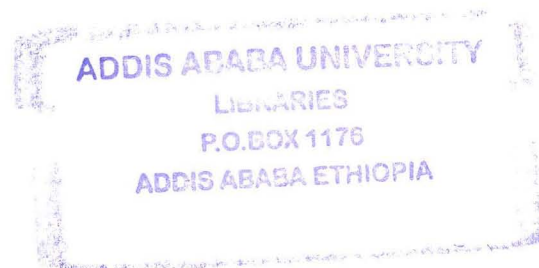


**ADDIS ABABA UNIVERSITY**  
**SCHOOL OF GRADUATE STUDIES**

**The Educational Condition of Students with Disabilities in Integrated  
Class Rooms; the Case of Preparatory Schools in Addis Ababa**

**BY**  
**BERHANU FIKRU**



JULY, 2007

**THE EDUCATIONAL CONDITION OF STUDENTS WITH  
DISABILITIES IN INTEGRATED CLASS ROOMS; THE CASE OF  
PREPARATORY SCHOOLS IN ADDIS ABABA**

BY

BERHANU FIKRU FIRESENBET



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## Table of Contents

Acknowledgement .....	I
Table of contents .....	II
List of tables .....	III
Acronyms .....	IV
Abstract .....	V
List of appendices .....	V
CHAPTER ONE: THE PROBLEM AND ITS APPROACH	
1.1. Background of the study .....	1
1.2. Statement of the problem .....	4
1.3. Objectives of the study .....	5
1.4. Significance of the study .....	6
1.5. Delimitation of the study .....	6
1.6. Definition of terms .....	7
CHAPTER TWO: REVIEW OF THE RELATED LITERATURE	
2.1. History of Special Education .....	8
2.2. The issue of integration .....	9
2.2.1. Associational integration .....	10
2.2.2. The organization structure .....	10
2.2.3. Arguments for mainstreaming .....	11
2.2.4. Arguments against mainstreaming .....	11
2.3. Early intervention .....	12
2.4. Special needs education in Ethiopia .....	12
2.5. Prevalence of disabilities in Ethiopia .....	12
2.6. Research activities made in Ethiopia .....	13
2.7. Disabilities of common type .....	15
2.7.1. Visual impairment .....	15
2.7.1.1. Causes of visual impairment .....	15
2.7.1.2. Classification of visual impairment .....	16
2.7.1.3. Classification of degrees of visual impairment .....	17
2.7.1.4. Etiology of visual impairment .....	17
2.7.1.5. Adaptive devices for visually disabled students .....	18
2.7.1.6. Orientation and mobility .....	19
2.7.1.7. Map and chart reading .....	20

2.7.2. Hearing impairment .....	20
2.7.2.1. Characteristics of hearing impairment .....	20
2.7.2.2. Causes of hearing impairment.....	20
2.7.2.3. Classification of hearing impairment .....	21
2.7.2.4. Measurement of hearing loss .....	21
2.7.2.5. Communication system for hearing impaired people .....	21
2.7.3. Physical impairment .....	22
2.7.3.1. Cerebral palsy and associated problem .....	22
2.7.3.2. Spina bifidia .....	23
2.7.3.3. Kinds of cerebral palsy .....	23
2.8. Teaching methods and styles .....	25
2.8.1. Teaching styles and presentation (General considerations).....	26
2.8.2. Modifying instruction based on specific disabilities .....	28
2.9. Support services and facilities .....	31
2.9.1. Curriculum content .....	31
2.9.2. Library .....	32
2.9.3. Guidance and counseling. ....	33
2.10. Accommodations for students with disabilities (removing barrier).....	33
2.11. Social interaction .....	34
CHAPTER THREE: THE RESEARCH DESIGN AND METHODOLOGY	
3.1. The Research Design .....	36
3.2. Participants of the study .....	36
3.3. Sample size and sampling technique- .....	37
3.4. Sources of Data .....	37
3.5. Instruments of data collection and procedures .....	37
3.5.1. The questionnaire.....	37
3.5.2. The interview.....	38
3.5.3. The observation.....	39
3.6. Method of Data analysis .....	40
CHAPTER FOUR: ANALYSIS AND INTERPRETATION OF DATA	
4.1 Analysis and interpretation of questionnaires for students and teachers .....	41
4.2 Analysis and interpretation of class room observation .....	63
4.3 Analysis and Interpretation of the Interview with the school principal,	

Guidance and counselors & education bureau officials .....	64
4.4 Analysis & interpretation of teachers' responses.....	69
4.5 Responses to the open- ended questions .....	71
CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATION	
5.1. Summary .....	74
5.2. Conclusions .....	78
5.3. Recommendations.....	79-81
References .....	82
List of Appendices .....	86-99

## List of tables

<b>Table 1.</b> Visual condition and the etiology .....	18
<b>Table 2.</b> Background information of the respondents .....	41
<b>Table 3.</b> Background information of teachers .....	42
<b>Table 4.</b> Background information of principles Guidance & Counselors' education bureau official and librarian .....	45
<b>Table 5.</b> Disabled students' evaluation of teachers, their teaching method and support for disabled students. ....	46
<b>Table 6.</b> Disabled students' attitude towards the provision of facilities, equipment and resources by the schools .....	53
<b>Table 7.</b> Responses of students showing their attitude towards the physical environment .....	55
<b>Table 8.</b> Disabled students' responses showing their relationship with the non disabled students .....	57
<b>Table 9.</b> Students' attitude towards guidance's and counselors and their task.....	58
<b>Table 10.</b> Attitude of the regular teachers towards the disabled students. ....	60
<b>Table 11.</b> Rank of students learning in Yekatit 12 and Menilik II secondary school .....	62
<b>Table 12.</b> Table showing the result of class room observation .....	63

## **Acronyms**

ENAD- Ethiopian National Association For the Deaf.

IDEA- Individuals with Disabilities Education Act.

ILO- International Labour Organization.

LRE- Least Restrictive Environment

MOE- Ministry of Education

NETP- New Education and Training Policy

NGO- Non Governmental Organization

UNESCO- United Nation Education Scientific and Cultural Organization

WHO- World Health Organization

## **Abstract**

Students with disabilities have the legislative right for education in the least restrictive environment and they have the right to be equally treated as the non disabled students. These students have the potential to be equally successful if they are taught in manners that decrease the effect of their disabilities on their education. Because of the impact of their disabilities on their education, only a few are privileged to join the preparatory schools. However, these students face many problems. The objective of this thesis is to examine these problems and give comments on how to solve them. For this purpose, the researcher selected three preparatory schools from region 14 where these disabled students are learning 44 disabled students, 7 physically impaired, 2 hearing impaired and 38 visually impaired were selected to examine the educational problems they face and promote special needs education. The number of the disabled students was manageable, hence available sampling technique was employed. The disabled students were the main data sources of the research. Teachers of these students, the principals, guidance and counselors, the librarians of the three schools and an expert in special needs education of region 14 education bureau were supplementary sources of data. The instruments of data collection used were likert type questionnaires for the disabled students and for the teachers, unstructured interview for the principals, guidance and counselors, librarians and the expert. Seven research questions were asked as a guide in the examination of the problems. Based on these research question data were collected. The examination of the data revealed the following results.

- Teachers' inefficiency to identify the needs of the disabled students, select and use the appropriate method of teaching.
- The absence of material provision by the responsible authorities.
- The inappropriateness of the architecture of the buildings and the physical environments.
- The inefficiency of guidance and counseling services
- Lack of skills in how to make friends by the disabled students.
- It is also found out that teachers are positive toward mainstreaming disabled students, except that they lack the necessary knowledge in teaching people with special needs. In spite of all these problems most disabled students perform very well which might be attributed to their own effort.

Finally it is concluded that disabled students face many educational problems which should be given due attention by the government, principals, teachers and guidance and counselors. Recommendations are then given by the researcher which might help in alleviating the educational problems of the disabled students learning in the preparatory schools of Addis Ababa.

## List of Appendices

Appendix 1. English version of Questionnaire for students .....	87
Appendix 2. Amharic Version of questionnaire for students .....	92
Appendix 3. Checklist for Classroom observation .....	97
Appendix 4. Questionnaire for teachers.....	98-101
Appendix 5. Coding Sheet and coding System .....	102-103

# CHAPTER ONE

## THE PROBLEM AND ITS APPROACH

### 1.1. Background of the study

For centuries, the educational provision of children with special needs has ranged from total exclusion and denial of access, segregated provision, partial and full integration to inclusion (African Journal of special Education, 1999 cited in Tinsae,2000). The segregated form was catered in special schools for the more seriously handicapped. Recently global educational reforms have focused on education for all and inclusive education. In addition to the goals of access and equity, one other main trust of the education for all movement is quality of learning. The latter goal shifts the emphasis of education from more access and participation to enrichment of the learning with useful knowledge, reasoning, ability, skills and values. It is argued that this usually takes place in the environment where learners receive support required to benefit from education (UNESCO, 1996). Schooling for children with special needs is part of the overall movement towards education for all. The challenge for teacher education is that to support the learning process of these students all teachers should be prepared with this principle in mind. To do this, it has been suggested that at the pre service level, special education needs content be integrated into regular curriculum and educational psychology teacher courses. This content could cover issues on children with special needs and equal educational opportunity, identification and assessment to meet special needs, special aids and equipment, classroom management, support services and specialized need services (Jangira cited in UNESCO, 1996). In the context of our country education as the right of all citizens regardless of sex, nationality, economic status and disabilities is stated in the Ethiopian constitution. It emphasizes the need to allocate resources and provide assistance to disadvantaged groups (art. 41 and 91). The educational index of persons with disabilities in Ethiopia as stated by Tirusew et.al is that

66.1% were illiterate, 17.5%, primary education and 16.4% secondary education (Tirusew, et al 1995). The finding of this study further revealed that the profile of the magnitude of specific disabilities in the country is as follows: 41.2% persons with motor disorder (persons who showed inability to walk, to sit, to eat and drink); 30.4% persons with visual impairment (weak sighted & blind); 14.9% persons with hearing impairment (hard of hearing & deaf), 6.5% persons with cognitive disability (Referred to as moderate, & profoundly mentally retarded), 2.4% with behavioral problem and 2% with multiple disabilities. This estimate is relatively lower than other previous estimate made in the country by others including WHO. In the education and training policy of Ethiopia (1994), It is stated that, "special education and training will be provided for pupils with special needs (Ministry of Education NETP, 1994). This implies that the government has the responsibility of ensuring the provision of education for these people. The education and training policy however lacks clarity in how disabled students should be provided with the appropriate education. Providing education for all, including disabled students primarily requires the identification of disabilities. Due to the lack of identification, assessment and support, children or students with learning difficulties or disabilities are likely to repeat and dropout. It is evident that due to lack of identification the number of disabled people found in the country is not clearly known. Planning, data collection and statistics has not considered the disabled children. Hence there are no reliable data available on inclusion or exclusion of disadvantaged groups in education. Until now, planning, data collection and statistics have failed to consider a large minority, that of children and students with disabilities or learning difficulties. According to international estimates 10-20% of any school age population has special educational needs (ILO, 2004; Peters, 2003; UNESCO, 2001). Children or students with disabilities or learning difficulties encounter a wide range of barriers to learning. These difficulties are often associated with the children or the learners. However, several other factors are also included. These

factors are quality of teaching, availability of facilities and equipments, negative attitudes of teachers and other staff members to disabled students. In Ethiopia, special needs education has been expanded during the last decade in the form of special classes and units attached to government schools. The existing special unit classes for grades 9 & 10 in A.A are in Menelik II, Yekatit 12 and Kokebe Tsibah Schools. And most of them have long waiting class. Consequently, significant number of children and students are still excluded from all education. It is estimated that less than 1% of children and students with special needs get access to primary education. (Mamo Mengesha, 2001, Tirusew et.al, 1995). Very few of them continue in vocational secondary and higher education and are assisted by their peers and individual teachers who have good will. There is no organized form of support. A school's approach to inclusion depends on the staff's attitude towards students with special needs. Because negative attitudes tend to inhibit the potential of inclusion, it is important to address these attitudes in the form of different delivery model. Ideally, we would like to see a school that adheres to one belief and thus one model of inclusion. Realistically, we find that teachers just like students, work in an environment that accommodates their needs. When reasoning why some teachers have negative attitude, Brule et.al (1983) cited in Winzer, (1990), states that, "When faced with the prospect of integrating a physically handicapped pupil, teachers react with anxiety, fearing that they will need to devote a disproportionate amount of time to the child. Hence there must be a conducive condition for teachers too, to teach the disabled in mainstreamed classroom. This would motivate teachers to use different models of teaching such as; consultation, team teaching, etc. The extent to which a mainstream school includes children with special needs in the educational, social and community life of the school ought to be an important outcome of the quality of education for all the children who attend the school but there are some conditions; the inclusion has to be reasonably practical, the special needs of disabled students must be met,

arrangement must not interfere with the education of other children in the school who are not disabled and resources must be used efficiently. Hegarty et.al, (1988) states that, educating pupils with special needs in the ordinary school is not simply a question of importing special education to the ordinary school. What is required is that the school adopts its educational provision so as to be able to cater for a wider variety of pupils. This means a highly flexible range of provision is needed. The ordinary school is an organic system. It must change. Changes in the school can not be made in one part of it with out affecting other parts. Change affects the staffing, curriculum, pattern of socialization etc. The number of preparatory schools in Addis Ababa where disabled students are included is very few. As the support delivered for the disabled students in the general secondary schools (grades 9-10) is low these disabled students have difficulty to be promoted to preparatory school. Hence their access for preparatory education (grades 11-12) is insignificant. Those students, who by their effort, have the opportunity to join the preparatory program still are not supported and provided with the appropriate education they needed to have. The question to be raised here is therefore, what are the problems these students with special needs face? What should be done to promote the present special needs education in the preparatory schools? This paper tries to asses these problems and to suggest ways to solve the problems.

### **1.2. Statement of the problem**

Disabled students like the blind, the deaf the physically impaired and others have been integrated in the regular classroom with their "normal" peers. Their disabilities affect their education by causing learning problems. The impact of their disabilities can be alleviated by modifying the teaching methods, providing them with the appropriate accommodation, and developing their self esteem and confidence through proper guidance and counseling. However, problems are often observed associated with provision of special means of access to curriculum (through special equipment, facilities or resources, modification of the physical environment or specialist

teaching technique, provision of modified curriculum according to the needs of the disabled students). So based on these and other problems not cited so far the study attempted to answer the following research questions.

- ◆ Do teachers identify the needs of disabled students and use a teaching method that fits their needs?
- ◆ Does the school provide them with the necessary educational inputs according to their disabilities?
- ◆ What are the environmental problems encountered by the students with disabilities?
- ◆ What does the attitude of the regular class teachers towards students with disabilities look like?
- ◆ How do the disabled students relate with their peers?
- ◆ How do they perform when compared to their “normal” peer?
- ◆ What does the support given by guidance and counselors look like?

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

The study generally attempted to identify the major problems disabled students face in their teaching and learning process and suggested solutions to solve the problems.

- ◆ To examine whether or not teachers employ different methods of teaching and provide them the necessary support their disability demand for effective learning.
- ◆ To assess whether or not the schools provide the necessary facilities, equipments and resources.
- ◆ To examine the environmental problems they face that hinder their learning process.
- ◆ To examine the relationship of the disabled students with their “normal” peers.
- ◆ To examine the attitude of teachers towards the disabled students.
- ◆ To examine the support given by guidance and counseling service.

- ◆ To assess their achievement by comparing their rank with their “normal” peers.

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

This research is intended

- ◆ To enable teachers, directors, supervisors, policy makers and education officials become aware of the problems of disabled students included in the normal class and find solution for their problems.
- ◆ It can be used as a reference when setting up new integrated schools
- ◆ It helps parents and other interested body to understand the educational problems of the disabled children and follow up the implementation of the recommended solutions.
- ◆ It helps curriculum developers to get insight about what should curriculum for inclusive education be, from the implications of the result of the study.
- ◆ It initiates others to make further research in this field.
- ◆ Disabled students will also be the main beneficiaries of the research

#### **1.5. Delimitation of the study**

Disabilities are so varied that all types of disabilities were not included in this study. Hence the study was delimited to the visually impaired, the hearing impaired and physically impaired students mainstreamed in the regular classes of grade 11 and 12 preparatory program. The study was conducted in three preparatory schools namely Menilik II, Yekatit 12 and Addis Ketema preparatory schools. The student researcher purposefully selected these schools because the students with these disabilities were found more concentrated in these schools than in other preparatory schools in Addis Ababa. The study also focused only on the disabled students who learn in the preparatory classes (10+1 and 10+2). Previously, Studies had been conducted on the problems of visually impaired and hearing impaired students. However, I believe the study concerning the problems of physically impaired students is what makes this study different from the others.

## **1.6. Definition of terms**

Deaf: - a hearing impaired person where the sense of hearing is non functional for the ordinary purpose of life.

Disability - A physical, or neurological deviation in an individuals make up. A disability may or may not be a handicap to an individual depending on one's adjustment to it. The terms disability and handicap often have been considered and used synonymously, but this is not accurate, as handicap actually refers to the effect produced by disability.

Hard of hearing: - a hearing impaired person where the sense of hearing is defective but functional, with or without a hearing aid (Nielsen, 1997).

Integration- The placement of children with handicaps in educational programs serving disabled students also serving children with out handicaps. A similar term is mainstreaming.

Inclusion- Educating exceptional students regardless of type or severity of disability in regular classroom in their neighborhood schools, also known as full inclusion (Yesseldyke, 1995)

Inclusive education- refers to an education system that is open to all learners regardless of poverty, gender, ethnic background language, learning difficulties and impairment. Inclusion emphasizes that all children and students can learn. The educational environment must be adjusted to meet the needs of all learners. (Brennan, 1985).

Special educational need- a special educational need exists when any disability (Physical, sensory, intellectual, emotional, social or any combination of these) affects learning to the extent that any or all of special access to curriculum, special or modified curriculum or specially adapted conditions of learning are necessary if the pupil is to be appropriately and effectively educated. (Brennan 1985)

Visual impairment:- The diminishment of the ability to see (Nielsen, 1997).

## **CHAPTER TWO**

### **REVIEW OF THE RELATED LITERATURE**

#### **2.1 HISTORY OF SPECIAL NEEDS EDUCATION**

Historically people with disabilities were often placed in hospitals, asylums or other institutions that provided little, if any, education. Special education programs are relatively recent origin. As with ordinary education, the education for children with disabilities was began with individual and charitable organization (Ainscow, M. 1994).

Government intervention followed at first in order to support voluntary efforts and finally to create a national framework in which public and voluntary agencies could act in partnership to see that all children receive a suitable education ...Many of the current practices of special education have developed since the early 1960s. During the early parts of that period, only those with perceived handicap were categorized as disabled, and special education was provided for these small populations. In the later 1960s and early 1970s concern for children in ordinary schools who were perceived as making unsatisfactory progress began (Ibid). New ideas and trends rose which were challenging the existing provision. Adams, (1986) cited in Ainscow, (1994) summarized six important trends.

- I. A growing understanding that handicapping conditions are much widely spread, more varied and more complex than the system of categorization based on medical criteria.
- II. The awareness that educational and developmental difficulties of young people are likely to arise as much from disadvantageous circumstances as from individual characteristics.
- III. Acceptance of the fact that parents of children can contribute to their children's development.
- IV. The recognition that early intervention and continuing attention with regular review and appropriate modification of support programme

to meet the changing needs of children with special needs is essential.

