations are presented based on the findings:

- **Adapting curriculum:** adapting curriculum is one of the appropriate solutions to enhance student's capacity and to have full participation in the academic environment. Thus, the institution should adapt curriculum that take the needs of students with visual impairment in to account. For example: in the choice of department, the students with visual impairment have limited choice of department. But, if curriculum is adapted for students with visual impairment, they can successfully join in all departments and contribute for their country.
- **Raising awareness:** The institution should develop its awareness taking the experience of others developed countries, asking from the students with visual impairment themselves and other concerned bodies. In Addition to this creating awareness of others is also the other measure to change the experience of students with visual impairment in a fruitful way. Because, it will have great contribution to have positive attitude. Furthermore, the university should give different training for students with visual impairment to build up their capacity. For example: providing mobility training, computer training, and life skill training, extra.
- **Providing assistive materials that are valid for swvi:** Since the students with visual impairment cannot use the materials that are presented for sighted students, the institution should substitute by the appropriate materials that are necessary for the students with visual impairment. For example computers with screen reader, Braille books, Braille paper, white cane, and extra.

- **Making the physical environment accessible:** When they move from place to place within the campus, the physical environment should be accessible for the students with visual impairment. For example: the dorms, class buildings, and other part of campus should be accessible. In this case the institution should prepare appropriate sign and Braille map in facilitating conducive physical environment to simplify their activity.
- **Being part of solution for the problems:** The students themselves should be part of solution in different ways. For example using or creating options, giving value for them, and demonstrating the direction of solution for the concerned bodies.
- **Creating conducive academic environment:** The university should exert its own effort to facilitate the teaching and learning process in general for SVI. For example: making the visual instruction accessible and changing the negative attitude of instructors.

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## **Appendices:**

### **Interview questions**

#### **Introduction:**

Thanking the participant for his or her willingness to participate in the research. Reminding him/her the purposes of and procedures of the study, the importance of his/her participation to the study and his/her right. Reminding them interview will be audio taped.

Back ground information:

✓ What is your department?

What about your academic years?

Main questions

1. How does it feel to be a university student?

➤ What things did you observe different from your secondary school years?

2. How do you describe the situation you have encountered when you first enter the university?

3. How did you join the department? Is it based on your free choice? Do you like the department?

➤ Is there any department you would have loved to join but denied?

4. How do you describe the teaching and learning process in the class room?

5. How do you explain the instructors' commitment to consider special learning needs as WSVI?

- What experience can you tell me where instructors have neglected your specific learning needs?
- Were there situations where your instructors have presented a learning material which you couldn't understand because of your impairment?
- Have you ever discussed about your challenges with any of your instructors? If so how do you describe their reaction?

6. How do you describe the difficulties you encounter: in lecture room, in doing your assignment, during study hour, and during exam?

- ✓ Is there any challenge you face from the nature of course you take? If so how? Do you think this challenge could have been reduced?

7. What kind of support do you get from your department and the university at large towards facilitating your learning?

- ✓ How do you accept the academic problems that you faced?
- ✓ What provisions would you like to see in your institutions that will be helpful to you in meeting academic demand better?
- ✓ How do you describe the support you get from your sighted peers?
- ✓ Do you feel inferior to your class mate?

8. Can you tell me about how you use the libraries?

- What do you do when there is an assignment or any other task if you do not get the reference materials in Braille?

9. How do you describe the physical environment of campus?

10. How do you accustomed to the physical environment of campus?



- How accessible are libraries regarding the physical environment?
- What are the measures that you take to reduce the challenges from physical environment?

**11.** How do you describe the attitude of campus community regarding your impairment?

- ❖ How do you describe your social interaction with students with and without visual impairment?
- ❖ How do you describe your café, library, and dorm life from perspective of social interaction??

**12.** What were your measures to seepage difficulties regarding the attitude of campus community?

**13.** Any

**14.** Other challenges you would like to add, or anything else you would like to say?

Closure:

Thanking the interviewee for the valuable information he/she has provided and that I will meet him/her again after the interview is transcribed for checking if they are actually his/her own idea.

