

# **Social Interaction and Participation of Hearing Impaired Students in the Regular Classroom Setting**

*The Case of Four Hearing Impaired Students in Amhara  
Regional State, Ethiopia.*

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## **Abstract**

This study is carried out in the classroom and out of classroom at one of the school in the Amhara Regional State in Debre Markos. The purpose of the study is to investigate the social interaction and participation of hearing impaired students with their teachers and hearing peers in the regular classroom setting in different teaching learning activities. Out of classroom in extra-curricular activities, guidance and counseling, sport and play during break time are also investigated in this study.

A qualitative approach with a case study design is used in the study with the intention of examining the phenomena under investigation in depth. The data was collected through observation, interview and informal talks. Four students with hearing impairment were purposefully selected on the bases of them being in inclusive classroom setting. Their teachers, hearing classmates, hearing impaired students (the focal group), parents of hearing impaired students, regular teachers, the head master and coordinator of the special unit were the informants of the interview.

The finding of the study indicates that the hearing impaired students have poor interaction with their teachers and hearing peers. The participation of hearing impaired students inside the classroom as well as out of the classroom activities is insignificant. The concerned authorities that are responsible for students with disabilities do not have sufficient background knowledge in special needs education and they do not have the initiative to give special support for these students, from the school up to the level of Regional educational office. Hearing impaired students are considered as regular students by the school and the various educational offices. Teachers use regular teaching techniques.



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## **List of Abbreviations**

HI Hearing Impairment

JRM Joint Review Mission



# 1. Introduction

This thesis overviews the social interaction and participation of hearing impaired students with their teachers and hearing peers in the regular classroom setting, Sport, extra-curricular activities, guidance and counseling and playing during break time in one primary governmental school in Amhara Regional State, Debre Markos District in Ethiopia.

The study aims to find out how hearing impaired students, hearing peers and regular teachers interact and participate in the regular school situation in group discussion, lecture time, note taking, conversation and other related activities in the classroom as well as outside of the classroom during play time in the break, sport, extra-curricular activities and guidance and counseling services. The study focuses on the challenges, support and mediation during interaction and participation of hearing impaired students with their teachers and hearing peers. This chapter discuss background of the study, background of Ethiopia and Amhara Regional State, research question and significance of the study.

## 1.1 Background of the Study

The study focuses on the interaction of hearing impaired students with their teachers and hearing peers in and out of classroom situation in the regular school setting. It is focused on qualitative case study based on observation; interview and informal talks as the method of data collection. The main informants of this study are three deaf and one hard of hearing students who are integrated in the regular school setting in grade five (5). Parents of these students; hearing peers; regular teachers; hearing impaired students (the focus group of the study); the head master and the coordinator of the special unit were also informants in the study.

Social interaction and participation in this context is the communication of hearing impaired students with teachers and hearing students in the teaching and learning

process, extra-curricular activities and guidance and counseling service. Interaction is the mutual understanding of two or more persons towards each other to share and interchange interests; feelings; opinions; or information by using different systems of communication (Johnsen 2001).

From the ecosystem prospective and the zone of proximal development theories the child gets different experiences from his/her immediate environment and learns different activities through interaction with more experienced adults and peers (Rogoff, 2003). Integration of students with special needs in the regular classroom setting will be successful if they are appreciated by their teachers and accepted by their peers as well as by school administrators (Antia, et al. 2002). Teachers should have positive attitude towards students with special needs; this helps the students to develop self steam and to be efficient socially and academically.

Interaction is important for the development of language and from this interaction, communication skills come from the interaction of hearing impaired children and other children who have positive attitude in the process of the communication (Ysseldyke and Algozzine2003)

## 1.2 Background of Ethiopia and Amhara Regional State

Ethiopia is located on the horn of Africa (Appendix A); with an area of 1,127,127 sq km (435,186 sq mi).The country's population is estimated to be73,053,000 (est. 2005). It is land locked country with mountain in the north, low land to the east and western highlands. There is a Regional States division system based on ethnical groups, resulting in nine Regional Governments (Appendix B). The Ethiopian calendar has 13 months, 12 having 30 days each and the 13<sup>th</sup> month has 5 (or 6 days every fourth year). The Ethiopian calendar is also seven years behind the Gregorian calendar and the length of the day and night is fairly equal throughout the year.

Amharic is the official language of the country and different languages are spoken by different ethnic groups. Ethiopian`s population is highly diverse; with more than 80 different ethnic groups within the country. The country is predominantly a Christian



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country, with a lot of Muslims living in the lowland parts of the country. English is the most widely spoken foreign language and is the language of instruction in all secondary schools and tertiary education. Amharic was the language of primary school instructional media but now it has been replaced in many areas by local languages such as Oromifa and Tigrigna.

### **1.2.1 General Overview about the Amhara Region**

Amhara regional State is one of the nine ethnical regional states and the home of Amhara people with estimated total population of 18.6 million i.e. about 25.5% of the population of the country from this total population 91.2% is Amhara 8.8% is from other ethnicity. It is the 2<sup>nd</sup> most populated region next to Oromia in the Country. Its surface area is over 161,828 square km. The Region consists of 11 zones and 118 woredas (Districts) as of 2004/05. The capital city of the Amhara Regional State is Bahir-Dar. The population density of the region is estimated to be 120.12 per square kilometer. From the total population of the State 81.5% is Orthodox Christians, 18.1% were Muslims and 0.1% protestant.

### **1.2.2 Debre Markos**

Debre Markos is one of the oldest cities and District in the Amhara region. It is located in east central part of Ethiopia along the road from Addis Ababa to Bahir Dar, about 300 km away from Addis Ababa (The capital city of Ethiopia), sitting at an elevation of 2,446 meter above sea level. At this time there are nine elementary schools, two secondary schools-first cycles, one preparatory school, eight kindergartens, two basic alternative schools, thirteen basic adult educations, one technical and vocational training school, one college-Debre Markos College of Teachers Education, and one National University in the town. . Students with special needs are attending their education formally or informally in the regular schools. There is only one regular school where children with disabilities are formally attending their lessons in the special classes attached the regular school and integrated in the regular classes with regular student setting.

### 1.3 Research Question

In Ethiopia the cause of disability including hearing impairment is wrongly perceived as a curse, evil did, sin or wrong doing of parents or other grand-parents, the persons with disability themselves or other spiritual force. Because of this parents are using holy water or local medicine for the treatment of disability to take out the spiritual force from the person; and hide the disabled person not to be teased by others.

Hearing impaired persons are considered as dull; aggressive and non functional in the society. The study is undertaken in an attempt to answer the following one main and two sub questions based on the social interaction and participation of hearing impaired students with their teachers and hearing peers in and out of classroom activities. The research is focused to answer the following main question.

How do hearing impaired students participate in the classroom interaction during different activities, extra-curricular activities, break time and other activities with teachers and hearing peers?

From the above main question the following sub-questions are derived

- What are the challenges for hearing impaired students regarding interaction with their teachers and hearing peers across different activities?
- How do teachers encourage and facilitate hearing impaired students and hearing peers to participate in the classroom activities?
- By which mediational means (gesture, pointing, speech, writing, etc) do hearing impaired students interact with teachers and hearing peers?

### 1.4 Significance of the Study

Interaction with different age groups helps young children the opportunity to practice teaching different activities and to imitate and practice role relations from older children (Whiting and Edwards, 1988; Whiting 1975), as cited in Rogoff (2003).

My long experience (I worked for 7years) of working as a coordinator for the special unit also helped me to observe the daily activities of students with hearing impairment. I observed that students with hearing impairment are segregated in the regular school. There is no interaction with hearing peers during break time; hearing impaired students who are integrated in the regular school coming back to find their groups who are hearing impaired from the unit to communicate each other.

I also observed that there is no special consideration by the classroom teachers for the hearing impaired students in planning, selection of contents, methods and strategies of teaching and learning, classroom organization and methods of assessment. The curriculum is not flexible to meet the educational needs of students with disabilities in general. It is a great challenge for the hearing impaired students to be in the regular classroom.

The hearing impaired students face communication challenge with their hearing peers, the regular teachers and school administrators. From this observation; I want to investigate the social interaction and participation of hearing impaired students who are integrated in the regular classroom setting participating in different activities and out of classroom during play time, sport, extra-curricular activities and guidance and cuoncling.



## 2. Education in Ethiopia

This chapter focuses on different issues related to the education of hearing impaired students in Ethiopia in general and in Amhara region specifically. According to Tirussew (2005) in Ethiopia the number of persons with disabilities is 1.9% from the total population, out of which 14.9% are hearing impaired. Compared to other types of impairments, hearing impairment is one of the most common impairment, next to motor disorder and visual impairment.

Ethiopia is a country with diverse population in relation to ethnicity, culture, and language. Due to these diversities, the attitude of people towards persons with disabilities varies from culture to culture and from place to place. Traditionally, persons with disability have been neglected (marginalized) due to cultural, religious, socio-economic factors and lack of awareness in the society. According to Tirussew (2005), the cause of disability is wrongly perceived to be a result of curse, resulting from wrong doing or evil deeds by parents, family, and the persons with disabilities themselves or other supernatural force. Thus many families of the community prefer to hide children with disabilities or send them somewhere remote so that they may live by begging rather than sending their children to schools.

On the other hand even those who got the chance to go to school are not getting appropriate support and benefit from the general education system. Here, children with disabilities are put in separate classes (unit) with assigned teachers who are trained or untrained with basic skills to work with children with disabilities. Children in the special units benefit academically, but remain to be socially segregated.

Even in the school where the disabled students are integrated formally, the school environment is not encouraging for inclusive education. In one class there are more than 56-60 students, making the teaching learning process more challenging. The teacher did not have special training to educate and support or prompt children with disabilities. The other schools are not willing to accept children with disabilities.

Because of this and other reasons, participation of disabled children within the formal education system is limited in Ethiopia.

## 2.1 Historical Development of Special Needs Education in Ethiopia

Traditional education in Ethiopia has been going on for a long time before the introduction of modern education. It is known that even if they were less in number, individuals with visual and other physical impairments had been participating in the religious education made accessible by the Church and Mosques. Such persons were also serving as teachers in the religious education system. But persons with hearing impairment didn't participate in the history of traditional education.

Education of children with disabilities has many challenges in the country; the community has negative perception on the causes of disability, on the potential of children with disabilities, on the advantage of general education and generally on the remedy for children with disabilities. The society assumes that persons with disabilities are inadequate physically, capacity to learn, guide independent life and social interaction (Tirussew, 2005).

Special needs education in the country has been extended at early time in the form of classes and units attached to government regular school. According to WHO (cited in Tibebe, 1991), there are about 3 million children with disabilities in the country, from this population only 2,300 children get access to educational services in 7 special boarding schools, 8 special day schools and 42 special classes.

The current Educational Draft in Ethiopia for children with special educational needs consist of boarding special schools, special units, day special schools and preparatory programs in the form of Community-based Rehabilitation Programs (Shimeles, 2002). According to Savolainen (2006), there is a great increase in the level of special class in the regular school setting for the hearing impaired students. This situation helps to generate more opportunities for interaction and participation among the hearing

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impaired students and hearing peers in the classroom setting, extra-curricular activities and during play.

According to Tirussew (2005), the number of children attending in special boarding and day schools is about 1,066 at the same time 1,210 children with different disabilities is attending in special classes attached to the regular schools with a total number of 2,276 children.

## 2.2 Historical Development of Schools for Children with Hearing Impairment

In Ethiopia, modern education for children with disabilities started in 1910s. The first modern education for the visually impaired started in the year 1917, before this time the education was based on the church education in which the visually impaired were highly benefited than any other persons with disabilities.

The special school for the deaf in Ethiopia was started in the 1960s and 1970s by the support of missionaries and non-governmental organization from American and Europe. Mekanisa School for the Deaf, the first special school for the deaf, was established in 1962, by the Church of Christ. This school has two other branch schools “Centeria” and “Mazoria” in the Southern parts of the country. Alpha which is the second school for the deaf was established in Addis Ababa in 1967 by American Emanuel Baptist Mission. Hosanna was the third Boarding Special school for the deaf, established in 1981 by church of Mekanyesus and the fourth school for the deaf, African outreach, was opened in 1987 (Alemayehu, 2000).

After the introduction of modern education system into the country, it took a long time to give access to education for all school aged children. However, there are still various limitations to give educational access to all (including children with special needs). According to Mamo Mengesha, Tirussew et al. (1995, 2006, cited in Ministry of Education 2006), the existing special units are situated in urban areas. It is estimated that less than 1% of school aged disabled children get access to primary

education. To narrow down this gap, the Ministry of Education designed a strategy aimed at creating better educational access to children with special educational needs.

Earlier research has shown that students with special needs are marginalized in the education system. Therefore, the Ministry of Education has designed a strategy for special needs education program to guide development of an inclusive education system in 1994. The main objective of the strategy is to encourage universal primary education, including children with special needs. The strategy draws on the Ethiopian constitution that establishes the universal right to education, and the government policy goal stating that by year 2015 all school age children must have access to and complete primary education (Ministry of Education, 2006).