- V. A recognition that there is no sharp divide between "handicapped" and "normal" but rather a range of individual needs across a continuum.
- VI. The understanding that every young person including the handicapped has the right to have a full independent life as possible, hence young people with severe difficulties must be integrated and main streamed in schools and community life (Ibid).

This movement resulted in the enactment of PL 94-142, The Education for All Handicapped Children Act (1975), now renamed as the Individuals with Disabilities Education Act (IDEA). This legislation mandated that all students with disabilities be provided with appropriate instruction in the *least restrictive environment* (LRE) (salend, S.J, 1994).

## **2.2. THE ISSUE OF INTEGRATION**

Special education in separate special schools which was the predominant form of provision by many countries serve only very limited number of students leaving many children with disabilities with little or no education. This observation gained from UNESCO survey (1988b) led the participants in UNESCO consultation in special education (1988a) to make the following statement (Ainscow, 1994). "Given the size of the dominant and the limited resources available the education and training of the majority of disabled persons cannot be met by special schools and centers. Hence mainstreaming is taken as an alternative .They suggested that vast majority of children with disabilities and many others who experience difficulties could be helped in main stream schools by relatively minor adjustment to the teaching that is provided. Salend, (1994) defines integration as other planned interactions between students. For instances the placement of students with mental retardation into a physical education class with their regular education peers twice a week. This definition however has a very

narrow meaning. Hegarty, et.al., (1981) describes integration in its widest usage as a process of making whole, of combining different elements into a unity. As used in special education, it refers to the education of pupils with special needs in ordinary schools. Integration provides a “natural” environment where these pupils are along side their peers and are freed from isolation that is characteristics of much special school placement. The concept of integration is a complex and dynamic one. It has evolved from a simple opposition to placement in a special school to encompassing a variety of arrangement in ordinary schools. This diversity by arrangement is descried in two ways’ First in terms of nature of association between the “Special group” and the ordinary school and secondly in terms of organizational structure. (I bid).

**2.2.1. Associational integration**, Warnock distinguishes three main forms of integration in terms of association, **Locational**, **Social**, and **Functional**.

**Locational integration**- exists where special units or classes are set up in ordinary school share the same site.

**Social integration**-is where children attending a special class or unit eat, play and consort with other children and possibly share organized out of classroom activities with them

**functional integration**- is the fullest form of integration and is achieved when location and social integration lead to joint participation in educational activities where children with special needs join, part time or full time, the regular class of the school, and a full contribution to the activity of the school (I bid).

### **2.2.3. The organizational structure**

Hegarty, et.al., (1981), further elaborates that the second way of explaining the concept of integration is to describe the different organizational arrangements it encompasses. One of the most popular follows Deno’s (1970) cascade model. Following this in England as Hegarty, et.al., (1981) stated, official reports like Warnock report and Snowdon Report have sought to describe the organizational arrangement in terms of a

continuum between placement in an ordinary class with out support and in a residential special school. These vary slightly, but the essential pattern is something as follows!

- i. ordinary class with support in classroom
- ii. Ordinary class with withdrawal
- iii. Special class part time, ordinary class part-time
- iv. Special class in ordinary school full-time
- v. Special schools with contact with ordinary school

As Salend, S.J, (1994) cited from (Stephens, Black Hurst, & Magliocca, 1982), a student with disability would be placed in one of the placement alternatives based upon the student's individual needs, skills, abilities, and motivation.

#### **2.2.4. Arguments for mainstreaming (Integration)**

Salend, S.J, (1994) stated that... proponent of mainstreaming support it for the following reasons. Mainstreaming allows students the opportunity to learn from and interact with each other, prepares all students for their career and lives in a setting that is more representative of society. It promotes the academic and social development of all students. It fosters the development of an understanding and appreciation of individual differences and finally it infuses the skills of special educators in to the school and curriculum.

#### **2.2.5. Arguments against mainstreaming (Integration)**

Opponents of mainstreaming argue against mainstreaming because of the following reasons. They state that regular educators are not trained to work with students with special needs. They also argue that students with special needs will require excessive amount of teacher time there by impeding progress of others. Further more they say that regular educators and peers have negative attitude toward students with a special needs, which will result in the isolation and stigmatization of students in the regular education milieu. They also state that regular education is not structured to accommodate the needs of students with disabilities. Finally they give

reason that students with special needs will be denied services and specialized instruction and fall further behind their peers (Ibid).

### **2.3. Early Intervention**

Early intervention is the delivery of a variety of intervention services to children from birth to 6 years of age and it has been successful in promoting growth in terms of increased acquisition of physical, motor, cognitive, language, speech, socialization and self help skills (Salend 1994). According to Brook-Gunn and Lewis (1983) cited in Winzer, M., (1990) early intervention serves; in identifying children who are at risk for handicapping conditions, diagnosing handicapping conditions, predicting the child's future level of functioning and prescribing treatment.

### **2.4. Special needs education in Ethiopia**

As stated in Tirusew, (2006), special needs education at present is provided either by government or non-government and charity organizations. The government has established special needs education classes attached to ordinary schools. (All of them are but under resourced. As reported in the special needs) education program strategy, MOE (2006), there are 17 special needs education schools, 11 of them run by non-governmental organizations. There are over 30 organizations promoting inclusive education or supporting students with disabilities who study in ordinary schools. In the strategy, it is further stated that, needs assessment and data collection and cooperation is needed. The legislation of Ethiopia also has provided universal right to education and emphasizes the need to allocate resources and assistant to disadvantaged groups. (Art. 41 and 91).

### **2.5. Prevalence of disabilities in Ethiopia**

In describing the prevalence of disabilities in Ethiopia Tirusew, et.al. (1995) stated that, taking the school age population in the age group (7-16) of 15,203,092 (MOE, 2005) and the prevalence of apparent disabilities among children in to consideration, there may be a minimum

of 456, 092 school children and youth with common disabilities. However it is stated further that there is no full and reliable data on the incidence prevalence and the situation of persons with disabilities. The data available is fragmentary incomplete and sometimes misleading (Tirusew, 2005). Based on the report of the Ethiopian government the number of persons with disabilities constitutes 1.9% of the total population. On the other hand it is stated in Tirusew et.al (1995) that the 1995 focused based line survey of persons with disabilities in Ethiopia revealed the prevalence of disabilities to be about 2.95%. The study further revealed the problem of the magnitude of specific disabilities in the country as follows; 41.2% persons with motor disorder, 30.4% with visual impairment, 14.9% persons with hearing impairment, 6.5% persons with cognitive disability (referred to as mild, moderate, and profoundly mentally retarded, 2.4% persons with speech and language impairment, 2.4% of persons with behavioral problems and 2% persons, with multiple disabilities. (Tirusew, 2005 cited in Tirusew 1995).

## **2.6. Research activities made in Ethiopia**

Although not for all disability types, education for the disabled in Ethiopia is not a recently began activity. Rigby, (1970) cited in Tinsae, (2000) stated that; the Ethiopian orthodox church had been teaching the blind in traditional way. Moreover, she affirmed that before the 20<sup>th</sup> century, the Ethiopian Orthodox Church by using the traditional method of teaching (Oral memorization) had been, delivering religious education. This method of instruction attracted the blind students to learn morally. As Rigby, (1970) stated, it was this time Ethiopia started an organized integrated system of education for the blind. In the 1930s, the Ethiopia school system began to follow the Western academic type, where no real attempt was made to integrate blind students. This weakened the traditional form. Later on charity organization initiative motivated the government to open residential schools. Thus some elementary schools were opened in several administrative areas; Sebeta, Bako, Shashemene,

Wolayita Sodo, Gimbi, Asmara and Dire Dawa (Rigby and Sawaraga, (1970) cited in Tinsae 2000). As Azalech 2005 stated, on the other side, educational provision for children with hearing disability in Ethiopia is very little known. However, the Ethiopian National association of deaf (ENAD), (1999) cited in Azalech (2005) pointed out that educating the deaf informal schools started a few years back. Special schools for hearing impaired were first opened by the non-governmental voluntary organizations in 1962... currently it appears that the opening of special classes and integrating hearing impaired students in regular classes is at a growing rate bringing students into closer physical proximity for possibly better social interaction, (Azalech, 2005). However, researchers approved that the educational provision for disabled students has problems. The problems may vary according to the disability type, the severity of the disability, the socio economic status, and the condition of the organization that caters the education. For instance, the research finding by Azalech, (2005) indicated that the major problem of hearing impaired students is language and communication problem, which has a great influence on the students' social interaction and academic achievement. It also indicates that the absence of sign language on the part of teachers and hearing students may cause academic and social problem. Research also indicated that lack of support from educational authorities has influenced the education of hearing impaired students. Researches made by different researchers on visually impaired students' learning in integrated classes in different areas indicate that, visually impaired students have a problem of getting Braille texts, Braille paper and stylus, visually impaired students are affected by the negative attitude non disabled students have towards them, insufficiency of guidance and counseling services, inadequacy of the support given by teachers for visually impaired students, inadequacy of attention given by educational authorities, shortage of effort made by schools to solve their problems (Tensae, 2000, Desalegn, 2006, Anto, 2004). On the other

research made on hearing impaired students concerning the attitudes of teachers and students regarding the integration of hearing impaired students into regular class by (Abebe G/selasie, 2000) concluded that though there seems to be a general truth that integration is favored for its social and academic benefits particularly for children with special needs, the obtained result in his study did not confirm this truth in large. He stated that though regular class students appeared to have a somewhat positive attitude towards integration, the majority of hearing impaired, students special class teachers and regular class teachers did not support the integration of hearing impaired students into regular classes: Information obtained from the focus group discussion and from, key informants confirmed that there was no smooth social relationship between the hearing impaired and regular class students. The major factor for disfavoring the integration of HI student were mainly related by communication problems, feeling of incompetence in facing challenges that may be encountered in the integration process (Abebe G/selassie, (2000).

## **2.7. Disabilities of common type**

### **2.7.1. Visual impairment**

A student with visual impairment has impairment in vision that, even with correction, adversely affects a Childs educational development. Visual impairment includes both partial sight and blindness (Yesseldyke, 2004, Salend, 1994). Students with severe visual impairments are usually identified before they enter the school, although some partially sighted students may not be identified until they reach school age, when visual demands increase (Yesseldyke, 2004)

#### **2.7.1.1. Causes of visual impairment**

Heredity is the major cause of visual impairment. Other factors include infectious diseases, poisoning, diabetes, tumors and pre-natal complications. Aging has become a primary cause of blindness in the elderly (Salend, (1994)

### **2.7.1.2. Classification of visual impairment**

According to Yeseldyke, (2004), there are three ways in which vision may be limited... Visual acuity, the field of vision may be restricted, & color vision may be restricted.

**Visual acuity-** refers to the clarity or sharpness with which a person sees. The method of measuring visual acuity is derived from the use of the Snellen wall chart. A person is described as having normal vision (20/20 in both eyes) if, at 20 feet from the chart that person is able to distinguish letters that an average person can distinguish at 20 feet. A rating of 20/200 means that the person can distinguish letters at 20 feet that the average person can distinguish at 200 feet. Conversely 20/10 means the person is able to distinguish letters at 20 feet that the average person can distinguish only at 10 feet.

**Field of Vision-** A person's field of vision may be restricted in two ways. First, a person may demonstrate normal central visual acuity with a restricted peripheral field. This is usually referred to as *tunnel vision*. Second, a person may have a *scotoma*, a blind or dark spot in the visual field. If the spot occurs in the middle of the eye, it may result in central vision impairment, particularly if both eyes are impaired.

**Color vision-** is determined by the discrimination of three qualities of color; hue (such as red versus green), saturation (pure versus muddied color), and brightness (vibrant versus dull) reflection of light. The essential difference between people who have color blindness and those who do not is that hues that appear different to normal person look the same to color blind person. Color blind persons frequently do not know that they are color blind unless they have been tested and told so. Most color blindness is partial; the person has difficulty distinguishing certain colors, usually red and green. Total color blindness is extremely rare. Color blindness is an inherited trait found in about 1 out of 12 males and about 1 out of 200 females. There is no cure for color blindness, but the condition is not usually regarded as

disability. According to Nielsen, (1997), blindness can also be classified as a) partially sighted (b) legally blind (c) low vision and (d) totally blind.

### **2.7.1.3. Classification of degrees of visual impairment.**

In describing the degrees of visual impairment Nielsen, L.B (1997) classified it as follows...

- a) *Partially sighted* person has lost most of his or her sight. He/she can not see much more than light or some large shapes and has central visual acuity of 20/70 to 20/200 in the better eye with correction. This means with correction he/she sees at 20 feet what the normal eye sees at 70 to 200 feet.
- b) *A legally blind* person has central visual acuity of 20/200 or less with correction in the better eye or has a very limited field of vision, such as 20 degrees at its widest point. A person who is legally blind sees with correction at 20 feet what the normal eye sees from a distance of 200 or more feet.
- c) *low vision* usually refers to a severe visual impairment, but it is not necessarily limited to distant vision. Low vision also applies to all who have difficulty reading news papers or other reading material, even with correction.
- d) *A totally blind person is the most visually impaired*

### **2.7.1.4. Etiology of visual impairment**

Visual problem arise from any interference with the formation of images on the retina or the transmission of retinal images to the brain (Harley and Lawrence, 1977 cited in Winzer, 1990). Optical errors, defect of the eyes, diseases, syndromes and associated conditions all affect vision to a greater or lesser extent. The following exhibit shows an outline of some visual conditions, their consequence and their etiologies.

**Table 1. Visual Condition and their etiology**

Category	Example	Manifestation	Etiology
Refractive errors	Myopia	Near sightedness	slightly out of Shape eye ball; light does not hit directly on the retina
	Hyperopia	Long sightedness	
	Astigmatism	distorted or blurred vision	
Eye pathologies	Glaucoma	impaired outflow of vitreous fluid, causes pressure on eyeball	Congenital; heredity; aging
	Retinoblastoma	Malignant tumor of the retina	genetic
	Albinism	lack of skin pigmentation	genetic error of metabolism
	Optic nerve atrophy	Nerve degeneration	damage to the optic nerve
	Retinitis pigmentosa	Narrowing of field of vision	hereditary condition
Ocular motor problems	strabismus	See double	arise from disorder of the eye muscle
	nystagmus	Rapidly moving eye ball	
	Amblyopia	Lack of depth perception	
Other problems	color blindness	deficient in color Vision	genetic
	Photophobia	extreme sensitivity to light	
	Cataracts	growth over lens	Aging; heredity, disease & infection

**2.7.1.5 Adaptive devices for visually disabled students**

Visual and print impaired students acquire information from print materials by using the following devices...*Kurzweil Reading Machine*- an electronic device programmed to recognize letters, group letters into words, pronounce

words. Printed materials are placed on the glass top of the machine, students can pause, rewind, move ahead, spell words, control pitch and volume by pressing buttons. *Optacon* - a camera like device that can be moved along a printed page. It translates the image into a tactile Braille type representation or converts it into speech. *Optical aids*- are magnifiers of different kinds. *Tele- Braille*- facilitates communication for deaf and blind individuals by converting a message typed on a Braille keyboard into print on a video monitor, which is read by a sighted person. The sighted person then types a response which is converted into a Braille display. *Electronic devices*... Curriculum access can be addressed effectively and efficiently by assuring that disabled students have the appropriate tools. A wide range of products have been developed for the blind that are referred to variously as 'assistive' technologies. As Shepard, (2001) in Desalegn, (2006) stated these technologies include: traditional devices like long cane, magnifying glass, portable Braille, type writer, hand held video camera, talking calculator/clock/ dictionary/ measuring device cassette recorder and dicta phone, large print books and raised line drawings), as well as more recent technology associated with the computer (e.g. Braille key caps, Braille embosser, Braille display, screen reader, screen magnifier, speech synthesizer, text-to-speech software, scanner, electronic travel aid, personal navigation assistant and laptop. These tools are however very expensive.

#### **2.7.1.6. Orientation and Mobility**

As stated in Kirk (1986) training blind children and adults to move about in their environment is very important. The situations that force dependence and can cause the greatest personality and social problems for visually impaired individuals usually involve mobility. Tools for improving mobility for adults include; long canes, seeing- eye dogs, sighted guides. But children and high school students must also learn to move about their environment

independently and safely. This is why orientation and mobility have become part of the curriculum in all schools for blind children.

#### **2.7.1.7. Map and chart reading**

A favorite curriculum for children with visual handicaps are models or tactile maps representing spatial relationships that students can master through their sense of touch (Kirk, 1986).

#### **2.7.2 Hearing Impairment**

##### **2.7.2.1. Characteristics of hearing impairment**

The manifestation of faulty hearing, whether due to a malfunction of physical apparatus or of perceptual processing, are amazingly similar. Both types of problems result in inadequate assimilation of auditory information, and hence difficulties result in language and speech, (Bock miner, 1981 cited in Solomon, 2005). Many people are not aware of that there are two dimensions to the sense of hearing. First, the intensity, or loudness with which sound is received, and second, the quality, or clarity with which sound is received. Difficulties concerning only the loudness factor are due to conductive losses and can usually be helped with the use of hearing aids. Difficulties with clarity, however, are due to sensory neural losses. Such losses are usually caused by damage to nerve fibers in the inner ear, (Allen, 1989 cited in Solomon, 2005).

According to Kirk (1962), a hearing impaired person is considered to be **deaf** if the sense of hearing is not functional for the ordinary purposes of life, or **hard of hearing** when the sense of hearing is defective but functional, with or without a hearing aid (Ibid).

##### **2.7.2.2. The causes of hearing impairment**

The causes of deafness can be heredity or environmental factors. Total deafness, which is rare, is usually congenital. Trybus, (1985) cited in Salend, (1994) identified the primary causes of hearing impairment as hereditary, maternal rubella, prenatal and perinatal complications, meningitis and childhood diseases and injuries.

### **2.7.2.3. Classification of hearing impairment**

There are two types of hearing losses; conductive and sensori-neural (Gearheart, Weishahun & Gerheart (1988). The most common cause of hearing loss in childhood is middle ear infection (otitis media), which causes fluid to collect in the Eustachian tube. This gives rise to conductive hearing loss. It affects about 1 in 4 of young children. Sensory neural deafness is much less common (affecting about 1 in 1000), but is usually far more severe in its effects. The condition is usually permanent as a result of irreversible damage to the nerve endings of the inner ear. It may be caused by infection from rubella, viral damage or it may be inherited (Roe & Ross, 1988).

### **2.7.2.4. Measurement of Hearing loss**

Hearing impairment is detected by an apparatus called audiometer. Both hertz and decibels are used in hearing tests to find out the degree of loss. A sound's intensity or loudness is measured in Decibels (dB), and its frequency or pitch is measured in hertz (Hz) (Nielsen, 1997, Roe & Ross, 1988). The authors classified the degree of hearing impairment as follows.

25-40dB=mild

41-55dB= moderate

56-70dB= moderately severe

71-90dB= severe

91+dB= profound

### **2.7.2.5 Communication system for hearing impaired people**

Nielsen, Lee Brattland, (1997) enlist and describe the different types of communication system as follows.

