

**ADDIS ABABA UNIVERSITY SCHOOL
OF GRADUATE STUDIES**

**COMMUNICATION CHALLENGES OF STUDENTS WITH
HEARING IMPAIRMENT IN 'INTEGRATED' CLASSROOM
SETTING AT YEKATIT 25 SENIOR SECONDARY
SCHOOL SNNPR: HOSANNA**

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Abbreviations

- HIS - Hearing Impaired Students
- ENAD - Ethiopian National Association of the Deaf
- FDAD - Federal Democratic Association of the Deaf
- TGE - Transitional Government of Ethiopia
- UNESCO - United Nations, Education, Science and Cultural Organization
- WFD - World Federation of Deaf

Abstract

This study attempted to determine the communication challenges of hearing impaired children in regular classroom and assessed its effect on social interaction and academic achievement of these students at Yekatit 26 secondary school, in Hadiya zone, SNNPR. Qualitative study design was applied to identify the communication problems of these students. Data was collected from 4 hearing impaired students, 3 regular class teachers, 4 parents, 4 hearing classmates and the principal of the school. The main data was collected through interview. In addition classroom observation and student's first semester result and informal talks were used to support the data obtained through interview.

The predominant problem identified in the study is communication problem that has negative influence on students social and academic achievement. Lack of knowledge of sign language on the part of teachers and classmates, lack of interpreter services, lack of teacher's readiness, lack of resource room and lack of guidance and counseling services are the related problems.

In the study it's revealed that the sampled student's are deprived of communication and language exposure in the accessible linguistic environment i.e. sign language.

The students academic result also seems to be average or not that much lower than the classmates because of their strong base in primary schools and unreserved support they are given from their boarding school teachers.

So, as the finding showed it, these students face profound challenges in the school. So, different measures should be taken to overcome the challenges.

Therefore, the efforts of the school to overcome the problems that these students face in all the stated areas appear to be highly limited though many feasible actions could be taken at school level.

Chapter One

Introduction

1.1. Background of the Study

It is obvious that hearing is an important learning tool from the time a child is born. If a child has hearing impairment, vocal speech and oral language skills development will be delayed when compared with the development of a hearing child. The vocal language skills are learned and developed in a slower rate or not developed at all, placing the impaired child in a longer and more tiresome developmental tasks.

As the result of the challenges that the child with auditory impairment encounters in oral language skills, ability to use listening, speaking, reading and writing skills is markedly restricted (Gearheart et al., 1988).

According to Moores (1996), so, for deaf children, oral language could not be a facilitating device for the acquisition of knowledge; rather, it is a barrier between them and the full realization of their academic, intellectual, and social potential. Although of normal intelligence, deaf children may find their range of experience constrained by communication limitations. Relative to other children, they lack opportunities to interact fully with and manipulate their environment in meaningful ways.

In addition to this, it is said that integration is the way to provide deaf students with what they cannot gain from their deaf environmental experiences. Social, business and professional contacts in life cannot be fully achieved without effective language and communication skills. Therefore, integration is designed firstly to build speech and language skills (Webster and Wood, 1985). However, in Ethiopia, as different research findings revealed (Ababa, 1996, Tafesse, 1998, Tesfaye, 2003), hearing impaired students in special schools and those integrated in regular classes have been rather deprived and frequently handicapped in varying degrees in academic, social and language developments and little efforts have been done to encourage interactive communication and care.

According to Alemayehu (2003), in Ethiopia the learning of language and communication skills of deaf children both at home and in the school environment, seems to be at a very low status. One reason may be due to lack of competent user of sign language. Language models may not be available at home and school environments, and the development of sign language as natural language in curriculum both for teachers training and school settings may be inefficient.

Moreover, lack of training in sign language, access to information and lack of understanding about deaf people and their language on the part of the family, the community, and the teachers may be another barrier. Furthermore, there is no policy on sign language development and early intervention for deaf

children. These weaknesses may have negative effects on language, communication, social, psychological and academic development of deaf children.

So, due to the language and communication barriers already mentioned, the education programs of the children with hearing impairment, in most cases, demand special adoptions and modifications. The programs in some way need consideration of training for parents, siblings, classmates, classroom teachers and other individuals who have significant close contacts with the children both in the home and school environment on the use of sign language. This is because the knowledge of sign language is an engine of the teaching-learning activities of deaf children. Of course, there are other means of communication that these group of children could make use of. For instance, total communication, cued speech, lip-reading etc. would be systematically taught and applied in the teaching-learning process of the children.

On the basis of these realities, this paper tries to assess the communication problems of teachers and deaf students in the regular school environment of Yekatit 25 senior secondary school, located in SNNPR, at Hossana town, 230km South of Addis Ababa.

1.2. Statement of the Problem

Deafness in academic world demands special attention and programming to teach such children. No one who has no personal knowledge of a hearing

impaired child in the family can be unaware of the potential obstacles to learning which may arise for such children (Webster and Wood, 1995).

In Tirussew (2000), it is indicated that a high rate of early repetition and dropout rate is recorded in the primary schools. This is observed more with children having hearing impairment than with other disabilities. Moreover, many hearing impaired children are also attending their education with out being detected and subsequently their educational needs are unmet. Most of the available education services in special schools and units of the deaf are urban based and generally ill-equipped. Deaf students integrated in regular classes are the most affected groups. The most important factor that adversely affects their academic achievement and social interaction is the problem they confront in communication with their teachers, peers, parents (caregivers) and the school community.

The hearing impaired students in Ethiopia, according to Alemayehu (1995), have no appropriate natural early language exposure. Teachers also have poor competence in special communication skills used by deaf children such as sign language, total communication, lip-reading etc., because of lack of proper and adequate training on the area. This results in low academic achievement and social development of the students. As a result, the teacher and the hearing impaired students erode their enthusiasm to teach and learn respectively.

Therefore, this study attempts to address the following fundamental research questions:

1. What communication problems do the teachers and the students with hearing impairment students face in the teaching-learning processes?
2. What are the main communication methods used by teachers and students with hearing impairment?
3. What communication problems do students with hearing impairment and their hearing peers face in social interactions?
4. Do communication problems affect academic achievement of students with hearing impairment in integrated classroom settings?

1.3. Objectives of the Study

The main purpose of the study is to identify communication problems of students with hearing impairment and their teachers in the selected school.

More specifically, the study will have the following objectives:

- To identify the main communication methods used by students with hearing impairment and the regular class teachers.
- To find out the communication challenges encountered by students with hearing impairment and the regular class teachers in teaching learning process in the school.
- To identify the communication challenges faced by students with hearing impairment and their hearing peers in the social interaction.

- To identify the effect of communication problems on the academic achievement of students with hearing impairment.

1.4. Significance of the Study

Identifying communication barriers and their effects on the academic achievement and social interaction of hearing impaired students is crucial to plan different support systems. The predominant communication methods, used by teachers and hearing impaired students which are used in the school would help to improve the system of developing interactive communication and care for hearing impaired students in order to grow cognitively and socially.

Therefore, the results of the study may:

1. Contribute to the understanding of the communication problems and its effects on academic achievement and social interaction of deaf students in our context and to bring important information on the improvement of these problems.
2. Create awareness on regular teachers to understand their students and create interactive and conducive teaching-learning environment.
3. Provide important information for other professionals who work in related areas that support these students in avoiding communication problems.
4. Contribute to researchers who are interested in conducting research on related issues.

1.5. Definition of Key Terms

Hearing impairment-	Hearing loss significant enough to require special education, training and/or adoptions. It ranges from mild to profound and includes both deaf and hard of hearing conditions/ (Orlansky, 1988).
Sign language -	Is a visual gestural language, involving the use of hands, eyes, mouth, head and body, which is a language in its own, with its own grammar and vocabulary (WFD, 1993).
Communication -	Is any interaction that transmits information. It is the process which involves two or more individuals, with transmission of thoughts or ideas taking place between them. In the simplest form, this involves individuals for instance A and B where A transmits a thought or idea to individual B.
Interpreter -	A person who uses sign language and/or finger spelling to translate spoken communication so deaf individuals can understand it. (Vergason and Alenn, 1990)
Academic achievement -	Knowledge obtained or skills developed in the school subject, usually designed by test scores, by mark assigned by teachers or by both (Schulze, carpenter and Turnbull, 1991).
Social interaction-	Companionship of others or effective interactive condition with other people (Reynolds and Janzen, 1990).

1.6. The Scope of the Study

The scope of the study is limited to Yekatit 25 Senior Secondary School of Hosanna town, Hadiya zone, SNNPR. Moreover it delimited itself to four students with hearing impairment, three regular teachers, parents (caregivers), four hearing peers and the director of the school.

1.7. Limitation of the Study

The researcher has faced problems in relation to time, because the budget release has taken a large amount of time. In addition to this during data collection the researcher's inability to find all the mothers of students with hearing impairment because of the different reasons might have affected the fullness of the data. It would have been comprehensive if they were involved in the study. So, the researcher has depended only on father's information.

Chapter Two

Literature Review

The hearing impairment's greatest effect on the developing child occurs with regard to language, both with receptive and expressive systems. Therefore an effective communication systems, that permits those using it to exchange information with a high degree of ease, flexibility, speed and accuracy in a wide variety of circumstances is very essential in developing a certain child socially and academically. In relation to this in this chapter different issues related to hearing impairment in general and communication challenges of deaf students in particular are discussed. An overview of hearing impairment, developmental profiles of hearing impaired children, methods of communication for deaf children, controversy and choice of communication methods, integration of hearing impaired students in regular classroom, historical development of education of the deaf, the history of deaf education in Ethiopia are the different topics that are presented.

2.1. An Overview of Hearing Impairment

2.1.1. Definition and Classification of Hearing Impairment

According to Tirusew, 1995, the definitions given to hearing impairment are different. Different definitions and terminology may be used in different countries for different purposes. The following are the most commonly used.

According to Yesseldykke and Algozzine, 1995 deafness is a severe disability. People who are deaf have a hearing loss that prevents understanding speech through the ear. They have little functional hearing, even with a hearing aid, and they do not use hearing as their primary sense for gaining information. Hard of hearing is a less severe disability people who are hard of hearing is a less severe disability people who are hard of hearing can process information from sounds and usually profit from amplification provided by hearing aids.

Moore (1987) on the other part, used decibel levels to define deafness and hard of hearing. According to him, a "deaf person" is one whose hearing is disabled to an extent (usually 70 dB or greater) that precludes the understanding of speech through the ear alone, with out or with the use of hearing aid.

A "hard of hearing \person" is one whose hearing is disabled to an extent (usually 35 to 69 dB) that makes difficult but does not preclude, the understanding of speech through the ear alone, without or with a hearing aid (p. 9)

2.1.2. Types of Hearing Impairment

The ear is a complicated structure and it functions in a complex way. Although many problems can occur to our hearing system, they can be classified into three types.

2.1.2.1. Conductive Hearing Loss

It reduces the intensity of sound reaching the inner ear where the auditory nerve begins. Wax or a malformation can block the external canal, the eardrum can be broken or punctured or the movement of the bones in the middle ear can be obstructed. Conductive defects seldom cause losses of more than 60 to 70 dB. These losses can be effectively reduced through amplification, medical treatment, or surgery (National information center of Deafness, 1989) (NICD) cited in Anastasiow, 1993).

2.1.2.2. Sensorineural Hearing Loss

It is caused by defects of the inner ear (Cochlea) or the auditory nerve, particularly the delicate sensory hairs of the inner ear or the nerves that supply them, as these transmit impulses to the brain. Sensorineural hearing losses can affect only certain frequencies, especially the high ones (Anastasiow, 1993).

2.1.2.3. Mixed Hearing Loss

When both a conductive and sensorineural losses are present the loss is classified as mixed loss (Tirussew, 1995). Here problems occur in the outer ear as well as in the middle or inner ear (NICD, 1989). Thus, these persons may hear distorted sounds as well as have difficulty with sound level (Anastasiow, 1993).

Another way to describe hearing impairments has to do with the time of onset. There are those that are congenitally hearing impaired, and those whose

hearing impairment is acquired after birth and considered adventitiously hearing impaired. There is also prelingual hearing impairment (impairment occurring prior to the development of speech and language) or post lingual hearing impairment (the impairment occurring after the development of speech and language). The sub classifications are important in that children who have developed some speech and language skills before their hearing loss may have an advantage in developing those skills further. A child who experiences prelingual deafness typically has a much more difficult time educationally than one who experiences post lingual deafness (Fish, John, 1980).

In addition to this the level of hearing loss is also an important issue in classification. Therefore degree of hearing loss has been established as a common type of measure. Students who are deaf and hard of hearing can be described, therefore, as having a mild, moderate, severe or profound hearing loss. The degree of hearing impairment is often determined by analyzing if someone is able to hear sounds of different pitches (frequency of sound waves) at different levels of loudness (intensity). The greater the hearing loss, the more likely the child is to experience difficulty in hearing language and academic skills. Children and young adults who have mild hearing losses generally perform better academically than those with severe losses.

2.1.3. Causes of Hearing Impairment

According to Tirussew (1995), the causes of hearing-impairment can be studied in several ways. One way is it can be studied in terms of birth period; prenatal,

perinatal and postnatal (Taylor, 1992); genetic and environmental factors; chromosomal abnormalities, diseases toxin etc. (Mittler, 1970). Another way is in terms of ear structure; outer, middle, inner (Gardwood, 1983). But for the purpose of this study the researcher has seen causes in their general forms.

The leading known causes of hearing impairment are heredity and meningitis (Hotchkiss, 1989). However, the cause is unknown in almost half of the total population with hearing impairments. Even in these unknown cases, some researchers believe that heredity and genetics are responsible for the majority of the hearing impairments (Boone, 1987; Nance and Sweeney, 1975). Otitis Media, meningitis, and heredity are causes that have increased over time. Maternal rubella has decreased dramatically but unfortunately is still a contributing factor in the number of causes of children with hearing impairment today (Deborah, 1995).