*Ethiopia generates an education policy attaching to special needs education; there are no clear and specific, separate or integrated legislation and strategies. Due to this and many other factors, the education of children with special needs is not yet clarified in terms of specific activities. However, the situation has been much improved after the Support to Special Education in Ethiopia Project (SSEP), University of Joensuu, Finland, was launched. As a result of increased awareness and increased manpower training by the project, many schools have been flourishing in all regional states (Alemayehu, 2000 p. 9).*

### 2.3 Special needs education in Amhara Regional State

Teaching children with special educational needs is included in the policy of the regional educational office. On the other hand, there are several limitations that slow down its implementation: lack of Resources, lack of teachers with special training, lack of accountable body to the issue at District level. (Amhara Region JRM Team, 2006).

The education and training policy has created encouraging situation for the expansion of special needs education. It has outlined the principle of special needs education by



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stating that all children and youth as well as those with special needs learn based on their full potentials and needs. However, at present, the existing special classes are located only in 20 Districts of urban areas. There are no reliable figures available on school age population who needs special needs education in the region. The data collected in the year 2004/05 indicates that 989 (641 male and 348female) children and youth with different disabilities (visual impairment, hearing impaired and intellectual disabilities) attend formal education in 53 special classes being helped by 64 trained teachers with special needs education (Ministry of Education, 2006).

From the total 989 children with disabilities 45.3% are visual impaired, 43.78% are hearing impaired and 10.8% are children with intellectual disabilities. All special units are run by the government, except one special education unit at Gonder run by one Catholic charity organization. The major problems in the education of children with disabilities include lack of schools, unfavorable attitudes and lower level of awareness of the community towards disabled children. The special unit and schools found in the region are few in numbers and limited to urban areas. In addition, these schools are under-resourced; they have no trained man power with special needs education and lack teaching materials (ibid).

There has been a decrease in the number of special needs education students in the region for the last five years (2000/01 to 2004/05). It decreased from 1,137 to 989 during this period. The average annual growth rate was -4.34%. Across the type of disabilities, there has been a decrease of visually impaired students by 5.46%, while the number of hearing impaired and intellectual disability students decreased by 1.33% and 9.4% respectively. During the same three year period, the number of special need classes has also decreased by 6.97%, while the number of teachers increased by 5.46% (Appendix M). Special needs education classrooms are found only in 28 schools out of the 4650 regular schools in the region (Amhara Region JRM Team, 2006).

### 2.3.1 Inclusive Education in Amhara Region

*Some initiatives are being taken to start inclusive education in the region. District education offices have asked schools to register children with special needs. However school directors have reported that they have found it very difficult to identify and register children with special needs. Parents are not open to tell if they have children with special needs (Amhara Region JRM Team, 2006 p. 21).*

## 2.4 Education service in Debre Markos

Up to 1941, there was no modern education in Debre Markos. The only type of education offered to disabled children was church education, offered especially for children with visual impairment and physical disabilities. The foundation for the introduction of modern education to the town was started 1941, by the establishment of Nigus Teklehimant school by giving a limited number of children to get modern education. When founded the classes were built to accommodate grades 1-12. But because of the increase in the number of students another high school called Debre Markos Comprehensive High School was built in 1970 and grade 9-12 were shifted to the newly established high school. Currently at Nigus Teklehimant Elementary school, there is 2009 total number of regular students, from this population 951 are male and 1058 are female.

At the moment there are nine elementary, two secondary schools-first cycles, one preparatory schools, eight kindergartens, two basic alternative schools, thirteen basic adult education centers, one technical and vocational training college, one college-Debre Markos College of Education, and one National University in the town.

Students with special educational needs are attending their education formally or informally in the regular schools. There is only one regular school Nigus Teklehimant Elementary School, where children with disabilities are formally attending their education in the special classes attached to the regular school and

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integrated in the regular classes with regular students. In the regular classroom there are 26 hearing impaired and 22 visually impaired students.

## 2.5 NG primary school

NG primary school is located at the center of Debre Markos town. It is the oldest school established in 1941, this makes it the first school to offer modern education for School age children for seven Districts around by the town. According to the headmaster, currently, it accommodates 2009 (951 male and 1058 female) students from grade 1-grade 8 and taught by 75 teachers (39 certificate and 26 diploma holders). The school has two groups; the regular classes and the special unit. The unit gives services only from grade 1 to grade 4. The special unit operates in two shifts a day while the regular classes working only in one shift or the whole day program. The school serves as a cluster center for four elementary schools in Debre Markos town. The cluster center helps the teachers to come together and discuss common problems and come to solution, improving continuous assessment, managing self contained classrooms, organizing child-friendly classrooms, practicing active learning in the school and preparing low cost teaching aids from locally available materials.

**The school administration:** - The school is administrated by the head master, the vice head master and two unit leaders. The duty and responsibility of the head master is planning, managing and controlling the administrative and technical works and following their implementation. He is also in charge of communicating with parents in case where disciplinary measures are taken on students. The vice head master is mainly concerned with academic purposes such as the preparation of time-table, examination and monitoring of teachers. The unit leaders have responsibility of watching late comers and the behavior of the students outside classroom in school compound and takes measures when unwanted behavior occurs.

**Guidance and Counseling:** - The school gives guidance and counseling services to all grade level students, especially for the second cycle (from grade 5-grade 8). The guidance and the counselor had no special training needed for the job and also no

special incentives are provided. She had to do the job during the break or free time. There is no guidance office, and because of this it, is challenging even for the students to get access to the counselor easily and discuss about their problems.

**Other facilities:** - During the observation, the researcher found out that the school has one staffroom with wooden chairs and tables. Teachers are using the room, to stay in, preparing lesson plans and notes and drink tea during their break time. There are three open fields used for physical education. It is a dusty bare field, students come to the field during break, free time and when they had physical education session.

In the school compound one woman sells tea, candies and juices during break time. The students drink water from the tap water only during their break time making long line and waiting longer, few students get the chance to drink before the bell rang. The school has two toilets with eight holes and has partition in to two for each toilet, one for the male teachers and students, the other for the female teachers and students. The toilet usually cleaned by students who are late comers to school. Females' toilets is usually well handled and clean than males'.

Regular students use the school library when they have free period but the hearing impaired and visually impaired students are not using this library; instead they stay in the class to read their books or do some other activities. There is also one laboratory in the school which is not functional because of lack of chemicals. There is no resource room for students with disabilities.

## 2.6 The Special unit

The special unit, which is the first unit to offer modern education for children with special educational needs (hearing impaired, visual impaired and intellectual disability), is established in 1995 attached to the regular school. According to the special unit coordinator, the unit was started with 10 hearing impaired, 5 visually impaired and 7 intellectually disability students, a total of 22 children, from these students 11 are female and 11 are male, and 3 male trained teachers. At present there are 7 female teachers teaching in the unit (5 trained and 2 untrained). Currently the

unit accommodates 10 hearing impaired 48 visual impaired and 5 intellectually disability students a total of 63 students with special educational needs. There are also 26 hearing impaired and 22 visual impaired students, a total of 48 students attending in the regular classroom setting with regular students from grade 5- grade 10.

At the moment, the number of students is increasing rapidly, especially the participation of girls is becoming more than boys. Table 1 show the enrolment of students with special needs in the unit and table 2 shows the enrolment of the students with disability into the regular classroom setting in the year 2007/8.

Table 1: Enrolment of students in the special unit in (2007/8),

Disability	Enrolment		
	Girls	Boys	Total
Hearing impaired	7	3	10
Visually impaired	33	15	48
Intellectual disability	3	2	5
Total	43	20	63

Table 2: Enrolment of students with special educational needs in the regular classes (2007/8)

Disability	Enrolment		
	Girls	Boys	Total
Hearing impaired	19	7	26
Visually impaired	7	15	22
Intellectual disability	0	0	0
Total	26	22	48

There is shortage of trained man power in the field of special needs education. Sebata is the only teachers training institute that prepares elementary school teachers for

special educational needs children in the country, but since 2005 this center is not training teachers with special needs education at primary first cycle level (from grade 1-grade 4).

There are 115 students with disabilities in the unit as well as in the regular classes. In the unit there are 10 hearing impaired (7 girls and 3 boys), 48 visual impaired (33 girls and 15 boys) and 5 intellectual disabled (3 girls and 2 boys) students. There are also 26 hearing impaired (19 girls and 7 boys) and 22 visual impaired (7 girls and 15 boys) students who are integrated in the regular classroom with the regular students from grade 5 up to grade 10. There is no student with intellectual disabled in the regular classroom. There is no screening for these students for their educational needs. All children with intellectual disability (educable and trainable, speech problem) are in the one classroom helped by one untrained teacher. There is no teaching material except the black board and chalk to teach them.

The number of visual impaired students in the school is increasing from time to time, because they have residential and monetary support from the regional education office. There is not much attention given for the hearing impaired students. They are attending their education as non disabled students. In 2007, 5 students (the first group) sat at the national examination, but none of them succeed in their academic performance. This is not because of the potential of the student; it is because of the educational system which is organized for the regular students but not for the hearing students especially for the deaf.

There are ten students with hearing impairment in the unit, five beginners (grade 0), three in grade 1 and two students at grade 3. Students with hearing impairment in the beginner group and grade 1 are attending their education in one classroom with one teacher for academic and non-academic subjects for the whole periods.

Two students with hearing impairment who are in grade 3 and 14 visually impaired students in grade 2 are in one class helped by one trained teacher. The hearing impaired students are integrated to the regular class after completing grade 4, but the integration of visually impaired students can be after completing grade one or grade

two, depending on the availability of special needs educator in the unit. In the case of students with intellectual disability, they will be integrated in the regular class if they can read and write within the five years period they are allowed to stay in the school, if not they are trained in different self help skills at the unit and send back to their home.

During observation and my previous experience, these children with intellectual disability are not trained in self help skills, usually they are counting numbers and letters the whole periods and sometimes they go to out of classroom when they had sport activities. The regional educational office allocates 30.00 Ethiopian birr for each child with intellectual disability per month.

The visually impaired students have budget allocated from the regional educational office, 100 .00 Ethiopian birr per month for each child, but it is not enough for survival so that they are begging, selling lottery, candy, chewing gum and mobile card during their spare time. These students have residence to live from the government and get better educational access compared to other students with disabilities.

The regional educational office does not give much attention for the hearing impaired students. There is no budget allocated for them, because they are considered like regular students. One of the teacher from the unit stated that “(we) have asked so many times about their budget to be considered like other students with disabilities, but the District Educational Office replied that they are the same as other regular students except their hearing loss so they can survive like other regular students”. But the District Educational Office give only some exercise books (which is not more than ten), one pen and one pencil once a year at the beginning of school.

Children with hearing impairment who come from different Districts can't get the access of education, because of lack of residence and low economic status of their family. After one month they return back home. In general, the hearing impaired students are not getting attention from the school and the regional government.

**3.**



### 3. Literature Review

This chapter focuses on the theoretical frame work and literature review related to this study. The first part discusses function of the ear, types of hearing impairment, language development of hearing impaired children, methods of communication for children with hearing impairment, social development of children with hearing impairment, integration of students in the regular classroom, support for the hearing impaired students, Involvement of Parents in the school program and Importance of extra-curricular activities in the School are the different topics that are presented in this chapter.

#### 3.1 Function of the Ear

An ear is a vertebrate organ of hearing responsible for sensing and collecting sounds as well as maintaining equilibrium. The ear is divided into three parts, the outer ear (pinna), the middle ear, and the inner ear. Each part of the ear has its own functions. The function of the ear is to collect sound from the environment goes different process that can be interpreted by the brain (Harris, 1986 cited by Hewared & Orlansky, 1992).

#### 3.2 Types of Hearing Impairment

The ear is a complicated structure and it functions in a complex way. Many problems can occur to our hearing system. Hearing impairment occurs when there is a problem or damage to one or more parts of the ear. Hearing impairment is a hearing disability at any degree of hearing loss from mild to profound. It includes the subcategory of deaf and hard of hearing. There are three types of hearing impairment.

- **Conductive hearing loss:** - results from a problem or difficulty with the outer or middle ear, including the ear canal, eardrum. A blockage or other structural problem interferes with how sound gets conducted through the ear, making

sound levels seem lower. In many cases, conductive hearing loss can be corrected with medications (Hewared & Orlansky,1992).

- **Sensorneural hearing loss:** - loss occurs when inner ear nerves become damaged and do not properly transmit their signals to the brain. These can results when the sound is delivered in unclear way or not delivered at all. The person has problem hearing clearly, understanding speech, and interpreting various sounds. This type of hearing loss is permanent. It may be treated with hearing aids or not in severe cases (ibid).
- **Mixed hearing loss:** - is the combination of both conductive and sensorineural hearing problems (ibid).

The greater the hearing loss, the more the child is experience difficulty in social interaction and participation. Children and young adults who are hard of hearing generally perform better social interaction and participation than those who are deaf.

- **Deafness:** - is a hearing loss that is so severe or profound that can't processing linguistic information by hearing with or without a hearing aid. A child with severe hearing loss can't hear conversational speech at all and uses sign language as means of communication (Hewared & Orlansky,1992).
- **Hard of Hearing:** - The term "hard of hearing" refers to those who can hear with the use of hearing aid and has sufficient residual hearing to successfully process linguistic information through the ear (Meyen & Skrtic, 1995).

### 3.3 Language development of Hearing impaired children

According to Alemayehu (2002, cited in Azalech, 2005), children who become deaf before they have begun to speak (usually before the age of two) have difficulty in learning a form of language as children who are born deaf. But those who have learned some language and lost hearing around 3 or 4 years old can be trained more quickly and more successfully in language when they start school than congenitally are exposed to sign language environment in infancy, they can fluently communicate.