**Sign language**- is one variety of communication system used by hearing-impaired people. It uses the visual medium rather than the auditory.

**Finger Spelling**- is a manual alphabet. It is similar to writing in air

**Speech reading (lip-reading)**- the deaf person watches the speakers lips, facial expression, and gestures. **Cued speech**- uses eight hand shaped in

four possible positions to supplement the information that is visible on the lips. Oral communication- refers to the use of speech residual hearing and lip-reading. Some researchers believe that all deaf children may have functional residual hearing. **Simultaneous communication-** uses both spoken words and finger spelling. The person who has a hearing impairment lip-reads along with the sign and finger spelling of the speaker. **Total Communication-** uses all possible methods of communication. E.g. sign, finger spelling, speech reading, gesture, reading, writing and any modal that will result in clarity and ease of communication (Evans, 1982 in Tirusew, 200)

### **2.7.3. Physical impairment**

As noted in Salend (1994), two types of physical disabilities are recognized by the United States department of education (1977); **orthopedically impaired and other health impaired.** **Orthopedically impaired** students are defined as having the following; A severe orthopedic impairment which adversely affects a child's educational performance, (which includes impairment caused by congenital anomaly (e.g., clubfoot, absence of some member, etc), impairments caused by diseases e.g. poliomyelitis, bone tuberculosis, etc.), and impairments from other causes (e.g., cerebral palsy, spina bifidia, amputations, and fractures of bone which cause contracture (USOE, 1977 in Salend, 1994)

**Other health impaired-** is defined as the following; having limited strength, vitality, or alertness, due to chronic or acute health problems such as a heart condition, tuberculosis, rheumatic fever, nephritis, asthma, sickle cell anaemia, hemophilia epilepsy, diabetes, leukemia which adversely affects a child's educational performance (Federal Register, 34, July 1, 1985 cited in Salend 1994).

#### **2.7.3.1. Cerebral palsy and associated disorders**

The brain is the control center of the body. When something goes wrong with the brain, something happens to the physical, emotional, or mental functions of the organism (Kirk, S.A, 1962). An injury to the brain or lack of

development of the brain is likely to result in disabilities of various kinds. Cerebral palsy refers to a 'palsy' or motor disability resulting from, a deficiency in the cerebrum (brain). Injuries to the brain or part of it can cause mental disorders like mental retardation, language disorders (aphasia), reading disability (dyslexia), writing disability (agraphia), inability to understand words (word deafness), and various forms of motor incoordination including cerebral palsy. "Cerebral" means "brain", and "palsy" means "a motor disability". Cerebral palsy refers to a motor disability caused by a brain dysfunction, characterized by paralysis, weakness in coordination, or any other aberration of motor function caused by pathology of the motor control center of the brain. In addition to this motor dysfunction, cerebral palsy may include, learning difficulties, psychological problems, sensory defects, convulsion and behavioral disorders of organic origin (Ibid).

#### **Kinds of cerebral palsy**

- a **Spastic paralysis (hypertonia)** - in spastic condition one or more limbs of the body may be affected. Balance is absent and instead of a smooth movement there are jerky, uncontrolled movements, with the spasmodic contraction of the muscles. The child is able to move the affected muscle voluntarily since the muscle is normal, but the movement is slow, explosive, and poorly performed (Ibid).
- b **Athetosis**- children with athetosis walk in a lurching, writhing, and stumbly manner. (Ibid).
- c **Ataxia**- An individual with ataxia experiences difficulties in balancing and using hands (Salend, 1994).
- d **Hypotonia**- An individual with hypotonia has loose and flaccid muscles and may have difficulty maintaining balance (Salend 1994).

#### **2.7.3.2. Spina Bifida**

Spina bifida is a condition that is caused by a defect in the vertebrae of the spinal cord and usually results in some type of paralysis of the lower limbs as well as loss of control over bladder functions; Students with spina bifida

often have good control over their upper body but may need to use some type of prosthetic device for mobility such as a walker, braces, or crutches. They also may require the use of a catheter or bag to minimize their bladder control difficulties (Salend, 1994). Spina bifidia is a congenital defect in which part of one or more vertebrae fails to develop completely, leaving part of the spinal cord exposed. According to the spina bifidia Association of America as cited in Nielsen (1997), "It is a defect in the bony spinal column where the spine failed to close up to form one piece during the first two months of pregnancy. It is a permanently disabling defect occurring with a higher frequency than dystrophy, polio, and cystic fibrosis. Its cause is unknown. Both genetic and non genetic factors are believed to be involved. It's occurrence in siblings is 3%-5%. Spina bifidia are classified as;

**spinabifidia occulata, myelocele, meningocele, and encephalocele.**

**Spina bifidia occulata** - is the most common type and the least serious form. In this form, there is an opening in one or more of the vertebrae of the spinal column with out the damage to the spinal cord. There is little external evidence of this form except for a possible dimple or tuft of hair over the underlying abnormality. At least 40% of all Americans may have spina bifidia occulta. Most do not even know they have it because they experience few or no symptom. **Myelocele (meningomyelocele)**- is the severest form where the portion of the spinal cord protrudes through out the back. In some cases the sacs are covered with skin and in others, tissues and nerves are exposed. A child with myelocele is generally severely handicapped and may have other associated abnormalities such as cerebral palsy, epilepsy, mental retardation and visual problems. 70%-90% of children with myelocele may have hydrocephalus (a fluid build up in the brain). **Meningocele**- is less severe than myelocele the spinal cord remains intact but the meninges, or protective covering around the spinal cord, have pushed out through the opening in a sac called meningocele. It can be repaired with little or no damage to the nerve path way.

**Encephalocel-** in this type the protrusion occurs through the skull and results in severe brain damage.

### **Characteristics**

Depending on the type of spina bifidia a child has, he or she may be heavily braced or be indistinguishable from other children: However, the American spina Bifidia Association has presented the following characteristics.

Varying degree of paralysis, weakness in the feet and, ankles, and/or legs, diminished feeling in the feet, ankles, and/or legs. Incontinence both bowls and bladder from nerve damage, resulting in occasional accidents and a probable need for clean intermittent catheterization during school hours. Shunting of fluid from brain, learning disabilities, perhaps resulting from perceptual difficulties and/or damage of the brain, Motor difficulties in the arm and hands children with spina bifidia are similar to other children in their intellectual ability, ranging from gifted to developmentally delayed. The majority will have normal to above normal intelligent (Nielsen, 1997 & Kirk, 1962).

### **2.8. Teaching Methods and styles**

Method is about the manipulation of the learning in which pupils are involved Brennan, W.k (1985). Teaching methods are of the utmost importance, for through them the school achieves objectives, satisfies aims and makes a reality of the individualization of curriculum and teaching for pupils with special educational needs. Teaching methods should be subjected to evaluation and discussion with purpose. Theoretical contemplation and analysis must be closely related to actual work in classroom in which new ideas or modification or the existing are tested and evaluated with the pupils they are intended to benefit (Ibid). Hence, in explaining what a teacher ought to do Moss, G., (1995) states that a teacher should never be rigid. He should never expect pupils to fit into the curriculum; rather he should tailor the curriculum to meet the learning needs of individuals. Teachers, need to be more varied and flexible in their teaching, so that all students including those with special needs are able to

take part. Moss, (1995) further states that, a flexible teacher is concerned to bring the content of lessons alive by different means so that all children are engaged from the outset. Resources and activities are designed so that pupils of varying abilities can get something from them, working at different speeds and levels. Learning is organized to take account of these pupil differences. In general teacher is required to differentiate. Differentiation should not be confused with “individualized learning” there are distinctions. All children are individuals and there are times when specific help will be required by one child from one teacher. However this entails all pupils working on different materials, interaction between teacher and children becoming superficial, brief and infrequent (Ibid).

### **2.8.1. Teaching styles and presentation (General considerations)**

Moss, (1995) mentioned the following considerations to be taken during the processes of teaching.

- a) **Planning topics**- consider the size of the task and the amount of topic to be completed. When introducing a new topic, remember that this new topic needs to build on and link with the pupils’ earlier experiences if it is to be absorbed. At this stage, issues such as the level of language complexity, familiarity of vocabulary, concepts and any technical information can be discussed (Moss, 1995).
- b) **Lesson pro-forma**- Where it is important to introduce new terms, key concepts, or technical vocabulary, these can be written on a handout or profile could be produced giving additional explanations and highlighting lesson content in terms appropriate to your pupils’ existing levels of comprehension. There is more likelihood of success when every one understates and shares the reasons for doing a task, the material to be used, the questions to be addressed, the time available and what is anticipated as the outcome.
- c) **Multimedia presentation**- long stretches of unrelieved listening, without any visual illustrations, practical tasks or concrete examples can be very tiring for some pupils, particularly those with limited

- listening skills or poor attention span. Multimedia method presentation can be used to reinforce key points and sustain interest. Over head projectors, flip charts, video records, white board and other methods of displaying lists summaries, diagrams, key concepts and other important written dues (Ibid).
- d) **Classroom context**- this also may influence the quality of learning. Having a learning environment which is well ordered in terms of materials and their uses will assist those pupils who may be clearly distracted. Factors such as amount of movement around the room, noise source from outside and noise generated within the learning context, need to be considered as well.
- e) **Seating arrangement**- Good position for listening when the child has hearing or attention problem, most students can be helped by adopting positions where they can see the speakers face, lip patterns, facial expressions and natural body gesture which accompany speech. Also important are speaking whilst writing on the board or with competing background noise, (fans, heaters etc), addressing a child from behead silhouetting oneself against a light source, and relying on video sound tracks where the speaker is not visible. So too, students who may have visual problems need to be seated in position where they are in good light for their own work, and can focus upon visual display which is part of the lesson activity (Ibid).
- f) **Hands on experience**- For many children with special needs the greatest impact is often achieved by marking out a topic area through real-life or participatory experiences. Photographs sound recordings, videos, role plays, artifacts, tools, archive materials, can be used to bring more remote subjects to life (Ibid).
- g) **Sensory channels**- A range of channels can be used when presenting topic, including visual, tactile, kinesthetic as well as auditory experience (Ibid).

- h) **Group work**- all pupil particularly pupil with individual needs benefit from cooperative group work for some of the time. Managed effectively groups promote higher self- esteem and confidence and can involve pupil in more positive interaction, negotiation and discussion. Group work can extend children in the following ways; listening to others, learning how to make suggestions, or enter a discussion, putting aside a selfish interest to promote the good of the group, willingness to help one another, identify roles, such as ideas; person, technician, manager, secretary, motivator etc (Ibid).
- i) **Buddy system**- One strategy that works well both in primary and secondary school context for a child with special needs, such as a visually impaired youngster is to be 'adopted' by a sympathetic class member or 'buddy' prior to any topic changes, important listening points, announcements or instructions, the buddy gives a signal, such as a nudge or quiet word, which alert the child (Ibid).

### **2.8.2. Modifying instruction based on specific disabilities**

Students with sensory disabilities have unique needs that teachers must address. For students with visual disabilities, teachers must emphasize presenting information orally, for students with hearing disabilities; teachers must focus on the use of visual stimuli to provide meaningful instruction (Salend 1994). Teachers modify instructions for students with visual disabilities by enacting the following

- Provide experience that allows students to learn by doing and using manipulative.
- Give test directions, assignments, notes, and directions verbally
- Make letters and numerals on the chalkboard larger.
- Provide additional time to students with visual impairment to complete assignments and tests, and minimize the number and length of activities that cause visual fatigue.

- Use and allow students to use typewriters with large, clear type when preparing written assignments.
- Record assignments or present information on an audiocassette
- Phrase questions and comments directed to students with visual impairments to include names.
- Give directions to specify destinations within the classroom or school by using non-visual statements. Directions for going left or right should be in relation to the student's body rather than yours
- Assign a buddy to facilitate their movement through the school. Peers can also read directions and materials, describe events in the class room, take notes, and assist these students during drills and other emergencies
- Provide students a copy of notes, verbalize notes as they are being written on the board, and allow students to take notes using a laptop computer.
- Provide students with desk copies of important visual stimuli such as charts or maps.
- Provide audible warning signals accompanied by simultaneous visual signals to alert students with visual impairment to dangerous situations and fire drills (Ibid).

Teachers can modify instruction for students with hearing impairments by enacting the following suggestion.

- Use an over head projector to present material; it simultaneously allows the student to view both the material & the teachers lips.
- Assign a peer to take notes using carbon paper and to point to speakers during a group discussion. A peer also can ensure that the student is following along in the correct pace? when the class is working on an assignment.
- Speak clearly with a normal tone of voice and at a moderate pace.
- Use visual signals to gain the student's attention.

- Re-phrase content or questions to be more understandable
- Supplement information presented orally with visual aids
- Give test directions, assignments, and lecture outlines in writing.
- Provide the students with outlines, assignments, vocabulary lists, and the like prior to introducing new materials.
- Establish visual signal to alert students to dangerous situations.
- Provide the student with the script of a record or filmstrip to help the student follow along.
- Try to limit movement and unnecessary gestures when speaking to students with hearing impairments.
- Repeat and summarize main points of orally presented information
- Provide written models to aid students in checking the accuracy of their assignments.
- Use an interpreter to help students coordinate the visual and auditory messages associated with the class presentation (Salend 1994).

### **Educational modification for students with physical disabilities**

The provision which have to be made for students who are physically disabled are for physical, medical, and health reasons rather than for academic accomplishment. If the student is unable to hold his book or write because of his disability, it becomes necessary to develop devices that will facilitate holding a book or communicating on paper. Because of the heterogeneity of physically disabling conditions, it is difficult to describe facilities for all children Kirk, (1962) points the more general modifications as follows...

- Slippery floors, swinging doors, easily overturned equipments; stair ways are not suitable for physically disabled students.

- The physical plant must be adjusted in a way that enable freedom of movement .i.e. there must be ramps, elevators, handrails, wide hallways, spacious classrooms.
- Lavatories should be equipped with handrail to facilitate independence.
- Doors should be wide enough for wheelchairs.
- The teacher can modify and use numerous aids for instructional use (Kirk 1962)
- Motivating the physically disabled to find realistic ways to attain certain satisfactions which are within their ability , to understand and recognize that he has qualities which are of value , that he can succeed and accomplish something , and to approximate independence (Ibid).
- Compensating for the physical disability by exaggerating abilities in another area often provide much needed satisfaction.
- Promoting association with non-disabled children so that they will learn about the activities of normal children
- Physically disabled children experience the same needs for recognition , security and self –esteem as do normal children and hence they have to have guidance in adjusting to their handicap and finding compensatory satisfaction(ibid)

## **2.9. Support services and facilities**

Schools require support services across a broad front if they are to achieve the curricular and organizational reforms in view here, of the priority services in a school, the guidance and counseling service, the library service are some. The school facility needs to be observed, examined and adjusted according to the needs of the students with disabilities.

### **2.9.1. Curriculum content**

As stated in Gaijarow, (2000), the term curriculum is the most fluid concept. For most parents it means textbooks; for teachers it includes the text guides and perhaps the syllabi; for others it may mean content and structures of the lessons. This is but narrow definitions of curriculum. On

the other hand Derbessa, (2004) defines curriculum in its broadest sense as, every thing that transpires in the course of planning, teaching, and learning in an educational institution. What ever the meanings are given meeting special needs of the people with disabilities is the main issue. The curriculum should be balanced in terms of the competencies and context it includes incorporating learning related to the development of knowledge, skills and values to be meaningful and functional for every child. Assessing the problems of the learners with learning difficulties the important modification in a core-curriculum may encourage schools to use the range of available flexibilities in order to respond to local and individual differences (winzer, 1990). The curriculum need not be rigid. It must be flexible and leave space for local adaptation. In Yesseldyke & Algozine, (1995) stated that, in addition to traditional academic content taught to their peers, students with disability needs a curriculum that demands disability specific contents which includes, Braille using, Listening skills, use of slates etc. The lack of access to physical education activities may hinder the children to monitor their activities other children do and create difficulties with general health and appearance.

### **2.9.2. Library service**

Library service is one of the support services that need to be considered .the library must be able to entertain all kinds of students with disabilities. for instance as Fagbulu (1985) describes , the library ought to be a spacious hall exclusively for the purpose of stocking books , films, records , and charts. It should be a place where people can sit down and read newspapers, magazines, journals, and educational material in a reasonable comfort. The furniture provided must be comfortable though not comfortable so as to make one feel like sleeping. The library is supplied to be a quite place and on no account must students be allowed to disturb the peace of those using it.

### **2.9.3. Guidance and counseling service**

The role of guidance and councilors as outlined by Deighton, (1971) includes, counseling students to improve their self-understanding, self acceptance, personal decision making and personal problem solving, coordinating the use of school and community service, helping with educational planning and placement of students within a school or in transition between schools, servicing as a consultant to parents, administrative and teaching staff. Conducting local research related to pupils needs and to the effectiveness of the guidance program and communicating and interpreting the guidance programme to the public. In addition to this the councilor should understand the societal provision for the disabled including educational provision, the medical, economic and vocational rehabilitation (Gown, 1965).

### **2.10. Accommodations for students with disabilities (removing barriers)**

An accommodation is defined by Byrnes as an adjustment, to an activity or setting, that removes a barrier presented by a disability so a person can have access equal to that of a person with out a disability. Hegarty, et.al, (1981) states that one of the most common objections to educating pupils with disabilities in ordinary schools is that the buildings are unsuitable or even dangerous. The difficulties are couched in terms of the physically handicapped. Wheelchairs blocking up narrow corridors, whole areas of multistory buildings out of reach, extra hazardous in the events of fire and so on. There are problems too with other handicaps though these are frequently articulated. Consideration of the physical environment tends to focus rather narrowly on the fabric of the school building. Access, mobility, sanitary arrangement all raise serious problems and may dictate specific modifications to the buildings. For instance

- a Parking facilities- There is a need for a suitably sized setting down area or collecting bay close to the most appropriate point of entry to school,

sheltered provision for waiting, and accessible departure and arrival points to the buildings.

- b Approach and entrance- There must be a level or suitably ramped approach from the public foot path to school entrance and from the school to external play areas.
- c Door and door ways- Should be wide enough to permit easy passage of wheel chairs. Doors should have appropriate handles at convenient heights and. There must be sufficient wall space adjacent to the door handiest and wheel chair users.
- d Internal changes of level- pupils needs to gain access to accommodation or different levels within the school. This will entail the provision of internal ramps, lifts or additional stair cases.
- e Sanitary provision- Depending on the number of disabled pupils, there is a need of one or more latrines with compartments accessible to wheel chair users of either sex. These must meet various specifications in regard of minimum dimensions, doors fittings and support rails,

### **2.11. Social interaction**

Gearheart (1995) declares that teachers have the potential to greatly enhance or seriously limit their students, feelings of self-worth, achievement, and behavior. Teachers must recognize that all students need to be acknowledged as individuals in their own right and to know that significant others in their lives care about what they do and how they feel. The teacher is the single most important factor in the successful mainstreaming of student with disabilities. Teachers have profound influence on the students' behavior and achievement Gerhard (1996) further illustrates that some of any students' difficulties are the result of interactions with peers. In fact many teachers label students difficulties as 'problems with peers'. In some case such difficulties can be reduced by changing seating, by some specific program of behavior managements, or simply by modification of teacher's attitude (Ibid). The social and economic factors have long been central issues in discussing a child's performance

and adjustment since differences in material circumstance, parental life style, attitude and values basically affect the child's learning achievement. In relation to the negative aspect of low income of the parents on the child, with the nutrition, housing or material goods needed for a positive, health social and cognitive development.