Professionals often classify causes of hearing impairment based on the location of the problems within the hearing mechanisms. A conductive hearing loss results from obstructions or interference in the transmission of sound from the outer or middle ear into the inner ear. A building up of excessive wax in the auditory canal can cause a conductive hearing loss. Some children are born with incomplete or malformed auditory canals. As its name implies, a conductive hearing loss involves a problem with conducting, or transmitting sound vibrations to the inner ear. Because the rest of the auditory system is generally intact, conductive hearing losses can often be corrected through

surgical or medical treatment. A sensorineural hearing loss can result from damage to the auditory nerve fibers or other sensitive mechanism in the inner ear. Amplification-making the source of sound louder-may or may not help the person with a sensorineural hearing impairment. Unfortunately, most sensorineural hearing impairments cannot be corrected by surgery or medication. Most people with sensorineural loss obtain some benefit from hearing aids. However, because hearing aids make airborne sounds louder but not clearer, it takes practice to learn to wear and use them well. Hearing impaired students enrolled in special education program have this type of hearing loss. Unlike conductive losses, sensorineural losses cannot be reversed through medical intervention.

2.2. Developmental Profiles of Children with Hearing Impairment

2.2.1. Academic Achievement of Children with Hearing Impairment

The severity of the hearing loss, the age of its onset, the socio-economic status of student's family, and the hearing status of the student's parents are related to the academic success experienced by students with hearing impairments (Yesseldyke and Algozzine, 1995). In addition to this, differences in language ability that result from deafness affect a student's ability to perform in traditional academic areas (Tirussew, 1995).

Moreover, according to Meadow (1980, cited in Orlansky, 1988), hearing impaired children-even those with superior intelligence and abilities-are at a great disadvantage in acquiring language skills. When standard measures of

reading and writing achievement are used with deaf students, examiners typically find that the student's vocabularies are smaller and their sentence structures are simpler and more rigid than those of hearing impaired children of the same age or grade level.

Webster and Wood (1995) also say that reading ability which relies heavily on language skills is probably the most important aspect of academic achievement that is the most affected. So, knowing the kind of instructional methods so far exercised in our situation could lead us to see the weaknesses, and strengths of each methodology being employed.

2.2.2. Language Development of Hearing Impaired Children

Young children are exposed to many utterances and it would be very difficult to sort out the language code. According to Bruner (1975), however, children receive highly selective language input within the routines of child-parent interactions. Many deaf children, deprived of interaction with their mothers consequently deprived of language and communication. Among other things, the challenges mothers faced such as emotional disturbances aggravated the deprivation (Adams, 1997; Chiswanda, 1997 cited in Alemayehu, 2002).

In addition to this, more than 90 percent of hearing impaired children are born to hearing parents. This means that the child has difficulties of various degrees to learn the spoken language used by his parents. The parents knowing nothing of deafness, sign language or oralism before their child was born, must make far-reaching choices concerning the communication mode of the child and the

whole family, in a situation where they already feel anxious and depressed due to the diagnosis of the hearing impairment (Sinkkonen, 1994).

According to Gleason (1989) cited in (Alemayehu 2002), children who become deaf before they have begun to speak (usually before the age of two) have a great 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 deaf children. But if the deaf children are exposed to a 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. One reason may be due to 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 natural language in curriculum, both for teacher training and school settings may be inefficient (Alemayehu, 2002).

It is also perhaps impossible for a person with normal hearing to fully comprehend the immense difficulties faced by a deaf child trying to learn verbal language. Hearing children typically acquire a large vocabulary and a knowledge of grammar, word, idiomatic expressions, fine shades of meaning, and many other aspects of verbal expression by listening to others and to

themselves from early infancy. A child with a hearing impairment however, is exposed to verbal communication only partially or not at all.

Communication problems can seriously interfere with interpersonal relationship for students with hearing impairments who receive all or part of their education in regular classrooms. Their inability to communicate with other students can delay their language development. Moreover, they communicate in ways that are different from those around them. This condition can inhibit their social interaction and development. It is argued that the effect of hearing loss are pervasive and can create psychological stress (Moore, 1996). Children who are deaf are often passive participants in communication, as their parents or caregivers tend to deprive them from any type of interpersonal relationships. As a result, the vocabulary and syntax of children who are deaf grow slowly. Variations in normal hearing responses and deviations of speech and language development may be the first clues that a child suffers from hearing loss. Our use and understanding of language naturally depend at first up on hearing. The studies of speech of deaf have by and large dealt with differences between the speech of the deaf and of the hearing people. Silverman cited in Travis (1971) described the following abnormalities in the speech, usually accompanied by high chest pressure with the expenditure of excessive amount of breath; prolonged vowels with consequent distortion; abnormalities of rhythm; excessive nasality of both vowels and consonants; and imperfect joining of consonants with the consequent addition of super flows syllables between abutting pairs. The same

author found errors of articulation involving both consonants and vowels, and errors of rhythm. The more severe the deafness, the greater is the effect on verbal language development; but even mild degrees of conductive deafness are thought in some cases to have a significant effect (Freeland, 1989). Functional hearing refers to a person's ability to understand information presented orally and related to how a person might be taught. Typically functional hearing loss is categorized by decibel groupings.

The degree of hearing loss is determined by analyzing whether someone is able to hear sounds of different pitches (frequency) at different level of loudness or intensity (Taylor, 1989). The device that is used to measure the sharpness and range of hearing is known as audiometer. Results are recorded in graph (audiogram) that shows frequency in Hertz (Hz), a measure of cycles per sound, across the top. As frequencies increase in number, pitch becomes higher. Intensity of a sound is expressed in decibels (dB) along the side of the graph. Normal hearing is defined as zero dB for each frequency level (Garwood, 1983).

2.2.3. Social Development of Children with Hearing Impairment

Communication problems can seriously interfere with interpersonal relationships for students with hearing impairments who receive all or part of their education in general education classrooms. Their inability to communicate with other students can delay their language development. Moreover, that they communicate in ways that are different from those around them can inhibit their social interaction and development.

Orlansky (1988) says that most hearing impaired people are fully capable of developing positive relationships with their hearing peers when a satisfactory method of communication can be used. A number of deaf children do have serious behavior disorders that require treatment. Unfortunately, however, there are relatively few specialists in the identification and treatment of behavior disorders who are able to communicate easily and directly with deaf peoples, so the special needs of this population remain largely unmet.

Therefore, according to Butler, (1989: 63), although there may be other contributing factors, communication abilities are highly responsible for the social success of the child.

2.3. 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 psychical and social environment.

We communicate verbally or non-verbally. Verbally we use spoken, written or sign language, and non-verbally, we communicate through facial expressions, body language gesture etc. Social interactions are greatly strengthened by habits of gesture-movements of the hands and face, nods, smiles, frowns, hand

shakes, kisses, fist shakes, and other gestures convey the subtlest understanding. However, language is the most prominent among all these systems of communication and is our primary means of intentional communication (Corner and Hawthorn, 1993 cited in Alemayehu, 1986). But for the deaf children, normal language development and fluent communicative interaction may be a problem due to absence of the usual intact sensory organ, i.e. auditory channel. So, the immediate and most important effect of hearing is the impact it has on communication.

According to Schulze, Carpenter and Ann (1991), for people who have a considerable hearing loss, the basic approaches to communication are oral, manual and total communication.

The oral-aural method of communication makes use of oral and auditory training and speech reading. This method encourages the use of residual hearing while the presentation of material emphasizes the students visual and auditory attention; of course, use of amplification is stressed. The oral method emphasizes speech-reading and oral speech as the primary means of communication (Gearheart, 1988).

Oral-aural programs do not use or encourage the use of sign languages or finger spelling, believing that manual communication impeded the child's adjustment to the hearing world (Anastasiow, 1993). Auditory method involves auditory training-teaching the child to listen to sounds and to discriminate among different sounds.

Manual communication according to Gearheart et al (1988), is a set of gestures representing words or concepts. It is generally used by the adult deaf population and has been called the mother tongue. Finger spelling or manual alphabet is another form of manual communication. In finger spelling various finger positions represent individual letters of the alphabet that are used to spell out words. Sign language, is one widely used form of manual communication.

Total Communication combines the manual and oral-aural methods according to the abilities, interests, and needs of the hearing impaired students. This method teaches the student to become skillful in speech reading and oral speech. Signing and the manual alphabet are both used, the information conveyed by signs being supplemented by the manual alphabet when necessary, as for proper names (Gearheart et al, 1988).

'Total communication' as we use the term, doesn't mean that all the above methods used for every child. It means that we try all that might work for a child. Then we work with the child to communicate as easily and fully as possible with her family and community.

2.4. Controversy and Choice of Communication Methods

The debate over which method of communication should be taught to the deaf child and by which methodology is hundreds of years old. The earlier teachers of the hearing impaired argued over the effectiveness of the oral method or the manual. After the introduction of total communication in the education of

hearing impaired, schools are now divided between those who use total and oral/aural method and still there are no conclusive finding for those who support one method only (Tibebu 1991).

However, common to all method supporters, is the premise that early years are optimal for establishing the foundation for the child's acquisition of communication and his emotional or affective maturation (Silverman et al. 1978)

According to Alemayehu, 2003, oralists believe that speech is accessible to deaf children and that language is best acquired through the spoken word; advocates of total communication judge that a significant number of deaf children need the support of signs if they are to develop verbal language; bilingualists (who postpone the introduction of speech and first teach gestural system) assert the right of deaf children to have sign language as a first language and as a means of acquiring social identity.

Liben, 1978 as cited in Sinkkonen, 1994, says, the proponents of the "oral only" method suggest that the use of manual communication will interfere with the child's motivation for developing oral skills. Secondly, they maintain that the integration of the deaf child into the dominant hearing community will be hampered. Thirdly, they suggest that manual language do not have the capacity for expressing abstract ideas and that people using manual languages will be limited to concrete thinking. Those who support manual communication argue that empirical evidence refutes these criticisms. Indeed, in the light of recent

scientific findings, the manual method seems to have more advantages to the intellectual and emotional development of the deaf child than the oral only approach. Additionally, it is well-known that the most vigorous attempts to train the severely or profoundly deaf child to speak and/or to lip-read rarely lead to satisfying results.

Some people also feel that the problem with the total communication method is that the effort to sign and speak at the same time results in a poorer quality of sign language. Not only that, some people believe that total communication results in deaf children failing to develop fluency in either spoken language or sign language because of the imperfect use of both. Others favour total communication as a catch-all that ensures that a child has access to some means of communication. For example, a child who cannot communicate well orally gets the additional support of sign language, and vice versa (Cruickshank, 1954).

Alemayehu, 2003, in his study named "communication experience of pre-lingual deaf students in the special classes" explained and presented the different researchers view. In his study, Clark, 1989, says that deaf children in the past, unable to use oral language for 'real' communication, typically would use sign amongst themselves and therefore were not reinforcing and developing verbal language. Now a days, oralists themselves argue that providing a conducive environment for the successful development of spoken language in a profoundly deaf child is difficult, but not more difficult than providing the

conditions necessary for language development using any of the available alternative approaches.

On the other hand, total communication, for the person would be difficult. Attempting to speak and sign simultaneously appears to be psychologically and physically overwhelming. Under such difficult conditions, one or both parts of the signal will deteriorate. A hearing person will typically begin to audit the speech portion of the signal and will allow the sign signal to deteriorate either by omitting signs randomly, or by deleting those signs that do not fit the rhythmic pattern of oral speech. At the same time, the spoken signal is typically slowed down and altered phonologically and is often characterized by excessive halting, hesitation, repetition or other delaying tactics. In general, the less the speech signal is altered, the more the signed signal will be unintelligible (Jonson, et al, 1989, as cited in Alemayehu, 2003), whilst total communication is supposed to make use of all modalities, and offer "total" linguistic information, it would seem that up to now it falls very far short of that goal.

Sign language advocates also say that the deaf individual can communicate as effectively as any one else. Sign language, it is argued, is uniquely suited to the abilities of the deaf individual and it is only by offering sign language as a first language that the young deaf child can acquire language without delay (Bouvet, 1990). To try to make deaf children speak, as the primary mode of communication, is a violation of their rights to their own language and culture. No longer, say, bilingualists, should a socially oppressive hearing society

impose its norms on the deaf as a minority group (Mottez, 1990). Bilingualists support the goal of oral language, at least in the written form, but they believe that oral language should be taught as a second language and only when sign language is a first language has been acquired. It is claimed that sign language is established when the child's "common underlying proficiency" can be used as a means of acquiring verbal language (Cummins, 1984; Pickersgill, 1990). Since sign language is to be the deaf child's "mother tongue", bilingualists emphasize that information and education should be offered primarily through sign rather than oral language (Johnson et al, 1989).

Generally, according to Deborah et al, 1995, debates about the best mode of communication to use when educating deaf students continue. Interest is renewed in the oral-only approach, particularly for those children who are receiving cochlear implants, because it stresses developing the student's facility with oral language. Others advocate the manual approach, where students are taught sign language as their native language and learn the oral language as a second language. The majority today, though, support the total communication approach, in which signs support speech.

2.5. Integration of Hearing Impaired Students in Regular Classroom

According to Moores (1987), hearing impaired students attend classes in a wide range of situations. Programs are categorized according to the degree of impairment. These placement options include residential schools, day schools, day classes, resource rooms and Itinerant programs.

However, the global trend on the education of children with special needs is towards inclusive education. Inclusive education means welcoming all children, without discrimination, into ordinary schools. (Radda Barnen, 1999: ID.DC, 1998 cited in Tirussew, 1995).