In Ethiopia the learning of language and communication skills of deaf children, both at home and in the school environment seems to be a very low status, because of lack of competent users of sign language. Language models may not be available at home and school environments and the development of sign language as a natural language in a curriculum, both for teacher training and school setting may be insufficient (Alemayehu, 2002 cited in Azalech, 2005).

### 3.4 Methods of Communication for Children with Hearing Impairment

According to Bench (1992), human communication is interpersonal, that develops early in life. It involves the sharing of thoughts, meanings and ideas between people. An act of communication usually requires a reciprocal act. Such communication skills progress naturally from a young child's interaction with the social environment (Bench, 1992).

*-Oral Communication:* - oral communication methods are a method of expressing ideas by using speech, speech reading (lip reading) and residual hearing, and expressing themselves through speech (Moore, 1996).

*-Manual Communication:* - this system usually use hand sign, gesture to transmit a message between persons. Being expressed manually, they are received visually and sometimes tactually (ibid).

*-Total Communication:* - is the use of all means of communication such as sign, finger spelling, speech, lip reading, facial expressing and gesture (Lynas, 1994).

*Sign language:* - peoples with hearing impairments express their ideas using body movement instead of speech, expressing ideas by using other parts of the body: - eyes, eyebrows, cheeks, lips, tongue and shoulders in the language being used. Finger spelling is a special form of sign system in which each letter of the alphabet has a finger sign used to spell words and sentences used in conversation (Heward & Orlansky, 1988).

### 3.5 Social Development of Children with Hearing Impairment

Skjorten in her discussion of the meaning of interaction, point out that interaction is the mutual understanding of two or more persons towards each other to share and interchange interests; feelings; opinions; or information by using different systems of communication (Skjorten, 2001). Ysseldyke and Algozzine (2003) also described interaction is important for the development of hearing impaired children and other children who have positive attitude in the process of the communication.

According to Bronfenbrenner`s nested ecological system the family and the school is the first Microsystems whose experiences directly influence the child`s development (Rogoff, 2003). The child gets different experiences from his/her immediate environment and learns different activities through interaction with more experienced adults and peers (Whiting, 1975 and Whiting & Edwards, 1988 cited in Rogoff, 2003). According to Tirussew (2005), Hearing impaired students can learn socialization from their parents, siblings, peers and teachers, but the value of socialization depends on the feelings of persons interacting towards the disabled person.

Bench (1992), discussed the development of communication as human communication is interpersonal, that develops early in life. It involves the sharing of thoughts, meanings and ideas between people social environment. Communication problems can seriously delay with interpersonal relationships for students with hearing impairments who obtain all or part of their education in general education classroom. With regard communication, (Azalech, 2005), hearing impaired students communicate in ways that are different from those around them can slow down their social interaction and development.

Hearing impaired students in the regular class who are not socially integrated may experience feeling of loneliness because of communication difficulty (Stinson & Antia, 1999). According to Nix (1976), the rationale of inclusion is creating significant social interaction and participation between hearing impaired students and

hearing students, and raising the positive attitude of hearing students towards hearing impaired students.

Most hearing impaired people are fully capable of developing positive relationship with their hearing peers when a satisfactory method of communication can be used (Heward & Orlansky, 1988). According to (Kluwin et.al, 2002), hearing impaired students in the regular school mostly have problem to establishing close relation with their hearing peers.

### 3.6 Integration of Hearing Impaired Students in the Regular Classroom

Inclusion can be practical when the hearing impaired students are fully interacting and participating in the classroom, when the classroom teacher has cooperation with special needs educator, adapt the classroom environment and curriculum to the student`s educational needs (Stinson & Antia, 1999). With regard to communication, (Kreimeyer et.al, 2000) indicated that one of the main objectives of inclusive classroom is to create a means of communication that allows direct interaction between hearing and hearing impaired students. According to Azalech (2005), Hearing impaired students communicate in ways that are different from those around them and this can slow down their social interaction and development. Regarding to interaction and participation Antia and Stinson (1999), the first and most essential, difficulty faced when hearing impaired students and hearing students are educated together is common access to communication.

Integrating children with hearing impairment in to the regular classroom has become an argument among teachers, professionals and parents. Because fulfilling the special needs of hearing impaired students particularly of those who are integrated with the hearing peers, is not an easy task Azalech (2005).

Teachers and hearing students` attitude towards the hearing impaired students are factors that can affect the effectiveness of integration. Maintaining students with special needs in regular education depends on the attitude and the action of the regular

teacher and the school team, organization, financing, regulations, teacher training and so on can all facilitate and enable integration, but if teachers do not actively support the effort to achieve integration, the placement of students with special needs in regular setting will remain problematic (Catherine, 1988 cited in Azalech, 2005).

One of the huge challenges of hearing impaired students in the regular classroom setting is managing students with a wide range of individual difference with social and academic disabilities (Cawthon, 2001). He also described, Communication needs of deaf students and the teaching method in atypical oral-only classroom are likely difficulties with inclusive education. Sign language interpreters can be used to addition teacher speech and help deaf student involvement in classroom dialogue.

In order to make the classroom inclusive for all learners, teachers should work jointly with special needs educators, and professionals to make adaptation in the curriculum to meet the diverse group of learners in a class (Friend and Bursuck, 1996 cited in Stinson & Antia 1999). Antia & Stinson (1999) also described that, if the classroom teacher does not take proper actions, such as structuring class discussion to encourage participation, then the experiences of the hearing impaired students are doubtful to be successful.

### 3.7 Support for the Hearing Impaired Students

Teaching hearing impaired students in the regular classroom needs reliable knowledge and constant effort of the classroom teachers Azalech (2005). According to Etenesh (2008), the challenge towards inclusive education could come from different directions such as attitudinal factors, inflexible school system, and resistance to change, lack of clear educational principle, and fear of losing one's job on the part of special school teachers.

According to Stinson and Antia (1999), the diversity of the student in the regular classroom challenges educators to give support, and motivate to be effective in their academic results. As it is described by Cawthon (2001), it is obeys that using oral language as a media of instruction in inclusive classroom where hearing impaired

students are found, is not only academic problem also as a violation of the right of the deaf students (Cawthon, 2001),

Parents and teachers need to help young children and adolescents to establish a course for self-esteem by focusing on their strengths, supporting them, and helping them to take control of their lives with their own culture and values (Ornstein et.al, 2003).

The real challenge of inclusive education is to meet the special needs of all children with and without disabilities. In some schools, regular teachers are asked to teach special needs students without receiving any type of training as well as administrative support (Etenesh, 2008).

In inclusive classroom, if teachers do not actively support the effort to achieve integration, the placement of students with special needs in regular setting will remain problematic (Catherine, 1988 cited in Azalech, 2005). According to Antia et.al, (2002), teacher expectation can have a negative impact on the academic performance of students by communicating to students that they are not expected to fully participate in classroom activities.

### **3.8 Involvement of Parents in the school program**

The involvement of parents is a serious part to the achievement of individual students and the success of the school program (Afzali-Noumani, 1995 cited Antia et.al, 2002). With regard to parents (Semakula, 1999 cited in Etenesh, 2008), the involvement of parents is essential for the common sharing of knowledge, skills, experiences and decision-making for the development of the hearing impaired students.

### **3.9 Importance of Extra-curricular Activities in the School**

Extra-curricular activities for all children are essential. This may include organizing field trips and visits and formations of clubs like for example, music, art, photography, debate, natural science, research, drama and other recreational programs. This is an important parameter not only for promoting inclusion outside the

classroom among students but also for unfolding of the diverse potentials and talents of both children with and without disabilities. Such as habit needs to be nurtured right at primary school level so that children will be used to wisely spending their out of school time Dereje (2006).

Extracurricular activities are a major avenue by which students can obtain a sense of belonging to the school community and gives good opportunities for students to learn about each other and to share experiences (Antia, et.al, 2002).



## 4. Research Design and Methodology

This chapter discusses the research design and methodology that is used to carry out the study. It presents the design of the study, issues related to gaining access to the school, sampling of cases and informants, methods of data collection and analysis, measures taken to secure validity and reliability, ethical considerations that have been taken when the study has been carried out; and also it discusses limitation and delimitation of the study.

### 4.1 Research Design

The purpose of the study is to investigate the social interaction and participation of hearing impaired students with their teachers and hearing peers. In order to meet this purpose, the study is going to answer the basic questions by using qualitative case study. The qualitative method is chosen for this case study because of the characteristics of the research questions and objectives. The focus of the study is in classroom and out of classroom in the school to study the phenomenon under investigation in depth. Case study, as defined by Gall, Gall and Borg (2007), is an empirical inquiry that investigates the phenomenon within the real life situation in which different sources of evidence are used.

The qualitative research has a style of art that shows people, things and experiences as they really are, focus on common-sense practices to answer the how questions and helps the researcher understand people's experiences. Qualitative research helps the researcher to be flexible and encourages introducing new data and it is the researcher who is structuring the data during the field work (Silverman, 2001). Qualitative research involves in the real situation by interacting with the empiric in their own language on their own language teams and case study typically involve field work in which the researcher participates in the natural setting (Gall et.al, 2007).

A qualitative approach with a case study design is chosen to structure the study to enable investigation of the phenomena in its context and in depth. Case study research as defined in Gall, Gall and Borg (2007) is the in depth study of instance of a phenomenon in real-life settings and from the perspective of the participants involved in the phenomenon.

This is an in-depth investigation of how hearing impaired students interact with teachers, hearing peers and hearing impaired each other in the classroom setting during lecture, group discussions, conversation, note taking, teaching by radio, group presentation and other activities in the class and out of class, co-curricular activities, sport and play time in the school, focusing on challenges and supports during the interaction. According to Gall, Gall and Borg (2007) phenomenon refers to the processes of, events, persons and things of interest to the researcher where as a case is a particular instance of that phenomenon. The phenomenon under investigation in this study is interaction and participation.

## 4.2 Gaining access into the field setting

Gaining access into the field setting for a study should be achieved through administrative hierarchy. As Gall, Gall and Borg (2007) suggested, the researcher must take care to follow appropriate channels of authority to gain access into the field. Similarly, the researcher requested Debre Markos Teachers Education College permeation to get access and conduct the study in the selected school through a written application submitted to the college with the letter from the Department of Special Needs Education, University of Oslo (Appendix C).

A permission letter to conduct the study in the school was granted by the college (Appendix D) and handed to the school. Permission to collect data from the school was obtained from the headmaster of the school. The selected grade five teachers were contacted through the headmaster and briefed to the purpose of the research and their collaboration to offer the necessary data was requested. Permission to conduct

the study in the classroom was granted from the teacher after they have been briefed about the purpose of the research.

### 4.3 Population and Sampling

As Gall, Gall and Borg (2007) stated, it is not possible to study everyone at the real life context in qualitative research methods and the sampling must be small number of people in their real context and studied in depth. Cases in qualitative research are selected by a purposeful sampling process (Gall, Gall and Borg, 2007). The target population of this study includes three deaf and one hard of hearing students who are in the regular classroom, two regular teachers, four parents or guardians of the hearing impaired students, two hearing peers, the head master of the regular school and coordinator of the special unit. The hearing impaired students were chosen deliberately because of the following reasons:

1. It is the first time for the hearing impaired students to be in the regular classroom. From kindergarten (beginner) up to grade four they were in the unit and it is new environment to interact and participate with regular teachers and hearing peers.
2. There is only one hard of hearing student in this group and mixing deaf and hard of hearing students in the sample helps the researcher to compare the social interaction and participation among themselves with their teachers and hearing peers.
3. They are no late or absent from school, this will help the researcher to get thick information during data collection.

The regular teachers were chosen based the complexity of the subject they are teaching. They are teaching mathematics and English. Teaching these subjects for hearing impaired students in the regular classroom without sign language interpreter is very challenging, so the researcher wants to see how these teachers are supporting these students to participate and interact in different classroom activities, such as

planning, selection of content, teaching methods and strategies and the way of assessments.

Before starting data collection, there was information about the number of students who are integrated in the regular class by the coordinator of the unit. Based on the information, there are 10 hearing impaired students integrated in five sections of grade five. The sampling technique was purposeful sampling and out of the 10 students with hearing impairment in the regular class in grade 5, four hearing impaired students from two sections were chosen by the researcher.

The distribution of sex was three female and one male hearing impaired students and one of the female student was hard of hearing. This combination helps to compare the social interaction and participation of deaf students and hard of hearing students with their teachers and hearing peers. Two teachers from integrated classes were purposefully selected to serve as a source of data. In addition to this, two hearing students (one from each integrated sections), parents or guardians of the hearing impaired students, the head master of the school and coordinator of the special unit were involved in the study.

Therefore the total number of the informants is 14 (10 female and 4 male). The purpose of selecting regular teachers and hearing students is to get rich information about how hearing impaired students are interacting and participating in classroom activities, extra-curricular activities and play.

### **4.3.1 Description of the Sample**

#### *Background information of Students with Hearing Impairment*

In order to identify the social interaction and participation of hearing impaired students in the regular classroom setting one student with hard of hearing and three pre-lingual deaf students are chosen for the case study. The data is collected in the classroom in the teaching and learning process through different activities, and out of classroom situation. The back ground information of hearing impaired students is presented in table 3 as follows.