## **CHAPTER THREE**

### **THE RESEARCH DESIGN AND METHODOLOGY**

#### **3.1. The Research Design**

This research is a qualitative research that employs descriptive survey method. It employs the data collection instruments observation, interview and questionnaire that characterize qualitative research. The data collected through these instruments are analyzed qualitatively. However, simple mathematics (i.e. percentage and mean) are used to analyze and interpret the data collected through questionnaire.

#### **3.2. Participant is of the study**

The subjects of the study were 44 disabled (28 male and 16 female) students: visually impaired, hearing impaired, and physically impaired students integrated in three preparatory schools of Addis Ababa. The schools selected were Addis Ketema, Yekatit 12 and Menilik preparatory schools. The schools were purposefully selected by the researcher because he noticed that more disabled students are registered in these schools than in any other government preparatory schools in the administrative region. The subjects from Addis Ketema secondary school were 3 male and 3 female students, all were with physical impairment. In the school specifically in grade 11 and 12, there was no other noticeable disability except physical impairment. In Yekatit 12 secondary school a total of 18 students, 17 visually impaired one physically disabled were the subjects of the study. The visually impaired students were 9 female and 8 male students. The subjects of the study in Menilik II preparatory and general high school were 18 visually impaired and two hearing impaired students. The visually impaired students include 15 male and 3 female students. The hearing impaired students include 1 male and 1 female students. The subjects of the study were all preparatory students learning in grades 11 and 12. Even though the main subjects of the study were disabled students, teachers of these students, principals of the schools, guidance and counselors of the schools,

official from the education bureau of A.A were used as additional, sources of data to triangulate, the information got from the students. The sites of the research were three government preparatory schools found in A.A. Two of the preparatory schools namely Menilik II and Yekatit12 secondary schools are located in Gulele sub city. The third one, Addis ketema senior secondary school is found in Addis ketema sub city. All the schools are senior secondary schools, accommodating grades 9 to 12 students. The schools are big, registering a total of approximately 4833 to 5098 students.

**3.3. Sample size and sampling technique-** because of the small number of disabled students in the school, all visually, hearing and physically impaired students were included in the study. Hence available sampling technique was employed. Hence 6 physically impaired, 2hearing impaired, and 30 visually impaired were studied.

**3.4. Sources of Data-** As the study employed qualitative approach; multiple sources of data is used. The main sources of data were, visually impaired, physically impaired, and hearing impaired students of Yekatit 12, Menilik II and Addis Ketema preparatory impaired, a total of 44 disabled students. However in order to triangulate the information the principals of the three schools, the guidance and counselors, the librarians, and the teachers of the respective schools were also used as sources of data. In addition to these the official in the education bureau of the administrative region who is responsible for special needs education was interviewed. And lastly observation was made on the physical set up of the school, the library and teachers' activity in the classroom.

### **3.5. Instruments of data collection and procedures**

The main instrument used was questionnaire. Furthermore, interview and observation were also administered

#### **3.5.1. The questionnaire**

Questionnaire was prepared for both students and teachers. The questionnaire prepared for students was in English language. But for the sake of understanding and clarity, the English Version was translated into

Amharic language. The Amharic Version of the questionnaire was reviewed by two English and Amharic instructors in order to check for the consistency of the translation with that of the English version. A student of postgraduate study in special needs education had also reviewed the questionnaire for the validity of the content. Then the questionnaire was administered to five students who were learning in grade 10 in Minilik II secondary schools for pre- test. These students were not included in the main study. The questionnaires were collected and analyzed. Based on the analysis two items that were irrelevant were discarded. The items were concerning laboratory service. Finally, a questionnaire with 7 background questions, 36 items of close ended questions and 7 open ended questions resulted. The close ended items were Likert type, five points (strongly agree, agree, uncertain, disagree and strongly disagree). Then the student researcher first met the principals of the three high schools. After they were told about the objectives of the study and read the letter of cooperation written from the department, they all directed me to the guidance and counselors of the respective schools. All the guidance and counselors were very cooperative. They all took the responsibility of appointing the disabled students. Because all the students were not attending class at that time, especially grade 12 visually impaired students were not present. The visually impaired students were at home because most teachers had already finished their topics, the students were studying at the library for the visually impaired at Afinchober. Hence, the guidance and counselors of Menilik and Yekatit 12 could get them only by sending message for their friends. Fortunately all the disabled students filled the questionnaire. But, had it not been for the effort of the guidance and counselors, it would have been very difficult to get them. The copies of the questionnaire papers were then collected and made ready for analysis.

### **3.5.2. The interview**

Unstructured interview were prepared for the school principals, the guidance and counselors, the region 14 education bureau official

responsible for special needs education and the librarians of the three schools. The interview was conducted to get additional information to the questionnaire. Appointment was taken from the respondents before the interview was conducted. Accordingly, interview taking 20 to 30 minutes was conducted. The respondent from the education bureau was new for the duty he is placed on. For the librarians no appointment was needed, they responded soon as the researcher met them.

### **3.5.3. The observation**

The observation mainly focused on the activities of teachers in the class. For this, observation check - list was prepared. Four teachers were observed while they were teaching in the classroom. The observation took three consecutive weeks. The observation focused on the classroom settings, the activities of teachers, and the materials used by the disabled students. The disabled students who were the concern of the observation were visually impaired and hearing impaired students mainstreamed in grade 11. The educational requirements of physically impaired students were regarded as the same to that of the non-disabled students. Hence they were not observed. Their requirement for classroom organization was taken as the same to visually impaired students; that is their problem of movement within the classroom. The observation then focused on educational provision of visually impaired and hearing impaired students. The classroom observation didn't include grade 12 students because at the time of the observation most of the visually impaired students were not attending class. The guidance and counselors of both Yekatit 12 and Menilik II preparatory schools informed the researcher that, because during that time most of grade 12 teachers had finished their topic, the visually impaired students preferred to study at home. Three social science sections and four teachers were chosen for observation. The sections selected for observation were designated by the researcher as section A, B and C. On the first week the teachers of geography and History teaching in section A were observed. The disabled students in this section were all visually impaired students.

The teachers were designated as H1 for one of the History teacher and H2 for the other history teacher and G1 for one of the geography teacher and G2 for the other one. The first week G1 and H1 were observed in class A and the second week G2 and H2 were observed in class B. The third week because there were no other geography and history teachers for grade 11, G1 and H1, were observed again in the 3<sup>rd</sup> class. The hearing impaired students were found in class "B". The observation was conducted using a check list containing 19 items labeled in alphabets A to S. In addition to the classroom observation, the researcher has tried to observe the library, the paths and the architecture of the buildings informally.

### **3.6. Method of Data analysis**

After the data are collected through the aforementioned instruments, analysis was done as follows. The data obtained, through the questionnaire was first tallied and coded on a code sheet, then it was analyzed and interpreted using descriptive statistics (the mean). The frequencies of the responses for each item were first registered and the mean of each item was computed. The means of the items were then compared with the average mean of the Likert scale which was given values 1 to 5; to strongly disagree, disagree, uncertain, agree, and strongly agree. The average mean is found to be 3. The interpretation for the mean scores was then: 4.00 and above -very strong, 3.5 –3.99 Strong, 3.00 – 3.49-Moderate, 2.00 – 2.99 - low, 1.00– 1.99 -very low. The background information was all interpreted using the percentage. The data obtained through interview, observation and open ended questionnaire are analyzed qualitatively. The responses to the open ended questions of both the students and the teachers are placed as they wrote it.

## CHAPTER FOUR

### ANALYSIS AND INTERPRETATION OF DATA

This chapter deals with the analysis and interpretation of the data obtained through various data collecting tools

#### 4.1 Analysis and interpretation of questionnaires for students and Teachers

*General Characteristics of the respondents*

**Table 2. Background information of the respondents**

				Total	%
1. Disability	Physically impaired	Male -	4	7	15.6
		Female -	3		
	Hearing Impaired	Male -	1	2	4.5
		Female -	1		
	Visually impaired	Male -	23	35	79.9
		Female -	12		
2. Age	15-17			6	13.6
	18-20			28	63.6
	21-23			8	18.4
	24-26			2	4.5
Grade	11			27	
	12			17	
3. Living Condition	- living with parents			15	34
	- living alone			13	29.5
	- living with others			15	34
	- No response			1	2.3
4. Monthly Income	< 150			9	20.9
	150-250			3	6.8
	250-500			2	4.8
	500-1000			2	4.8
	> 1000			2	4.8
	No response			25	56.8
Training taken in special needs	Mobility only			1	29%
	Braille only			25	71.5%
	Mobility & Braille			9	25.7%
	Sign language			2	100%
	Lip reading			-	-

**Table 3. Background information of teachers**

			N <sub>o.</sub>	%
1	Sex	M	14	82.9%
		F	3	17.6%
2	Qualification	Diploma	-	-
		Bachelor degree	16	94.1%
		Master degree	1	5.9%
3	Year of service	1-5	-	-
		6-10	-	-
		11-15	1	5.9%
		16-20 > 20	16	94.1%
4	Grades Teaching	11	5	52.9%
		12	3	17.6 %
		11 and 12	9	64.3%
5	Opinion on inclusion	Strongly agree	5	29.4%
		Agree	8	47%
		Disagree	2	11.8%
		Strongly disagree	2	11.8%
6	Training on methodology for teaching disabled student	Not trained	16	94.9%
		Trained	1	1%

From the table of background information for disabled student, it can be observed that the number of hearing impaired students is low. Only two students out of 44 disabled students were deaf. When the hearing impaired students are mainstreamed, these students need sign language interpreters in the class room as well as supplementary resource assistance. The response of the hearing impaired students to the open ended question; "What problems do you face during the teaching-learning process in the

class? Appears to confirm this problem. They stated that, they can't hear what the teacher speaks; they prefer writing from the blackboard to listening to their teacher. Teachers seem not to understand their problem. They complained that teachers do not write on the black board. Teachers, including the guidance and counselors and the principal of the school where the two hearing impaired students are found, also had explained, that these students have big communication problem. They learn in a class where there is no interpreter. These students have taken training in sign language, but the teachers do not have the knowledge of sign language.

The hearing impaired students also had reported that because their peers do not know sign language, they could not communicate with their peers. Hence the students seem to align them. Their communication problem seems to adversely affect their social as well as educational activities. Regarding the physically impaired students in the sample schools, they were mostly integrated in Addis Ketema S.S.S. They constituted 85.6% of the sample. Only one student (14%) was integrated in Menillik S.S.S. Some 71% of the physically impaired students live with their parents. The rest 28.5% live with others which might include distant relatives. The income of 71.4% of these physically impaired students appear to be less than 150 birr per month. Their financial status seems to affect their education. This also was confirmed by the principal and the guidance and counselors of Addis Ketema S.S.S. They mentioned that some of the students were even supported by contribution of money from teachers. Being a disable compounded with financial shortage is really distressing. One can imagine what this amount of income would be used for. A student requires food, clothing, and educational materials in addition, being disabled he/she may require medical service and accommodations like leg brace, special shoe, and others. The visually impaired students constituted the highest number of disabled students in the preparatory schools. They comprised 79.9% of the disabled students. Considering the living condition of the visually impaired students, 10(28.5%) live with their parents, 13(37%) live alone and

22(62.9%) live with others (relatives). Regarding their income 25(71.4%) of the visually impaired students were not pleased to tell their income (they gave no response). 4(11.4%) of the visually impaired students have income less than 150 birr per month, 8.6% have income between 150-250 only 1(2.9%) have income 250-500, 1(2.9%) have income 500- 1000 and 1(2.9%) have income more than 1000 birr per month. The data indicate that most of the visually impaired students seem to be afflicted by financial problem. Concerning special trainings for the disabled students the data indicates that out of 35 visually impaired students 1 student (2.9%) has taken training on mobility only 25 students (71.5%) has taken training on Braille reading and writing and 9 students (25.7%) has taken training on both mobility and Braille.

People who are visually handicapped must develop a series of special skills. For children who are blind, learning to use Braille is a key skill for communicating with the sighted world( Kirk.A, 1986). Equally important is the skill to move about in their environment. Mobility forces dependence and can cause the greatest personality and social problems for visually impaired individuals. Students must learn to move about their environment independently and safely. This is why orientation and mobility have become part of the curriculum in all schools for blind. They need to avoid obstacles make turns in hallways, stop before they run into a door.

The number of visually impaired students who took mobility training is very low. Out of 35 visually impaired students only one (2.9%) has taken mobility training. This makes the visually impaired students dependent for moving from place to place. The background information of the teachers who teach the disabled students indicates that, the majority of them (94%) are bachelor degree holders and they are also well experienced (94%) with the experience of more than 20 years of service. They also have a strong positive attitude (76%) towards the students with the non disabled students in the regular class. 94% of these teachers did not take training on the methods of teaching disabled students. Modification of teaching method

according to the needs of specific disabilities is vital for the successful teaching of disabled students. But this data give a clue that the disabled students are not effectively instructed, although the teachers have many years of teaching experience.

More information on handicapping especially those of a physical or sensory nature along with details on matters such as checking hearing aids, lifting pupils in wheel chairs, and a better understanding of the educational implications of these conditions, along with an insight into the teaching that the pupils were receiving seems to be required by teachers.

**Table 4. Background information of principals, Guidance & counselor, Education bureau official and librarian**

No	Place of work	Duty/position	Sex	Qualification	Year of Service
1	Addis Ketema	Principal	M	MA	14
2	Addis Ketema	Guidance & counselor	M	BA	-
3	Addis Ketema	Librarian	M	Diploma	5
4	Yekatit 12	Principal	M	BA	>20
5	Yekatit 12	Guidance & counselor	M	BA in psychology	27
6	Yekatit 12	Librarian	M	Diploma in Lb	32
7	Menilik II	Principal	M	Bachelor of education	25
8	Menilik II	Guidance & councilor	F	BA in sociology	35
9	Menilik II	Librarian	F	Library science	10
10	Addis Ababa education bureau	Special needs department	M	Master in special needs.	>20

**Analysis and interpretation of the responses of disabled students to the questionnaire for students**

*Identification of the needs of disabled students and use of the appropriate teaching method by teachers*

To examine the basic question “Do teachers identify the needs of disabled students and use a teaching method that fits their needs? A questionnaire

containing 11 items was prepared. The subjects indicated their responses on a five point scale ranging from strongly agree to strongly disagree. Strongly agree was given 5 points and strongly disagree was given 1 point. The response uncertain was given 3 points. For the negatively worded items scores are given reversely i.e strongly disagree is given 5 points and strongly agree was given 1 point. The responses given by all the respondents (subjects) was added and divided to the number of subjects to get the mean. The average mean is 3. The mean scores are interpreted through out the text as follows.

Mean 4.00 and above    Very strong  
 “    3.5 to 3.99            Strong  
 “    3.00 to 3.49            Moderate  
 “    2.00 to 2.99            Low  
 “    1 to 1.99                Very low

**Table 5. Disabled Students’ Evaluation of teachers, their teaching method and support for disabled students.**

Item No	Description	mean
1	- Support and encouragement is given to disabled students from teachers to achieve good result.	3.27
2	- There is modification of instruction by teachers according to the needs and disabilities of the students.	2.2
3	- Support is given by teachers in the class room so that disabled students can follow their lesson appropriately, with out obstacle.	2.75
4	- Teachers use student’s responses to encourage or to bring others into the discussion.	3.9
5	- Attention is given for disabled students by teachers in checking homework, class work and other activities.	2.36

6	- Support and encouragement is given by teachers in the classroom so that disabled students can use aids like Braille, tape recorder, hearing aids etc.	2.29
7	- There is willingness of teachers to help disabled students personally by tutoring them separately.	2.5
8	- There is motivation of disabled students by a smile, a nod or gesture or rewarding words when they answer questions correctly.	3.3
9	- Effort is made by teachers to encourage cooperation and friendship among disabled students and the non-disabled students.	2.9
10	- Teachers explain lessons from simple to complex, step by step so that disabled students can catch up and understand.	2.8
11	- Effort is made by teachers to make non-disabled students understand the needs of disabled students and help them.	2.5
12	- Teachers help disabled students to get the right sitting position in the class.	3.25

The response given by the students for the 1<sup>st</sup> item support and encouragement given by teachers was moderate with an average scale of 3.27. Students with disabilities need support and encouragement in order to achieve the desired result. A teacher should never say, "I am here to teach my subject, and if pupils cannot or won't learn, that is their outlook (Moss G, 1995). Providing special support and encouragement enables disabled as well as non disabled students to feel that he/she is an important part of the whole group. Class rooms need to pull together and form a community. Such a community will teach children to share, to communicate one another and to join together and to overcome the

prejudice of those who do not believe that every one belongs. The teacher must be wise enough to identify students and their problems and approach them, communicate to them and encourage them. His encouragement develops a feeling of acceptance in the mind of the disabled student and gives him/her inner strength to achieve more. This effort by teachers seems to be average in the sample schools. Modification of instruction by teachers according to the needs and disabilities of the students was the second question. The response was low. (M=2.2). While a variety of techniques exist for adapting the learning environment to promote the optimal performance of mainstreamed students, the selection of an appropriate modification will depend on several factors, including the students' learning needs and the teachers' instructional styles (Salend, 1994). For instance, students with sensory disabilities have unique needs that teachers must address. For students with visual disabilities, teachers must emphasize presenting information orally; for students with hearing impairment, teacher must focus on the use of visual stimuli to provide meaningful instruction. This seems to be below average in the sample schools.

Disabled students' response to the item "support given by teachers in the class room, so that disabled students can follow their lesson appropriately with out obstacles" was also low (M=2.75). There are obstacles or barriers that hinder learning in the class room. Noise while the lesson is undergoing is an obstacle for visually impaired students. These students cannot use their sense of sight. Instead they use their sense of hearing, touch, taste and smell. If the classroom has noise of any kind it can be noise of ventilator, disturbance of the non disabled students, the disabled students cannot follow the lesson. On the other hand, disabled students with hearing impairment must be seated at a place where they can see the teacher easily so that they can lip-read and use their residual hearing. The desk of students with hearing impairment should be in a central position, about two rows from the front, where these students can have visual access to the teacher and other student's lips. Teachers also should consider lighting and

sense of hearing, touch, smell and even taste. Hence specialized materials such as Braille, audio aids, Talking Books have to be provided.

Some teachers do not allow the use of tape recorder. But it should be practiced by teachers as long as the materials are available. The problem here is in the sample schools, the students, because of financial constraint do not have tape recorder.

Teachers must also be willing to help disabled students individually by assigning them peer to take notes using carbon paper . Especially the hearing impaired students might miss information because they could not hear. Visually impaired students might also miss information when they are interrupted by noise or when the teacher simply writes on the blackboard with out verbally speaking the words. Hence they also need help from their peers(buddy). The sample schools seem to miss this point.