Despite this, integrating children with hearing impairment into the regular classroom, has triggered controversy among teachers, professionals and parents. Because fulfilling the special needs of deaf students particularly of those who are integrated with the hearing learners, is not an easy task. It needs reliable knowledge and consistent effort of the classroom teachers.

According to Schulz, Carpenter and Turnbull (1991), classroom teachers are undoubtedly expected to assume major responsibility in the mainstreaming process. It again demands deliberate collaboration among classroom teachers, school principals, parents, and other professionals in the school.

Moreover, research supports parents concerns about regular education placements for students with hearing impairments (Lee and Antia, 1992). For instance, students with hearing impairment who attend regular education classes are not included in nonacademic activities by their hearing classmates; the major reason for exclusion is difficulty with communication (Deborah, 1995).

In addition to this, teachers and hearing students attitude towards the hearing impaired students and teachers competence are factors that can affect the effectiveness of integration. So, maintaining students with special needs in

regular education depends crucially 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 settings will remain problematic (Catherine, 1988).

Communication problems are also the most serious factors that can interfere with academic achievement and social developments for students with hearing impairments who receive all or part of their education in general education classrooms. Their inability to communicate with other students can delay their language development and social interaction. So, integration cannot be achieved without effective language and communication skills.

Therefore, even though integration of hearing impaired students is aimed at positive results, in Ethiopia, where sign language is not studied and interpreter services are not available, it would not be effective and satisfactory.

2.6. Historical Development of Education of the Deaf

Education is a basic necessity for all people. It is recognized as a primary means for gaining independence, citizenship right, appropriate employment economic power and self-empowerment (UNESCO, 1999). All people, regardless of origin, gender, age, disability and creed, have the right to a meaningful education. The United Nations and the United Nations Education Scientific and Cultural Organization (UNESCO) advocate education as a human right for all

people. However, the hearing impaired children's severe communication problem and the negative attitude of the society dictate early initiation of education for the hearing impaired.

In early times, Greek philosophers, like Aristotle, considered the ear as an organ of instruction and hearing was taken as a major factor contributing to intelligence (Moore, 1996). As a result, owing to misconceptions attached to hearing impairment, hearing impaired children had been denied of their educational rights for many years (Moore, 1996).

Initially, the major concerns were centered on defining the legal and religious rights of the hearing impaired and education for the deaf was not a consideration in societies in which the majority of the population was illiterate.

In the long run, educators and other professionals began to have an insight into the possibility of educating the hearing impaired children. As noted by Goldstein (1989), in the 16th century, there was a renewed interest in Europe and institutions were opened to educate even the profoundly deaf children. As a result most deaf children began to attend their education separately "either in residential or in day school for the deaf" (Moore, 1996).

The first teacher of the deaf recorded in history was Pedro Ponce De Leon (1520 to 1584), a Benedictine monk who established a school at a monastery in Valladolid where he tutored deaf children of Spanish nobility. Numerous individuals in other nations also contributed to improving the conditions of the

deaf and major advances in the education of the deaf were achieved in many countries.

Around the beginning of 1968, there came a reaction against increasingly segregated educational provisions for hearing impaired children. In fact referring to its historical background for more than three hundred years, the primary emphasis among educators of the deaf has been communication by giving secondary attention to academic achievement.

In addition to this, in spite of the achieved progress, the field of deaf education has been full of "bitter controversy and conflict" and the educational achievement is said to be far below what it should be (Moore, 1996).

Furthermore, Smith and Luckasson (1995: 478) stated that "the best education methods for students who are hearing impaired are still matters for debate by those who are deaf and by professional educators. It is believed that hearing impaired children deserve to be placed in an environment where they can communicate with peers, and meet their academic, social, emotional and cultural needs. They deserve to be in an environment where they are truly included in every aspect of the school (Smith and Luckasson, 1995: 482-483).

Currently legislation, technological advances, improved educational services, and the growing public awareness have brought a remarkable progress in the area of deaf education (Moore, 1996).

2.7. The History of Deaf Education in Ethiopia

Educational provision for children with disability is at its infancy stage in developing countries to which Ethiopia is a part. Because of the negative attitude of the society, hearing-impaired persons are commonly labeled with superstitious qualities that push them outside human communication and deny their access to education, work and other equal opportunities that would make themselves supportive and full members of their respective societies (Tibebu, 1991).

The negative attitudes of people may also result in the sufferings of hearing impaired people to rejection, isolation and deprivation of cognitive developments. In addition to this, it also seems to negatively affect the hearing impaired at level of self-esteem, social participation and in exercising their own right in Ethiopia (Alemayehu, 2000).

Regarding the education of hearing impaired in Ethiopia, very little is known. As the Ethiopian National Association of Deaf (ENAD, 1999) pointed out, educating the deaf in formal schools started a few years back. Special schools for the hearing impaired were first opened by the non-governmental voluntary organizations, in 1962 E.C. (in Addis Ababa- Mekanisa), Mazoria and Centeria (in Southern Nations Nationalities and Peoples Region, and (in Addis Ababa around Bole) by the church of Christ missions and by the American mission respectively.

Recent evidence (Tilahun, 1991: 15) shows that residential schools, special schools, and regular classes are forms of educational provision available for hearing impaired students in Ethiopia. Currently, it appears that the openings of special classes and integrating hearing impaired students in regular classes is at a growing rate bringing students into closer physical proximity for a possibly better social interaction.

These days religious organizations are focusing more on giving support to all handicapped children. The Mekaneyesus and the orthodox churches, for example, have special programmes arranged for the deaf. The Orthodox Church started the Sunday special arranged programs and special sign language studies to hearing impaired children (Tibebu, 1995).

The new educational policy of 1994 has also considered the provision of education to special needs children. Under its specific objectives, it is stated as, "to enable both the handicapped and the gifted learn in accordance with their potentials and needs" (TGE, 1994: cited in Abebe, 2000). The educational policy further confirmed, 'special education and training will be provided for people with special needs' (TGE, 1994 cited in Abebe, 2000).

Furthermore, what has been stated in the education policy also appears in the Ethiopian constitution Article 41, which declares, "every Ethiopian nation has the right to equal access to publicly funded social services" (FDRE, 1995: 15). Moreover, Article 90 states as follows." To the extent the countries resource permit, policies shall aim to provide all Ethiopians access to public health and education." (FDRE, 1995: 13).

Chapter Three

Research Methodology

3.1. Research Design

The main purpose of this study was investigating communication problems and its effect on the academic achievement and social development of hearing impaired students integrated in the regular classroom settings. In order to meet this purpose, qualitative study design was employed to find out the real situation of deaf children's communication challenge.

3.2. Population and Sampling

The target population of this study includes integrated hearing-impaired students, their teachers, their parents (caregivers), hearing peers and the director of Yekatit 25 Senior Secondary School. Before starting data collection, the researcher had been informally informed by the school director that in the school there are 18 deaf students integrated in four sections of grade 9.

According to Patton, 1990, sampling in a qualitative study tends to be small number of people nested in their context and studied in depth unlike quantitative studies which aim for larger number of context stripped cases and seek statistical significance.

So, the sampling technique was purposeful and out of 18 children with hearing impairment in the regular class it was concerned with only four. From four

integrated sections, one from each section were deliberately chosen by the researcher based on the belief that they would be able to reflect the reality representing the other deaf students in their section. The students had also equal distribution in terms of sex. Three teachers from integrated classes were purposefully selected to serve as a source of data. In addition to this four hearing students (one from each integrated section), parents (caregivers) of the hearing-impaired students (all were fathers) and the school director were involved in the study. Therefore, the total number of the participants is 16 (3 females and 13 males).

3.3. Data Collection Instruments

The study used qualitative case study method. It is concerned with the major communication challenges of hearing impaired students and their teachers in the regular classroom setting. So, to obtain adequate information for the study a multiple-method (triangulation) approach was chosen. These multiple methods include, interviews, observation, informal talks and review of students first semester result. In addition to this, these instruments were applied because of the small number of participants and in order to investigate the problem in depth.

3.3.1. Interview

The interview was the main data collection instrument. It was prepared and conducted with all the participants of the study. During the interview with sampled deaf students, sign language was used and interpreters also employed.

The interview with teachers regular classmates and principals were conducted in the school by choosing separate room. The interview with parents was also employed in the school. All the interview that is done in oral language and interpreted to oral language with the participants was tape-recorded.

3.3.2. Observation

Observation took place while the students are in classrooms using observation checklist. The classroom is selected deliberately to explore the communication of the deaf children with classmates and teachers. The data was gathered by checking the activities and taking notes. The observation was conducted for two consecutive weeks in all the integrated classes and out of the class.

3.3.3. Informal Talks

Informal talks took place with the deaf students in the school and in their boarding school by sign language and writing. In this regard, the sign language training that the researcher got in the university helped to some extent in communicating with the students. There were also talks with the school principal and teachers and classmates during breaks and free times. The researcher had a chance also to observe the teaching learning process in the boarding school and had informal discussion with the school teachers and director.

3.3.4. Students First Semester Results

The student's first semester result was checked and described in comparison with their classmates by using some elementary descriptive measures such as using average.

3.4. Data Collection Procedure

First of all, before arriving to a research site, the pilot test was carried out at Minilik II secondary high school in Addis Ababa and all the necessary improvements were made.

At the sample school of the main research, at the very beginning, contact was made with the school director and vice director. The mission of the researcher and the purpose of the research work were explained. In the vice director's office the identification of integrated sections with their respective number and name of hearing impaired students was made.

The vice director introduced the researcher for the hearing impaired students. Then four cases representing hearing impaired students from grade 9, two males and two females were selected. From those two of them are prelingual and two of them are postlingual. All the students are profoundly deaf. With this students the time that is appropriate for the interview was decided. They also promised to bring their parents to school.

Three teachers were also randomly selected by the vice director to serve as source of information. Next to this, four hearing students from each class chosen by their regular teachers.

The interview conducted with all the participants was arranged according to the time chosen by them including holidays. It was also conducted at the room reserved in the school for this purpose. The observation was also conducted in each class for two weeks during instruction and out of the class.

The researcher had also informal discussions with all the participants during tea breaks, and free times and those was also recorded.

The data gathered from hearing impaired students by sign language was transcribed to Amharic version as interpreted by sign language interpreters, and transferred to English. The data from all the rest of participants was also transcribed and translated to English. Finally, the information collected from different sources was organized and presented.

3.5. Method of Data Analysis

The data collected have been analyzed and interpreted qualitatively. The data secured through interviews, observation and informal discussion have presented and analyzed qualitatively through in depth explanations. The data obtained from students first semester result was also described using some elementary descriptive statistical comparisons. Ideas proposed on the specific communication problems faced by the deaf students and potential solutions of the problems and other related matters have been summarized and discussed.

Chapter Four

Result and Discussion

4.1. Result

The main intention of this study was to investigate communication challenges of hearing impaired students integrated in regular classroom setting of Yekatit 25 Senior Secondary School. From eighteen students integrated in different sections of grade nine, four were selected from four sections for the study. Two of them were prelingual and the rest two were postlingual deaf. Therefore, in this chapter the findings from these students and other data sources are presented.

4.1.1. Communication Problems as Perceived by Students with Hearing Impairment

Table 1: Background Information of Students with Hearing Impairment

Name	Sex	Age	Grade	Hearig level	Onset of Pm.	Cause of pm	HI in family	Language	A parent's ed. Level	Parents occupation
1. BT	F	16	9G	Profound	3 years	Sickness	No	Sign lang.	12 complete	Labourer
2. FG	M	18	9F	Profound	3 years	Accident	No	"	12 complete	Gov't employed
3. YG	F	17	9I	Profound	6 months	Sickness	No	"	Elementary	Trade
4. MM	M	16	9H	Profound	1 year	Accident	No	"	Elementary	Gov't employed

Case 1

Case 1 is a female student who lost her hearing ability at the age of three because of sickness (high fever). Her hearing level is profound. Since she is postlingual, she has a little memory of spoken language. But it is diminishing after she has joined the boarding school for the deaf. After the problem has happened her parents has tried many traditional and spiritual medicines but didn't succeed.

The student was asked the time she has started sign language, and responded that after joining elementary school at Hosanna Deaf school. Before that her parents trained her to use spoken language. Their complete effort was to open her mouth and enabling her to produce speech like normal children. They completely did not think of sign language. She had no contact with adult deaf signers in her village in helping her to sign. She has started signing at deaf school and abandoned using spoken language.

When asked about her family members knowledge of sign language, she said that her father and mother do not know it, but her siblings use sign language to communicate with her. Her parents use indicating/ pointing, body language and writing to communicate with her. She has complained about her parents that they are missing sign language training that is offered by the boarding school. However, parents send her siblings to be trained and the siblings were becoming fruitful in using her language. She also suggests that her parents

would better to not miss this chance, because they may not get this opportunity after she has left the school.

The student suggested that to some extent she benefits from lip-reading if the speaker speaks very very slowly, because she has a memory of spoken language. The method of communication that she uses at home and school, is also different, because teachers in their school use formal sign language and her family uses home signs and non-verbal communication methods. So, she said, this breaks her normal language development.

Regarding the communication problem of the regular school in relation to academic achievement, she said she has never attended the regular school before and learned upto eight grade at Deaf school. So, the regular school setting is very strange for her. She expressed that the instruction in the class is totally oral including instruction presented on plasma programs. She said, teachers sometimes even do not write a word on a board. They totally discuss with hearing students and dictate even the notes. Then she copies from her close friends without having any idea about the lesson. In the class she never asks questions because of the communication barrier, eventhough she has questions, rather she prefers to ask her boarding school teachers later after school. Because the school has arranged tutorial programs in all subjects for students who learn in integrated situations.

The student also complained about lack of interpreter service in the school. She says, "if there were, they would have helped us a lot." The school doesn't

consider them as students who have special learning needs. The student thanked her close-friends in the regular classroom for their support in interpreting and writing about home works, reading assignments and instructions about exam dates and coverage.