Table 3: back ground information of students with hearing impairment

Name	Sex	Age	grade	Hearing level	Time of onset	HI in the family	language	Parents educational level	Parents or guardians occupation
Alemitu	F	12	5-A	Moderate	3 years	3	Total communication.	No education	farmer
Tewabech	F	16	5-A	Profound	Before birth	no	Sign language	No education	farmer
Workitu	F	22	5-C	Profound	Before birth	no	Sign language	No education	farmer
Dereje	M	19	5-C	Profound	Before birth	no	Sign language	Completed grade 12	employed

### The case of Alemitu

Alemitu is 5<sup>th</sup> grade student who is hard of hearing with speech. According to her mother she has a very little hearing capacity. Audiological measurement has not been made to know her hearing ability, because of lack of access for audiogram. She is 12 years old and almost the right age for the class, since the official age for the class is 11 years of age for grade 5. She is the 7<sup>th</sup> child for her parents. According to her mother she got hearing loss when she is 3 years old. She has one deaf and one hard of hearing brothers. Her uncle (mother's brother) is also deaf in the family. Her brother with hard of hearing is studying in grade 7 in a regular school with no consideration for his hearing impairment. According to Alemitu's mother, the cause of the hearing loss in the family is related with "spiritual force" so that nobody took them to the Hospital, instead took them to holy water, praying to God and used local medicine to take out the "spiritual force" from them.

She walks almost an hour from home to school. She has been attending her education in the unit from beginner up to grade four and now she is in grade 5 with hearing students in the regular classroom.

**The case of Tewabech**

Tewabech is a 5<sup>th</sup> grade deaf student with no speech. She is 16 years old. She is older than the official age for grade five by 5 years. She is the second child for her parents and the only child with hearing impairment in the family. Her hearing impairment was identified by her parents when she failed to attain normal language development. Audiological measurement has not been taken to know her hearing ability, because of lack of access for audiogram.

According to her father the cause of her hearing loss is related to “spiritual force”, so that she has been taken to holy water, prays to God and used different local medicines to take out the “spiritual force” out of her. But she couldn't hear and speak like other children in the village. For the last four years, she has been attending her education in the special unit like the other students with hearing impairment, but now she is attending in integrated classroom. She walks almost for an hour from home to school every day with her friend and classmate Alemitu who is hard of hearing student.

**The case of Workitu**

Workitu is a grade five student with hearing lose and no speech. Audiological measurement is not taken to know her hearing ability. She is 22 years old and the oldest student in the classroom. She is the 4<sup>th</sup> child for her parents. She attended her education in the unit up to grade four but now she is in the regular classroom setting like others. According to the coordinator of the unit she has low academic performance when she was in the unit, because of group assessment she scores pass mark for the next grade without problem. She is also weak in sign language.

**The case of Dereje**

Dereje is deaf without speech. He is 19 years old and the only child for his parents. Audiological measurement is not taken to know his hearing ability. There is no any other person with hearing impairment in the family. His mother and father are living apart. Dereje is living with his aunt (the sister of his mother) in Debre Markos town. His guardian (the aunt) is educated and employed in a government office. According to his guardian, the cause of his hearing loss was not identified soon. His mother was

trying all her best to get medical treatment but she couldn't get solution for the problem. He attended his education in the special unit up to grade four like other students with hearing impairment.

### *Background information of regular teachers*

For the purpose of the study and to seek rich information for the data, two regular teachers are selected who are teaching students with hearing impairment in the regular classroom setting. These teachers are observed in the teaching and learning process in the classroom, interviewed at the time of their free periods and additional information was also gathered through informal talks. The back ground information of these teachers is described in table 4 below.

Table 4: Back ground information of regular teachers who were interviewed

Name	sex	Knowled ge of sign language	Service year in teaching	Area of study	Educational level	Subject teaching	Experiences of teaching in integration classes
Helen	F	No	28	Mathematics	Diploma	Mathematics	6 months
Bertukan	F	No	3	English	Diploma	English	6 months

### **The case of Helen**

Helen has been a primary school teacher for the last 28 years. She graduated from Gonder Teachers Training College with Diploma after completing two years training. She is teaching mathematics in grade five in three sections where regular students and students with disabilities (hearing and visual impaired) are integrated. Helen explained that, she doesn't have training or experience teaching students with hearing impairment. She also doesn't have the knowledge of sign language.

### **The case of Bertukan**

Bertukan has been teaching in the NG primary school for the last three years. She graduated from Bahir Dare University with Diploma after completing two years of training. She is teaching English in grade five in three sections where regular students

and students with disabilities (hearing and visual impaired) are integrated. There are two hearing impaired students in each section. Bertucan doesn't have training and experiences how to manage students with hearing impairment like the other regular teachers. This is her first time to teach hearing impaired students in the regular classroom. She also doesn't have the knowledge of sign language. She strongly disagrees with the integration of students with hearing impairment for a reason described latter in the analysis.

## 4.4 Methods of Data Collection

In this study, three methods of data collection are used to get reach information from different sources for the purpose of triangulation. The purpose of triangulation is to secure validity and reliability of the data. These multiple methods include observation, interview and informal talks. Observation was the main data collection instrument while interview and informal talks were supplementary data collection methods of this study.

### 4.4.1 Observation

As it is described by Gall, Gall and Borg (2007), the advantage of observation in qualitative research is it helps to obtain the real data directly from the social and physical environment of the informants being studied. If used properly it provides reliable data; however, it is time consuming. Selected observations in a researcher's report provide a more complete description of the phenomena than would be possible by just referring to interview statements or documents. Just as important, observations provide an additional source of data for verifying the information obtained by other methods (Gall, Gall and Borg, 2007).

The observation is based on how students with hearing impairment, hearing peers and teachers were interacting and participating in the classroom situation (in group discussion, during lecture time, roll playing, and note taking). It is also focused on how hearing impaired students interact and participate during play extra-curricular



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activities, sport and Guidance and counseling. Some key points were developed prior to the fieldwork to be used as guide for the pilot observation and the final observation. The Pilot testing of the observation guide gave a chance to check and recheck the focus point and make proper corrections.

The informants being observed were 3 deaf and one hard of hearing students in two sections of grade 5, integrated in the regular classroom in NG governmental primary school. In this study, twenty in and out of classroom observation were conducted and recorded on observation record sheet.

The observation period occurred during in the morning and afternoon session. The observation is focus on nine teachers who are teaching different subjects in the same classroom, this is to cross check the interaction and participation of hearing impaired students with different subject teachers.

During the first the observation period in each class I introduced myself and explain the purpose of my presentation in the class for the students. I also explain as I would be in the group where hearing impaired students are found and sometimes at the back of the class to use the video camera. Seven observations were made in each classroom a total of fourteen observations in the teaching and learning a length of 40 mints for each subject. Six observation periods were also made out of class during sport period and break time length of 15-40 mints using video camera and observation recorded sheet. The aspects of the school and the classroom such as the physical setting, facilities, activities, interaction and participation are observed and recorded (Appendix K and L). The researcher had also observed the teaching and learning process in the special unit.

#### **4.4.2 Interview**

Interview was the supplementary method of data collection method used in this study. As Gall, Gall and Borg (2007, p. 228) stated, the advantage of interview is its adaptability; skilled interviewers make an effort to built trust and rapport with respondents thus making is possible to obtain information that the individual probably

would not reveal by any other data collection method and also can follow up a respondent's answers to obtain more information and clarify vague situations.

Four students with hearing impairment, two hearing peers, two regular teachers who were observed in the classroom, one special needs educator who is teaching in the special unit and serving as coordinator in the unit, one parent/guardian of each hearing impaired students and the headmaster of the school were informants of the study and interviewed separately by the researcher after the observations were completed. The special unit coordinator also participated in the interpretation of sign language for the hearing impaired students. Interview guide with list of questions were prepared before the field study (Appendix E, G, H and J).

The interview guides were translated into local language i.e. Amharic and sign language as a means of media between the interviewer and respondents (Appendix F and I). These questions were open ended and unstructured that means other relevant questions rising during data collection and on site-analysis were included. The interview of the hearing impaired students was facilitated with sign language interpreter who has long experience in teaching hearing impaired students in the special unit in the regular school. The interview was recorded by audio tapes.

Four interview sessions were done with the two regular teachers after the observation is completed. In order their convenient the interview were conducted and tap recorded in the laboratory room which was non functional during their free time. The length of time for the interview was taking from 1 hour to 1 hour and 30 mints. The interview with the head master of the school was conducted in his office and took 1 hour and 30 mints. The interview which is conducted with the special unit coordinator was in her office and took 1hour and 15 mints.

Two hearing students were interviewed, one from each class of observation made. The hearing impaired students were interviewed in the special unit office with the sign language interpreter during their free period. The interview was taking 2 hours for each interviewer and tap recorded the transcription of the sign language. Each of the parents of hearing impaired students were also interviewed and tap recorded.

### 4.4.3 Informal talks

Informal talks took place with the hearing impaired students, coordinator of the special unit, hearing students, regular teachers and the head master of the school during break and free times as supplementary method of data collection to cross check the data collected through observation and interview methods, this also helps to increase the degree of validity and reliability of the study.

## 4.5 Methods of Data Analysis

The data collected through observation and interview by the help of audio tape recorders, video camera and field note is analyzed qualitatively using the interpretational method of data analysis. Gall, Gall and Borg (2007) defined interpretational analysis as “the process of examining case study data closely in order to find constructs, themes, and patterns that can be used to describe and explain the phenomenon being studied.

The process of data analysis in this study is undertaken during and after the data collection. The collected data is converted into written forms to be ready for coding and analysis. The result of the interview from regular teachers, the head master of the school, parents of the hearing impaired students, special unit coordinator and the hearing peers are transcribe and translated. The interview is conducted in the local language (Amharic), transcribed from the recorded tape and is translated in to English.

The data gathered from hearing impaired students (the focus group) by sign language is transcribed in Amharic in written form as interpreted by the special unit coordinator who has long experience with sign language and teaching hearing impaired students. Then the data is translated into English. The data gathered through video recording of the classroom observation is transcribed in Amharic in written form and later translated into English.

The data collected through informal talks from the regular teachers, the head master of the school and the special unit coordinator is transcribed in the field note in Amharic and later translated into English. All the information collected from different participants through the above described multiple methods is coded to identify themes and patterns. The transcription and translation of the data is carried out immediately after the data collection. Due to the ethical issues the name of the participants and the school is replaced by another name (code name).

## 4.6 Validity and Reliability

To keep the study's validity and reliability it is tried to make the research questions and interview guides specific enough to be answered by the informant. Pilot testing have been conducted before the main study which gave a chance to check and recheck the interview guide and observation guide and made proper correction.

To cross check the validity and reliability of the study triangulation of methods, instruments and respondents is used. To obtain accurate data, video camera and tape record are used during observation and interview in addition to the field note which is completed immediately after each observation session. The interview is conducted after the observation in order to avoid biases and to crosscheck the information that is collected through observation and informal talks.

## 4.7 Ethical considerations

Data collection in case study research poses various ethical problems. An interviewee might experiences unexpected emotional difficulties as a result of expressing deeply held and perhaps controversial beliefs and feelings to an interviewer (Gall, Gall & Borg, 2007). It is very important to make ethical considerations to better protect the right of the participants. In order to undertake the study in an ethical manner, the following ethical principles were included into the research process:

- Getting permissions from the college, school administrators, teachers and parents.
- Permission and readiness of the participants to participate in the study after understanding about the purpose and significance of the study.
- Participants were informed who will get access to the data
- The participants were informed that their identities remain confidential.
- The study was carried out with respect and concern for the dignity and welfare of the research participants.

## 4.8 Delimitation of the study

The study was delimited to one governmental primary school in Amhara Regional States. And this study can't represent the social interaction and participation of hearing impaired students in other schools in the region. But the study will help to understand the situation of hearing impaired students in the inclusion system and hopefully indicates possible measure to be taken to create better environmental condition for the hearing impaired students in particular and other students with disabilities in general.

## 4.9 Limitation of the study

It was difficulty getting local literature relevant to the field of this study. Efforts have been made to get literature from the Addis Ababa University, but there were not sufficient materials there too.

Difficulty of data collection through interview from focus group of hearing impaired students was challenging because of problem of communication between the sign language interpreter (special unit coordinator) and the hearing impaired students. Using video camera especially during break time proved to be impossible to get the natural behavior of the participant students.



## 5. Discription and Analysis

This chapter presents the data collected through observation, interview, informal talks and field notes in the regular school setting of NG primary school in Amhara regional state, Debre Markos town in Ethiopia. From ten hearing impaired students who are integrated in five sections of grade 5, four were selected from two sections for the study. Three of them were pre-lingual deaf and one was post-lingual hard of hearing.

In order to identify the interaction, participation and support given to the hearing impaired students in the regular classroom setting in different activities (lecturing, group discussion, and other activities) and out of classroom during sport period, break time, guidance and counseling and extra-curricular activities, multiple (triangulation) methods of data collection is used. Therefore in this chapter the finding from the students and other data sources are presented.

The observation in the teaching learning process shows that hearing impaired students' social interaction and participation is poor. They are passive in the class. The detail challenges of the hearing impaired students in the teaching and learning process based on observation in and out of classroom of the regular classroom setting is described as follows:-

- The points that Interaction of hearing impaired students in the regular classroom setting; under this category a discussion on the teaching learning process on the bases of classroom organization, teaching methods, lecturing, group discussion , and the curriculum is presented. The discussion is also focused on the interaction of hearing impaired students with regular teachers and hearing students out of classroom situations, like at the period of sport (physical education) on the field, break time, extra-curricular activities and guidance and counseling service in the school.
- The second part of the analysis is on the interaction of hearing impaired students with their parents.