Motivating the children with a smile, a nod, or rewarding words when the disabled students answer questions correctly was the other item. Students spend much of their classroom time listening. An important aspect of listening to and following direction is paying attention. However because many mainstreamed students may have difficulty focusing their attention, teachers may have to use several strategies to get their attention such as physical gesture, verbal statements like "Listen carefully to what I say) help in motivating the students. The 8<sup>th</sup> item also has a mean response of 3.3 which is not far from the average. Hence it is moderate. The teachers of the sample schools seem to fall short of this activity. The 9<sup>th</sup> item which is about encouraging cooperation and friendship among disabled students and non-disabled students has a mean of 3.2, Which is moderate, Gearheart (1995) declares that teachers have the potential to greatly enhance or seriously limit their students' feelings of self worth, achievement, and behavior. That result in peer acceptance such as using praise social greetings, and affection to positively reinforce others, initiating social interaction at appropriate times, such as play ground time rather than doing seat work (Dodge, Coie, & Brakke, 1982 in Salend 1994). Explaining lessons from

teacher properly, with regard to this the teachers of the sample school appear to be at the average scale.

All the items are found alternating at the average between 3.43 and 2.2 indicating that there is a problem of identifying the needs of disabled students and modifying the teaching method according to their need.

This seems to be supported by student's response to the open ended question, "what problems do you face during the teaching-learning process?" The visually impaired students said that; some teachers forget that there are visually impaired students in the classroom, as a result they write on the blackboard but do not teach us orally/verbally. Some said, "I don't understand when teachers explain pictorially" some students said, because I have no Braille text I am unable to follow my teacher especially when the teacher writes on the black board without speaking orally. Others said "enough time is not given for us during the time of examination" and tests. Some said "Disturbance in the class hinders me not to follow the lesson. All these responses from the questionnaire and the open ended questions appears to give a clue that teachers' system of identifying and discerning disabilities and using the appropriate method to teach is between average and below average.

#### *Provision of equipments and facilities by the schools*

This part was the second major question of the research. Pupils with special educational needs almost always require additional accommodation. Children with special needs show greater variation in a class than other children in age, ability, home and social background, patterns of interest duration of attention to a task and degree of individual attention from the teacher. To meet these needs the teacher must have a greater variety of teaching material than normally necessary. The following questionnaire was prepared aiming at answering the above questions. In addition to this, interview was conducted with the school principal and with the concerned regional education bureau authority to supplement the information. The result was as follows.

programme. This leads us to the assumption that, they would make effort to supply materials and equipment for the disabled. The second item was "effort is made by the school administrators to provide the appropriate educational materials for disabled students such as text book, Braille, etc." The mean for the students' response was low (2.59). This indicate that although, the administrators seems to accept the philosophy of integration they do not appear to supply the necessary materials and equipments for the disabled students. Items 15,16, and 18 also have low means (mean 2,9,1,7 and 3.1). They are all below average mean. The effort to organize the library according to their need also is moderate. This value appeared to be higher because in the school where the majority of the subjects are found the school has tried to prepare a separate reading room for the visually impaired. But the open ended question item indicates that the library lacks much to be done to fulfill its service. Besides these, from what the researcher has observed all the libraries in the sample school do not have Braille texts for grade 11 and 12. The libraries of Menilik and Yekatit 12 are within very old buildings their floor is wooden & produce sound when students walk and both libraries are dim lighted because their ceilings are very high. The reading room of Menilik school was at the inner room of the main library. The disabled students have to pass, across the main library to get there, which is a problem for them. The Braille texts in both libraries are very outdated & disorganized. These libraries do not have assistant librarian who can read Braille, and organize the Braille. Students complain that they lose much time in searching the Braille texts they want to read. Further more, the main library in Yekatit 12 School is found upstairs at the 1<sup>st</sup> floor of an old building which is by itself a problem for disabled students to climb up. As regards encouragement of cooperation and friendship among disabled and non disabled students, the interview to the school principals & guidance officers attest that effort seems to be made to create much awareness about disability among the school community. The sample schools especially Menilk II and Yekatit 12 tried to give orientation about

disabilities for the non disabled only at the beginning of the year when the schools opened. The open- ended question for the disabled students also indicated that students do not show the willingness to cooperate with them and help them.

*Physical and environmental problems that disabled Students face hindering their learning process.*

The third major question of the research was what environmental problems are faced by disabled students that hinder their education. The environment here doesn't include the social environment. It refers to the physical environment. To asses the relevance of the environment, three items were developed. Disabled students were asked to rate these statements. The result are presented in the table 6.

**Table 7. Responses of students showing their attitude towards the physical environment**

Item No	Description	Mean
19	The location of service quarters like the library, cafeteria, the staffroom is accessible...	3.18
20	The lavatories have hand rails and entrances to gates and classes have ramps.	2.7
21	Paths within the school have no obstacle	3.95

As regards the problems posed by the physical environment, one of the statements used as indicator was the location of service quarters. The students' responses to this indicator are moderate. This seems that they have problems of getting the service areas easily. As Hegarty et al (1988) describes, this topic is important not merely because the physical appointments of the school are often critical to integration but because of the links between the physical environment of the school and the educational needs it is to serve. Architectural features do not on their own

determine what the school can do, but they have an influence on it, not least where people with special needs are concerned. Many special schools have the benefit of purpose built accommodation. The absence of which in the ordinary school is sometimes seen as presenting insuperable difficulties to integration. The second statement (item 20) also has a mean value below average. As also attested by observation the sample schools except Addis Ketema secondary school have latrines which are very difficult for physically disabled students to use. They have no hand rail for the disabled students to support themselves. The seats of the latrines also need to be modified. As the researcher observed the entrances to the school of Menilik II have many stages, physically impaired students have to go circular road to get to their classes. Not only Menilik, but also Yekatit 12 School in like manner does not have ramps at the gates.

As the researcher observed, let alone the old buildings of the schools, the new buildings which are multi storied do not take in to considerations, the problems of the disabled students. They all do not have ramps, lifts etc. The paths within the school also got a response with a mean value below average or low grade by the disabled students. Their responses to the open ended questions also confirm that the paths are ragged. Especially during rainy times, they suggested that pits store water and they are troubled wading in to water.

*The relationship of disabled students with the non disabled students.*

**Table 8. Disabled students' response showing their relationship with the non disabled students**

Item No	Description	Mean
22	I am not pleased to learn with the non disabled students	4.5
23	I have a problem to make fellowship and to create social interaction with my peers	3.8
24	I participate in extracurricular activities	3.3

25	Non disabled students suggest that disabled students should never learn with non disabled students in the regular classroom	4.8
26	Non disabled students think that disabled students need support, we should help them.	3.3

Disabled students appear to be pleased to learn with non disabled students because their responses to the 22<sup>nd</sup> item is very high.. The 23<sup>rd</sup> item indicate that non disabled students seem to no problem in making friends and fellowship with their peers Teachers also need to create opportunities for both disabled and non disabled students for creating friendship. A desired out come of mainstreaming is the development of friendship and peer support (Stainback, Stainback & Wilkinson 1992 in Salend, 1994). Because mainstreamed students may have limited few friends and limited peer support (Gottlieb & Leyser, 1981) teachers and parents need to encourage the development of friends and peer support system for mainstreamed students who are isolated in their regular education classroom (Perske & Perske, 1988, Strully & Strully, 1989 Cited in Salend, 1994), non disabled students have moderate participation in extracurricular activities /3.3/.As perceived by students with disabilities, non disabled student have very strong positive attitude towards integration /M= 4.8/. But their support to the disabled students is moderate /M= 3.3/. As mentioned above they seem to need support to develop and enhance the skill of creating friendship.

*Support given by guidance and counseling service.*

This part tries to asses, the service delivered to disabled students by guidance and counselors. As stated in Deighton, (1971), the task of guidance and councilors includes, counseling students to improve their self understanding, self acceptance, self confidence, personal decision making & personal problem solving, serving as a consultant to parents, administrative and teaching staff. The following statements are constructed to asses

student's perception towards the guidance and counselors related to the achievement of their tasks.

**Table 9. Students' attitude towards guidance counselors and their task.**

Item No	Description	Mean
27	Support is given by guidance and counseling service to enable disabled students develop self confidence and self esteem	3.13
28	Support is given by guidance and counselors to enable students get the service quarters within the school such as offices, libraries etc.	2.9
29	Effort is made by guidance and counselors to understand the personal problems of each disabled students.	2.8
30	Effort is made by the guidance and counselors to create cooperation with the administration and parents of the disabled students to solve their problems.	2.5
31	Effort is made by guidance and counselors to inform the disabilities of students to the regular class teachers, so that they may know the students specific problems and help them accordingly.	2.8
32	My disability does not prevent me from doing any thing	4.2
33	I have a feeling of depression because of my disability.	3.9
34	I have much psychological problem because of my denial to accept my disability	4.1

As the response of the students point out the support by guidance and counseling service given for disabled students to develop their self confidence & self esteem is moderate (3.13). This implies that, their service seems lacking this is supported by the responses of the disabled students to the questionnaires about their activities. The 28<sup>th</sup>, 29<sup>th</sup>, 30<sup>th</sup> and 31<sup>st</sup> items

have all means less than the average mean i.e. (2.9, 2.8, 2.5 and 2.8 respectively).

This means that their provision of support to the disabled students is low. The guidance and counselors are responsible for acquainting the newly mainstreamed disabled student with curriculum resources of the school such as the library, store room, laboratories, classrooms etc. Otherwise, the students will be frustrated. The 30<sup>th</sup> item also gained a mean below the average. The guidance and counselors effort to create cooperation with administration, parents & teacher is low. It is obvious that mainstreaming is a collaborative effort. Successful mainstreaming depends on an ongoing process of good communication and cooperation (Hundert,1982 cited in Salend,1994). Research suggests that the success of mainstreaming is often dependant on the quality of communications and support among educators, other professionals, and parents (Millet & Masabatino,1978 in Salend,1994). The guidance and counselors in this regard are expected to play a greater role to facilitate the cooperation. Disabled students need to be more confident to approach the guidance and counselors than any other personnel. The guidance and counselors need to become facilitators and connect teachers to disabled students. Teachers must be informed more about disabled students from the guidance and counselors. They must know the nature of their disability so that they can individually support the disabled children. The disabled students' responses for item 33 are above average that is they strongly disagreed. This seems to indicate that they are morally strong and matured. It seems that they have developed self confidence. Hegarty et.al (1988) describes the development of self confidence to be affected in various ways by pupils' presence in the ordinary school. Some physically handicapped teenagers derived confidence from the sheer fact of being in an ordinary school. "Here you are part of the world". They had not been totally cut off in special school and indeed appreciated the opportunities created there to enable them enter the mainstream of society. Here they were part of the mainstream and there was less need for them to

feel different in special school they feel as they are handicapped persons, but here they fear that they are persons with handicap.

**Table 10. Attitude of the regular teachers towards the disabled students.**

35	Teachers think that disabled students should not learn in the regular classroom with the non-disabled students.	3.9
36	Teachers think that disabled students need support from their peers and teachers	3.9

As perceived by the students the attitude of teachers to the philosophy that disabled students should not learn with the non-disabled students is positive. Students strongly disagree with the 35<sup>th</sup> item. The mean value of students' perception to the perception of teachers that disabled students should not learn with the non-disabled students is strong (3.9). The second item is a negative attitude. The statement that states, "Teachers think that disabled students need support from their peers and teachers imply that the disabled students are weak, they can't stand and do things by themselves. This implies that they always need the help of others. This leads teachers and the non-disabled students to over-protect the disabled students. This inhibits the development of self confidence and independence. As stated in Hegarty et.al, 1988, "Too high a level of supervision and support was detrimental and prevented pupils from growing independence. In one case this was felt to be a marked contrast with the special school which the pupils had attended previously where "there is a very dependent atmosphere... The opportunity to act independently, to run risks and make mistakes, to explore the world about them and their own capacities in relation to it, is essential part of growing up for all children. It is no less important for those who have special needs. In some ways it may be more important since particular disabilities such as vision impairment or lack of mobility may restrict the scope for independent action. The response of students, to the statement; teachers think that disabled students need

support from their peers and teachers is low (2.6). This means that they have a positive attitude towards the disabled students. Even though, in some instances we have to help them, they need to be left free so that they could develop independence.

*Performance of disabled students when compared with the non disabled students*

The performance of the disabled students has been compared to the performance of the non disabled students by using their ranks. The researcher chose their rank for comparison because he believed that the rank represent the cumulative result of the students. The performance measure relate to achievement in the content areas, (Wang Anderson, and Brain, 1985 in Salend 1994). This doesn't include the attitude measure. Here the researcher chose Menilik II and Yekatit 12 for comparison of their performance, because the field of study of the disabled students and their disability is the same i.e. social science. The physically impaired students in Addis Ketema secondary school were studying some natural science and some social science. Hence, thinking that this may affect the comparison they are excluded. The ranks of the students are tabulated in the following table.

**Table 11. Rank of students learning in Yekatit 12 and Menilik II secondary School**

School Name	Total N <sup>o</sup> . of students in grades 11 and 12	Number of disabled students in both grades	Ranks of the students		
			1 <sup>st</sup> -5 <sup>th</sup>	6 <sup>th</sup> - 10 <sup>th</sup>	>10
Yekatit 12	1006	18	5	6	-
Menilik II	653	28	13	2	-
Grand total	1653	38	18	8	-

The total number of students of the two high schools who learn in the preparatory schools including the disabled students is 1653. The number of

non disabled students in the two high schools will be  $1653-38= 1615$ . Taking the average number of students in a section as 55, there will be a total number of 30 sections (this includes the disabled students). A total of 300 students including the disabled will have rank of 1<sup>st</sup> -10<sup>th</sup>. Excluding the disabled students ( $300- (18+11)$ ), a total of 271 non disabled student have a rank 1<sup>st</sup> to 10<sup>th</sup>. This makes 16.8% of the non disabled students, who stand 1<sup>st</sup> to 10<sup>th</sup> when we come to the disabled students, a total of 38 students are found in the two schools). Out of the 38 students  $18+11= (29)$  students have a rank between 1<sup>st</sup> to 10<sup>th</sup>. This make 76% of the disabled students who have a rank between 1<sup>st</sup> to 10<sup>th</sup>. The rest 24% have rank above 10. This is a very high performance. The grading system in the schools is the traditional system where by students are compared and assigned numerical grades based on their performance on tests. The disabled students have to compete with the non disabled students. The difference is, the disabled students specially the visually impaired do not take mathematics and physical education. However despite all the shortcomings of the teaching method, provision of materials, and the examination system, they perform very well. This seems to be attributed to their effort and strive to pursue and achieve better life. The researcher believes that it is not the quality of education they are provided with, that contributed to this achievement but rather their personal effort.

#### 4.2 Analysis and interpretation of class room observation

**Table 12. Table showing the result of class room observation**

Grade & section	11A		11B		11C		Total count
	3/04/07		11/04/07		17/04/07		
Date	G1	H1	G2,	H2	G1	H1	
Subject & teacher							
Item A	X	X	X	X	X	X	6X
" B	X	X	X	X	X	X	6X
" C	X	X	X	X	X	X	6X
" D	✓	X	✓	✓	X	✓	4✓
" E	X	X	X	X	X	X	6X
" F	✓	✓	✓	✓	✓	✓	6✓
" G	✓	✓	X	X	✓	✓	4✓
" H	X	X	X	X	X	X	6X

“	I	X	X	X	X	X	X	6X
“	J	-	-	-	X	-	-	✓X
“	K	X	X	✓	✓	✓	✓	4✓
“	L	-	-	-	X	-	-	X
“	M	✓	✓	X	X	X	X	4X
“	N	X	✓	✓	✓	✓	✓	5✓
“	O	✓	X	X	✓	✓	X	3X
“	P	X	X	X	X	X	X	6X
“	Q	X	X	X	X	X	X	6X
“	R	✓	✓	✓	✓	X	X	4✓
“	S	X	X	X	X	X	X	6X

Key X = No/unseen

✓ = Yes/ seen

G1= Geography teacher 1

G2= Geography teacher No 2

H1=History teacher No 1

H2= History teacher No 2

Dates= in Gregorian calendar

### **Analysis and interpretation of classroom observation**

As it was mentioned in the methodology section, four teachers of Menilik II General & Preparatory School were continuously observed. The teachers observed were two geography and two history teachers. The result of the observation is depicted in the table above. As the observation check list indicates, the desks the students sat on were not conducive for writing on Braille, because the desk tops were narrow and three students were seated on one desk. The class rooms were filled with desks. As a result, it seems teachers can not group students for group work or group discussions. The structure of the desks was not safe for grouping, in numbers more than three in one. More over, the number of students in the classes was not manageable for the teacher to check assignments, home works and to help disabled students individually within the very limited duration of time. Visually impaired students were not using Braille text, they were rather listening quietly. They were trying to answer questions when the teacher ask

them. The hearing impaired students were trying to copy what was written on the black board during the discussion time. The teachers were using lecture method but in the midst of the lecture they were asking questions. Some teacher tried to write some points on the black board but most teachers don't write on the black board what they speak .It must be noted that both writing on the blackboard and speaking what is written is necessary for teaching hearing and visually impaired students. What was encouraging was in most of the classes there was silence. Silence is very important for the visually as well as for the hearing impaired students in order to follow their lesson attentively. Most disabled students were seated one or two seats at the back of the first seat which was conducive for the disabled students. The hearing impaired students were not using hearing aids. Teachers were not observed using audiovisual aids. Teachers were not observed calling the names of the disabled most of the time. Buddies were not assigned by the teachers, which should be practiced by all. All the teachers did not take the disabled students into consideration while they were teaching. They were rushing just to complete their lesson only.

#### **4.3 Analysis and Interpretation of the Interview with the school principal, Guidance and counselors & the education bureau official**

The student researcher made unstructured interview with the principals, the guidance & counselors, the librarians and an official from region 14 education bureau who is responsible for special needs education programme of the region, to get additional information about the educational condition of disabled students. The interview focused on how disabled students are assigned (placed) in the different preparatory schools of Addis Ababa, the budget allocation, the material provision, how authorities follow up these students, the role of guidance and counselors and what they did so far, the library service, and disabled students current condition in these schools.

Concerning how they are assigned in the schools, all the school directors said that the students are assigned to their school by their own choice.

Especially the Addis ketema principal said that; when they come and apply to register, I always accept them warmly. The other reason may be because the school is found at the center of the city, they can get transportation. In addition to this, in the school we try to simplify their problems by asking aid and support from NGOs such as Cheshire home. For instance we have modified the latrines for the disabled students. We have also made ramps at some sites of the school in collaboration with Cheshire home. He also reported that no budget is allocated for this specific purpose. We try to simplify their problem by coordinating teachers (fund raising) and the NGOs. What problems, do you think, are there at the moment? He answered there are students who could not get crutches and special shoes. The principal was also asked about whether there are higher offices that follow the issues of disabled students or not. He answered there is no authority who is really concerned with this issue. Regarding the budget all the other directors responded in the same way, no budget is allocated specially for the disabled students. The school principals were asked about their relation with parents of the disabled students. All the 3 principals responded that "the schools do not have any cooperation with parents regarding disabled students.