She has also added that she is training sign language for her close friends. They are interested and becoming effective in interpreting.

Her communication with the regular class teachers in the class and out of the class is through writing. However, she says, teacher do not tolerate and some times ignore their questions. The student also explained that she has a reading difficulty concerning both vocabulary and grammar. If her friends can not explain it for her, every thing stays dark until she would ask her former teachers after the school time.

The student was asked on her attitude towards integration and she responded that integration in this school is only mixing them with regular students in one class. They are integrated with the hearing world and it is good only to experience socialization and how to live with the hearing world. But, when she sees its academical advantage, she says themselves 'toys'. The students expressed her feeling as follows.

You know what? Others discuss, ask, respond, laugh, agree, disagree but we are observers in the teaching learning process. It is at that time that I hate and damn the day I am created.

In relation to this, the student expressed the communication problem's effect on academic achievement. Because she said, "hearing is one of the learning way. If you can't hear, you can't gain what is said orally. If so, you can't achieve as other students. Therefore, it's effect is unquestionable." The student suggested that they have a good base in their school. If the school wants to help them to use their potential, the whole school community should cooperate with them; understanding their problem and need, hiring interpreters, training sign language for teachers, classmates, and parents.

The student was asked whether she has satisfactory social relation with hearing peers or not. She said "to some extent." Mostly because of the communication gap, it is not that much. When interacting with them, she uses lip-reading, writing and body language. However, she revealed that she more prefers to make friendship with hearing-impaired students, because of the communication access. They understand her easily, they have the same problem with her, she doesn't feel inferior when she is with them. However, in the hearing world, she says, she is always strange for every thing.

Concerning her participation in family discussions, she said that she participates mostly but some times she couldn't get the idea and at that time she keeps quiet. However, she emphasizes that her communication is mostly with her siblings than parents. She has friends in neighborhood and she communicates with them by writing and lip-reading. The student also suggested that the communication problem influences her social relation

because socialization mostly depends on communication. So, if there is a communication gap, it does. So, it would be better if everybody in the school community learn their language and communicate with them. And also, she would like if every body works for the better future of them.

Case 2

Case two is a boy who is 18 years old. He has lost his hearing ability at the age of three. The case of his hearing problem is accident. His parents have tried different things to cure his hearing. Medical treatment, smoking perfumes, and so on. This student communicates using sign language both in Amharic and English. The child hasn't learned sign language at his home but he started it after coming to the boarding school. His parent's push was, however, towards speech even though they didn't succeed.

The student was asked about the way he communicates with his families and responded that many times by body language and sometimes by pointing, and facial expression. By lip-reading he differentiate a few words if the person is familiar with him. The method of communication he uses at home and school is different, because he uses sign language in school and body language and indicating at home so, they are very different.

The student first enrolled in regular school, but later his parents realized that he is not benefiting from the regular classroom and transferred him to boarding school, i.e. Hasanna Deaf School.

Now, in the regular classroom setting he uses/relies mostly on vision and reading during instruction. When the lesson is presented and the teacher writes on the board his work is seeing, reading and copying without understanding and getting the idea of the lesson on the agenda.

The student has also a reading comprehension problem. During instruction, if he has question he asks sometimes by writing the question on the board or paper. But he said that he doesn't always do that fearing that it might not motivate teachers and will kill time. Because teachers do not consider it is their right to learn in this classes. Some times he writes the question and his friends read it to his teachers, and the response will also take place in the same way.

The student also explained that they have no interpreter service in the class. He knows that their boarding school has a plan to hire qualified interpreters. In the class his friends support him by interpreting and writing. The student responded on the communication of him with his teachers that he discusses some issues out of the class by writing. For example if their teachers tell them that there would be an exam, he informs the teacher to write corrections and other special instructions on the board and to consider them during exam time.

In relation to communication problem and academic achievement, he responded that, although they have normal intelligence, mind and ability, because of the communication barrier they are missing many things and lagging behind others. The student said that especially if the subject is his favorite one, he struggles very much to score higher marks. So, he said, the

communication challenge is a big problem in integrated setting. His attitude towards regular classroom placement is also negative. He likes the placement only for social interaction. Otherwise, he says, he doesn't call it integration without arrangements and readiness from both teachers side and administrators side. So he doesn't think of high achievement like hearing peers. If people have an intention to support, encourage and make them successful, they should share their language. Teachers, principals, hearing students and the school community as a whole should accept their language.

Regarding his social relation with the hearing peers, he responded that not that much satisfactory. Communication is a base for social interaction. He approaches some students but they both feel discomfort because of the silence. Because of this, he prefers hearing impaired students to be with and to make friendship. In addition to this, they rapidly understand him even if he faces problems.

He also said that in family discussion, he participates by writing to his siblings and body language for parents. His friends in neighbourhood also do not understand sign language. So, they communicate by writing.

The student also asked about the effect of communication challenges on social development, and responded that communication by itself is social. It is very important for social interaction. So it has a direct effect on social development. Finally, the student has suggested the following issues to be improved and get attention from the school community:

- Getting sign language training and communicating with them in order to support them socially and academically.
- Hiring interpreters in the school.
- Giving attention to their learning need in order to make their future bright.

Case 3

Case 3 is a girl of 17 years. She is prelingual deaf. She has lost her hearing ability after six months of age. The cause of her problem is sickness. Her parents have tried different treatments to cure her, however it was not fruitful. First, she has tried regular school and after its failure she came to the boarding school.

The student has started using sign language after she has started primary school. Her parents did not try to teach her sign language in early times. However, their complete effort was towards spoken language. Even though there were people who use sign language in her village, her parents did not expose her to the environment in early times. She also said that her sister in their home tries to use sign language and sometimes she serves as an interpreter in the family. However, with the rest of the family she communicates by body language and writing. She says, "if sign language is learned by every body around us, we would benefit more and it is interesting to them also being included in deaf community."

The student also suggested that the communication method she uses at home and school is different. Because in school they uses formal sign language but in home if the communication is with her sisters, she uses home sign. If it is with parents, the communication is by body language.

When asked about her school enrolment in early times, she said that she has learned first grade in regular school found around her village. But later, she came to Hosanna boarding school. During instruction in the class, she relies on vision mostly. She wants to ask questions and respond to questions, but it interrupts the teaching-learning process. So, many times she doesn't like to do so. She sits with out any participation. Rarely when lessons become very hard for her, she calls some teachers to her sit and ask by writing. There is no interpreter in her school. They learn more when they go to their boarding school, because it has qualified teachers and facilities.

The student is training her classmates to her benefit. Because they help her in classroom when there is instruction from teachers or other bodies.

The student doesn't communicate with teachers out of the class. She also said that some teachers even do not know their presence in the class. When she raise her hand or students tell them they become surprised. However, it is not their fault because the school administrators should have introduce their integration to them. So, they are totally forgotten groups. When they ask to give them tutorial classes, teachers complain about their work load and are not volunteer.

Regarding reading, she has a problem. Sometimes sentences puzzle her until she asks somebody to explain it. In addition, they also be in problem to explain if it is new idea or not concrete.

She also responded that the communication barrier that exists between them affects their academic achievement. She also doesn't like to be included in regular classroom. She says that they miss out many information presented orally. So, this can highly affect their achievement. Suggesting on the improvement she said:

I suggest that I would be better if people who have close contact with us can learn our language in order to support and push our effort to a certain distance. Our problem is only communication, not inability to learn. If this problem is avoided we can do any thing like our hearing peers. The concerned body should make appropriate integration. Inappropriate integration will be dangerous for our future life.

In relation to social interaction with hearing peers, she said that it is not successful as she needs it. Because, she can't hear speech, her peers can not sign. She communicates with them by writing so this is very passive and takes time. Her preference to make friendship is both with hearing impaired and normal. However her friendship with hearing impaired is most of the time is long-lasting and very close. She says this is so for nothing but for mutual understanding and having common language. In family discussions, she involves always with her sisters and sometimes with her parents. Because her sisters better communicate with her and discuss freely any problem that they

face. She has friends also in neighborhood. She communicates with them by writing. Finally, she was asked about the effect of communication problem on social development and she responded 'completely!' She says "how can one develop socially without talking, greeting, discussing and playing. Without having common language it takes time to develop socially." She has also suggested the following ideas for the improvement of their learning condition:

- Teaching sign language for all school community.
- Preparing sign language books and distributing it to the whole country.
- Preparing the plasma programs in sign language like programs for hearing impaired in ETV-unless they are not benefiting from it without copying what is written on the screen.
- The government should have a clear picture about their learning behavior and potential, their opportunity and challenge so as to help them in practicing their citizen right.

Case 4

Case four is a boy whose age is 16. He is prelingual deaf. He has lost his hearing ability at the age of one. The case is accident /falling/. His parents has tried medical, spiritual and traditional treatments to cure their child even though it doesn't work. After realizing his deafness, the child's parents effort was to teach him spoken language. However, after he has joined the deaf

school, he stopped the trial to use spoken language and started using sign language.

When asked about his parent's early effort/support/ to train him sign language, he said that his parents consider sign language as a foreign or strange language. Even when he tries they discourage him. However, later he started making contact with adult deaf signers after beginning elementary school. His parents also recognized that the spoken language is not appropriate for him. Especially, his mother and siblings started learning his language from him. His siblings also attend the training that is offered by his boarding school, however his parents do not want to be trained explaining it would be difficult for adults. However, the student likes/prefers if every body around him learns his language. He says every body who likes him should show his feeling by learning his language.

The student does not benefit from lip-reading because he has no memory about spoken language. When asked about method of communication he uses at home and school, he said they are different. In the school he uses pure sign language however at home he uses home sign with his siblings and acoustic signs or signs related to structure of a certain object or way of acting.

The student was asked whether he has attended regular school before or not and he said he did not because he is prelingual deaf and cannot hear speech. So, when he became a school age child, he directly has gone to the boarding school and learned upto eighth grade there.

Now, in the regular classroom, he relies more on vision and reading. During instruction he always wishes to ask questions and discuss on some issues, but because of the communication barrier he rarely does that. Teachers do not sign a single word; he doesn't listen a single word, silent world!. His classmates help him in interpreting, because in his free time he carefully teaches them sign language. So, they help him in interpreting some new concepts.

When suggesting about communication with teachers out of the class, he said that very rarely. Because teachers do not tolerate to read questions from paper and to write the answer. If they are volunteer, he want to ask and discuss many things from every lesson. But his deafness and its respective effect tied him to not do that. Sometimes teachers ignore them in order to avoid the challenge. They read their faces and turn back. So, this is a great challenge in his life time. The student also said he has a big difficulty in reading when he faces a new word. When he finds a new word which he doesn't know before, it makes the whole paragraph gloomy to him and he stops reading.

The student complained that the communication problem is killing even the knowledge what they have before. Nobody understands their problem except their prior school teachers who are devoted on helping all the integrated class students. The student says that he was high achiever when he was in boarding school. But, now his achievement is decreasing. His prior teachers also over worried about this and they are eager to help him. He also doesn't agree with their integration in regular classes. Because, he says, it is meaningless to

integrate them without an interpreter service. There is no interaction with teachers and classmates. They sit idle in the class. They don't know even what is going in the class sometimes. So he feels always discomfort. Because he learns fully in his prior school without any worry. So, this placement does affect his academic achievement. So, they are facing failure.

When asked about the social relation he has with others, he responded "no, how one can expect satisfactory social relation without communication!" In friendship preference, he likes both groups but he prefers more his school children who are hearing impaired. Because there is no suffer, no puzzle to communicate with them. So, he enjoys to be with them.

Regarding his participation in family discussions, he said sometimes. Because of the communication problem, he participates more if the discussion is with his siblings rather than parents. So, with parents he sometimes communicates by indicating and using body language. Because his parents know nothing about signing and he know nothing about speech. So, it is not that much. His friends in neighbourhood also communicate with him by writing. Finally, he revealed the effect of communication barrier on social development. He says, "language by itself is a social phenomena, if one loses this social phenomena, he lost something very essential to develop social interaction."

To improve the above mentioned problems associated with academic and social developments, the student has suggested the following ideas:

- Opening high schools for the deaf students;

- Colleges and universities should include sign language training for teachers to a certain extent.
- Putting those students who share the same problem is important so that they can share and discuss on their own problems and challenges and decide on solutions.
- Preparing sign language books in advanced quality and number and distributing in the whole country and schools so that every body can try the language.
- The government and other organizations who support them in regular classrooms should think before putting their life at risk.

4.1.2. Communication Problems as Perceived by Regular Teachers

Table 2: Background of Teachers who were Interviewed

No	Name	Sex	Sign language knowledge	Service year	Area of study	Educational level	Subject teacher	Experience teaching integration
1	NK	M	No	21	Chemistry	Diploma	Chemistry	1
2	T/G/M	M	No	31	Maths	Diploma	Maths	1
3	W/M/s	M	No	16	Amharic	BA	Amharic	1

*All the teachers were from grade nine.

Regarding the communication method by using sign language, two teachers responded that they have no idea about sign language and one teacher said that he tries very little by experience with deaf persons. Teachers also added

that they want to be trained in sign language if the school offers the opportunity in order to help the hearing impaired students.

When asked the main communication method they use in the class to present the lesson, all the three teachers responded that oral language is their main way of communication, and they added that they know it is disadvantage for this group of children. However, there is no alternative to choose for them.

Teachers also reported that when hearing impaired students want to ask questions or respond to questions given on the board, they use mainly writing and sometimes body language. In addition to this, sometimes their hearing classmates help them in interpreting. One of the teachers said that when these students want to ask or respond to questions, they use two ways, whether they use the blackboard coming in front of the class, or he goes to them. The other teacher also said that in his class there is a clever girl. When some thing confuses her during lesson she rises her hand and show him to come to her sit. Then she writes her question and asks without any fear. Some times if he couldn't see her she stands and waves her hand, so that he can see her.