- The last part of the analysis focuses on the quality of supports from the regular teachers, from professionals, the school administrators and parents.

## 5.1 Interaction of hearing impaired students in the regular classroom setting

This study focuses on the challenges and opportunities in the interaction and participation of hearing impaired students in the regular classroom setting and out of classroom setting in the regular school with their teachers and hearing peers. Based on the result of the collected data through observation, interview and informal talks, the analysis is sub divided into the following parts.

### 5.1.1 Classroom Organization

As described in chapter 4, the observation is focused on how hearing impaired students, hearing peers and regular teachers are interacting and participating in the classroom situation in group discussion, during lecture time and out of classroom during break time, sport, extracurricular activities and guidance and counseling service.

The seating arrangement is organized at the beginning of the academic year and remains throughout the year by the demand of the subject teacher, without the consideration of the comfort of the students. The desk and bench are organized by the teachers in the way of a semi-circle to be convenient for group discussion. Each group consists of 6-8 students. The hearing impaired students are in the same group in each classroom and also in the same group. This helps these students to help each other.

For example three of the deaf students in both classrooms seat facing towards the black board and the teacher, but one of the hard of hearing student seat with her back towards the black board and the teacher. This student always turns her face to see the teacher and to take note from the black board. This also limits the access of getting information from gesture or lip reading from the teachers and hearing peers. The



hearing impaired students are in the same group in every section. This allows them to help each other.

There are two hearing impaired students in each classroom in grade 5, except one section only one student in a classroom. During observation this student asked to shift to another section where hearing impaired students are found, but the classroom teacher refused to accept this student, because regular teachers do not like to have hearing impaired students in their section where they are homeroom teachers. The number of the students in the classroom is large, with an average of 50-60 students in one classroom. This causes challenge for the teacher to walk around the classroom to give attention and support when needed by the students. The number of students (the class size) in a classroom is the same as other regular classrooms. There is no special consideration to reduce the number of students in inclusive classroom setting by the school administration.

There is no special consideration on the arrangement of classes for students with disabilities. Classrooms for the hearing impaired students have enough light like the other classes, and this helps the hearing impaired students to follow the activities, lip reading and body movement (gesture) of the teachers and their hearing peers.

### **5.1.2 Participation of Hearing Impaired Students in the Curriculum designed for the Hearing Students**

For every subject there is a given session teaching by the radio, at this time the hearing students are attending the program but the hearing impaired students are engaged in other activities. For example during English Radio program, the lesson is how to construct plural and singular sentences. The Radio starts the lesson singing a song about how to develop singular and plural sentences. At this time the regular students sing with the Radio clapping their hands. The hearing impaired students are looking at action of their hearing peers. After the song the Radio starts teaching the rule how to construct singular and plural sentences. After the Radio the teacher explains more about the lesson. But the hearing impaired students smile with each other. There is no special consideration for these students by the teacher.

For example teaching mathematics and language in the regular classroom language is very challenging for the hearing impaired students. Because mathematics needs practicing and problem solving, so how can hearing impaired students get the knowledge of the subject, the same is true for language, because it needs understanding of the rule of the language to apply properly.

The curriculum doesn't consider the hearing impaired students who are in the regular classroom setting. Teaching language in the regular classroom without is very also challenging for the hearing impaired students and also for the teacher. One of the teachers expressed her concern saying that it is a wonder how hearing impaired students understand the subject at all.

### **5.1.3 Teaching Methods**

The teaching methodology in the classroom is student centered, which motivates the student to participate and interact in the teaching learning process practically. This helps the student to learn by doing. But for the case of hearing impaired students it still remain challenging. During the observation, almost all of the regular teachers teaching in the selected classrooms were using the same procedures to apply student-centered method in the teaching learning process. The teachers used lecturing and group discussion as the main methods of teaching methodology in the classroom. The focus of the teaching and learning methodology and strategy is described as follows.

#### *Involvement during Lecture*

During observation in Music period, the teacher asked students oral question about the last lesson how Music is important for the society. The hearing students give answer orally turn by turn. The teacher summarized the answer orally but the hearing impaired students are seating in the class trying to follow the activities of the students and the teacher. There is no attention for the hearing impaired students by the teacher. Hearing students read a poem about Abay River (Nile River) turn by turn. The teacher is drawing the river from the source showing the path of the river. The hearing impaired students are seating looking at the activities of the class. After the poem the

students are singing about Abay River (Nile River) with the teacher. It is very challenging for the hearing impaired students to learn Music in the regular classroom setting without giving special support (attention) for them. These students are assessed in the same way as the hearing students. It is not difficult to imagine that what the results of these students would be comparing to their hearing peers.

During lecture time students with hearing impairment do not give attention for the lesson, they are doing different activities, like talking to each other using sign language, writing short notes from their book, seating idly or laying their head on the desk, hide their face between their hands and stretching their bodies upright, because they do not understand what the teacher is saying and losing attention from the oral discussion and conversation among the teacher and the hearing students.

The hearing impaired students seem to be disappointed by the teaching methodology of the regular classroom teachers. During the teaching and learning observation Dereje is frequently gesturing to indicate that he does not grasp the subject. At the time of interview and informal talks they indicated that they prefer teachers who have knowledge of sign language.

For the period of English lesson, the teacher is recapitulating the previous lesson and introduced the topic for the day. The teacher is walking around the classroom to check how students did their home work or assignment paying no attention to the hearing impaired students.

The teacher is letting the students practice more on their assignment. The teacher said; “look at question number two from the book from the assignment. There is a long word “Ethiopians”, containing ten letters. Construct other short words by joining different letters from the long word. Students are writing short word from the long on the black board turn by turn such as “ant, eat, tea, the, she, he, is”, and so on. One of the deaf student, Dereje raised his hand to construct a word, he tried to observe the structured words by the students on the black board for a while and write the letter “ocr” which is wrong, then the teacher moved her head and said “ok thank you, but it is not correct”. Workitu, the other deaf student, followed the structure of the words

from the black board and raise her hand to create another short word the teacher is not giving attention for her but Workitu kept trying by raising her hand again and again, finally she get the chance to write the word on the black board, she wrote the word “sat”. The teacher said “yes, she is right “clap for her”.

The students are presenting their work orally turn by turn to the class, teacher summarize the answer based on the student`s activity. Alemitu is looking around the class. Tesema, a hearing student, who is seating next to her talks to Kebed, who is in the same group and next to Alemitu about the assignment looking to their exercise books. Alemitu is following their activities looking on their exercise books and their gesture. After their discussion she pulled Tesema`s exercise book to check what they were pointing and talking about, but Tesema didn`t give attention to her and took his exercise book and turn his face to the teacher, to attend the discussion.

The teacher gives individual class assignment from the text book orally, to construct four positive and negative sentences. Abebe (hearing peer) who is seating at the side of Dereje on the same bench, pull him and try to explain about the class work using gesture and pointing on the text book. Still it was not clear for Dereje, after a while the teacher tries her best to give some clue about the instruction of the class assignment. She writes on his exercise book about the sentence pointing on the text book and counting her fingers to show four sentences, using gesture and lip reading for verbal expression.

During this time Workitu (the deaf student) is reading her text book because she could not hear what the teacher said orally. Abebe who is seating at the side of Workitu pulled her and pointed to the book trying to tell her about the class assignment using gesture, but she didn`t understand what he is telling her. She is looking at Dereje (her deaf peer), after looking at the gesture of Abebe, tells Workitu what he understand from the gesture of Abebe, using sign language. The teacher later reported that it is very challenging to teach language for students who are hearing impaired in general in the regular classroom.

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At the end of the period the teacher gave assignment from the book for the class orally, Three hearing students in workitu`s group argue with each other which question number is given for assignment because they were not attentively followed the speech or the instruction of the teacher. This incident indicates that oral instruction in the class is challenging even for the hearing students. Lastly they compromised by other group mate who attend the oral instruction attentively. Then the hearing peers tried their best to clarify the word of the teacher by pointing to the page of the book and the exercise which is given by the teacher, using lip reading, pointing and writing on paper the word of the teacher.

There is no attempt by the teacher to pass the information to the hearing impaired students about the lesson. Sometimes hearing impaired students asked the help of their hearing peers and they help them better than the teachers to pass some of the information especially about the assignment, instruction and other issues related with the lesson conducted orally in the classroom.

During mathematics period the teacher is discussing the assignment about whole numbers. This includes counting numbers including zero. The teacher is discussing question number 6 from the assignment orally with students. Tewabech is seating looking around the activities of the students and the teacher. The teacher is walking around the classroom to check the student`s exercise book for the assignment with no attention for the hearing impaired students. Then the teacher asked question by pointing the students and voluntary participants solving the numerical question ” $9040 - 3463 + 109 = \underline{\quad}$ ” on the black board, talking towards the black board. One of the deaf students (Dereje) tried to solve the problem on the black board like other students but he couldn`t, this does not seem to be because of his talent, rather because of communication barrier. At last the teacher summarizes the answer for the question based on the written answers on the black board by the hearing students.

The teachers used different lecturing or oral methods of teaching in the teaching and learning process. For example in the form of conversation such as asking questions and answering the questions by the student and the teachers, presenting students activities by reading for the class, teaching by Radio and summarizing the main

points after Radio by the teacher. This is a huge challenge for students with hearing impaired students in the regular classroom setting.

### *Involvement in the Group*

The desk and bench are organized by the teachers in the way of a semi-circle to be convenient for group discussion. Each group consists of 6-8 students. The hearing impaired students are in the same group in each classroom. group. This helps these students to help each other.

During group discussion the deaf students are not participating in the group discussion but they are reading or writing from their books because the hearing peers are using oral language for discussion. The presence of the hard of hearing student (Alemitu) in one class is helpful for the deaf student (Tewabech), because the hard of hearing student has residual hearing ability so that sometimes she can communicate verbally with the group and translate to sign language for the deaf student who is in the group.

The teacher gave exercise orally to discuss in group, but the hearing impaired students didn't get the idea of the question. The hearing peers tried to sum up the question for the hard of hearing student using lip reading and speech to translate to the deaf student. The deaf student always depends on the hard of hearing student to get some idea. Even the student with hard of hearing is having communication barrier because she is hearing only few verbal speech and her seating is at the back of the class. She tries to communicate only with her group mates with lip reading and few verbal words. But in the other section communication is challenging, for both of the students are deaf. However, hearing peers sometimes tried to write on a piece of paper about the information.

During the group discussion Tewabech pointed to Alemitu but Alemitu was looking over her shoulder towards the black board for the short note written by the teacher, so she did not respond to Tewabech's gesture. Tewabech again tried to get Alemitu's attention by knock the desk again but she got no respond. Later on, Tewabech asked

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Alemitu, using sign language, to lend her exercise book to take note. She was copying the wrong page of the exercise book, but Alemitu pulled Tewabech's exercise book and turn page to show her the right page to be copied.

### *Involvement in Physical education*

The Sport (also called Physical education) lesson is given in theoretical form in the classroom and practical work on the field. During observation and informal talks, hearing impaired students are not considered in the field practice. They are remaining in the classroom doing some other activities. Which means participation depends on the interest of these students. But for theoretical purpose (lecture time) they are in the classroom.

For example, Tewabech is participating in sport period. The teacher gives oral instruction to the class to make line and running to the field. She followed the activities of the student and act like other hearing peers. Looking the action of the hearing peers she stood behind to make a line. While practicing in the sport activity, she is following the action of the hearing peers so that she is always behind the activity of others. The teacher said "you at the back, please be fast, don't lag behind the other students". Even he didn't identify as she is deaf.

In another episode, students are jumping individually using a rope for limited time, taking turn. Almaze pointed to Tewabech to jump for her turn and after a while Tesema said "that is enough", Zeritu gesture to stop jumping and to give the rope to the next student. The next exercise is jumping three students together with a rope, she is jumping with two hearing peers at the same time using a long rope, actually she manage it well following the action of the students. She is following the activities of the hearing peers attentively waiting for her turn until the hearing students gesturing her to continue the activity.

Dereje is an active participant and is interested in sport activities. The problem is that he is always behind the activity of the hearing peers. This is because of communication barrier; he watches the activities of his hearing peers and follows their action. On the other hand, Alemitu and workitu are not participating in sports

activities most of the time. The sport teacher is not giving attention for hearing impaired students like other hearing students. If they are interested they can join the students, and if they aren't interested, they will remain in the classroom doing different activities. . The problem is how to evaluate the performance of these students together with the regular students. Even they participate in practical activities the teacher doesn't give much attention for them.

### *Interaction During Recess*

During observation in break time, the male and the female hearing impaired students form different groups, but few female hearing impaired students join the male group. The following excerpt from the observation is presented to illustrate this idea.

Most of the time Alemitu is seating in the classroom during breaks time reading books, but sometime she joins students with hearing impairment in the unit. She is passive in the classroom and out of the classroom. But Tewabech and Workitu join other group of female hearing students from different sections from the regular classes. Usually they are standing in front of their classroom but others come to join them and form a group chatting and smiling with each other using sign language until the bell rang.

Dereje joins the other hearing impaired students from different sections of regular classes at the center of the field forming a group and discuss different issues using sign language. He seems to be the leader of the group, because he takes most of the time to sign with the group members. And he also has acceptance of the group. Sometimes the group moves to the unit to join hearing impaired students.