Concerning the educational material provision the directors of Menilik II & Yekatit 12 said that" there is no Braille text for the visually impaired students for grades 11 & 12. The Menilik's director also added that the hearing impaired students are troubled because there is no sign language interpreter in the class he suggested that the interpreter if available must be a person who knows the subject matter. Regarding how disabled students are assigned in different schools of A.A, the official of the education bureau responded by saying that, "disabled students are not assigned to these schools by the knowledge of the officials there, but rather by their own choice just like the other non disabled students. The office even do not know whether these students are disabled or not, because, the format for the choice of schools doesn't include disability form. Hence, when they are

assigned at schools of not their choice, they come and apply and their cases have been reconsidered again. Regarding, budget allocation the official said budget is allocated for grades below 11 but for grades 11& 12, there is no budget allocated. He said that, "the reason for this is that the problem was not taken as problem." Regarding the question; whether there are lower officials that closely follow up the cases of the disabled in the schools, he said, "currently, professionals in special needs who follow up this issue are being employed up to Kifle ketama level". The education bureau official was also asked about what the future plan of the bureau will be? He answered that; one of the main duty of the office will be preparing Braille text for grades 11 & 12. Concerning the hearing impaired students, he said "employing teachers who have the knowledge of sign language for all subjects will be very difficult. Besides this, the number of hearing impaired students in the preparatory schools is very small. In addition the vocabularies of sign language are very limited hence it is impossible to interpret all the technical words in sign language. Furthermore, the question of educational problems of disabled students in the preparatory schools has not been considered as problem, and no one has so far raised such kind of question. It is for the first time that this problem is raised. So we will think about it in the future, was his answer. From the interview conducted with the principals & the education bureau official, it seems that 11<sup>th</sup> and 12<sup>th</sup> grade disabled students do not get the necessary support from the concerned education officials. Special needs education is a high cost requiring programme. The financial constraint limits the educational provision for the disabled students because educational provision is directly connected to the finance. As to the guidance and counselors of the three schools, they were asked what the role of guidance and counselors is regarding disabled students. Counseling the disabled students on matters such as developing self confidence, self esteem, discussing the problems of the students with the administrative bodies and teachers, and helping, supporting and guiding the students in every matter was their response.

The disabled students have to be more close to the guidance and counselors than any other body in the school. The Addis Ketema guidance and counselor reported that, concerning disabled students our responsibility includes dealing with the office and assigning them in suitable classes at the beginning of the academic year is one of our duties. We also deal with teachers concerning the problems disabled students encounter with them and settle their problems. We try to assign the students at a suitable place during examination. He also stated that, “we encourage them to organize themselves. A question was asked to tell what the major problems in the school are? He answered some students have wound which requires treatment, otherwise it produces some sort of bad smell in the class. There is no clinic for this type of problem. They do not get crutches, artificial shoes etc. In answering the question: do teachers help the disabled students? He said; yes they help them. They even are supporting some disabled students by contribution. The guidance and counselor of Menilik II responded to the question; what help do you give for the disabled? She said during the time of placement they come and contact us in search of assistance. In collaboration with one visually impaired teacher, we teach them how to use Braille. We write letters to the organizations that support them when they are asked to bring evidence that they are learning on the due time. We also deal with teachers to settle some disagreements with them. Concerning their social interaction with their peers she said, “Those disabled students who have been learning here beginning from 9<sup>th</sup> grade do not have problem of interaction. But those who come from other places and join grade 11 have problem. Regarding the problems currently faced by disabled students she said that “Unavailability of Braille text is one of the crucial problems for grade 11 & 12. Further more she said teachers are not willing to teach the hearing impaired students. When they are assigned in classes where these students are found they become annoyed. She also said that the teachers who teach the disabled are not trained in teaching students with disability. The guidance and counselor of Yekatit 12 responded to the question; what

did the guidance and counseling service do to help disabled students? He responded, "We have prepared a reading room for the blind". We help visually impaired students to take examination in Braille and we translate it is English for teachers to check it in collaboration with visually impaired teachers. The problem they have currently is the absence of Braille text for grades 11 & 12 students. Further more we brought outdated Braille from central library; we helped them to learn Braille writing. Concerning the relationship between disabled & non disabled students' he said, "there are some disabled students who interact with the non disabled students while some do not". This depends on the approach of the disabled students. He also stated that, "the non disabled students are ready to help them; the researcher further asked him, "How do you help them to make fellowship with the new comer disabled students? He said we give orientation for the non-disabled students about disabled students at the beginning of the year. When we come to the interview with the librarians, the library of Addis Ketema S.S.S is a bit spacious and it has class for the physically impaired students. The librarian has said that the physically impaired students are given priority in getting books. They are not required to take turn with the non disabled students. He also said that the library has steps at its gate but now a ramp is made for wheel chair users. Concerning the availability of reference books, he said "the physically impaired students use the same reference as the non disabled, so there is no shortage of books. He also suggested that, it would be preferable if a room wider than this is prepared for the disabled students. The library of Menilik School as observed by the investigator is a bit narrow and with wooden floor. The room for visually impaired students is found at an inner room of the main library. They have to cross the main library to get there. The librarian said visually impaired students of grade 11 and 12 do not have text books in Braille. She also said that the Braille references on the shelf are disordered because; there is no assistant librarian who can read Braille. The hearing impaired students use the same text as the non disabled students. The library has a very long

ceiling and the light is dim. The Yekatit 12 library is found on the 1<sup>st</sup> floor of an old building. It has a wooden floor that produces sound when students walk on it. The library is not safe for physically impaired students, because it is found upstairs. The ceiling is very long and the light is not sufficient for reading. The librarian reported that, “visually impaired students do not use the library because; reading room is prepared for them. But, the reading room is a bit small. The Braille references placed in the library are few. Grade 11 and 12 students do not have student text in Braille. There was no one responsible for the materials in the library. From the interview it can be observed that, there seems to be

- Less concern for disabled students from authorities
- Absence of material provision by the concerned bodies.
- Insufficient library service
- Less effort by guidance & counselors to alleviate their social problem.
- Less effort by school principal to cooperate with NGO’s and others to alleviate their problem.

#### **4.4 Analysis & interpretation of teachers’ responses.**

For the analysis of the responses of teachers to the following questionnaire, the same grading as that of the students is used. The questionnaires administered are the following.

**Table13. Teachers’ perception on the educational problems of disabled students**

Item No	Description	Mean
1	Teachers perception on the effect of high number of students as barrier for helping students individually	4.3
2	Noise condition in the class as a barrier to teach in the class	3.7
3	The classroom condition doesn’t allow disabled students to sit and move with wheelchairs	4.1
4	Getting resources like overhead projector, video recorder etc is a problem	4.2
5	Accepting the fact that children learn at different rate and applying this truth in the teaching learning process is a problem	3.1
6	Treating the disabled student equally with the non disabled student is impossible.	2.9

7	Participation of disabled students during the teaching learning process	2.5
8	Participation of disabled students in extracurricular activities like clubs, field trips is minimal	3.8
9	location of service centers is inappropriate for disabled students	4.1
10	Location of the school, its access for transportations the traffic problem is challenging	3.8
11	The architecture of the building, the corridors, absence of lifts, space in the classroom is in appropriate for disabled students.	4.2
12	Getting sympathetic peers is difficult	3.8
13	Knowing the personal problem of disabled student and helping them individually is difficult, because of lack of information about them	3.00
14	Giving extra time for examination helping them individually is difficult for teachers.	3.1
15	There is problem of disabled students in developing self esteem and self confidence.	3.00
16	Disabled students do not get sufficient guidance and counseling service	2.8
17	There is lack of attention given by authorities regarding the issue of disabled students.	3.7
18	Disabled student lack skills in creating social interaction with non disabled peers.	2.8

The means of most of the above items lie below moderate. This seems to indicate that the education of the disabled students is adversely affected. The mean values which are all below moderate seem to match with the means of the students' responses which gives extra evidence to the existence of the problems. Teachers reason out that they are unable to help disabled students because the number of students in the class is high. They also lack teaching aids like audiovisual. The participation of disabled students during the teaching-learning process is high. This seems to indicate their enthusiasm to learn, but their disabilities seem to hinder their participation in extracurricular activities. Teachers also need to be informed about disabled students and their problems so that they may help them. This should be the task of guidance and counselors. The inappropriateness of location of service centers the architecture of the building, the space in the classroom, are all given a value below the average. This becomes extra evidence to the response by the students. The perception of teachers that guidance and counseling service is insufficient matches with the perception

of the disabled students. Lack of attention given by authorities also matches with the interview to the principals and the education bureau.

#### **4.5 Responses to the open- ended questions**

The responses to the open ended questions by the students and teachers are presented below. Redundant opinions are summarized in one statement.

The open ended questions focused on,

1. What problems do you face during the teaching learning process in the class room? The response by the physically impaired students was generally; we face not much problem

The visually impaired students responded as;

- Some teachers do not explain what they write on the black board verbally, they usually forget that there are visually impaired students in the class.
- Some teachers use pictorial description which is difficult for us to understand.
- We are not assessed continuously as our sighted classmates are assessed.
- Some teachers use demoralizing words against us
- I get no one who is willing to help me, so I simply pass what I do not understand in the class.
- No one gives attention for me, so I follow my lessons just like the non disabled students. Teachers and administrations need to give attention for us.
- Because I have no Braille text in my hands I can not follow my teachers, especially when they write on the blackboard silently, we need to record what the teacher teach. Tape recorder should be provided.
- Not enough time is given for us during the time of examination and tests.
- Disturbance in the class and pictorial explanation by the teacher are my problems.

- No text is given for us.
- I have a shortage of Braille paper

The hearing impaired students reported that, teachers teach only the hearing students. They do not write on the black board. Because I can't hear I don't understand what I learn easily. The lessons have to be given by teachers who have the knowledge of sign language.

2. What problems do you face with your peers during your social interaction? This was the second question .A physically impaired students responded, some students encourage me, some others tease me

The hearing impaired students responded:

- I have a problem of communication with my peers.

The physically disabled students:

- Some students think that all people with motor disability have cognitive problem.
- They insult disabled students.
- People do not want to make me their friend.

Visually impaired students:

- Student do not allow me to participate in their discussion
- After I create intimacy with the sighted peers, I worry fearing that, what, If might have displeased them? We don't have the opportunity to create fellowship with the sighted people, because we do not participate in activities like watching films together, playing football etc.

3. What are the shortcomings of the guidance and counseling service? This was the third question.

- Most students do not have a positive attitude towards us so the guidance and counseling office need to work much to create awareness about disability within the students.
- Orientation about disabled students should be given not only at the beginning of the year but through out the year.

4. What problems do you face concerning the physical structure of the buildings, the roads etc? The physically impaired students responded

- Since I have motor problem I am unable to climb up the long stairs of the buildings
- Our staff room is up at the first floor, so I can not meet my teachers, during recess time.
- Lavatories are not safe to use, they need to be modified.

The Visually impaired students responded as

- There is big problem. The paths are ragged, not safe
- There are pits on the paths that store water, there are poles, As a result we are always late for school.
- The library is at the 1<sup>st</sup> floor so it is difficult to climb up
- The latrines, the classes and the library are far apart from one another.

5. What are the short comings of the library?

- There is no Braille text for grade 11 & 12
- Menilik's library is old and not clean
- The library for visually impaired students in Minilik School is at the inner room, so we have to pass across the main library to get to the library for visually impaired students.

## CHAPTER FIVE

### SUMMARY, CONCLUSION AND RECOMMENDATION

#### 5.1. Summary

After the conception of the thought that disabled students learning in the preparatory schools of Addis Ababa faces many educational problems, the researcher formulated seven basic questions in order to examine these problems. Three preparatory schools were then selected which were believed to accommodate more disabled students. Accordingly disabilities which are believed to be more observable were chosen. The researcher chose visually impaired, hearing impaired and physically impaired students as the subjects of his study. Seven physically impaired students, thirty five visually impaired and two hearing impaired students, a total of forty four disabled students were selected from the sample schools. Data was collected using multiple data collecting tools that comprises likert type questionnaire, observation and interview. The data was then analyzed qualitatively. The examination of the data revealed different results which are summarized as follows. Beginning from the background information: It is found out that the number of hearing impaired students were very much insignificant when compared to the other disabilities. The result matched with the theoretical back ground which states that mainstreaming deaf high school students successfully is difficult because they are often several grade levels behind their age mates in achievements (Kirk, 1962). It has been found out that the income of the physically impaired students is less than 150 birr per months. This was also testified by the response of the principles & the guidance and counselors to an unstructured interview. Concerning the first research question, it is found out that disabled students have problems with the teachers who teach them. Some of the problems are:

- Teachers do not support and encourage them as they should
- Teachers do not modify their methods of instruction according to the needs and disabilities of the students.

- Teachers do not try to remove barriers of learning in the class which prevent disabled students to follow their lessons appropriately such as sound.
- Teachers do not use students' responses in order to bring others into the discussion.
- Teachers do not give more attention to disabled students in checking home works, class works, and other activities.
- Teachers do not use the necessary teaching aids such as audiovisuals, models, tape recorders etc.
- Teachers do not show self initiated willingness to help disabled students personally.
- Teachers' effort to create friendship among disabled and non disabled students is low.
- Teachers do not take into consideration, the disabilities of students when explaining lessons.
- The number of students in class is high that teachers become unable to help students individually.
- The result of the second major question, "provisions of equipment and facilities by the school have been low".
- Appropriate educational materials like Braille texts Braille papers slates & stylus are not provided.
- Sign language interpreters for hearing impaired students are not available.
- Barriers and obstacles that prevent movement are not properly removed.
- No effort is made by the schools to create conducive condition for transportation.
- The effort made to organize the library and furnish it is low.
- Effort made by the school to create fellowship and friendship among disabled & non disabled students is low.

The result of scrutinizing the data concerning the problems faced by disabled students with their physical environment is summarized as follows.

- The locations of service quarters like the libraries, the staffrooms, and the cafeteria are not conducive and appropriate for disabled students.
- Lavatories are not modified for use by disabled students like the physically impaired.
- There are no hand rails, and ramps where necessary.
- Paths with in the schools have obstacles for wheel chair users & blind students.

Examination of the data collected concerning the relationship of disabled students with the non disabled students, is found out that:

- The disabled students are highly interested in learning with the non disabled students, in the same way it is found out that the non disabled students do not have a negative attitude towards the integration of disabled students. However the disabled students admit that they have problem in making fellowship and to create social interaction with their non disabled peers.
- It is also found out that the participation of disabled students in extra curricular activities is moderate.
- Non disabled students' support to disabled students also is moderate.

The examination of the data collected concerning guidance and counseling service reveals the following findings.

- The supports given by guidance and counselors to enable disabled students develop self confidence and self esteem is low.
- The support made by guidance and counselors to acquaint the new disabled students with the service quarters within the school is found out to be low.
- Their effort to understand the personal problems of the disabled students so that they might give the necessary support is found out to be low.

- The guidance and counselors do not try to make cooperation among parents and school administrator including teachers to solve the problems of disabled students cooperatively.
- Guidance and counselors do not have much effort to inform the disabilities and the needs of the disabled children to the classroom teacher, this is related to their low level of effort to understand the personal problems of the disabled students.
- The data revealed that the disabled students show self confidence in doing things. It is also found out that they claim to be morally strong and matured.
- The research result also revealed that the performance of disabled students is very well.
- From the interview made with the principals and from the open ended questionnaire for teachers it is found out that there is insufficient attention given by education officials for disabled students.
- From the interviews with the guidance and counselors, principals and from the responses of the hearing impaired students to the open ended questionnaire, it is found out that there is no sign language interpreter for the hearing impaired students.
- The interview to the guidance and counselors also revealed that teachers are not willing to teach hearing impaired students.
- The interview with the principals, the background information of teachers revealed that the teachers of the disabled students of the three high schools are not trained in teaching disabled students.

The questionnaire, the open ended questions for the disabled students and the interviews with guidance and counselors revealed that most disabled students do not have cooperation with non disabled students, especially the hearing impaired and the visually impaired students reported that students are not pleased to make them their friends.

## 5.2. Conclusions

Beginning from the inception of this study, it has been attempted to find answers to seven basic research questions already stated in unit one. Based on the result of the study, it can be concluded disabled students learning in the preparatory schools are not given the privilege to benefit from what the education policy and the law claim to provide.

- 1) The education catered for disabled students is not appropriate, because according to the research finding teachers do not use the appropriate teaching methods. They do not understand the specific problems of the disabled students. Hence they are unable to treat each student according to their problems. This was also supported by the response of the students to the open-ended questions, and the interviews to the guidance and counselors. Both the hearing impaired and visually impaired students complained that, teachers cannot understand our problems. This has an implication, that they do not use the proper method of teaching and assessment.
- 2) The material provision delivered for disabled students in the preparatory schools is almost none. Budget is not allocated for fulfilling materials for the disabled students. The disabled student in grades 11 and 12 do not get teaching aids like text books, tape recorders etc. Authorities do not show concern for the disabled students in the preparatory schools. Budgets are allocated for disabled students at lower grades only. Even support teachers like sign language interpreters are not available. Braille text for visually impaired is not prepared.
- 3) The service rendered by guidance and counselors is low. The guidance and counselors ought to have to help students develop independence, self esteem and confidence but the finding doesn't confirm that they are doing well. Their effort to create awareness among the non-disabled students on how to make friends is also low.
- 4) It can also be concluded that the cooperation between disabled and non-disabled students is weak. Non-disabled students do not help the

disabled. It seems that it is not because non-disabled students do not like to help them, but according to the study it is because of lack of the skill in making friendship.

- 5) Teachers are found to have a positive attitude towards the integration of disabled students. But they lack the knowledge about how to teach disabled students. They are found complaining that the number of students in the class, the absence of interpreters who reads sign language for the hearing impaired, and lack of teaching materials like Braille text has made teaching disabled students challenging.
- 6) Based on the research result concerning the physical environment that challenges the education of the disabled student it can be concluded that.

- Buildings are not conducive or safe for accommodating disabled students. For instance the new buildings do not take into consideration the problems of disabled students. There are no ramps, no bridges over ditches, no hand rails in the latrines, and latrines are not modified for use for physically disabled students. The paths with in the school are ragged, there are poles, pits etc. The classes are not safe for disabled students, such as wheel chair users to maneuver within the class.
- Finally it is very important to note that clinic is necessary for disabled students like for those who use special shoes. There is no clinic in the high schools where the research has been conducted.

### **5.3. RECOMMENDATIONS**

#### *5.3.1. Measures to be taken by the government*

- 1) Even though policies and legislations are issued, there appears to be lack of clarity and specifications. Therefore there must be clearly stated guidelines to provide special education to children with different types of disabilities. Legislations, educational policies, and teacher training programme also need to be

progressively updated to realize integration as an education modality.

- 2) Regardless of the school, curriculum facilities, or other aspects of the setting, if the teacher is not qualified and skilled in teaching disabled students, and if he/she is not able to identify the needs of the disabled students, the students will not achieve as they should. Hence the teachers of the ordinary school need to receive special training in the form of workshop, summer programme or correspondence.
- 3) Experts, administrative staff and education bureaus at region or Kifle Ketama level should be more concerned with the education of these disabled students and play a significant role in improving, organizing and planning the learning environment of the disabled students in an integrated setting, especially the preparatory schools.
- 4) The concerned government officials must make an effort to fulfill the educational materials and alleviate the economic problems of the disabled students in collaboration with domestic and international non-governmental organizations.
- 5) The government has to allocate budget specifically for fulfilling the materials needed by disabled students.
- 6) The government must also allocate budget for health service i.e. Clinic is required in the schools where disabled students are mainstreamed.
- 7) When choosing a school for use to teach disabled students, the buildings, toilets and paths need to be modified.
- 8) New constructions should take the problems of disabled students in to consideration.