When asked about the level of understanding of the students about their lesson, they all responded that very little, because the students cannot listen.

The teachers suggested on the way the students communicate with in themselves and responded that mostly by writing and sometimes by sign language. Because hearing impaired students are trying to teach their close friends and volunteer groups sign language.

When asked about the way they discuss hearing impaired students problem with them, they all responded that rarely. One of the teachers said that some students go to his office and ask him to help themselves in grading. The other teacher also said that they asked him to give tutorial classes and he responded that he can't do that because of large work load he has. However, he said that he has a plan for the future.

The teachers revealed the challenge during instruction that the hearing impaired students inability to hear on their part and inability to sign in teacher's part. Teachers also suggested that they believe in their ability, that nothing is related to their intelligence. The only difference is their inability to hear and they can't attend oral presentation.

When asked whether the communication challenges affects the academic achievement of these children, one of teacher said, "this depends on the child's talent/intelligence/ level, because it is only the communication barrier that blocks them, so if they can get the right assistance, they can work like normal children." The teacher added that in his class there are students who scored better than normal. Two teachers said it does because they lack one of the important learning tool i.e. auditory channel.

Regarding the effect of communication barrier on the students social interaction, all the teachers agreed on it's negative effect. They said that if these children communicate only with their groups, they miss many interaction with the large group i.e. hearing society.

Therefore, one of the teachers said:

for social interaction to be developed there should be initiation from their part and the hearings too. The interaction should not be restricted on their schools, but also in their villages with peers, neighbors and community as well. Otherwise they may find it difficult to mix with the hearing community in later times.

When these teachers were asked about their teaching experience of these students and their encouragement of integration of these group, they all responded that they are assigned in such classes for the first time only in this year. Concerning integration they said that without having trained personnel and special arrangement, it is difficult even to talk about integration rather than practicing. Because they said these students may not go equally with normal group in any aspect of learning because there is a barrier. So, this is a clear disadvantage. Even the plasma service is not on their part. So, by the name of empty integration they are missing many things. It was helpful if they are integrated from the very beginning. This also should be not only in school, but also in the whole community and society. At this time the have many difficulties that cannot be avoided easily without the cooperated effort of the community.

Regarding interpreter services, one of the teachers said that, he would not allow in his class, because it destroys the normal students attention and would interfere with the over-all teaching learning process. The rest two teachers responded that, if it is arranged in a good way they can deserve it. The teacher

who do not accept interpreter, says that, it would be possible to assist them by arranging tutorial times, and study programs with high achieving student and encouraging their learning.

In general, teachers suggested that they are blaming themselves about their inability to help those children and the school too for not making any effort to assist these children. The teachers also appreciated the students for their discipline and eagerness to learn and understand what is said in the class. Finally, teachers suggested the following ideas:

- The lessons presented on plasma programs are very important. These students are losing this important lesson, so, there should be an interpreter service for the children.
- Regular classmates should also help these children in interpreting and encouraging for their success.
- The school should also know the responsibility to help the children in practicing their citizen right.
- Teachers should also know their duty to teach these children according to their needs.

Finally, teachers promised that they would support these children by counseling, encouraging planning tutorial programs and arranging study program in collaboration with their classmates and the school community to change the futurity.

4.1.3. Communication Problems as Perceived by Hearing Classmates

When students were asked about their attitude towards integration of hearing impaired students within their classroom, three of them said that they don't encourage it. Because, these students miss all information presented in oral language, and they cannot achieve equally with them by only copying what is written on the board and on plasma screen. In addition to this, many teachers do not consider these groups during lesson, sometimes they finish the whole lesson by oral explanation. So, because of the aforementioned reasons these students do not encourage integration. However, one student suggested that "separation is not advantage for these students. They may see the rest world negatively. Even for academic achievement, they can benefit from integrated classroom if the hearing community in the school cooperate with them."

Regarding making hearing impaired students their friends, these students expressed that they like it. The method of communication that they use is mostly writing. However, students said, that they are trying to learn sign language. One of the students expressed her strong need to learn sign language and support these children. Concerning playing with this children, students said that they like playing with them like foot ball, telling jokes and stories and other activities. One student also added that he enjoys being with them because he likes their language and the students discipline.

Students involved in the study further suggested that they help these students by doing different activities. They mentioned activities like, interpreting or

writing instructions from teachers about exam date, exam area coverage, homework, reading assignments, preparing notes from textbooks, make-up classes and report of final grade and rank. Beside this, one student said that he supports the students by giving advises on study programs and related issues. Out of the class he also, sometimes, interprets mini media programs especially if there are program on HIV/AIDS. One student /female/ also explained that they discuss always about issues like education, life and HIV/AIDS, because they sit together.

These students also want to learn sign language if it is given. In the current situation, they are getting some knowledge on the use of sign language from these students. They believe that it is minorities language. They like it too.

The regular students complained that the hearing impaired students participation is low. This is because it is blocked by communication barrier. However, all the students appreciated these students for the result they have scored in the first semester being in this situation. These students have a need to ask and discuss on questions by writing, but teachers sometimes do not tolerate. They even sometimes ignore their questions. one student said that in his class one of the students sometimes directly call teachers if there is something ambiguous for her she raises her hand or wave, or make sound if she has any idea, suggestion or question.

When asked about the effect of communication problem on the students academic and social development all the students agreed that it does. One students said:

these children are learning in oral only classroom. They communicate only by writing. Teachers lack readiness and commitment to help them. They can't ask, respond, discuss and participate. Every thing that is oral is dark for them. There is no help that we see from the school or another body. So, this completely affects their achievement, eventhough they can learn and achieve as normal children. Because the inability to hear has no association with their ability to learn except the communication barrier.

Students also added that socially too these students should involve in discussions, talks, and other related social issues. To develop socially one should ask, respond interact with people in the near environment. These students fail to do this. They are always calm.

Finally, students expressed their belief that if there is early intervention programs and adequate attention from parents, teachers, and the school administrators, hearing impaired students are able to do things like normal children. Their eagerness and attention to education is very promising. So, the communication barrier is their main challenge that affects their academic and social development.

4.1.4. Communication Problems as Perceived by Parents of Students with Hearing Impairment

For the interview, all the cases presented their fathers and the interview was conducted only with fathers. The researchers effort to find mothers was not fruitful.

First, parents were asked about the cause of their children's problem, and two of them said it is due to sickness and the rest two said it is due to accident. They also added that their children's problem was identified only when they failed to respond to sound stimulus.

Parents replied on the difficulty that they face in communicating with their children. Case 2's parent said that he wants to discuss with his son about education, future life and another issues, but he cant fully do that. So, this parent feels much at that time. Case 3's parent responded that "when she comes to home, I want to express my longe and advise but it is only by writing." Case 1's and 4's parents also expressed their difficulty in relation to communication.

Parents also revealed that in early times their effort was to teach the children spoken language in regard to communication skills. However, they did not succeed. In early times, they also did not get support and counseling service from professionals on how to teach communication skills in early times and how to cope with the problem. They all thanked the boarding school finally for taking the responsibility in the education and communication skills.

Concerning sign language knowledge, all the parents said that they do not sign. Even when the school offers the training, they do not want to be trained explaining different reasons. Assuming that it would be difficult for adults, being busy and others. So, they prefer to send students sisters and brothers, and these can communicate in a better way than the students parents. Parents also expressed the way of communication method they use with their children. Three of them responded that body language is the main method and writing follows it. The rest parents said that pointing/indicating are the main methods followed by body language.

When parents asked about their children's social relation with other people, three of them responded that their children have friends in neighbourhood and they communicate with them by writing and body language. However, one parent said "eventhough my son has friends in neighbourhood, he doesn't like to approach them, because sometimes they glare at him as if he is different creature. At this time they up set him."

The parents also expressed their emotion on the influence of communication problem on their children's social development. Case 1's parent expressed "communication is the main thing to develop socially. It should be from both directions. This relation to be developed, communication plays a large role. So, I couldn't say they are successful." Case 2's and 3's parents also replied that by keeping quiet there is no kind of social relation to be developed. There should be play, chat, discussion, quarrel with others to develop this skill. So, this

children are at the disadvantage of social relation. Finally, case 4's parent responded that communication is a social issue, it is a social tool. Therefore, without communicating it is difficult to talk about social interaction successfulness.

When asked about the academic and social support they give for their students, they all said that they can't because of communication barrier. Concerning the influence of communication problem on academic achievement in relation to integration, all the parents responded negatively. Case 1's parent said as follows:

when I heard about their integration first, he cried for the whole day. Because it seemed to me that these students are going to school or a place where there is nothing. In the situation of oral instruction how can one learn without listening.

So, he doesn't accept their integration and it absolutely deprives their achievement. He prefers if his daughter learns upto tenth grade in the prior school separately.

The rest three parents also responded that teacher's inability to sign and student's inability to hear is the main problem. They all do not accept integration; one parent especially explained that before integrating these students, the school should have make preparations. Like training teachers, preparing interpreter services, creating awareness on the classmates and school community. The school administrators have also to know the right of these students. As a citizens they should fulfill their need and should not

expect every pressure from their boarding school. So, he concluded that he sees students lagging academically after coming to this school.

4.1.5. Communication Problems as Perceived by principal of Regular School

The principal of the school was asked on different academic and administrative issues of the teaching learning process of integrated hearing impaired students. He informed the researcher that there are eighteen hearing impaired students in the school and are distributed in four sections.

Regarding the academic challenge they face in the school, he said that in the school all lessons are presented orally, and due to this these students miss many information. So, they cannot compete with hearing students. According to the principal the students came to this school by communicating with their school, however, there are no arrangements made to welcome them. So, this created a problem.

The principal said that in the school, no body knows their language (including him) to help them. However, if there is an opportunity, he wants to learn their language. Regarding parental cooperation in the education of their children, he said that nothing. The school also has no such a kind of program so far but for the future they have a plan. Still the principal believes that parental cooperation should be with their prior school i.e. the boarding school.

When asked about teachers complain in teaching hearing-impaired students, he said that nobody complains about that. Rather some teachers appreciate some students for their success and all the group for their discipline. However, the teacher complain is for the hearing-impaired students benefit. They sympathize.

The principal doesn't encourage their integration. He prefers if there is a separate class for these students to learn by their own teachers, with full facilities and learning atmosphere. He said "for their social interaction, it is helpful, not only for them but also for 'normal' to experience living with differences and developing sympathy. But, academically it is disadvantage."

Concerning sign language training, he responded that they have no plan and budget. However, the students boarding school can do this. There is also no guidance and counseling service in the school. Again there are no interpreters. Hearing impaired students, most of the time, do not come to his office to discuss on their problems.

When asked, if they have ever arranged tutorial programs for these children, he said that they don't. Because there are many students in the school, teachers work in two shifts, they are over-loaded. So, it is difficult to ask these teachers to arrange tutorial programs. But he added that they have a plan to convince teachers and make arrangements to help those students by asking the boarding school to send interpreters.

The principal finally said that, he believes on the students ability to achieve academically and interact socially, work as any citizen if they get the opportunity. So, there should be a certain body who can finally take the responsibility to help these children to practice their citizen right. There should be follow up and continuous assistance. He also understands their problems. So, in association with teachers and the school community, he has an intention to initiate supporting activities to make their future better.

4.1.6. Observation Result

Being in a regular classroom doesn't necessarily provide deaf children with the same education as hearing children. In the classroom observation shows these students are passive participants, their interaction with the regular classmates and teachers is poor. The communication is mainly by writing. It takes much time to understand each other.

In the classroom, the frequent work of hearing impaired students, is copying what is written on the board and on plasma screen. Sometimes, teachers finish the whole instruction orally. Regular classmates are good at supporting these students when there are instructions, home works and other issues conducted orally. Generally the deaf students are unable to gain from either the content or the context of a regular school classroom, such a setting is neither "normal" or helpful.

4.1.7. Communication Problem and Academic Achievement

Table 3: Students First Semester Result

N_1	N_2	X_1	X_2	S_1	S_2	t-obtained	t-critical
4	15	66	70	16	18	1.69	2.09

* $p < 0.05$

Table 3 shows that there is no significant difference observed between the academic achievement of hearing students and students with hearing impairment. Therefore it can be interpreted that the difference is not significant in the academic achievement between the two groups.

Regarding their achievement students with hearing impairment strongly expressed their idea, that if there was no help from their boarding school, their result would have not been this. Their teachers in the boarding school support them in all subjects by having time that can be comparable with the time that they pass in the regular school. As the students say it, their prior teachers do not want to see their student's failure. Had it been these students depend on only the regular teachers instruction, none of them would score even passing marks. Students also revealed that the base that they had before in their boarding school has also helped them in coping with the new situation.

4.2. Discussion

In this part of the study different data gathered from the participants are discussed in relation to different researchers findings. The discussion is made beginning with hearing impaired student response to parents teachers, hearing classmates and principals.

4.2.1. Communication Experience of Students with Hearing Impairment

For a certain child deafness is not only the challenge he faces in relation to losing auditory channel but it has also great influence on the child's communication with its surroundings. Besides, the communication problem affects the child's social development and academic achievement. In order to loosen these problems, early identification of the hearing loss is very crucial. This helps the child develop the appropriate communication skills early. However, in the course of the interview, all the cases revealed that their problem is identified not in early times, and even after the problem identified the focus was on curing them by seeking traditional, medical and spiritual treatments rather than beginning early home intervention. Therefore, as the students response shows, they have started using sign language after they have joined the elementary school.

The student also revealed that their parents early focus was on teaching them spoken language and using it at home together with body language. So, because of this effect, the students early language exposure is highly deprived. To confirm this idea Bench (1992) says especially for a deaf child born in a

hearing family, effective communication may not be present in the child's home environment. If the deaf children exposed to a sign language environment in infancy; they can fluently communicate. However, deaf children in Ethiopia seems to experience a great variability in language input from their environment due to lack of early exposure to sign. Most mothers and teachers are hearing and do not use effective communicative intervention (Alemayehu, 2003).