## **The collection of category:**

### **1. Category of feeling of being limited**

Third interview Category 1 feeling of being limited:

(feeling of being limited (having negative attitude of instructors(having inadequate materials(not having information givers(not having gained once choice of department (having in an appropriate way of teaching of instructors(feeling as not having gained enough knowledge(feeling of being limited(limited choice of department(being forced to join in the department out of their choice(feeling of being limited(limited choice of department(being challenged(feeling of being challenged(having limited Braille materials(negative attitude of instructors(lacking materials(negative attitude of instructors in accommodating facilities(feeling of being limited(lacking awareness of instructors(having attitudinal problem(having negative attitude of classmate(negative attitude of instructors(lacking enough materials(not having accommodated exam time(not having attitudinal change of instructors(feeling of being limited(lacking assistive technology(feeling of being limited(feeling of being limited(feeling of being limited(lacking adequate materials(getting exam readers as a problem(studying in non-conductive setting(stating the non-conductive setting of studying in the dorm(feeling of being limited(lacking assistive technology(getting readers as a problem(not having readers endurance to stay in exam (quality of exam readers as a problem(quality of exam readers as a problem((inadequate exam time(not having extra time on exam(negative attitude of instructors(taking exam in non-conductive place(lack of awareness of classmate(lacking reference materials(not having enough knowledge in assistive technology(lacking Braille materials(lacking assistive technology(having limited Braille materials(lacking awareness about SWVI

Forth interview Catagory1 feeling of being limited:

(having lost full site in university(facing challenges because of blindness(lacking Braille materials(lacking assistive technology(not having knowledge in assistive technology(not getting mobility training(not getting training in assistive technology(facing problem that lead to dropping class(negative attitude of instructors(not getting training(feeling of being limited(feeling of being limited(changing the choice of department because of blindness(limited choice of department(limited choice of department(having inadequate Braille materials(considering the expensiveness of Braille materials(lacking awareness of institutions(taking exam in non conducive setting(feeling of being limited (feeling of being limited(feeling of being limited(lacking awareness of students(having scored low grade(expressing the challenges of new comer students in university(feeling of being limited(not having developed awareness(quality of exam readers as a problem(feeling of being limited(not showing once capability due to exam readers(facing the absence of exam readers(feeling of being limited(not having extra time on exam(feeling of being limited(feeling of being limited(feeling of being limited(having forced to study in non conducive setting(feeling of being limited(having problem of listening skills(losing grade due to problem of listening skills(feeling of being limited(facing new challenge(quality of exam readers as a problem(feeling of being limited(not having awareness(having inadequate Braille materials(not getting Braille materials in appropriate place(having inadequate assistive technology(having inadequate assistive technology(having inadequate Braille materials(not getting mobility training(having negative attitude of community(not having developed awareness

Fifth interview Category 5 feeling of being limited:

(having scored low grade((having scored low grade(lacking Braille materials (feeling of being limited(limited choice of department(feeling of being limited(feeling of being limited(getting

readers as a problem(facing financial problem(getting reader as a problem(feeling of being limited(quality of reader as a problem(lacking assistive technology(feeling of being limited(taking exam in non-conducive place((quality of exam reader as a problem(paying money for readers(lacking assistive technology) (feeling of being limited(lacking Braille materials(lacking assistive technology(being limited(feeling of being limited(negative attitude of community(generalization)(negative attitude of community

## **2. Category of having accessibility gaps:**

Third interview Category 4 having accessibility gaps:

(having accustomed to physical environment ( having inaccessible environment for the new comers(not having Braille map or appropriate signs(having inaccessible buildings(having accessible dorm(having accustomed to the physical environment(having inaccessible visual instructions(making visual instruction accessible(having inaccessible buildings(not having accustomed to the physical environment

Forth interview Category 5 having accessibility gaps:

(having accessible buildings(facing accident because of not knowing the physical environment(facing environmental difficulties(having inaccessible materials(not being considerate the inaccessibility of assistive technology(not being competent due to inaccessible materials(doing assignment in non conducive place(taking exam in non conducive setting(having non conducive studying place(facing sexual harassment due to inaccessible studying place(having reserved studying place in the library(using dorm as a studying place(facing non conducive situation studying in the dorm(having accessible buildings(locating class as a problem(change of class(having inaccessible physical environment