In the classroom hearing impaired students are passive and have very poor interaction and participation with their hearing peers and teachers, but at break time they are active and have very good interaction and participation with their hearing impaired peers from other sections. They have poor interaction with their hearing peers during break time. They join different groups from different sections.



### *Involvement in Extra-Curricular Activities*

Extra-curricular activities are activities performed by the student outside normal curriculum of the school including clubs and groups to get support from other students. These clubs and groups help to meet students who are different with each other to bring together and to develop social interaction and participation among students.

There are different clubs in the school organized by teachers and voluntary participants of students to exchange different experiences among students. The clubs consist of Music and Drama, Social study, Sport, Welfare association, Red Cross, and others.

In the contrary the hearing impaired students in particular and students with disabilities in general are not participating in the extra-curricular activities of the school. According to the head master, this is not because of lack of interest on the disabled students; rather it is because of lack of attention by the school for the whole students with disabilities. According to the special unit coordinator, the disabled students do not have even any idea about the extra-curricular activities in the school.

Extra-curricular activities are very important to create positive environment to students with disabilities in general and hearing impaired students in particular to have better social interaction and participation with regular students and to get different experiences from others.

### *Involvement in Guidance and Counseling Services*

As indicated in chapter two previously the guidance and counseling service is functioning with volunteer teacher assigned by the school. Students with special educational needs are not getting this service. Every activity of the school is designed for the regular students.

These students are not considered as they are part of the school community.

According to the guidance and counselor, these students do not come looking for the service, and also she does not go to them to provide the service. She reported that she never thought that these students need to be included in the service. She also reported

that even if she wants these students to benefit from the service, she has no means to communicate with them. Even the special needs educators did not take the initiative to give service for these students with disabilities. The service is designed for the regular students especially for girls for the second cycle grade level (grade 5 to grade 8), based on gender issues.

## 5.2 Communication Experience Between Students with Hearing Impaired and their Families

It is interesting to know the back ground interaction of hearing impaired students with their families outside classroom. The information is based on interview with their parents. The description of the data in this study is presented as follows.

### *The Case of Alemitu*

Alemitu is living with her biological parents who are living in the outskirts of Debre Markos town. She is from low income family, her father is a farmer and mother is a house wife and both of them are uneducated. According to her mother, Alemitu has very little residual hearing and can speak verbal language. She can hear very loud voices with near distance, so that she can communicate easily with the family members by lip reading and spoken language with low speed of speaking and high voice. Almost half of the children in this family have hearing loss, and they can communicate each other easily because of the same background they have.

### *The Case of Tewabech*

Tewabech is living with her parents who are living in the outskirts of Debre Markos town. They are low income family, her father and mother are farmer and house wife respectively and both are uneducated. Because of high degree of her hearing lose she has problem of communication especially with her parents because she is using formal sign language which she is using in the unit and communicates with hearing impaired students in the school but they are trying to communicate using gesture and pointing said her father. But she can communicate easily with her brothers and sisters

in written form, but she has problem of understanding with her mother and father because of communication barrier. She reported that she feels alone most of the times in the family since they cannot understand each other very well.

### *The Case of Workitu*

Workitu's parents are living in one of the District in Eastern Gojjam but she is living with her older sister in Debre Markos town. She came to Debre Markos town because of the educational access for children with disabilities. She has communication problem in the family; the only ways of communication is using lip reading, gesture and pointing. According to her sister, they do not understand each other easily in the house hold activities, but usually they try to understand each other by relating things with practical actions. For example if she is going to prepare coffee, someone shows her the action how to prepare coffee and the same is true for other activities.

### *The Case of Dereje*

He is living with his aunt. According to his aunt; he is a boy with smiling face, is active and communicates easily with every one using gesture, pointing, lip reading and written form. He is very active and fast so that he can understand things easily by using descriptive way of communication which is related with the daily activities.

From the result of the interview from the hearing impaired students and their parents, it seems that the hearing impaired students are communicating better in their family than school. They have different resources to communicate like lip reading, gesture pointing and writing that do not get in the school environment. Even in the family they have better communication with their sisters and brothers than their parents.

## **5.3 Regular Teachers` Supports for Students with Hearing Impairment**

This study focuses on the quality of support for the hearing impaired students from regular teachers. The following description is based on the interview by the regular teachers.

According to the regular teachers as indicated by the interviews and informal talks, it is very difficult to give especial support to the hearing impaired students in the regular classroom settings and out of the classroom. They are also stated that they strongly disagree with the integration of hearing impaired students in the regular classroom because of the following reasons:

- The number of students is more than 50 in a classroom, the length of the period for a subject is only 40 minutes and the curriculum is designed for the hearing students,
- Most of the hearing impaired students are walking more than an hour from school to home. There are different extra activities in the school out of class for the teachers which are also exhaustive for teachers. Because of these and other reasons, it is difficult to arrange tutorial class for the hearing impaired students. Even when tutorial classes are arranged, the means of communication is challenging.
- There is no support from Personals who are at the level of District, Regional Educational Offices, Colleagues, administrators and professionals for these students and teachers who are teaching in the integration classes. According to the regular teachers, there is no special attention for these students because of lack of communication to understand each other, but sometimes they give them text book in case of shortage of text books in the school.
- They do not give attention for these students, because they are not trained with special needs education,
- There is communication barrier to understand hearing impaired students.
- There is no policy documents, training etc. that encourages teachers, and addressing the educational needs of hearing impaired students.
- The media of instruction is only oral for discussion and dictation for giving note with some usage of the black board. There is no special methodology or strategy planned for these students.

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- They are assessed the same way with regular students.
  - The curriculum doesn't fully considered these students. For example: education by the Radio program is not designed for the hearing impaired students. There is no means of getting the knowledge from this program. There are no special teaching aids and materials specially designed for the hearing impaired students which facilitate the teaching learning process in the classroom.

Regular teachers also suggest that the curriculum needs to be flexible to meet the educational needs of these students, because the number of students in a classroom, the method of teaching, the content of the subject, the period allotment and the means of assessment is designed for the regular students. And also there must be sign language interpreters in the regular classroom with the regular teachers.

Sometimes teachers are discussing with each other how they find it challenging to teach students with hearing impairment. They give materials and text books for these students to read individually when they have to share books with hearing peers. A text books is given to a group of students ranging from 2-10, depending on the availability of the book in the school.

Helen, one of the regular teachers, stated that she only has an experience of giving special support to Workitu, who is living with her older sister and always come late to school. She called her sister or guardian to school to discuss the issue, and now the problem is solved, this student comes on time to school.

The hearing impaired students from beginner up to grade four attend their lessons in the special unit by the help of trained teachers with special needs education. Starting from grade five they join the regular class with their hearing peers. For these students who are in grade five; it is their first time to join the regular classroom. They are taught by regular teachers with no special training for the field. The number of students in the regular class is usually from 50 to 60, and there is no special consideration to minimize the number of student in the integration classrooms. The

large number of students in the regular classroom setting is challenging for the teacher to give special attention for students with special educational needs.

## 5.4 School Administrators' and Professionals' Support

The description of this part is based on the interview result of the special unit coordinator and the head master of the school.

According to the coordinator of the special unit, there was an effort to allocate budget for the hearing impaired student to be beneficial like the visually impaired and intellectually disability students. But the District Educational Office decided that they are like other students except their hearing loss and they can support themselves like other hearing students. The special unit coordinator did not go farther more to get solution for the problem. All budget come from the Regional Educational Office but attention is not given for students with hearing impairment in the grass root level.

Special needs educators who are teaching in the unit strongly disagree about the integration of students with special educational needs specially students with hearing impairment because of the following reasons:-

- Regular teachers do not have training to meet the educational needs of students with hearing impairment,
- Regular teachers do not have positive attitude towards students with disabilities in general and hearing impaired students in particular. They are not even willing to include these students in their classroom.
- Regular teachers assume that students with special educational needs are also intellectually disabled.
- If students with hearing impairment are integrated in the regular class, there should be sign language interpreter in the classroom since the curriculum is designed for the hearing students.

According to the special unit coordinator the problem is not the curriculum or student's intellectual capacity but the problem is lack of sign language interpreter in

the regular classroom setting. Because most of hearing impaired students while they are in the unit they are efficient in their academic performance. According to her, for example, a student with hearing impairment who is grade 10 (regular classroom) compared with grade 3 (in the special unit) can't solve simple mathematical equations. This is not because of lack of potential, but lack of communication barrier in the regular classroom setting.

According to the head master of the school, the hearing impaired students specifically and students with disabilities in general are treated the same way as regular students in the school. There is no special consideration, they are considered as regular students, even their existence may also be forgotten in the class and the teachers also use regular teaching techniques. These students survive in the school because of their effort; they are not even participating in different extra-curricular activities in the school because of lack of attention for them by the school.

Awareness is not given from professionals about how to integrate and how to meet the special educational needs of these students in the regular classroom setting. He also reported that he had no knowledge on how to manage students with disabilities in general in the regular school. But now, after he attended an awareness seminar at Hsahena with special needs educators from the special unit and one supervisor from District Educational Office, he said that he has some ideas on integration now. This shades light for me about children with disabilities said the head master of the school.

As reported by the head master of the school and the coordinator of the special unit, sometimes supervisors come from District educational office to evaluate the teaching learning process of the school, but no one tries to visit the classroom situation of students with disabilities in the unit and in the integrated classroom.

The worst problem that the school faced is special needs educators are moved to another school by the District Educational Office after they upgrade their educational level to diploma, where there is no service for children with disabilities. Special needs educators are giving service in this school because of their training to be special needs educators but have less service year compared with other regular teachers. When they

get their Diploma, they lose their privilege to be in the school and are transferred to another school which requires less years of service. The head master of the school reported that, instead of moving these teachers to another school they can teach in the integrated classroom and this also helps the students with disabilities to be beneficial academically and socially.

According to the head master of school, for the future there is a plan to give training for them in tailoring and making embroidery if it can be practical, because no one will take the initiative. The school even cannot do any better for the students because there is no professional support from responsible administrative upper bodies. The other problem the school encounters is lack of budget to fulfill their special educational needs, because the Regional Educational Office does not allocate budget for the students with hearing impairment. From my personal experience of teaching in the special unit four years ago, there used to be 4 tailoring and 3 embroidery machines in the unit to rehabilitate hearing impaired students. But now the machines are non functional.

The relation of the school and parents/ guardians is not that much satisfactory, according to the head master, the school tried to contact some of the hearing impaired students' parents, but their parents are not much supportive for their children. This is because of the low socio-economic states of the families and lack of knowledge about their children special needs.

According to the school, it is very difficult to communicate with these students. No special way to communicate with them. They are informed everything like the regular students orally. For example students are informed about the rule and regulation of the school, the cause and prevention of HIV/AIDS, gender issues and others during the flag ceremony, for this matter there is no special considerations for these students to be part of the school community.

There is no responsible person for them, they are not coming to the office and also the office is not going to them in case of solving their problem because of lack of full communication and their problems are mostly not solved. According to the regular



teachers, unit coordinator and the head master, there are no special considerations and support to the hearing impaired students in particular, and students with disabilities in general.

The hearing impaired students are getting educational support from the special unit only when they are at the special unit, but after being integrated in the regular classrooms, there is no attention by the special needs educator for these students with disabilities. Sometimes when there is communication problem between the regular teacher and hearing impaired students, the special needs educators help in translating oral language to sign language and vice versa. This is only if students or regular teachers go to the special unit looking for help, but the special needs educators do not approach the regular teachers or the integrated students with special educational needs to give support for them.

Hearing impaired students do not have budget from the Regional Educational Office or District Educational Office that are in the special unit and regular classroom setting. But the visually impaired and intellectually disability have budget from the regional educational office through the District Educational Office.

## 5.5 Parents` Support for their Children with Hearing Impairment

The hearing impaired students in the case study are from different parents back ground and the quality of support they get from their parents is also different. To identify the quality of support from their parents, interview method of data collection is used with their parents and the hearing impaired students. The description of the data in this study is presented as follows.

### *The Case of Alemitu*

According to her mother, there are three children with hearing impairment (two of the children with hard of hearing and one child with profound hearing lose and also one of her uncle (her mother`s brother) is also deaf in the family. She is attending her

education for two shifts (morning and afternoon). According to Alemitu, especially her brothers and sisters are helping her by reading, writing, and discussing about the subject matter for her during their free time at home. They are supportive for her academic achievement. Her parents make some contact with the school when they are demanded by the school to discuss about different issues concerning their child's learning. Since there are two brothers and one uncle with hearing impairment in the family they are helping each other and understand each other. Hearing impairment is a common issue for this family.

### *The Case of Tewabech*

Tewabech is the only child who is deaf without speech in the family. She is attending her education for two shifts (morning and afternoon). According to Tewabech, she is not well supported by parents for her academic achievement; instead she is doing the house work behalf of her sisters and brothers. According to Tewabech no one gives attention to her because of her hearing loss. She tries her best to read her exercise books and text books but stated that she does not understand it well. Her parents are encouraging her brothers and sisters to study after school in order to be get a satisfactory academic result, but for her they give different house work activities and no one is even trying to talk with her. She feels lonely since she is the only one who is deaf in the family".

### *The Case of Workitu*

Workitu is 22 years old and deaf who is living with her older sister. She is attending her education for two shifts (morning and afternoon). According to her after school she has so many responsibilities in the home preparing food for the family, taking care of the children, washing clothes and so on. No one is concerned about her education; simply she is going and coming to school as usual.