In addition to this, the presence and absence of communication in early and later childhood has broad consequences for development. Deaf children who learn to sign at a young age also tend to be better adjusted emotionally, tend to do better in school, and have better social relationships with their parents and peers relative to those children raised in speech only environment. However, many parents still complain that they have trouble getting information and advice about the "pros and cons" of sign language. Some of this difficulty might result from their being understandably sensitive and confused when they first learn that their child is deaf. Moreover, delaying the learning of sign language in the hope of better speaking skills in deaf children, (eventhough it simply does not work in most cases) can make matters more difficult for both children and their parents (<http://www.astalvistia.infomedia>).

In the interview, the students also complained that when their school/ the Hossana deaf school/ offers sign language training for all student's family members, most parents do not go rather they prefer to send the hearing

children to be trained. However, as many researchers indicated, the availability of sign language or any other language only at a certain place by a certain body is not enough to lead to language fluency. Parents and children need to have a mutually accessible means of communication, not only for the transmission of information, but as a structure to support learning and development in a variety of domains. In general, if a child doesn't have sufficient hearing to function fully with spoken language, signing is likely to be the most viable alternative (Bench, 1992).

Therefore, according to Orlansky (1988) hearing impaired children born to hearing parents have difficulties of various degrees to learn the spoken language used by their parents. The parents, knowing nothing of hearing impairment and sign language before their child was born, must make far-reaching choices concerning the communication mode of the child and the family, in a situation where they already feel anxious and depressed due to the diagnosis of the hearing impairment.

4.2.1.1. Communication Challenge and Academic Achievement

Deaf children are different from hearing children in that their ability to listen is limited. This limitation not directly affects the child's intelligence, however, it has a negative effect on language development. Gearheart (1992), in this regard, says that hearing impaired children present slow language development in all linguistic aspects due to the sensory deficiency in speech system, poor cognitive development, linguistic experience and educational restrictions. Such delayed

and slow speech and language development influences a child's ability to develop communication skills such as reading, writing, listening and speaking. The extent of the difficulties in the language arts such as reading, spelling and writing depends on the child's degree of hearing loss and age of the onset of the loss.

Concerning the language skills, the most frequently cited academic difficulty among these children in the regular classroom was reading. The students said the area of difficulty is vocabulary and grammar. Schulz, carpenter and Ann (1991) confirming this idea say, many academic skills depend on students general awareness of language. Individuals who are hearing impaired are at risk for reading and writing difficulties, because the hearing loss affects their ability to construct accurate representations of sound letter correspondence. Because of their conceptual limitations, they may have problems in interpreting the language of others and expressing themselves in oral and written modes. Nevertheless, reading and writing form an essential link to the worlds of social and intellectual interaction, and the consequences of literacy or illiteracy will have increasing impact on all realms of functioning as deaf children grow up.

Students also expressed their feeling on integration. They said that it is only physical one. There is no interpreter, no itinerant teacher, teachers do not know sign language and lack readiness to teach them.

So, because of the aforementioned and other problems, they are not happy to be integrated. They say that they are learning in 'oral only' classroom

atmosphere including the plasma programs. So, they all revealed their fear in competing with their hearing classmates. In accordance with this idea, Kirk et al, (1993) stated that it is difficult to integrate high school students with serious hearing losses. When they are mainstreamed these students need sign language interpreters in the classroom as well as supplementary resource assistance. Therefore, the primary academic support needed by deaf students integrated in the regular classroom are communication related: interpreting and note taking. There are also other issues involved; including the effective use of classroom space, teaching strategies, and the sensitivity of teachers and counselors to the communication need and learning strategies of deaf students. There is also the need for technologies.

These students also informed that it is not their need to be placed in regular classroom without any prior arrangements to welcome them. All the students focused in their response that integration in their situation have advantages socially, but academically without solving the communication problem, having sign language interpreter and having all the school communities commitment, it is difficult to learn as hearing peers. In the interview one of the students said as follows:

Our integration is not appropriate. We are toys in the class in which the total instruction is presented orally; teachers do not tolerate to communicate with us by writing. Even some teachers do not know our presence in the class. The school also doesn't understand our right. So, we are missing many things from teachers, classmates and lessons presented on plasma as well. If there was no assistance in our boarding school, we all would score zero here. But thanks to our schoolteachers; they all are ready to help us in times which we are free from the school.

In line with the students suggestion Katz (1997) says that placement of hard of hearing and a deaf child in regular classroom with hearing children is a critical step, which must be carefully weighed before implementation. Overworked and untrained teachers may ignore or poorly teach a deaf student.

Moreover, explaining the problems that they face in regular classroom settings they appeared to lack confidence in facing academic challenges. Hegarty and Pocklington (1988) suggested that though hearing impaired students lack confidence, the lack of confidence must be seen in the context of the communication difficulty.

The students on the other hand expressed their belief that lacking auditory channel by it self doesn't affect the person's intellectual capacity or ability to learn. It requires special needs education. i.e. the requirement of special provision for such students. This includes not only school facilities like classrooms and technologies but also supportive professionals like trained teachers and counselors.

Therefore, despite the communication problem that these students face, perceiving them as full functioning individuals may have its own positive contribution in promoting the integration of hearing impaired students in regular classes.

4.2.1.2. Social Interaction of Students with Hearing Impairment

Language is an essential component of normal development for all humans, and social communication is one of the basic components of human understanding and development. So, any loss or absence of it such as in the case of hearing impairment opens great gap in the life and experience of human being.

In this study, the students responded that, eventhough they have no much exaggerated problem in relation to social interaction with their classmates, it is not that much satisfactory. This is because the communication barrier that exists between the two groups. In relation to this, Yssledyke and Algozzine (1995) suggested that most hearing impaired people are fully capable of developing positive relationships with their hearing peers when satisfactory communication is used.

Students also revealed that the communication problem that they face does affect their social interaction. One of the respondents said that:

Language is a social phenomena. It's purpose is also more of social. So, we lack this important tool with the hearing world in common. The hearing world cannot sign; we cannot hear/speak/. So, there is a mismatch in communication method, and this highly influences our social interaction with other people.

Supporting this idea, Alemayehu (2003) says that although there may be other contributing factors, communication abilities are highly responsible for the

social success of the student. Absence of sign language skills among teachers and other hearing people may lead to unfit social interaction pattern between the deaf students and the hearing people.

In addition, students suggested that their inability to fully involve in family discussion has also made influence to a certain extent on their social interaction. Family members especially parents ignore their deaf children by assuming that they cannot communicate with these children. According to Schlesinger and Meadow, (1972), parents show some sense of frustration about their inability to communicate with their children.

Different studies also revealed that the emotional and academic lives of young deaf children are enhanced by parents who are sensitive enough to their needs to pursue (1) early diagnosis of their children's hearing losses, (2) intervention and education programs for themselves and their children, and (3) communication instruction. There is also strong support for a relation between early parent-child communication, attachment, and later social ability. Those children with stable and secure attachments early in life tend to be more socially competent during the school years than are children with less secure attachments ([http://www.Lynchburg.org/special ed/htm](http://www.Lynchburg.org/special%20ed/htm)).

In the study, the respondents also reported that eventhough they like to make friendship with hearing groups, they mostly prefer to make friendship with identical groups who have the same language. Their reason was that simply for the relatively ease communication with them. In this regard, research

conducted by within intervention settings has shown that the ability of friendship among deaf preschool children is similar to those of hearing children. Both groups, for example, show similar patterns of playmate preference. Although younger deaf children do not use much formal language in interactions with either deaf or hearing playmates, they do use a variety of non-language communication in those interactions. Older deaf children appear to use more language and gesture communication with other deaf children than they do with hearing children. Their interactions with deaf playmates also tend to be more social and less object-centered than are their communications with hearing playmates. Finally, deaf children who have better language skills to play with more than one child at a time, to interact with teachers, and to use language during play (<http://www.astalvistia.infomedia>).

In general, as Ysseldyke and Algozzine (1996) suggests, communication problems can seriously interfere with interpersonal relationships for students with hearing impairments who receive all or part of their education in general education classroom. Their inability to communicate with other students can delay their language development. Moreover, they communicate in ways that are different from those around them which can inhibit their social interaction and development.

4.2.2. Teachers Communication with Students with Hearing Impairment

Teachers competence is one of the determinant factor in academic success of students including children with disabilities. Supporting this idea Paur and

Jackson (1993) say that the qualifications, perceptions, attitudes, and demands of teachers within the integrated setting are critical factors.

However, when it is seen in the regular school in which the hearing impaired students are integrated, teachers competence and readiness to teach in integrated classes is in question. Because, some teachers responded that they even do not know the existence of these children in the classroom; let alone preparing different strategies to support these children. There were also no information and orientations from the school administrators about the integration of these students.

Teachers also revealed that the communication method they use during instruction is totally oral. One of the teachers (Amharic teacher) said that he tries to use sign language but not in the class room. There are also no intervention activities or systems prepared by teachers to help these students facilitate their social interaction and academic achievement. Fish (1985) in this regard suggests that it is the responsibility of regular classroom teachers to design specific interventions to facilitate communication and interaction by helping hearing impaired students become more proficient at communication skills.

Tibebu, (1996) in his study also indicated that since the immediate and most important effect of hearing impairment is the impact it has on communication, teachers should be alert enough to understand students communication needs and satisfy the way they need, by making themselves competent enough in sign

language and all other appropriate means of communication such as lip-reading, cued speech, finger spelling and generally total communication.

Regarding the awareness creating activities and sign language training, all the teachers revealed that they need it if there is a certain body who can facilitate and shoulder the responsibility. According to Ysseldyke and Algozzine (1996), first of all teachers need to be aware of deaf culture because it means that many children who are deaf add a dimension to the diverse background they bring to the classroom. In addition to this, lack of training in sign language, access to information and lack of understanding about deaf people and their language on the part of teachers is the main barrier.

When asked about their assistance they promised a lot but they feared that integration will bring more work load for them. They also revealed that they fear on that their knowledge and skills are insufficient to treat these children without having training. Whinnery, Fuchs and Fuchs (1991) says that teachers consider themselves inefficient to deal with these students. However, all the teachers expressed their belief that the integration model will reduce the negative social stigma attached to disabilities.

In general, according to Schlesinger (1986), those mentors who based educational attainment on the development of good communication skills argued that deaf child signers, who were expert in their native sign language, could benefit educationally from good signed communication with their

teachers. However, this attitude quickly ran into problems, because few of the teachers, who were mainly hearing were not fluent in sign language.

4.2.3. Regular Classmates Experience in Communication with Students with Hearing Impairment

The hearing classmates in the regular classroom revealed their attitude towards integration of hearing impaired students that the hearing impaired students are not benefiting from the teaching-learning process that is oral. The students see its benefit only from social aspect. Many researchers also noted that integration will be more effective and enables handicapped children (including hearing impaired) develop a positive feeling about their personal values if their hearing peers in the school accepted them (Tibebu, 1995). Hallahan and Kaufman (1991) also says that social environment can largely determine the child's inclination to wards making healthy social interaction.

Concerning the communication barrier between them and hearing impaired children, they expressed that it will be solved by their effort to learn sign language. In addition, at this situation too, they communicate with them by writing and lip-reading. So, the students started working together to avoid the communication barrier not to influence their social interaction. Antia (1985), in this regard says that lack of understanding of the needs governing the communication of hearing impaired children was much a barrier to interaction with peers as linguistic competence, and that the results had implications for intervention programs for hearing and hearing impaired children a like. The

social integration of hearing impaired children could be helped by teaching the communication skills needed to begin and to maintain positive interactions. Structured situations for positive interactions with peers would, therefore, increase the social acceptance of hearing-impaired children, by promoting the appropriate use of communication skills such as greetings, invitations and acceptances, asking questions about the interests of others and turn-taking.

Students also expressed their fear on these students learning condition, because they don't see when assistances are given from teachers and school administrators. So, with out any sign language interpreter, teacher's readiness and the school communities commitment these students will lag behind them. Confirming the students idea Kirk et al, (1993) says that it is difficult to integrate high school students with serious hearing loses. When they are mainstreamed, these students need sign language interpreters, in the classroom as well as supplementary resource assistance.

There are also a number of considerations for the achievement of successful integration of hearing impaired students suggested by the world federation of the Deaf (1991: 40-41). There are four guidelines which are important for the preparation and implementation of integrated educational programs:

1. Provision of necessary services such as integrating sign language for the deaf, language specialists, counselors, specially trained teachers to work with disabled children, radiological equipment, psychological testing and communication therapy.

2. Establishment of good relationship between regular school and special school for the hearing impaired children and youth.
3. Creation of public awareness about hearing impairment.
4. A continues monitoring and evaluation of integrated children.

4.2.4. Parent's Experience in Communicating with their Children with Hearing Impairment

According to Bench (1992), although the evidence to support the distinction could be stronger, our own impression is that parental attitude, support, and counseling are probably more important for the success of early intervention. However, in this study, all the parents were not worried about the early intervention to the children in early times, rather they all sought complete cure for the problem. Even after confirming the problem, their focus was teaching the child spoken language.

Some parents do not understand the importance of early communication and frequently do not know what sign language is all about. Some of them view signing as a foreign and perhaps dangerous step that might impeded the development of speech. Other parents are eager for their children to look and act as "normal" as possible and sign language clearly doesn't fit that requirement. Little do they revise that early acquisition of sign language might be the best way to nurture a child who approaches their "normal" ideal, and

that the denial of that opportunity starts their child off at a distinct disadvantage reactive to other children (Catherine, 1988).