Fifth interview Category 1 having accessibility gaps:

(Not having Braille map for the new comers (not having guidance for the new comers (inaccessible visual instruction ((inaccessible announcement (having accessible environment (not having Braille map)(not having appropriate sign(facing challenges because of inaccessible Braille materials

### **3. Category of taking solution by once own:**

Third interview Category 6 taking solution by once own:

(Not having requested once right (not being part of solution (using assistive technology as a solution (taking solution by once own (requesting once needs to get solutions (creating signs to know the place (grasping the place in once mind) changing attitude showing once capability (giving awareness)

Forth interview Category 11 giving value for oneself:

(seeking solution from sighted ted peers(seeking solution from students with visual impairment(changing the attitude of oneself(having accustomed to the problem(giving value for oneself(changing attitude showing once capacity(providing professionals to solve problems(giving awareness for concerned bodies(making effort to do by oneself( developing awareness

Fifth interview Category 2 preferring to be more solution centered rather than problem centered:

making effort to change once attitude(having changed the negative attitude of instructors(making effort to solve problem((asking once challenge(having representative(giving attention(creating once sign(requesting others(giving informal advice(being patient(having endurance

#### **4. Category of not getting support:**

Third interview Category 7 support:

(Not getting support (having insufficient support (not having trained instructors for special needs students (lack of trained instructors (having insufficient financial support (having problem of getting money to pay for exam readers (having insufficient support

Forth interview Category 10 support:

Not getting adequate support (not getting adequate support (having inadequate financial support (not giving awareness for instructors

Fifth interview Category 9 support:

(Not getting support (having limited support)

Category of getting support:

Third interview (getting support from university friends (getting exam readers from church believers (getting support from classmate (recording note with the help of classmate (enhancing financial support

Forth interview (having support of Braille paper (providing exam by Braille materials (giving training in assistive technology (asking assistance to get support

Fifth interview getting support from senior blind students (getting support from church believers (getting support from others

## **5. Category of accommodating facilities:**

Third interview Category 9 accommodating facilities:

Feeling glad(having gained once choice of department(joining in the department of once choice(getting soft copy materials(being asked to clarify confusing part(being contributed to have better understanding (having positive attitude(not being discriminated (accommodating facilities(preferring to study in the library (accommodating facilities(accommodating facilities (having reserved place in library(having interested to study alone

Forth interview Category 6 accommodating facilities:

(Taking exam in a conducive setting (recording lecture (portraying the betterment of law school instructors (being under stood (having positive treatment of instructors in accommodating facilities

Fifth interview Category 7 accommodating facilities:

(Having positive attitude (positive approach of instructors (accommodating facilities ((having reserved place in library (using dorm for study as an option

Category of not having accommodated facilities:

Third interview (being considered extra time on exam as a charity rather than the right of others (stating about the weakness of addisabeba university (not having permanent library workers (not having positive attitude

Forth interview (developing awareness of instructors (providing materials(accommodating facilities(providing conducive studying place(developing awareness(not having employed library workers (having inadequate library workers

Fifth interview not having accommodated facilities (having inadequate studying place (not having employed library worker (facing challenge (paying money for readers (not being understood

#### **6. Category of developing mental readiness to accept challenges:**

Third interview Category 2 developing mental readiness to accept challenges:

(Feeling of being strong (developing mental readiness to accept challenges (taking responsibility to do many things (not having readiness to change the attitude of instructors (taking responsibility by oneself (feeling of being strong (mental readiness to accept challenges (taking responsibility (normalization

#### **7. Category of developing self confidence:**

Third interview Category 5 developing self confidence:

(Having developed self confidence (losing self confidence (not having surprised (feeling of being dependency (ruling oneself (losing self confidence (losing self confidence

Forth interview Category 2 developing self confidence:

(having developed self confidence(developing self confidence(losing self confidence(losing self confidence(believing in the capacity of blind students(losing concentration due to the absence of exam readers(losing confidence(developing capacity using group discussion(developing self confidence(passing challenges that occurred because of blindness