### *The Case of Dereje*

Dereje is the only child for his parents who is living with his aunt. His mother was trying different medical treatment for his impairment but solution was not found. He

is active and fast to identify things in everyday life than other hearing impaired students in the school. According to his guardian, his mother has a dream for him to be efficient in his life like his hearing peers, so that his mother is doing her best for him. His guardian has completed grade 12 and is employed. She has attention for him. She has good contact with the school as the school is demanding her.

Since the hearing impaired students are from different parents back ground the quality of support they get from their parents is also different, in general it seems low. This is not because of their hearing loss but because of their parent's educational back ground, low socio-economic states and lack of knowledge about their children needs.

Parents of the hearing impaired students did not give any suggestion about the problems and improvement of educational support from the school or the government; instead they are satisfied by the present condition of their children schooling, and grateful for getting the chance to let their children get educational opportunity. On the other hand, they complained that their children are spending their time at the school the whole day and are not helping them in the household chores.



## **6. Discussion and Conclusion**

The main objective of this study is to get an overview of how hearing impaired students, hearing peers and regular teachers interact and participate in the regular classroom setting situation in group discussion, lecture time, role playing, note taking, conversation and other related activities in the regular classroom as well as outside of the classroom during break time, sport period, extra-curricular activities and guidance and counseling services. This chapter discusses findings presented in chapter five in relation to the theoretical perspectives that are presented in chapter three, which is then followed by conclusion.

### **6.1 Discussion**

According to Bronfenbrenner`s nested ecological system (cited in Rogoff, 2003), the family and the school is the first Microsystems whose experiences directly influence the child`s development. How the hearing impaired students interact with the family, teachers and peers, what type of support is offered for the hearing impaired students from parents, teachers, peers and professionals all give an insight into understanding the student`s social interaction and participation in the regular classroom setting. Hearing impaired students can learn socialization from their parents, siblings, peers and teachers, but the value of socialization depends on the feelings of persons interacting towards the disabled person (Trussew, 2005).

#### **6.1.1 Interactions of Hearing Impaired Students in the Regular Classroom**

According to Whiting and Edwards (1988) and Whiting (1975 cited in Rogoff, 2003), interaction with different age groups provides young children the chance to achieve and they themselves teach different activities and copy and practice role relations from grown-up children. According to Nix (1976), the rationale of inclusion is creating significant social interaction and participation between hearing impaired

students and hearing students, and raising the positive attitude of hearing students towards hearing impaired students. The result of this currently study indicates that hearing impaired students were attending their education in the special unit attached in the regular school from beginner up to grade four. For the first academic year these students are practicing socialization with other students in the special unit and students in the regular school during break time and after class.

According to Bench (1992), human communication is interpersonal, that develops early in life. It involves the sharing of thoughts, meanings and ideas between people. An act of communication usually requires a reciprocal act. Such communication skills progress naturally from a young child's interaction with the social environment. After completing grade four, they are integrated to grade five in the regular classroom setting. This helps the students to get better opportunity for exposure of different age groups with different characters in regular classroom which leads them for better social interaction and participation compared to the special unit. This also gives opportunity to the hearing peers to develop positive attitude towards the hearing impaired students.

Inclusion can be practical when the hearing impaired students are fully interacting and participating in the classroom (Stinson & Antia, 1999). With regard to communication Kreimeyer et.al (2000) indicated that one of the main objectives of inclusive classroom is to create a means of communication that allows direct interaction between hearing and hearing impaired students. According to Azalech (2005), Hearing impaired students communicate in ways that are different from those around them and this can slow down their social interaction and development. Regarding to interaction and participation Antia and Stinson (1999), the first and most essential, difficulty faced when hearing impaired students and hearing students are educated together is common access to communication.

As indicated by the findings of this study, lack of communication seems to be the first challenge experienced by the hearing impaired students, being in the new environment without sign language interpreter. The hearing peers and regular teachers do not have the knowledge of sign language to communicate with the hearing

impaired students. The observation from this study indicated that the only means of communication is by pointing, body movement, writing on paper and sometimes lip reading. The hearing impaired students face this challenge of interaction with both the hearing peers and the regular teachers.

Hearing impaired students in the regular class who are not socially integrated may experience feeling of loneliness because of communication difficulty (Stinson and Antia 1999). With regard to interaction, most hearing impaired students are fully capable of developing positive relationship with their hearing peers when sufficient method of communication can be used (Orlansky 1988). Kluwin et.al (2002) also indicates that, hearing impaired students in the regular school mostly have problem to establishing close relation with their hearing peers.

The study indicates that the hearing impaired students have no strong relationship with hearing peers except with those who share seat in the classroom, but they have strong relation with each other (hearing impaired with other hearing impaired students). Hearing impaired students are communicating with the regular teachers and their hearing peers by pointing, gesturing or body movement, lip reading and writing on paper. This is time taking and which can't be practical because of the size of the class, the content of the subject and the length of the period which is organized for the hearing students. During break time, they usually make their own group even from different classes to join with another group of students with hearing impairment in the unit; and prefer to play with each other. After class, they usually accompany each other to go home.

The teacher should facilitate to meet the individual educational needs to increase the participation of students with disabilities (Cawthon, 2001). According to Antia and Stinson (1999), if the classroom teacher does not take proper actions, such as structuring class discussion to encourage participation, then the experiences of the hearing impaired students are doubtful to be successful. As it is described by Cawthon (2001), it is obvious that using oral language as a media of instruction in inclusive classroom where hearing impaired students are found is not only academic difficulty also as a violation of the right of the deaf students.

The study indicated that hearing impaired students are very poor in interaction and participation in the class activities during lecture time, dictation, conversation, group discussion and teaching by radio. The frequent activity of these students in the classroom is coping what is written on the black board or from their text book. This is also an indication of the existence of communication barrier. Most of the time the teacher finishes the whole period lecturing and all the instructions are oral. To become part of the class there needs to be involvement of the group discussion and good interaction with peers.

There is no sign language interpreter for the hearing impaired students that can facilitate the teaching and learning process. Teaching practices in oral language only in integration classroom is challenging for students with hearing impairment.

*Communication needs of deaf students and the teaching process in atypical oral-only classroom are potential difficulties with inclusive education. Sign language interpreters can be used to supplement teacher speech and facilitate deaf student participation in classroom discourses` (Cawthon, 2001).*

Students with hearing impairment are integrated physically in the regular classroom, but not in the system of the education because of the classroom environment which is not conducive to communicate the teacher and these students in the teaching and learning processes.

### **6.1.2 Support for the hearing impaired students**

One of the greatest challenges in the inclusive classrooms setting is meeting individual educational needs (Cawthon, 2001). According to Stinson and Antia (1999), the diversity of the student in the regular classroom challenges educators to give support, and motivate to be effective in their academic results. Based on the result of the study it is difficult to give special support for students with hearing impairment in the regular classroom because there is no special consideration of the class size where hearing impaired students are learning, the content of the subject, the teaching methods and strategies, and the length of the period is organized for the



hearing students. Regarding to support Friend and Bursuck (1996 cited in Stinson & Antia, 1999), in order to make the classroom inclusive for all learners, teachers should work in cooperation with special needs educators, and professionals to make adjustment in the curriculum to meet the different group of learners in a class. There is no coordination between the special needs educators, authorized bodies at different levels, the school administrators and regular teachers to implement the principle of inclusion.

The curriculum is designed for the regular students and with no flexibility. The hearing impaired students are getting support from the unit only when they are in the unit, but after they are integrated in the regular classes there is no attention for students with disabilities in general. Some times when there is serious communication barriers between the regular teacher and hearing impaired students, the special needs educators help as a media of communication by translating oral language to sign language and vice versa. This support is offered only if students are going to the unit, but the special needs educators are not going to them in case of solving such communication problems. There seems to be no responsible person for students with hearing impairment once they are integrated into the regular class.

Teaching hearing impaired students in the regular classroom needs reliable Knowledge and constant effort of the classroom teachers Azalech (2005). Etenesh (2008) describes that in some schools, regular teachers are asked to teach special needs students without getting any type of training as well as administrative support. According to Stinson and Antia (1999), inclusion can be properly practical when the classroom teacher with the special educators, create restrictive environment and curriculum to meet individual educational needs of the students. The finding of this study identified the regular teachers are teaching in the inclusive classroom setting without special training, and knowledge of sign language. They don't even have any experience in teaching hearing impaired students. There is also no sign language interpreter to give assistance for the teacher in the teaching and learning process. The authorized bodies that are responsible for students with disabilities do not have sufficient background knowledge in special needs education and they do not have the

initiative to give special support for these students, from the school level up to the level of Regional educational office. And there is also not much attention given for students with hearing impairment by the head master of the school, special unit coordinator, their teachers and most of their parents.

Lack of modification in assignments, teaching activities, homework or testing, as well as lack of specialized remedial instruction, many of hearing impaired show to be falling further behind their classmates (Zigmond et al, 1995, cited in Stinson & Antia 1999). There is no special consideration by the classroom teachers for these students in planning, selection of contents, methods and strategies of teaching and learning, classroom organization and methods of assessment. The curriculum is not flexible to meet the educational needs of students with disabilities in general. It is a great challenge for the hearing impaired students to be in the regular classroom without considering the classroom environment to be convenient for them.

In inclusive classroom, if teachers do not actively support the effort to achieve integration, the placement of students with special needs in regular setting will remain problematic (Catherine, 1988 cited in Azalech, 2005). According to Antia et.al, (2002), teacher expectation can have a negative impact on the academic performance of students by communicating to students that they are not expected to fully participate in classroom activities. As the results of this study indicate, there is no prerequisite in the school to apply inclusive education for students with disabilities. Specially hearing impaired students are integrated in the regular classroom setting without getting attention by the regular teachers. The teaching learning procedure is based on the needs of the regular students. There is no budget for the hearing impaired students because the regional educational office does not allocate budget for them, unlike students with visual impairment and intellectually disability.

Parents and teachers need to help young children and to create a course for self-esteem by focusing on their strengths, supporting them, and helping them to take administer of their lives with their own culture and values (Ornstein et.al, 2003). With regard to parents (Semakula, 1999 cited by Etenesh, 2008), the involvement of parents is essential for the common sharing of knowledge, skills, experiences and

decision-making for the development of the hearing impaired students. According to (Afzali-Noumani, 1995 cited Antia et.al, 2002), the involvement of parents is a serious part to the achievement of individual students and the success of the school program. The result of this study indicates that participation of parents of the hearing impaired students in the school program to help and encourage the development of students in different activities and problem solving in the school is not satisfactory. This may be because of their low educational and economical back ground and attitude towards their children education.

Extra-curricular activities for all children are essential factor not only for encouraging inclusion outside the classroom among students but also for develop the various types of the potentials and talents of both children with and without disabilities (Dereje, 2006). Extracurricular activities provide most important opportunity by which students can get a sense of belonging to the school community and advantageous for students to learn about each other and to share experiences (Antia et.al, 2002). As the result of this study indicates, students with disabilities in general are not participating in the extra-curricular activities and do not receive sufficient Guidance and counseling service. This is not because of lack of interest by these students but it is because of lack of attention to the issue by special needs educators and the school.

This study is the first study in exploring the situation of students with hearing impairment in the regular classroom context in Amhara Regional State especially in Debre Markos in one primary school. The study further indicates there is a need to carry out an additional in-depth study on the involvement of special needs educators, professionals, authorized bodies, school administrators, regular teachers and parents effectively in the education of the hearing impaired students specifically and students with disabilities in general.

## 6.2 Conclusion

This study tries to find out the interaction and participation of hearing impaired students in the regular classroom setting with their teachers and hearing peers. The data is collected in one of the school in Amhara Region in Ethiopia by focusing on the challenge, support and interaction between hearing impaired students and the teachers as well as hearing peers.

The child`s development is based on the ecosystem to learn from immediate environment through interaction with more experienced adults and peers to get a variety of experiences. The classroom observation shows that students with hearing impairment are passive participants. The interaction with their teachers is very poor but they have better interaction with hearing peers. On the other hand, the hearing impaired students have a relatively better interaction among themselves.

Most of the interaction in the teaching learning process is oral. The regular teachers don`t have training how to meet the needs of students with special educational needs. The only means of communication in the teaching learning process with their teachers and hearing peers is by writing on paper or black board, pointing, gesture and lip reading. The problem of communication is not only with the teachers, it is also with the school administrators.

The frequent activity of these students in the classroom is copying what is written on the black board or from their text book. Hearing classmates are supportive for them better when there is instruction, home work and other issues related with the lesson conducted orally in the classroom.

There is no coordination between professionals, special needs educators and the regular school teachers to create conducive environment for inclusive education. There is no attention for these students from concerned authorities, professionals, special needs educators, school administrators and regular teachers.

The involvement of parents is not satisfactory with the school for the educational development of their children. In a country like Ethiopia where there are so many

social problems related with the negative attitude towards disabilities, positive parental attitude to the education of hearing impaired children in particular and children with disabilities in general is very important for improving the learning of the child.

In sum, the interaction and participation of hearing impaired students in the regular classroom setting is poor with regular teachers and hearing peers in and out of classroom activities. The quality of support from regular teachers, special educators, professionals, the school administrators and educational offices is insignificant for the hearing impaired students in general. The hearing impaired specifically and students with disabilities are attending their education for the sake of the policy but not the benefit of these students from the regular classroom. There are no preconditions that are set for the hearing impaired students to be in the regular classroom.