In addition to this, the early stress they face in recognition of the problem also affects their attitude. Because the diagnosis of a significant hearing loss in a young child and hearing families adjustment to its new situation have a variety of ramifications. The most important thing to keep in mind is the entire family is affected by having a deaf child. Although mothers tend to take the greater share of responsibility for dealing with the added necessities of a deaf child (or any other child with special needs), the effects of such changes are felt by each member of the family.

Being in this situation, all the parents ignored the initiation of early home intervention for their children. So, postponing the beginning of sign language learning until "giving up" on speech training is a common pit fall for parents of deaf children.

Moreover, the hearing status of the family also makes a difference on the hearing impaired students social and academic success. Confirming this, Moores, (1996) says that more than 90 percent of hearing impaired children are born to hearing parents. This means that the child has difficulties of various degrees to learn the spoken language used by his/her parents. The parents knowing nothing of hearing impairment and sign language before their child was born, must make far-reaching choices concerning the communication

mode of the child and the whole family, in a situation where they already feel anxious and depressed due to the diagnoses of the hearing impairments.

Orlansky (1988) also says that a hearing impaired child with hearing impaired parents is considered to have better chances for academic success than a hearing impaired child with normally hearing parents.

Parent involved in this study said that because of the communication barrier between them, they do not involve themselves in supporting the children's academic and social development. Different studies involving hearing children have shown that parent's spending time with their children, facilitating their academic and extra-curricular interests, and answering their questions in supportive environments foster academic excellences as well as psychosocial maturity. Regrettably, a language barrier some times prevents such interactions between deaf children and their hearing parents, although this varies from family to family.

Generally speaking, those children whose parents are more actively involved with them will have better success in language learning, social interactions, and academic performance.

In relation to knowledge of sign language, all parents said that it is not them that get the training offered by the boarding school, rather the student's siblings usually learn and they better communicate with them. In line with this different studies revealed that, on average, there appears to be more active communication between deaf children and their hearing siblings than with their

hearing parents. Hearing siblings are often more likely to use signed and non-sign gestural communication than their hearing parents, who often try to focus on spoken communication. Hearing siblings, thus may serve as intermediaries between a deaf child and their parents as well as with people outside of the family. Their possible interpreter role aside, older siblings will provide models of language use, and some one with whom deaf children can 'practice' communicating. Deaf children accordingly tend to achieve higher communicative functioning when they have older siblings, either deaf or hearing ([http://www.lynchburg.org/special ed/.htm](http://www.lynchburg.org/special%20ed/.htm)).

Socially too, families play a relatively larger role in deaf children's than in hearing, it is for no other reason than that deaf children are likely to have a relatively greater proportion of their social interactions with family members than are hearing children. Siblings generally have an important role in childhood, providing a safe opportunity to try out new roles and get feedback on behavior. Deaf children, in particular, benefit from siblings both emotionally and in terms of communication skills.

In the course of the interview, parents also complained about the integration program by preferring the special school which has full facilities, attention and trained teachers. One parent said that without arrangement this integration is 'a one size fits all' approach. It need not suffer from the problems of programs that only provide superficial integration. Therefore, for some students, a mainstream classroom with appropriate academic support services can provide

excellent educational opportunities. There should be consideration about the communication needs of the child opportunities for direct communications with peers and professional personnel in child's language and communication mode, academic level, and full range of needs, including opportunities for direct instruction in the child's language and communication mode.

4.2.5. Experience of the School Principals Communication with Students with Hearing Impairment

School administration is one of the important factors that can determine the failure or success of integration. Principals as facilitators of the educational activity have the responsibility to organize the resource of the school and influence their subordinates to work rather than imposing.

In this regard, the principal of the school expressed his belief that he has no awareness about the students problem, and the integration is not planned. Teachers are not trained, regular classmates are not awared about these students placement.

In relation to this idea, Moores (1987), says that teachers lack of potency to help, poor encouragement and low motivation of hearing impaired students to learning, large class size, poor administrative follow up and unattractive school environment to hearing impaired students hinder integration. Experiences show that small classes of less than 20 pupils are far better for children with hearing problems. In small classes, the children receive more support as the teacher has the time to look after them better.

The principal also confirmed the response of hearing impaired students and their classmate's idea that there is less effort on the part of the school in arranging conditions for sharing experiences. According to Kegarty and Prokclington (1988: 41), little concern is given to intervene in a formal way to promote interaction between pupils with special needs and their peers.

The principal also expressed his fear that even though he believes the benefit of integration in socialization of children with hearing impairments, he doesn't think they benefit academically. He said:

Eventhough I encourage integration for the social benefit it has, the academic benefit should get priority. They are lagging behind their hearing classmates. Because they came here without any preparation and readiness, so I don't suggest in this way.

Kamfe (1984) in Tibebu (1996) also agrees that despite the enthusiasm and the wide acceptance of integration by educators there are few disadvantages:

1. They are inappropriately implemented, with no modifications of the curriculum.
2. Schools often fail to provide the special support services needed by hearing impaired children.
3. Teachers and school administrators are often not aware of hearing impairment.
4. Specialists, such as audiologists, psychologists, speech therapists, nurses etc are not always available in integrated situations.

4.2.6. Communication Problem and Academic Result

As it is indicated in table 3, in the result part, first semester result of students with hearing impairment is found to be not that much lower in comparison with the result of hearing classmates. For this students informed that it is their boarding school teachers' support and their strong base they had in primary education that helped them a lot in getting this result.

In relation to this, one essential aspect of academic achievement is that the students have to notice that their success in schoolwork is the result of their own efforts. Fearing the competition with the hearing peers, these students said that, they work together day and night. This has helped them in finding themselves at average level of achievement.

In addition to this confirming this, Kirk et al. (1993), stated that in educating hearing impaired students, it is very important to know their problems. So, identifying their problems at an early stage of their education in the elementary school level and giving early support can help them in their higher education.

Beside this, eventhough the difference between the two groups is not significant, students with hearing impairment complained that, they have the problem of communication, especially they are missing the lessons presented on plasma. Because the plasma lesson is presented at national level, and ESLCE exam will more depend on that. Regarding this Moores (1996), indicated that if the student doesn't communicate well, falls behind academically, loses confidence, or doesn't relate freely with his peers, and integrated setting can be

of a very negative learning experience. Even in a good integrated setting, the deaf student misses a great deal of the interchange between the teacher and students, which in a special school or classroom he would be able to pick up.

The students also expressed their belief on that they have the same learning ability with the hearing peers. They are similar to hearing children in many ways than they are different. Furth (1994), suggests that the condition of deafness in no way poses no limitation on the cognitive capabilities of individuals. As a group, deaf people function with in the normal range of intelligence, and deaf individuals exhibit the same wide variety as the hearing population.

Chapter Five

Conclusion and Recommendations

5.1. Conclusion

Educational provision for children with hearing impairments is important to make these students support themselves and be fully functioning members of their respective societies. However, there are several factors contributing to affect these activities. The communication barrier that exists between them and the hearing world plays an essential and most leading role in providing education and maintaining relationships for these group of children.

Therefore, the main focus of this research was to identify the communication challenges of hearing impaired students in the regular school selected for the study in which these students are integrated. From the findings of this research it could be concluded as follows:

As it is revealed by the study, the sampled deaf children were improvised in communication and language development due to lack of early intervention and absence of exposure to the accessible linguistic environment, i.e. sign language.

The major problem that indicated in the finding is that language and communication problem, which has a great influence on the students social interaction and academic achievement, eventhough there might be other factors.

Hence early sign language exposure enhances later academic, social and linguistic achievement; it is indicated in the study that parents have not focused on early intervention activities, and the deprivation of language and communication resulted on deaf children lagging behind the (eventhough it is difficult to make firm generalization depending on small number of sample) normal development in social, academic and linguistic areas.

In relation to communication problem, absence of sign language on the part of teachers and hearing students may cause poor academic and social interaction. Lack of readiness and lack of awareness on special needs and fearing about inefficiency on teaching these children may cause average academic interaction pattern between the deaf student and hearing people.

In addition to this parental involvement and support in promoting the education of hearing impaired children is unquestionable. However, in the study, it is found that parents are not working closely with schools to promote the education of hearing impaired students.

Moreover, as identified by the study the education of student's with hearing impairment in regular class settings has not yet obtained sufficient practical support from educational authorities. There is no educational interpreter services, resource room, guidance and counseling service for both students and parents, no awareness creating activities for teachers and students.

In the study it is also found that almost all the participants involved in the study discourage integration mainly because of the communication problem

and lack of awareness in the school community about hearing impairment. So, the situation suggest that many efforts have to be made to avoid the existing communication barrier between the hearing impaired and the hearing school community.

This study also revealed that the sampled deaf children have difficulties on language skills specially on reading skill.

Finally, students first semester average was found to be not that much lower than the hearing students. For this, the strong base that the students have in the boarding school, the boarding school teacher's unreserved support and may be their intelligence have contributed much more than the teaching-learning process in the school.

In general, the result of this study suggests that the education of deaf students in regular school is very limited and it needs hard work input on the part of the government, the community, parents and other professional related to the education of the hearing impaired children and the responsibility for hearing impaired education should be shared by all who are concerned for the future.

5.2. Recommendations

In order to improve these problems and factors affecting the development of deaf children in academic and social areas the following measures must be taken into consideration by concerned bodies:

1. Sign language in Ethiopia must be developed through research and be accepted in order to help an early sign language acquisition and training for those involved. Children must be trained in sign language early in life. Parents and teachers of the deaf must also be exposed to sign language training in order to establish communication that facilitates and enhances the psychosocial and academic development of these children.
2. If the integration of these students needed to be successfully implemented, the school should make every possible arrangements to equip regular teachers of integrated classes, through effective training in special education with special skills and aspirations to encourage them and cater for the educational demands of hearing impaired.
3. The regular school and the boarding school in cooperation should facilitate conditions to enable deaf students to obtain special services, such as resource room, guidance and counseling, interpreter, note taking and captioning the plasma programs.
4. The school should give public orientation to the school community in general and to hearing students and teacher in particular to be helpful for deaf students in the class and out of the class.
5. Parents should be given special training and guidance and counseling services on how to communicate and deal with their hearing impaired

children, and they should be able to work with the schools for the better academic and social development of their children.

6. Finally, the government and NGO's should support the hearing impaired by giving training programs, arranging some awareness programs to the community on effective communication methods to make the public aware of the hearing impaired more fully.

References

- Ababa Hagos (1996). Academic Barriers of the Hearing-Impaired MA Thesis. Universities of to Ensure, Finland. Unpublished.
- Adams, N. (1987). Elementary School Today. London: Hutchison, Ltd.
- Alemayehu Teklemariam (2000). Communication Experiences of Prelingual Deaf Adolescents. University of Oslo Norway. M. Phil. Thesis unpublished.
- Anastasiow, N. (1993). Social Historical and Theoretical Foundation of Early childhood special Education and Early Intervention. In Early childhood special Education. New York: Teachers College Press.
- Bench, John R. (1992). Commutation Skills in Hearing Impaired children. London: Whurr publishers.
- Bouvet; Danielle (1990). The path to language: Bilingual Education for the Deaf children. London: Multilingual matter.
- Butler, K. G. (1994). Hearing Impairment and Language Disorders Assessment and Intervention Syraaree: Aspen publisher.
- Chiswanda, Maria (1997). Hearing Mothers and Their Deaf children in Zimbabwe: Mediated Learning Experiences. University of Oslo. Unpublished Doctorial Dissertation.
- Corner, John and Hawthorn, Jeremy (1993). Communication Studies an Introductory Reader. London. Edward Arnold.
- Fish, John (1980). Special Education, England: Thomas Lithp, Ltd.
- Gallagher, Kirk, (1983). Educating Exceptional Children. Boston: Houghton Mifflin.
- Gearheart B.R., Weishahn, M.W., and Gearheart, C. J. (1988). The Exceptional Student in Regular Classroom (4thed.) Ohio, Merrill publishing.
- Gearheart, Bill R. and Weishan, Mel W. (1992). The Handicapped Students in Regular Classroom. St. Lous: Mosby.
- Goldstein D. (1989). The hearing impaired child Wondsor: The NFER NELSON publishing company Ltd.

Hallahan and Daniel P. and Kauffman, James M. (1993). Exceptional children: Introduction to special Education. Englewood cliffs. N.J. Prentice Hall International.

Heward, W.L. Orlansky, M.D. (1988). Exceptional Children (3rd.ed.). New York: Merrill publishing.

[http://www.lyncrburg.org/special ed/definitions. htm](http://www.lyncrburg.org/special%20ed/definitions.htm)

[http://www. astalvistia infomedia](http://www.astalvistia.infomedia)

Johnson, R.E., Liddell, S.K., and Erting, C.J. (1989). Unlocking the curriculum: Principle for Achieving Access in Deaf Education, Gallaudet Institute Working Paper, Gallaudent University.

La Porta, M. (1918). Mainstreaming Pre-school children with Hearing Impairment. Washington: Us Department of Health, Education and welfare office.

McAnally, P.L., Rose S., and Quigley, S.P. (1994). Language Learning practices with Deaf children. Austin pro. ed.

Mcconkey, R. (1986). Working with Parents. A Practical Guide for Teachers and Therapists. London: Croon Helm.

Meadow, K.P. (1980). Deafness and Child Development. Berkeley, CA: University of California Press.

Moore D.F. (1996) Education of the deaf: Psychology, principle and practices (4th ed) Boston: Houghton Mifflin comment.

Moore, D.F (1987). Educating the deaf (2nd ed.). Boston Houghton Mifflin.

Motetz, B. (1990). Deaf Identity, Sign language Studies, Volume 68, 195-216.

Nolan, M. and Tucker I (1983). The Hearing Impaired and the Family. London: Souvenir press. (E and A) Ltd.

Passonella, Ann and Cara, B. (1981). Teaching Handicapped Students in the Mainstream. Merrill publishing.