Fifth interview Category 6 developing self confidence:

Having equal capability (having developed self confidence ((not taking extra time on exam)



## **8. Category of being forgotten:**

Third interview Category 3 being forgotten:

(Feeling bad (feeling as not having acceptance (lacking listening ear (not getting attention (being forgotten (losing attention (losing attention (feeling of being forgotten (not getting attention (being forgotten (misgiving attention (not getting attention (feeling of being stressed (not having positive attitude for instructors

Forth interview Catagory3 (being forgotten (misgiving attention (being treated differently (feeling hopelessness (feeling sad (viewing once need in careless way (feeling sad (not being considerate once challenge (not being considerate once challenge (feeling sad (feeling sad

## **9. Category of being considered as incapable:**

Third interview Category 10 being considered as incapable:

(Feeling of being neglected (being considered as incapable (feeling of being neglected (being considered as incapable (being considered as incapable (feeling as capable

Forth interview Category 8 being considered as incapable:

(fearing the conclusion of others in once capability(feeling of being neglected(being considered as incapable(feeling of being neglected(not believing as being competent(feeling of being neglected(doubting once capability(feeling of being neglected(being considered as losing time to help others(considering once capability(feeling of being stressed(feeling of being stressed

Fifth interview category 3 being considered as incapable:

being considered as incapable)not being considerate once challenge(feeling of being inferior((feeling sad(feeling hopelessness(feeling of inferiority((responsible bodies acting in careless way))(not giving attention(feeling of inferiority))(feeling hopelessness(not giving attention(not getting attention(feeling hopelessness(feeling of inferiority(feeling angry

#### **10. Category of feeling pushed aside:**

Third interview Category 11 feeling of pushed aside:

(Feeling of being discriminated (feeling of being pushed aside (doing assignment excluding oneself (being over protected

Forth interview Category 9 feeling of pushed aside:

(Being discriminated (being over protected (being discriminated (doing assignment excluding oneself (being over protected (discriminating oneself (feeling of inferiority (feeling of inferiority (unwilling to accept once injury

#### **11. Category of feeling hopeless:**

Third interview Category 8 feeling hopeless:

(Not having active participation from blind students side (discriminating oneself (feeling hopelessness (discriminating oneself ((feeling of being inferior

#### **12. Category of feeling successful:**

Forth interview Catagory4 feeling successful:

(Not being happy (being satisfied (feeling successfulness (feeling successfulness (creating option to be successful (having good awareness

### **13. Category of feeling of being dependant:**

Forth interview Category 7 feeling of being dependant:

(Not gaining independence through assistive technology (feeling of being dependant (feeling of independent(feeling of dependency(taking exam using readers

### **14. Category of establishing friendship:**

Forth interview Category 12 establishing friendship:

(Establishing friendship (establishing friendship (having problem of interacting with others (not having inclusive dorm life

Fifth interview Category 8 establishing friendship ((establishing friendship

### **15. Category of no number**

Third interview Category no number

(Expressing the betterment of university from high school level (having better experience in university (having learned better experience from university (getting job opportunity as one target (not getting as once expected (being considered as doing good thing (facing challenges in the hospitality of new comers

Forth interview Category no number (having different experience (having partial site (having full site (reading ink print (getting as not expected (not having good hospitality (considering the betterment of high school in the teaching and learning process (being interested

Fifth interview Category no number expressing the betterment of university from high school (recording lectures (feeling glad