#### *5.3.2. Measures to be taken at school level*

- 1) The school should create awareness among the school community about the nature of disabled students. This would help regular

classroom teachers and students to perceive disabled students as persons with a potentiality to grow up.

- 2) The school should pay attention in getting an interpreter in the regular classroom.
- 3) The schools should adjust programme for continuous assessment of the disabled students in collaboration with the teachers.
- 4) The school should adjust programme for the teachers to share experience with other special schools.
- 5) The school must try to modify the paths, build bridges over ditches and construct ramps at places where there are stages. It also must try to modify latrines for uses by students with motor disability.
- 6) Schools also must set wider classes for disabled students, and fix black boards at a height suitable for wheel chair users.
- 7) Schools need to give refreshment courses for the guidance and counselors so that they can effectively counsel and guide disabled students.
- 8) Awareness creation for the non disabled student must not be once a year only. It must be progressive using posters, mini-media, and other means through out the year.

### *5.3.3. Measures to be taken by Teachers*

- 1) Equitable treatment of deaf students would be attained only if deaf students get their education using sign language as a medium of instruction. But if not available the teacher must use classmates (buddies) as helpers. Preferential seating can be a considerable assistance to facilitate deaf education.
- 2) Buddies also are used to assist visually impaired students in the absence of Braille text; the buddies can read what is written on the black board, when the teachers miss to speak it verbally.
- 3) Regular classroom teachers must also collaborate with special school teachers to meet the unique needs of the students.

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# APPENDIX I

**ADDIS ABABA UNIVERSITY**  
**SCHOOL OF GRADUATE STUDIES**  
**COLLEGE OF EDUCATION**  
**DEPARTMENT OF CURRICULUM AND TEACHERS PROFESSIONAL**  
**DEVELOPMENT STUDIES**  
**QUESTIONNAIRE TO BE FILLED BY STUDENTS**

This questionnaire is prepared to be filled by disabled students, learning in the regular classes of the preparatory schools in Addis Ababa.

The aim of the questionnaire is to collect data that will help to study problems faced by disabled students mainstreamed in the regular classes of the preparatory schools of Addis Ababa, and search solution for the problems. Your genuine cooperation is basic for the validity of the study. So I request your careful responses by putting the sign "v" in the box or by writing in the space provided.

1. Name of the school \_\_\_\_\_
2. Age \_\_\_\_\_ Sex \_\_\_\_\_ Grade \_\_\_\_\_
3. Your living condition
  - a)  Live with my parents
  - b)  I live alone
  - c)  With others, specify...  
.....
4. If you are living with your parents, how much is their monthly in Come?
  - a)  Below 150 birr
  - b)  150-250 birr
  - c)  250-500
  - d)  500-1000
  - e)  More than 1000
5. If you live alone, how do you earn your living?  
\_\_\_\_\_
6. Type of disability
  - a)  Visual disability
  - b)  Hearing disability
  - c)  Movement of the arms
  - d)  Unable to move legs
  - e)  Others Specify.....
7. What special education have you taken?
  - a)  Movement skill
  - b)  Reading Braille
  - c)  Sign language
  - d)  lip-reading
  - e)  other specify.....  
.....
8. Who support you in movement, communication, reading or writing?  
When ever you are in need? (Specify) .....

**Part I**

**Direction:** - Five alternative answers are given for each of the following questions. Your answer may be very high, high, moderate, low or very low. Put the sign "√" in the column under the appropriate answer you think right, in front of each question.

No		strongly Agree	agree	Uncertain	Dis-agree	Strongly Dis-agree
1	Support and encouragement is given to disabled students from teachers to achieve good result					
2	There is modification of instruction by teachers according to the needs and the disabilities of the students					
3	Support is given by teachers in the class room so that disabled students can follow their lessons appropriately, with out obstacle.					
4	Teachers use student's responses to encourage or to bring others into the discussion					
5	Attention is given for disabled students by teachers in checking homework, class work and other activities.					
6	Support and encouragement is given by teachers in the classroom so that disabled students can use aids like Braille, tape recorder, hearing aids etc.					
7	There is willingness of teachers to help disabled students personally by tutoring them separately					
8	There is motivation of disabled students by a smile, a nod or gesture or rewarding words when they answer questions correctly.					
9	Effort is made by teachers to encourage cooperation and friendship among disabled students and the non disabled students.					
10	Teachers explain lessons from simple to complex, step by step so that disabled students can catch up and understand.					

11	Effort is made by teachers to make non disabled students understand the needs of disabled students and help them.					
12	Teachers help disabled students to get the right sitting position in the class.					
13	School administrators suggest that disabled students should never learn with their non disabled peers in the regular classroom.					
14	Effort is made by the school administrators to provide the appropriate educational materials for disabled students such as text books, Braille. etc.					
15	Effort is made by the school administrators in removing obstacles in the school campus so that disabled students can move around in the school campus easily.					
16	Effort is made by the school administrators so that disabled students get access for transportation from home to school & from school to home					
17	Effort is made by the school to organize the library according to the needs of disabled students to use library					
18	Effort is made by the school administrators encourage cooperation and friendship among and non disabled students.					
19	The location of service quarters is very easy to find & get like the library, cafeteria, the staff room etc. is accessible.					
20	The lavatories have hand rails, entrance to gates and classes have ramps.					
21	Class rooms are spacious; paths have no obstacles to move around.					
22	I am unwilling to learn with the non disabled students.					
23	I have a problem to make fellowship and to create social interaction with my peers					

24	I participate in extracurricular activities.					
25	Non-disabled students suggest that disabled students should never learn with non disabled students in the regular classroom.					
26	Non-disabled students think that disabled students need support we should help them.					
27	Support is given by guidance and counseling service to enable disabled students develops self confidence and self esteem.					
28	Support is given by guidance and councilors to enable students get service quarters with in the school such as offices, library, cafeterias etc.					
29	Effort is made by guidance and counselors to understand the personal problems of each disabled students.					
30	Effort is made by the guidance and counselors to create cooperation with the administration and the parents of the disabled students to solve their problems.					
31	Effort is made by guidance and councilors to inform the disabilities of students to the regular class teachers, so that they may know the students specific problems and help them accordingly.					
32	Teachers think that disabled students should not learn in the regular classroom with the non-disabled students.					
33	My disability doesn't prevent me from doing anything.					
34	I have a feeling of depression because of my disability.					
35	I have much psychological problem because of my denial to accept my disability.					
36	Teachers think that disabled students need support from their peers and teachers.					

Write what you think can be appropriate answer for the following questions in the space provided

1. The number of students in the class.

Below 50       50-60       above 60

2. Your rank in your class

1-5       5-10       Above 10

3. What problems do you face during the teaching learning process in the class?

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Your recommendation \_\_\_\_\_

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4. What, problems do you face with your peers during your Social interaction \_\_\_\_\_

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Your recommendation \_\_\_\_\_

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5. What problems do you face as a result of your disability with the School settings such as the architecture of the building, position of Offices, Classes etc.

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What is your recommendation? \_\_\_\_\_

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6. Specify the strength and the short coming, of the guidance and

Counseling Services.

\_\_\_\_\_  
\_\_\_\_\_  
What is your recommendation? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

7. How do you evaluate the provision by the school of materials like textbooks, library service, and others?

\_\_\_\_\_  
\_\_\_\_\_  
Your Recommendations? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_





12	መምህራን የአካል ጉዳተኛ ተማሪዎችን በክፍል ውስጥ ተገቢና ተስማሚ መቀመጫ እንዲያገኙ ይረዷቸዋል።					
13	የትምህርት ቤቱ አስተዳደር የአካል ጉዳተኛ ተማሪዎች የአካል ጉዳተኛ ካልሆኑ ተማሪዎች ጋር በመደበኛ ክፍል ውስጥ መማር የለባቸውም የሚል አስተሳሰብ አላቸው።					
14	የትምህርት ቤቱ አስተዳደር የአካል ጉዳተኛ ተማሪዎች ተገቢውን የትምህርት መሣሪያዎች ለምሳሌ መድሐፍት፣ ብሬይል የመሳሰሉትን ነገሮች ያቀርባሉ።					
15	የትምህርት ቤቱ አስተዳደር የአካል ጉዳተኛ ተማሪዎች በት/ቤቱ ቅጥር ግቢ ውስጥ ያለችግር መዘዋወር እንዲችሉ እንቅፋቶችን ለማስወገድ ጥረት ያደርጋል።					
16	የትምህርት ቤቱ አስተዳደር የአካል ጉዳተኛ ተማሪዎች ወደ ት/ቤት ሲመጡና ሲመለሱ የመጓጓዣ ችግር አንዳይገጥማቸው ጥረት ያደርጋል።					
17	የትምህርት ቤቱ አስተዳደር መጽሐፍት ቤትን እንደ ልዩ ፍላጎታቸው ለአካል ጉዳተኛ ተማሪዎች ለማደራጀት ይጥራል።					
18	የትምህርት ቤቱ አስተዳደር በአካል ጉዳተኛ ተማሪዎችና የአካል ጉዳት በሌላቸው ተማሪዎች መካከል ሕብረት እንዲፈጠር ጥረት ያደርጋል					
19	የአገልግሎት መስጫ ክፍሎች ለምሳሌ የመጽሐፍት ቤት ካሬቴሪያ ፣ የመምህራን ማረፊያ በቀላሉ ላገኘው እችላለሁ።					
20	የትምህርት ቤቱ ሽንት ቤቶች መደገፊያ ያላቸው ክፍሎቹ ሰፊ መንገዶቹ ምቹ ስለሆኑ በአንቅስቃሴዬ ችግር የለብኝም					
22	የአካል ጉዳት ከሌላቸው ተማሪዎች ጋር ለመማር ፈቃደኛ አይደለሁም					
23	የአካል ጉዳት ከሌላቸው ተማሪዎች ጋር ህብረት በማድረግ ማህበራዊ ግንኙነት ለመፍጠር እችላለሁ።					
24	የአካል ጉዳተኛ ተማሪዎች በክብብና በሌሎች ተጓዳኝ ትምህርቶች ውስጥ ተሳትፎ ያደርጋሉ።					
25	የአካል ጉዳት የሌላቸው ተማሪዎች የአካል ጉዳተኞች በመደበኛ ክፍል ውስጥ የአካል ጉዳተኛ ካልሆኑ ተማሪዎች ጋር ማማር የለባቸውም የሚል አስተሳሰብ አላቸው					
26	የአካል ጉዳት የሌለባቸው ተማሪዎች የአካል ጉዳተኛ ተማሪዎች ዕርዳታ የሚያስፈልጋቸው ናቸው። ልንረዳቸው ይገባል የሚል አስተሳሰብ አላቸው					
27	የተማሪዎች አመራርና የምክር አገልግሎት የአካል ጉዳተኞች በራስ የመተማመን ስሜት እንዲያዳብሩና ራሳቸውን እንዲያውቁ ድጋፍ ያደርግላቸዋል።					
28	የተማሪዎች አመራርና የምክር አገልግሎት የአካል ጉዳተኛ ተማሪዎች የትምህርት ቤቱን የአገልግሎት ክፍሎች ለምሳሌ					

	ቢሮዎችን፣ መጽሐፍት ቤትን፣ መዝናኛ ስፍራዎች እንዲያውቁ ድጋፍ ያደርግላቸዋል።					
29	የተማሪዎች አመራርና የምክር አገልግሎት የአከል ጉዳተኞች ተማሪዎች የግል ችግር በመረዳት ችግራቸውን ለማቃለል ጥረት ያደርጋል።					
30	የተማሪዎች የምክር አገልግሎትና ከትምህርት ቤቱ አመራር እና ከወላጆች ጋር ቅንጅታዊ አሰራር በመፍጠር የአካል ጉዳተኞችን ችግር በጋራ ለመፍታት ጥረት ይደረጋል።					
31	የተማሪዎች አመራርና የምክር አገልግሎት የአከል ጉዳተኞች ተማሪዎች ችግር መምህራን በግል አውቀው አንዲረዱቸው ችግራቸውን ለመምህራን ለማሳወቅ ጥረት ያደርጋል።					
32	የአካል ጉዳተኝነቱ ማንኛውንም ነገር ከመስራት አልከለከለኝም					
33	በአካሌ መጉደል ምክንያት ከፍተኛ የሆነ የጭንቀት ስሜት አለኝ					
34	የአካል ጉዳተኝነቴን ባለመቀበሌ የስነልቦና ችግር ደርሶብኛል					
35	መምህራን አካል ጉዳተኞች ተማሪዎች የአካል ጉዳት ከሌላቸው መደበኛ ተማሪዎች ጋር ተቀላቅለው መማር የለባቸውም የሚል አስተሳሰብ አላቸው።					
36	መምህራን አካል ጉዳተኞች ተማሪዎች ከመምህራንና ከተማሪዎች ርዳታ ያስፈልጋቸዋል የሚል አመለካከት አላቸው።					

ክፍል 2

ትክክል ነው ብለህ የምታስበውን መልስ በባዶ ቦታው ውስጥ መልስ ወይም በሣጥኑ "✓" ምልክት አድርግ

1. በክፍልህ ውስጥ ስንት ተማሪዎች አሉ?

ሀ/  ከ50 በታች    ለ/  ከ 50-60    ሐ/  ከ60 በላይ

2. ከክፍል ተማሪዎች ውስጥ በደረጃ ስንተኛ ትወጣለህ

ሀ/  ከ1-5    ለ/  ከ5-10    ሐ/  ከ10 በላይ

3. በመማር ማስተማር ሂደት ጊዜ በክፍል ውስጥ ምን ችግር ይገጥምላል?

\_\_\_\_\_

\_\_\_\_\_

የመፍትሔ ሐሳብ ካለህ ግለፅ/ጩ

4. በማህበራዊ ግንኙነትህ ከክፍል ጓደኞችህ ጋር የሚገጥምህ ችግር ካለ ግለፅ/ጩ

\_\_\_\_\_

\_\_\_\_\_

የመፍትሔ ሐሳብ ካለህ ግለፅ/ጩ

5. በትምህርት ቤቱ የህንፃ አሠራር በክፍሎች አቀማመጥ በቢሮዎች አቀማመጥ በሽንት ቤትና በመሳሰሉት የገጠመህ ችግር ካለ ግለፅ/ጩ

\_\_\_\_\_

\_\_\_\_\_

የመፍትሔ ሐሳብ ካለህ ግለፅ/ጩ

6. የተማሪዎች የምክርና የጋይዳንስ አገልግሎት ጠንካራና ደካማ ጎን ካለ ግለፅ/ጩ

\_\_\_\_\_

\_\_\_\_\_

የመፍትሔ ሐሳብ ካለህ ግለፅ/ጩ

7. ትምህርት ቤቱ መጽሐፍትን የቤተመጽሐፍት አገልግሎትን በመስጠት በኩል ያለውን ጠንካራና ደካማ ጎን እንዴት ታየዋለህ?

\_\_\_\_\_

\_\_\_\_\_

## APPENDIX III

### CHECKLIST FOR CLASSROOM OBSERVATION

Date \_\_\_\_\_

School \_\_\_\_\_

Subject \_\_\_\_\_

Grade \_\_\_\_\_

	Yes	No
<b>I Class room setting</b>		
A. The seat is conducive for copying notes in the Braille		
B. The class room is conducive for grouping students		
C. The class room has space for movement of the disabled students, visually impaired and physically disabled		
D. There is silence in the classroom		
E. The number of students is manageable		
F. There is enough light in the room		
G. Students with disabilities are seated at the right position in the class		
<b>II educational materials</b>		
H. Students with disabilities have text book and for Braille text		
I. Students with disabilities use tape recorder		
J. Students with hearing impairment use hearing aids		
<b>III Teacher students interaction</b>		
K. There is active participation of visually impaired students by asking and answering questions		
L. There is participation of the hearing impaired students		
M. The teacher speaks while he is write and write while he is speaking		
N. The teacher encourages and praise the disabled students when they answer questions		
O. The teacher calls the disabled students by name		
P. The teacher uses audiovisual aids in the class		
Q. The teacher assigns buddy for the disabled		
R. The teacher speaks loudly		
S. The teacher allows enough time for the disabled to complete their work.		

**Addis Ababa University**  
**School of Graduate studies**  
**College of Education.**

**Department of curriculum and Teachers professional**  
**Development Studies.**

**Questionnaire to be filled by teachers**

The aim of the questionnaire is to obtain data related to the educational condition of disabled students learning in the preparatory schools of A. A. Therefore your genuine response to the questionnaire is decisive for the validity of the study. Your responses will be confidential. Thank you in advance for your cooperation.

**Part 1**

Direction – a) you don't need to write your name

b) Put “✓” mark under the alternatives you think is proper answer

c) Write on the blank space, where you are required.

**Background information**

1. Name of the School \_\_\_\_\_
2. Sex \_\_\_\_\_ 3. Qualification \_\_\_\_\_ 4. service year \_\_\_\_\_
5. Grades you teach \_\_\_\_\_
6. Have you taken teaching methodology course during your pre-service program?  
\_\_\_\_\_ yes \_\_\_\_\_ No \_\_\_\_\_
7. Have you taken training on how to teach disabled students?  
A. Yes  B. No
8. Do you think that teaching disabled students is challenging?  
A. Yes  B. No
9. Do you agree with the opinion that disabled students should learn with non-disabled students?  
A. Strongly agree  B. Agree  C. disagree  D. Uncertain   
E. Strongly disagree

## Part II

Direction: the following are issues that affect the education of disabled students. Indicate the extent to which you agree or disagree by putting the sign "✓" in the column provided. The numbers at the top of the column represents.

1. Strongly agree
2. Agree
3. Uncertain
4. Disagree
5. Strongly disagree

		1	2	3	4	5
1	The Number of students in the class is a barrier for me to help disable students individually.					
2	Noise condition in the class is a barrier for disabled students to pay attention during the time lessons are given.					
3	The classroom situation is inconvenient for disabled students to sit and move with wheel chairs.					
4	Getting resources like overhead projector, video recorders are a difficult task.					
5	Accepting the fact that children learn at different rate and applying this truth in the teaching learning process is a is problem for me.					
6	Treating disabled students equally with the non disabled students is impossible.					
7	Participation of disabled students during the teaching learning process is minimal.					
8	Participation of disabled students in extracurricular activities like clubs, field trips is minimal.					
9	Location of buildings (service quarters ) such as libraries, toilets, staffroom, administration offices is inappropriate for disabled students					
10	Location of the school in the city, its access For transportation, the traffic problem around the school is challenging for disabled students.					

11	The architecture of the buildings, the corridors, absence of lifts, space in the classrooms is inappropriate for disabled students					
12	Getting sympathetic peers that help them in reading, writing with carbon copy, guiding the visually disabled and moving the physically disabled around is difficult.					
13	Knowing the personal problems of disabled students because of lack of information about them is difficult for teachers.					
14	Giving extra time for examination helping individually in the classroom, and note taking is impossible.					
15	There is a problem of disabled students in developing self esteem and self confidence					
16	Disabled students do not get sufficient guidance and counseling service					
17	There is lack of attention given by authorities regarding the issues of disabled students.					
18	Disabled students lack skills in creating social interaction with the non-disabled peers.					