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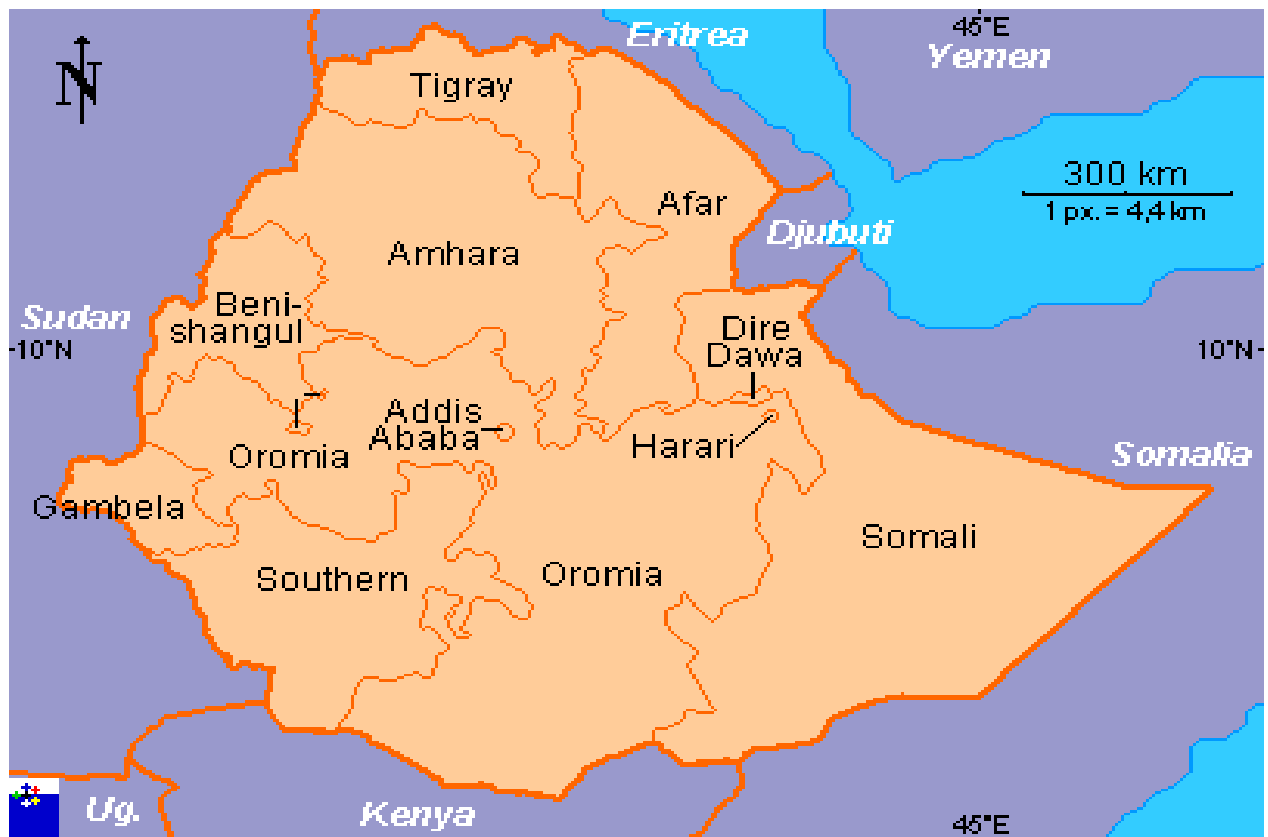
# Appendices

## Appendix A: Map of Africa

### AFRICA



## Appendix B: Map of the Federal Democratic Republic of Ethiopia



### Country Profile:

**Area:** - 1,127,127 sq km (435,186 sq mi),

**Population:** - 73,053,000 (est. 2005),

**People:** - Oromo 32.1%, Amara 30.1%, Tigraway 6.2%, Somalie 5.9%, Guragie 4.3%, Sidama 3.5%, Welaita 2.4%, other 15.4% (1994 census),

**Language:** -Amarigna 32.7%, Oromigna 31.6%, Tigrigna 6.1%, Somaligna 6%, Guaragigna 3.5%, Sidamigna 3.5%, Hadiyigna 1.7%, other 14.8%, English (major foreign language taught in schools) (1994 census),

**Religions:** - Christian 60.8% (Orthodox 50.6%, Protestant 10.2%), Muslim 32.8%, traditional 4.6%, other 1.8% (1994 census),

**Ethnic Groups:-** Oromo 32.1%, Amara 30.1%, Tigraway 6.2%, Somalie 5.9%, Guragie 4.3%, Sidama 3.5%, Welaita 2.4%, other 15.4% (1994 census)

**Source:** - <http://www.answers.com/topic/ethiopia?cat=travel>

## Appendix C: Letter from the University of Oslo



UNIVERSITY  
OF OSLO

Your ref:  
Our ref: 17/07,ST/db  
Contact person: Denese Brittain [d.a.brittain@isp.uio.no](mailto:d.a.brittain@isp.uio.no)

Date: June 5. 2007

Department of Special Needs Education

P.O.Box 1140, Blindern  
N-0318 Oslo  
NORWAY

Visiting address:  
Helga Eng's Building  
3rd and 4th floor

Telephone: + 47 22 85 80 59  
Telefax: + 47 22 85 80 21

FACULTY OF EDUCATION

### TO WHOM IT MAY CONCERN:

This is to certify that **HABTE, Nitsuh Belachew**, date of birth 17.02.1960, is a full-time student pursuing a course of study at the Department of Special Needs Education at the University of Oslo, Norway, leading to the degree of Master of Philosophy in Special Needs Education (M. Phil. SNE).

This is a continuous two-year programme run on the "sandwich" principle, which involves periods of study and field work/research in both Norway and the home country. The student has concluded the initial 11-month period in Norway and will be returning to the home country in July 2007 to continue full-time studies/research until 1 January 2008 when s/he returns to Norway for the final part of the degree. The period of study will be completed at the end of May 2008.

The main responsibility for supervising the research, developmental work and thesis remains with the Department of Special Needs Education, University of Oslo, Norway. However, we would kindly request that the relevant authorities give the student the access required to the schools and educational establishments necessary in order to undertake field work and research. We would also be most grateful for any assistance that is afforded to the student which enables her/him to carry out this work, particularly the use of facilities such as access to telephone, fax, e-mail, computer services and libraries at the various educational establishments.

Yours sincerely

Ass. Professor Steinar Theie  
Academic Head of International Master's Programme  
Department of Special Needs Education

Institutt for spesialpedagogikk  
Det utdanningsvitenskapelige fakultet  
Universitetet i Oslo  
Norge

Department of Special Needs Education  
Faculty of Education  
University of Oslo, Norway

Appendix D: Letters from DMTEC to NG School



በአማራ ስርዓት ክልል ውስጥ  
የአዲስ አበባ ከተማ አስተዳደር  
የትምህርት ሚኒስቴር

ቁጥር 799/አ-740/22/05  
ቀን 13-01-2005

ለአዲስ አበባ ከተማ አስተዳደር  
የትምህርት ሚኒስቴር

ጉዳይ፡- ትብብር ስለመጠየቅ ፤

የአዲስ አበባ ከተማ አስተዳደር የትምህርት ኮሌጅ መምህርት የሆኑት ወ/ሮ ንጹህ  
ዘላቸው በኦስሎ ( Oslo ) የኪቨርስቲ 2ኛ ዲግሪያቸውን ለመያዝ የአንድ ለመት  
ትምህርታቸውን አጠናቀው የመመሪታዎቻቸውን ጽሑፋቸውን መስማት የተማናቸው ተማሪዎችን  
ያላቸውን ማህበራዊ ግንኙነት ለክፍል ውስጥም ሆነ ከክፍል ውጭ በት/ቤቱ ውስጥ  
ለማየትና (Observation) ቃለ መጠይቅ (Interview) ለማድረግ ስለረገጡ እስኪረገጡ  
በሆነው ጉዳይ ሁሉ አገዛዥ ትብብር ት/ቤታችሁ እንዲያደርግላቸው እናሳስባለን ። ==

" ከሰላምታ ጋር "



ኃይለማርያም ተመስገን  
አካላዊ ም/ዳን

ገልጻችኛል፡-  
ለወ/ሮ ንጹህ ዘላቸው  
አዲስ አበባ ከተማ አስተዳደር

**Appendix E: Interview Guide for the Classroom Teachers in English**

1. Could you please give me some information about yourself?
  - Sex
  - Level of education
  - Service years in teaching
2. Do you have an experience of teaching hearing impaired students in the regular classroom setting before?
3. How do you describe students with hearing impairment?
  - Academic achievement
  - Social relationship
4. Please tell me about your relationship with the hearing impaired students?
  - In the classroom
  - Out of the classroom
5. Can you tell me any information you have get from policy documents, trainings etc. that encourages teachers to address the needs of hearing impaired students?
6. Are there any special considerations that you make in your teaching, with reference hearing impaired students?
  - In planning
  - In selection of content, teaching methods and strategies
  - In classroom arrangement
  - In assessment
7. What kind of support do you give to the hearing impaired students in the classroom and out of classroom situation?
  - In problem solving situations

- In interaction with others
  - In learning at different levels
8. How do you interact and communicate with hearing impaired students?
  9. How do you facilitate interaction and communication between hearing impaired students and hearing peers?
  10. How is your relationship with parents of these students?
  11. How do you describe the curriculum in relation to the education of students with hearing impairment?
  12. What kind of support do you get from others (colleagues, administrators and professionals)?
  13. What are your challenges and successes in teaching students with hearing impaired students?
  14. What are some of the practices that you think would have positive impact on the teaching and learning of students with special educational needs in general and those with hearing impairment in particular?
  15. What are your suggestions for improving the learning of students with hearing impairment?







**Appendix G: Interview Guide for students with hearing Impairment**

1. Could you please give me some basic information about yourself?
  - Sex
  - Age
2. How is to be in this school/classroom?
3. How do you describe your relationship with the teachers?
  - In and Out of the classroom
4. What kind of support do you get from the teachers?
5. Which classroom situations do you like/dislike? Why?
6. How do you feel about your academic achievement?
7. Whom do you ask for support when you have difficulties in solving problems?
8. Tell me about your relationship with your hearing peers?
  - In and out of classroom
9. Whom do like/dislike to work/play with and why?
10. How do communicate with your teachers in solving problems?
11. How do you communicate with your hearing peers?
  - In and out of classroom
12. What kind of support do you get from your parents?
13. What does the relationship between your parents and your teachers look like?
14. How do you explain the assessment methods used in your classroom?
15. What do you like/dislike about your school/classroom?
16. What suggestions do you give to improve the existing classroom and school situations?

**AppendixH: Interview guide for the Headmaster**

1. Would you please introduce yourself and your duties and responsibilities?
2. How do you describe the establishment and overall activities of the school?
3. Could you explain about pupils with hearing impaired students in the school?
4. What kind of support does the school give to students with hearing impairment?
5. How do you describe your relationship with the parents of students with hearing impairments and the community in general?
6. How do you communicate with students with hearing impairment?
7. How do you solve problems of hearing impaired students in the school?
8. What are the strategies used by the school to give support for students with hearing impairment?
9. Would you please give suggestion on how to improve the teaching learning environment for the hearing impaired students?
  - In and out of classroom



**Appendix J: Interview Guide for Parents**

1. Would you please tell me about your relationship with student “X”
2. How do you communicate with the student at home?
3. How do you describe the schooling of the student?
4. How do you describe your relationship with the school and the teacher?
5. What do you like/dislike about the school?
6. What are your comments to the school and the teacher to improve the learning and development of the student?

## **Appendix K: Observation Guide**

1. Frame factors
  - Facilities (staffroom, playground, library, toilet, etc)
  - Furniture
  - Teaching materials and teaching aids
  - Ventilation and lighting
2. Participation in the classroom
  - Task completion
  - Interaction and communication with hearing peers
  - Interaction and communication with each other
  - Interaction and communication with the teachers
3. Participation out of the classroom
  - Outdoor activities and interests
  - Interaction and communication with hearing students
  - Interaction and communication with the teachers

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**Appendix L: Observation Record Sheet of Sample Events**

Date -----

Child's name: -----

Gender -----

Setting -----

Type of activity/ event: -----

Number of students involved (if it is a group activity): -----

<b>Time and length</b>	<b>Records events</b>



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**Appendix M: Trend of Enrolment in special education program**

No	Indicators	Unit	2001/02	2002/03	2003/04	2004/05	Average Annual growth rate
1	Special classes	Section	67	71	53	53	-6.97
2	Teachers	No.	56	77	87	64	4.76
	▪ Male	”	21	24	32	21	4.76
	▪ Female	”	35	53	55	43	7.62
3	students	”	1,137	892	1,178	989	-4.34
	▪ Male	”	582	575	749	641	3.38
	▪ Female	”	555	317	429	348	12.43
3.1	Blind	”	537	347	518	449	-5.46
	▪ Male	”	262	278	389	257	-0.64
	▪ Female	”	275	69	129	192	-10.06
3.2	Deaf	”	451	422	521	433	-1.33
	▪ Male	”	294	229	284	322	3.17
	▪ Female	”	207	193	237	111	-15.46
3.3	Mental retarded	”	149	123	139	107	-9.40
	▪ Male	”	76	68	76	62	-6.14
	▪ Female	”	73	55	63	45	-12.79