## 1ኛመጠይቅ

1. የምታጠናው የትምህርት አይነት ምንድነው?
2. የዩኒቨርሲቲ ተማሪ በመሆንህ ምን ይሰማህል?
3. University እና highschool መማር ያለውን ልዩነት እንዴት ትገልጻለህ?
4. ለመጀመሪያ ጊዜ ወደ ዩኒቨርሲቲስት ስትመጣ/ጪ እንዴት አገኘኸው?
5. ወደዚህ ዲፓርትመንት ስትገባ ወደኸው ነው? ወይስ ተገደህ የገባህበት ዲፓርትመንት ነው?
6. ከሌላው ዩኒቨርሲቲ እንዴት በተለየ መልኩ ይህን ዩኒቨርሲቲ ልትመርጠው ቻልክ?
7. እስካሁን በቆየህበት እነዚህ ኤክስትራካሪኩላር አክቲቪቲዎች ተሳክተውልህል ማለት እንችላለን?
8. ፈልገኸው ያጣኸውስ የትምህርት ዘርፍ አለ?
9. አንድ አንድ ዲፓርትመንቶች ለአይነስውራን ክፍት የማይሆኑበት ምክኒያት ምን ይመስልህል?
10. በክፍሉ ውስጥ ያለውን የመማር ማስተማር ሂደትስ እንዴት ታየዋለህ?
11. ያንተን ልዩ ፍላጎት ከግምት ካለመክተት አንጻር በአሉታዊ ጎኑ የምታነሳው አስተማሪ አለ?
12. ሌላስ አስተማሪዎች የፈጠሩት ችግር የምትለው አለ?
13. አሃእነዚያ ፍላጎቱ የሌላቸው አስተማሪዎች ምክኒያታቸው ምንድ ነው ብለህ ታስባለህ?
14. ለየት ያለ የአይነስውራን ተማሪዎችን ልዩፍላጎት ከግምት ከመክተት አንጻር በአውንታዊ ጎኑ የምታነሳው አስተማሪስ አለ?
15. አስተማሪዎች ትምህርቱን ምቹ ከማድረግ አንጻር ምን እንዲያደርጉ ትወዳለህ?
16. የመማር ሂደቱንስ ከሚያዩት ጓደኞችህ በአኩል ደረጃ አግኝቻለሁ ብለህ ታስባለህ?
17. በጥናት ጊዜ፣ቤት ስራ ስትሰራ፣በፈተና ጊዜ የገጠሙህ ችግሮች አሉ ካሉስ እንዴት ተወጣኸው?

18. ከትምህርቱ ክብደት አንጻር የገጠመህ ችግር አለ?
19. የመማር ሂደቱን በማመቻቸት በኩል ዲፓርትመንትህና የንብርስቲው እንደ አጠቃላይ ምን አይነት ድጋፍ ደርጉልሃል?
20. የገጠመህን ችግሮች እንዴት ነው በውስጥህ ምትቀበለው?
21. ከሚያዩት ጉዋደኞችህ ጋርስ ያለህ ትስስር የሚያደርጉልህን ድጋፍ እንዴት ትገልጻለህ?
22. እንዴት ነው ላይብረሪ የምትጠቀሙት?
23. ላይብረሪ ውስጥ በቂ ማቴሪያል አለ?
24. የላይብረሪው ሰራተኞች ስለአይነስውራን የሚያደርጉትን ድጋፍ እንዴት ትገልጻለህ?
25. በላይብረሪው ውስጥ በቂ የብሬል መጽሃፎች ከሌሉ የቤትስራ ሲሰጥህ እንዴት ነው የምትወጣው?
26. ከላይብረሪ ውጭ የምታጠናበት ቦታ ዎች አለ?
27. ዶርምስ ከትምህርት ጋር የተያያዙ ስራዎችን ስትሰሩ የዶርም ጉዋደኞችህ ምን ያህል ምቹናቸው?
28. የዩንቨርስቲው ማህበረሰብ ለአይነስውራን ያለውን አመለካከት እንዴት ትገልጻለህ?
29. የዩንቨርስቲውንስ አካላዊ አቀማመጥ እንዴት ትገልጻለህ?
30. እስካሁን ግቢ ውስጥ ከቦታ ቦታ የምትንቀሳቀሰው እንዴት ነው?
31. ከእነዚህ ችግሮች ስለማምለጥ ምን አይነት እርምጃዎችን ወሰድክ?
32. የዩንቨርስቲው ማህበረሰብ በዚህ ዙሪያ አንተን ከመርዳት አንጻር ምን አይነት አመለካከት አለው?
33. እነዚህን የአመለካከት ችግሮች እንዴት ነው የምትቀበላቸው?
34. በመጨረሻህ ምታነሳው ነገር አለ ከጉዳዮችን ጋር በተያያዘ?