### Part II

Direction- Give your opinion for the following questions

1. State additional problems that you think faced by disabled students

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What is your recommendation (suggestion) to solve the problems you stated?

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2. What other problems have you faced while you are teaching disabled students?

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What is your suggestion on the solution for the problems?

Coding Sheet for students responses

Respondents	Items																																				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	
1	3	3	5	5	3	3	3	5	4	3	4	5	5	5	5	5	5	5	5	1	5	2	5	5	4	4	4	4	2	4	5	5	2	5	5		
2	5	3	4	3	3	2	4	3	4	4	4	5	5	5	3	2	5	4	4	4	5	4	4	4	5	4	3	3	4	4	3	5	4	5	5	4	
3	5	4	5	3	3	4	5	4	4	4	3	5	2	4	4	3	4	4	2	4	5	5	5	3	5	4	3	3	3	3	4	5	5	5	5	4	
4	4	3	4	4	3	3	4	4	3	4	4	4	2	4	4	3	4	4	4	4	1	5	5	4	4	4	4	4	4	3	3	1	2	5	4		
5	5	5	3	5	3	5	3	5	6	1	5	3	2	5	5	4	5	5	5	5	5	5	5	5	5	5	3	5	5	4	5	5	1	2	1	1	
6	5	3	3	5	4	3	3	3	5	5	5	4	5	4	4	4	4	4	4	2	4	5	3	5	5	5	4	4	4	4	4	5	3	3	4	5	
7	4	2	2	4	2	2	2	4	2	2	2	4	4	2	2	2	4	2	5	1	5	5	5	1	5	5	2	4	1	1	2	5	5	4	2	5	
8	4	1	1	4	1	2	2	2	1	4	2	4	5	1	2	1	1	2	4	1	5	5	4	5	5	5	1	1	1	1	1	5	2	5	5	4	
9	2	2	2	3	2	1	2	1	3	3	2	3	4	2	2	1	1	2	4	3	4	5	4	1	5	3	4	3	4	2	4	5	5	5	2	3	
10	3	4	2	4	3	1	1	4	2	1	5	5	4	3	5	1	1	1	4	1	4	4	5	4	5	2	3	2	1	1	1	4	4	4	5	3	
11	3	3	3	4	2	3	3	2	4	3	2	4	5	2	3	1	3	3	1	1	5	5	4	5	5	3	4	3	3	5	5	5	5	5	2	4	
12	4	4	3	4	4	2	2	5	2	4	4	2	4	3	2	5	2	2	1	2	5	4	4	2	4	4	4	2	5	4	5	4	4	4	4	5	
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14	2	2	2	3	2	6	3	3	3	3	3	2	4	4	2	3	5	3	2	3	2	4	3	4	4	3	3	4	4	3	2	3	4	4	5	4	
15	4	5	4	4	3	1	4	5	1	4	2	1	4	1	1	1	1	2	2	2	5	5	2	3	5	4	4	4	1	4	5	5	4	4	4	5	
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17	2	4	2	4	4	3	3	3	4	4	3	2	1	2	1	1	5	2	1	1	4	4	1	6	4	3	3	1	3	2	2	5	4	4	3	5	
18	2	1	2	3	1	1	1	2	1	1	1	2	3	2	1	1	2	2	2	2	5	5	5	3	5	4	2	2	2	2	1	5	4	4	2	4	
19	4	4	4	4	4	4	4	4	4	4	4	4	4	4	2	1	4	4	2	1	5	5	4	4	5	2	4	4	4	4	4	4	4	2	2	2	4
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22	4	2	2	4	2	2	2	4	2	2	2	3	2	2	1	2	2	2	3	4	4	2	3	5	3	2	2	2	1	2	4	2	4	2	4	3	3
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27	4	3	4	5	1	3	3	4	4	2	3	3	5	4	1	1	5	4	4	1	5	5	5	1	5	4	4	2	4	2	4	5	5	5	3	4	
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29	4	2	2	4	2	2	2	2	4	2	2	2	4	2	2	1	2	1	2	1	5	4	4	2	4	1	1	5	1	1	1	4	2	4	4	4	
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31	2	2	4	4	1	4	2	2	3	3	2	4	4	2	3	1	3	2	2	2	4	4	4	3	5	2	4	4	4	2	3	5	4	4	4	5	
32	4	3	4	1	3	4	1	3	5	4	1	5	5	3	6	3	1	1	4	4	3	3	1	4	4	4	5	5	4	2	5	5	2	1	5	3	
33	2	2	2	4	2	2	3	4	3	3	2	4	5	2	3	2	4	3	4	4	4	4	2	3	5	2	3	4	4	3	3	5	4	4	5	3	
34	2	3	1	5	1	1	1	3	3	1	1	3	1	1	3	1	3	5	1	1	5	5	5	1	5	5	4	1	1	4	3	1	5	5	1	5	
35	3	2	2	5	3	2	5	5	5	3	3	5	5	1	3	1	4	4	5	4	4	5	5	5	5	3	5	3	1	1	1	5	5	5	1		
36	1	1	1	1	1	1	2	4	1	2	2	5	2	2	1	1	2	4	4	4	4	4	2	3	4	2	2	2	2	3	2	3	2	5	3		
37	1	1	1	1	1	4	1	3	1	3	1	1	5	1	5	1	5	1	3	2	5	5	3	1	5	1	5	5	2	1	1	3	3	5	5	5	
38	5	3	1	5	4	3	4	3	2	3	2	4	3	3	4	2	4	2	5	5	4	2	4	1	5	4	2	3	3	2	4	5	5	5	3	5	
39	4	2	4	3	1	4	1	1	3	3	2	4	5	2	3	2	3	2	4	4	3	2	5	2	5	4	3	4	3	2	1	5	5	5	3	4	
40	2	2	2	4	2	2	2	2	2	2	2	2	4	4	2	2	2	2	4	4	4	3	3	4	5	2	2	2	3	2	3	4	3	3	4	5	
41	4	3	3	4	2	2	2	2	4	4	2	4	4	4	2	2	4	4	4	4	5	5	5	4	5	2	4	4	4	2	4	5	5	5	4	4	
42	4	2	3	4	4	2	2	2	4	3	2	4	4	3	2	2	4	3	2	2	2	4	4	3	4	3	4	3	3	3	2	4	4	4	4	4	
43	2	2	2	4	2	2	2	4	2	2	2	4	4	2	2	2	2	2	4	4	5	4	4	4	4	2	2	2	2	2	4	4	4	4	4	2	
44	5	1	4	4	4	4	1	4	1	2	2	5	4	4	5	1	1	2	5	3	4	5	4	4	5	4	1	2	2	3	1	5	5	5	4	5	

**Coding Sheet for teachers' responses**

Respondents	Items																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	2	3	5	4	3	1	2	4	4	4	4	4	4	2	3	3	2	2
2	5	4	3	3	2	1	1	2	5	4	4	4	2	4	4	3	4	4
3	5	5	3	3	5	3	4	4	4	5	3	4	2	4	4	3	4	4
4	5	2	4	2	2	1	2	2	4	5	4	4	2	4	5	2	2	2
5	4	2	4	5	4	2	4	4	4	4	5	4	4	2	2	4	4	2
6	4	2	4	5	1	4	1	4	5	5	5	4	2	4	2	2	4	3
7	5	2	4	4	4	2	2	4	5	2	3	3	3	3	2	1	2	1
8	4	5	5	5	4	4	2	5	5	5	5	5	4	2	4	2	4	1
9	5	5	5	5	5	5	5	5	5	5	5	5	2	2	5	4	4	4
10	5	5	3	2	2	2	2	3	3	2	4	2	2	2	3	3	3	2
11	2	3	4	4	3	2	1	2	4	2	4	3	2	2	2	3	3	2
12	4	3	1	5	2	2	4	5	5	4	4	4	4	5	1	3	4	1
13	5	5	5	5	5	5	5	5	5	3	3	5	5	5	5	5	5	5
14	4	5	5	4	1	4	2	4	4	4	4	4	2	1	2	2	2	4
15	4	4	4	4	2	4	4	4	4	2	2	5	2	4	4	3	2	2
16	5	4	5	5	4	5	1	4	5	4	5	4	4	5	1	3	3	4
17	5	3	5	5	4	2	1	5	4	5	4	4	4	2	3	2	4	4

**Scoring System for Students Responses**

- Strongly agree – 5
- Agree -4
- Uncertain – 3
- Disagree – 2
- Strongly disagree – 1

Items 13, 21, 22, 23, 25, 33, 34, 35 of students' responses are Negatively worded hence they are coded reversely and scored

- Strongly agree – 1
- Agree – 2
- Uncertain – 3
- Disagree – 4
- Strongly disagree - 5

**Scoring System For Teaches' Responses**

All the items are reversely coded and given the following scores

- Strongly agree -5
- Agree -4
- Uncertain – 3
- Disagree – 2
- Strongly disagree – 1

Coding Sheet for students responses

Respondents	Items																																					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36		
1	3	3	5	5	3	3	3	5	4	3	4	5	5	5	5	5	5	5	5	5	1	5	2	5	5	4	4	4	4	2	4	5	5	2	5	5	5	5
2	5	3	4	3	3	2	4	3	4	4	4	5	5	5	3	2	5	4	4	4	5	4	4	4	5	4	3	3	4	4	3	5	4	5	5	5	4	
3	5	4	5	3	3	4	5	4	4	4	3	5	2	4	4	3	4	4	2	4	5	5	5	3	5	4	3	3	3	3	4	5	5	5	5	5	4	
4	4	3	4	4	3	3	4	4	3	4	4	4	2	4	4	3	4	4	4	4	1	5	5	4	4	4	4	4	4	4	3	3	1	2	5	5	4	
5	5	5	3	5	3	5	3	5	6	1	5	3	2	5	5	4	5	5	5	5	5	5	5	5	5	5	3	5	5	4	5	5	1	2	1	1	1	
6	5	3	3	5	4	3	3	3	5	5	5	4	5	4	4	4	4	4	4	2	4	5	3	5	5	5	4	4	4	4	4	5	3	3	4	5	5	
7	4	2	2	4	2	2	2	4	2	2	2	4	4	2	2	2	4	2	5	1	5	5	5	1	5	5	2	4	1	1	2	5	5	4	2	5	5	
8	4	1	1	4	1	2	2	2	1	4	2	4	5	1	2	1	1	2	4	1	5	5	4	5	5	5	1	1	1	1	1	5	2	5	5	5	4	
9	2	2	2	3	2	1	2	1	3	3	2	3	4	2	2	1	1	2	4	3	4	5	4	1	5	3	4	3	4	2	4	5	5	5	5	2	3	
10	3	4	2	4	3	1	1	4	2	1	5	5	4	3	5	1	1	1	4	1	4	4	5	4	5	2	3	2	1	1	1	4	4	4	5	3		
11	3	3	3	4	2	3	3	2	4	3	2	4	5	2	3	1	3	3	1	1	5	5	4	5	5	3	4	3	3	5	5	5	5	5	5	2	4	
12	4	4	3	4	4	2	2	5	2	4	4	2	4	3	2	5	2	2	1	2	5	4	4	2	4	4	4	2	5	4	5	4	4	4	4	4	5	
13	2	1	3	5	1	3	4	5	3	3	4	1	3	2	5	1	4	2	4	6	5	5	5	2	5	3	2	4	4	3	3	5	5	5	5	5	3	
14	2	2	2	3	2	6	3	3	3	3	3	2	4	4	2	3	5	3	2	3	2	4	3	4	4	3	3	4	4	3	2	3	4	4	5	4		
15	4	5	4	4	3	1	4	5	1	4	2	1	4	1	1	1	1	2	2	2	5	5	2	3	5	4	4	4	1	4	5	5	4	4	4	5		
16	3	4	1	5	1	1	2	1	3	1	1	1	5	2	4	1	1	3	1	1	5	5	5	5	5	5	5	4	2	1	1	5	5	5	5	5		
17	2	4	2	4	4	3	3	3	4	4	3	2	1	2	1	1	5	2	1	1	4	4	1	6	4	3	3	1	3	2	2	5	4	4	3	5		
18	2	1	2	3	1	1	1	2	1	1	1	2	3	2	1	1	2	2	2	2	5	5	5	3	5	4	2	2	2	2	1	5	4	4	2	4		
19	4	4	4	4	4	4	4	4	4	4	4	4	4	4	2	1	4	4	2	1	5	5	4	4	5	2	4	4	4	4	4	4	4	2	2	2	4	
20	4	2	4	5	2	4	2	4	4	2	2	4	4	1	1	1	2	2	2	4	4	5	5	4	5	4	4	4	4	1	1	4	5	5	5	5	5	
21	1	2	3	4	1	3	1	2	1	2	2	1	3	2	2	2	2	3	3	2	3	5	5	5	5	3	1	2	3	3	3	5	5	5	5	4		
22	4	2	2	4	2	2	4	2	4	2	2	2	3	2	2	1	2	2	2	3	4	4	2	3	5	3	2	2	1	2	4	2	4	3	3			
23	3	2	2	4	4	2	4	4	4	4	3	4	5	2	2	1	4	4	2	2	5	5	4	4	5	3	5	4	4	4	4	5	5	5	5	4		
24	4	4	4	4	3	2	2	2	4	4	4	4	4	4	2	4	1	4	2	2	1	5	4	4	4	5	4	4	2	4	4	4	4	4	4	5	4	
25	5	2	4	5	2	1	3	5	1	3	2	5	5	2	5	1	4	2	5	4	1	5	4	5	5	4	2	1	1	3	2	2	2	4	5	4		
26	4	2	2	4	1	1	1	5	2	4	1	5	1	1	5	1	2	1	5	5	5	5	1	5	5	2	1	1	1	3	2	1	5	5	5	4		
27	4	3	4	5	1	3	3	4	4	2	3	3	5	4	1	1	5	4	4	1	5	5	5	1	5	4	4	2	4	2	4	5	5	5	5	3	4	
28	2	4	4	4	4	2	4	4	2	4	1	1	5	5	5	1	4	4	4	4	4	5	3	4	4	4	2	2	1	1	1	4	5	5	4	5		
29	4	2	2	4	2	2	2	2	4	2	2	2	4	2	2	1	2	1	2	1	5	4	4	2	4	1	1	5	1	1	1	4	2	4	4	4		
30	2	1	2	4	2	1	2	4	2	4	2	2	4	3	2	2	3	2	3	3	2	4	4	2	4	2	2	2	2	2	2	4	4	2	4	2		
31	2	2	4	4	1	4	2	2	3	3	2	4	4	2	3	1	3	2	2	2	4	4	4	3	5	2	4	4	4	2	3	5	4	4	4	5		
32	4	3	4	1	3	4	1	3	5	4	1	5	5	3	6	3	1	1	4	4	3	3	1	4	4	4	5	5	4	2	5	5	2	1	5	3		
33	2	2	2	4	2	2	3	4	3	3	2	4	5	2	3	2	4	3	4	4	4	4	2	3	5	2	3	4	4	3	3	5	4	4	5	3		
34	2	3	1	5	1	1	1	3	3	1	1	3	1	1	3	1	3	5	1	1	5	5	1	5	5	4	1	1	4	3	1	5	5	1	5	1	5	
35	3	2	2	5	3	2	5	5	5	3	3	5	5	1	3	1	4	4	5	4	4	5	5	5	5	3	5	3	1	1	1	5	5	5	5	1		
36	1	1	1	1	1	1	2	4	1	2	2	2	5	2	2	1	1	2	4	4	4	4	2	3	4	2	2	2	2	2	3	2	3	2	5	3		
37	1	1	1	1	1	4	1	3	1	3	1	1	5	1	5	1	5	1	3	2	5	5	3	1	5	1	5	5	2	1	1	3	3	5	5	5		
38	5	3	1	5	4	3	4	3	2	3	2	4	3	3	4	2	4	2	5	5	4	2	4	1	5	4	2	3	3	2	4	5	5	5	3	5		
39	4	2	4	3	1	4	1	1	3	3	2	4	5	2	3	2	3	2	4	4	3	2	5	2	5	4	3	4	3	2	1	5	5	5	3	4		
40	2	2	2	4	2	2	2	2	2	2	2	2	4	4	2	2	2	2	4	4	4	3	3	4	5	2	2	2	3	2	3	4	3	3	4	5		
41	4	3	3	4	2	2	2	2	4	4	2	4	4	4	2	2	4	4	4	4	5	5	5	4	5	2	4	4	4	2	4	5	5	5	4	4		
42	4	2	3	4	4	2	2	2	4	3	2	4	4	3	2	2	4	3	2	2	4	4	3	4	3	4	3	3	3	2	4	4	4	4	4	4		
43	2	2	2	4	2	2	2	4	2	2	2	4	4	2	2	2	2	2	4	4	5	4	4	4	4	2	2	2	2	2	4	4	4	4	4	2		
44	5	1	4	4	4	4	1	4	1	2	2	5	4	4	5	1	1	2	5	3	4	5	4	4	5	4	1	2	2	3	1	5	5	5	4	5		

### Coding Sheet for teachers' responses

Respondents	Items																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	2	3	5	4	3	1	2	4	4	4	4	4	4	2	3	3	2	2
2	5	4	3	3	2	1	1	2	5	4	4	4	2	4	4	3	4	4
3	5	5	3	3	5	3	4	4	4	5	3	4	2	4	4	3	4	4
4	5	2	4	2	2	1	2	2	4	5	4	4	2	4	5	2	2	2
5	4	2	4	5	4	2	4	4	4	4	5	4	4	2	2	4	4	2
6	4	2	4	5	1	4	1	4	5	5	5	4	2	4	2	2	4	3
7	5	2	4	4	4	2	2	4	5	2	3	3	3	3	2	1	2	1
8	4	5	5	5	4	4	2	5	5	5	5	5	4	2	4	2	4	1
9	5	5	5	5	5	5	5	5	5	5	5	5	2	2	5	4	4	4
10	5	5	3	2	2	2	2	3	3	2	4	2	2	2	3	3	3	2
11	2	3	4	4	3	2	1	2	4	2	4	3	2	2	2	3	3	2
12	4	3	1	5	2	2	4	5	5	4	4	4	4	5	1	3	4	1
13	5	5	5	5	5	5	5	5	3	3	5	5	5	5	5	5	5	5
14	4	5	5	4	1	4	2	4	4	4	4	4	2	1	2	2	2	4
15	4	4	4	4	2	4	4	4	2	2	5	2	4	4	3	2	2	2
16	5	4	5	5	4	5	1	4	5	4	5	4	4	5	1	3	3	4
17	5	3	5	5	4	2	1	5	4	5	4	4	4	2	3	2	4	4

#### Scoring System for Students Responses

- Strongly agree – 5
- Agree -4
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Items 13, 21, 22, 23, 25, 33, 34, 35 of students' responses are Negatively worded hence they are coded reversely and scored

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#### Scoring System For Teaches' Responses

All the items are reversely coded and given the following scores

- Strongly agree -5
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## Declaration

I, the undersigned declare that this thesis is my original work and has never been presented for the degree in any other university and that all sources of material used for the thesis have been duly acknowledged.

Name Berhanu Fikru  
Signature [Signature]  
Date 26/07/2007

This thesis has been submitted for examination by my approval as a university advisor.

Name Dr. K. KACAVALLI  
Signature [Signature]  
Date of submission 26/07/2007