Pickersgill M. (1990). Research in Bilingual Education: Current perspective Journal of Bilingual Education, vol. 2., 56-70.

- Reed, Michael (1987). Educating Hearing Impaired. London: St. Edmunds bury Ltd.
- Samuel A. Kirk, (1962). Educating Exceptional Children Houghton USA: Mifflin company.
- Schlesinger, Thilde, S. and Meadow (1972). Childhood Deafness Berkely: University of California.
- Schulze, Jane B., Carpenter, C. Dale and Turnlibull, Am. P. (1991). Mainstreaming Exceptional students: A Guide for Classroom Teachers. Boston: Allyn and Bacon.
- Stain back, W. and Stain back, S. (1990). Support Networking for Inclusive schooling. Balti more. Pual H. Brookes.
- Taylor, R.L., Sternberg, B and Richards, S.B. (1995). Exceptional Children. Integrating research and Teaching (3rd ed). London: Singular Publishing.
- Tibebu Bogale (1991). Communication used at home and schools for hearing impaired in Ethiopia. University of Tyvaskyla, Finland.
- Tirussew Teferra, Sovolainen, H., Agedew Redy and Daniel Desta (1995). Baseline Survey on Disability in Ethiopia IER, Addis Ababa University.
- UNESCO (1984). Consultation on Alternative Approaches for the Education of the Deaf pair: UNESCO press.
- Webster, A and Wood, D. (1995). Children with Hearing Difficulties London: Cassell Educational Limited.
- Yeseldyke, J. E. and Algozzine, B. (1995). Special Education. A Practical Approach for teachers. Boston: Houghton Mifflin Company.

Appendixes

Appendix A

INTERVIEW QUESTIONS FOR HEARING IMPAIRED STUDENTS

These questions are designed to be administered for hearing impaired students. The main objective of the questions is to investigate communication problems of deaf students in regular classrooms.

Part -1 Personal information

1. School _____ Age _____ Sex _____ Grade _____
Language 1. _____ Family language _____
2. _____ Family Size _____
3. _____
2. Age of onset of the hearing problem?
 - 2.1 Congenital / born deaf
 - 2.2 After 3 years of age
 - 2.3 After 6 years of age
3. What is the cause of your /hearing problem?
Please specify _____
4. Early measures taken to avoid the hearing problem
 - 4.1 Spiritual help
 - 4.2 Traditional help
 - 4.3 Medical help
 - 4.4 Others
5. Who in your family has the same hearing problem?
 - 5.1 Mother
 - 5.2 Father
 - 5.3 Both of them
 - 5.4 Brother and sisters
 - 5.5 None

6. Educational status of parents

Father

Illiterate

Read/Write/or Primary school /1-6/

Junior primary school /7-8/

High school /9-12/

Certificate

Diploma

Degree and above

Mother

Illiterate

Read/Write of Primary school /1-6/

Junior primary school /7-8/

High school /9-12/

Certificate

Diploma

Degree and above

7. Parent's occupation

Father _____

Mother _____

8. Parental living condition

8.1 Living together

8.2 Divorced

8.3 Separated

8.4 Father dead

8.5 Mother dead

8.6 Both dead

9. Type of hearing impairment

9.1 Deaf

9.2 Hard of hearing

Part 2: Communication Problems

10. When did you start using sign language?

10.1 After beginning elementary school

10.2 Before beginning elementary school

11. How was your parents help in training you sign language early?

11.1 Very good

11.3 Poor

11.2 Good

11.4 No help

12. Which method did you acquire early in life?

12.1 Sign language

12.2 Spoken language

13. Do you have contact with adult deaf signers in your village?

13.1 Yes

13.2 No

14. If your answer is "Yes " do they help you in teaching signing?

14.1 Yes

14.2 No

15. Does any one in your family know sign language?

15.1 Yes

15.2 No

16. If "Yes" who in your family?

Please specify _____

17. What was your early home intervention for communication?

17.1 Body language

17.3 Spoken language

17.2 Facial expression

17.4 Using objects

18. To whom it is important to learn sign language?

18.1 Teachers

18.3 Parents

18.2 Hearing students

18.4 Other

19. Do you benefit from lip-reading?

19.1 Yes

19.2 No

20. Do you use the same method of communication at home and school

20.1 Yes

20.2 No

21. If your answer is No' what is the reason? _____

Part 3: Academic Problems

22. Have you attended regular school from the beginning ?

22.1 Yes

22.2 No

23. If your answer for question number "22" is "No" where did you learn before?

Please specify: _____

24. Which method do you use more during classroom instruction

24.1 Vision

24.2 Reading

24.3 Hearing

25. Do you ask questions when you are unclear with the topic?

25.1 Yes

25.2 No

26. If your answer is "Yes" what method do you use?

26.1 Sign language

26.3 Writing

26.2 Indicating /pointing

26.4 Other

27. Do you have an interpreter service in your school?

27.1 Yes

27.2 No

28. Do your classmates help you in interpreting?

28.1 Yes

8.2 No

29. Do you communicate with your teacher out of the classroom?

29.1 Yes

29.2 No

30. If "Yes" by what method do you communicate?

30.1 Sign language

30.3 Writing

30.2 Indicating /pointing

30.4 Other

31. Do you have reading problem?

31.1 Yes

31.2 No

32. Does placing you in regular classroom help you in developing communication skills?

32.1 Yes

32.2 No

33. Does your problem in communication affect your academic achievement?

33.1 Yes

33.2 No

34. If your answer is 'Yes' how does it affect? _____

35. What measures should be taken to cope with communication problems in regular classroom settings?

35.1 Sign language training for teachers

35.2 Sign language training for hearing peers

35.3 Sign language training for school community

35.4 Other measure

Part 4: Social Problems

36. Do you have satisfactory social relation with hearing peers?

36.1 Yes

36.2 No

37. If your answer is 'Yes' what method do you use to interact?

37.1 Sign language

37.3 Writing

37.2 Lip reading

37.4 Other

38. Who do you prefer to make your friend?

38.1 Hearing children

38.2 Hearing impaired children

38.3 None

39. If your answer for question 38 is '38.2' what is the reason? _____

40. Do you participate in family conversations?

40.1 Yes

40.2 No

41. If your answer is 'Yes' to what extent?

41.1 Always

41.2 Sometimes

41.3 Never

42. By which method do you communicate with parents /siblings at home?

42.1 Body language

42.3 Indicating /pointing

42.2 Sign language

42.4 Other

43. Do you have friends in your neighborhood?

43.1 Yes

43.2 No

44. If 'yes' how do you communicate?

44.1 Sign language

44.3 Gesture

44.2 Lip reading

44.4 Body language

45. Does your problem in communication affect your social development?

45.1 Yes

45.2 No

Thank you for your cooperation!

Appendix B

Interview Questions for Teachers of Hearing Impaired Students

These questions are designed to be administered for teachers of hearing impaired students in regular classroom. The objective of the questions is to investigate communication problems of deaf students and their teachers in regular classroom settings.

Personal Information.

1. Sex _____ Language _____ Subject you teach _____

Service year teaching integrated class _____

Educational status

- Grade 12 complete
- Grade 12+6 month training
- Grade 12 +1 year training
- College diploma
- Degree
- Any other

2. Do you know how to communicate using sign language?

2.1 Yes 2.2 No

3. If your answer is 'Yes' how much?

3.1 Very little 3.2 Adequate 3.3 Fluent

4. How did you develop it?

4.1 By experience with deaf persons 4.3 Any other

4.2 By acquiring training

5. If your answer for question '2' is 'No', do you want to learn sign language?

5.1 Yes 5.2 No

6. If your answer is 'No' what is the reason?

7. What is the main communication method you use in the classroom?

7.1 Speech 7.2 Sign language 7.3 Any other

8. What method do hearing impaired students use to respond to you?

8.1 Sign language 8.3 Pointing/indicating

8.2 Body language 8.4 Other

9. To what extent do your students understand you?
- | | |
|---------------|-----------------|
| 9.1 Very well | 9.3 Very little |
| 9.2 Little | 9.4 Not all |
10. What communication method do students use to communicate among themselves?
- | | |
|--------------------|--------------------|
| 10.1 Sign language | 10.3 Body language |
| 10.2 Speech | 10.4 Other |
11. Do hearing impaired students discuss their problems with you?
- | | |
|----------|---------|
| 11.1 Yes | 11.2 No |
|----------|---------|
12. If your answer is 'Yes' how often?
- | | | |
|-----------------|----------------|-----------|
| 12.1 Frequently | 12.2 Sometimes | 12.3 Rare |
|-----------------|----------------|-----------|
13. How often do you help students in classroom instruction and out of classroom?
- | | | |
|-------------|----------------|------------|
| 13.1 Always | 13.2 Sometimes | 13.3 Never |
|-------------|----------------|------------|
14. What is your main challenge /difficulty/ in presenting lesson for hearing impaired students? _____
15. Does communication challenge affect academic achievement of hearing impaired students?
- | | |
|----------|---------|
| 15.1 Yes | 15.2 No |
|----------|---------|
16. Does communication challenge affect the social interaction of hearing impaired students?
- | | |
|----------|---------|
| 16.1 Yes | 16.2 No |
|----------|---------|
17. If your answer for questions '15' and '16' is 'Yes' how can it be improved?
- _____
18. How many years did you teach hearing impaired students in the regular classes?
- _____
19. Do you encourage their integration in regular schools?
- | | |
|----------|---------|
| 19.1 Yes | 19.2 No |
|----------|---------|
20. If you say 'Yes' what is your reason? _____
21. If you say 'No' what is your reason? _____

Thank you for your cooperation!

Appendix C

Interview Questions for Parents of Hearing Impaired Students

These questions are prepared to be administered for parents/caregivers/ of students with hearing impairment. The objective of the questions is to investigate communication challenges of hearing impaired students and their teachers in the regular classroom.

Personal information

Language spoken at home 1. _____ Sex _____ Age _____
2. _____
3. _____

1. What is your relation to the child?

1.1 Father

1.2 Mother

1.3 Caregiver

1.4 Other

2. Educational status

Illiterate

Certificate

Read /Write/Primary School/1-6/

Diploma

Junior primary school /7-8/

Degree

High school /9-12/

Any other

3. Parent's occupation

Father _____ Mother _____ Care giver _____

4. How did you identify your child's problem? _____

5. What do you think is the cause of your child's problem? _____

6. Do you have problem in communicating with your child?

6.1 yes

6.2 No

7. Have you tried to teach communication as early as the problem has happened?

7.1 Yes

7.2 No

8. If your answer is 'Yes' what kind of communication?

8.1 Sign language

8.3 Home sign

8.2 Spoken language

8.4 Other

9. Was there any professional support given for you?

9.1 Yes

9.2 No

10. If your answer is 'Yes' what kind of support did you get? _____

11. Do you know sign language?
11.1 Yes 11.2 No
12. How much?
12.1 Very little 12.2 Adequate skills to communicate 12.3 Fluent
13. Is there anybody in your family that knows sign language?
13.1 Yes 13.2 No
14. If your answer is 'Yes' who? _____
15. How do you communicate with your child?
15.1 Lip-reading 15.3 Pointing/indicating
15.2 Sign language 15.4 Body language
16. Does your child have friends in the neighborhood?
16.1 Yes 16.2 No
17. If 'Yes' how does he communicate with them? _____

18. Is there any guidance and counseling service offered by the school for you?
18.1 Yes 18.2 No
19. Is there any sign language training offered by the school for you?
19.1 Yes 19.2 No
20. Do you think that communication problem delays the academic achievement and social interaction of hearing impaired students?
20.1. Yes 20.2 No
- 21 If your answer is 'Yes' what do you suggest for the better academic achievement and social interaction of hearing impaired students? _____

22. Do you help your child in doing assignments and study at home?
22.1 Yes 22.2 No
23. How do you see your child's integration with hearing students in regular classroom?

Thank you for your cooperation!

Appendix D

Interview Question for Hearing Students in the School

These questions are prepared to be administered for hearing peers in the regular classroom. The objective of the questions is to investigate communication problem of hearing impaired students in regular classroom.

1. Do you encourage the integration of hearing impaired students in your classes?
 - 1.1 Yes
 - 1.2 No
2. If your answer is 'Yes' what is the reasons? _____

3. If your answer is 'No' what is the reason? _____

4. Do you have friends who is hearing impaired?
 - 4.1 Yes
 - 4.2 No
5. If 'Yes' how do you communicate with them?
 - 5.1 Sign language
 - 5.2 Writing
 - 5.3 Body language
 - 5.4 Lip reading
6. Do you play with hearing impaired students?
 - 6.1 Yes
 - 6.2 No
7. Do you help hearing impaired students in classrooms and out of the class?
 - 7.1 Yes
 - 7.2 No
8. If your answer is 'Yes' how often?
 - 8.1 Always
 - 8.2 Sometimes
 - 8.3 Rarely
9. Do you know sign language?
 - 9.1 Yes
 - 9.2 No
10. If your answer is 'Yes' how did you know?
 - 10.1 By experience with deaf people
 - 10.2 By training
 - 10.3 Any other
11. Do hearing impaired students participate in class activities?
 - 11.1 Yes
 - 11.2 No
12. Do you think that communication problems delay academic achievement of hearing impaired students?
 - 12.1 Yes
 - 12.2 No

13. Do you think that communication problems affect social interaction of hearing impaired students?

13.1 Yes

13.2 No

14. What do you suggest for the successful achievement and interaction of /hearing impaired students in regular classrooms? _____

Thank you for your cooperation!

Appendix E

Interview Question for Principal of the School

The objective of the questions is to investigate communication problems of hearing impaired students and teachers in the regular classroom settings.

Personal information

1. School _____ Age _____ Sex _____ Language _____
_____ Service year _____
2. How many hearing impaired students are there in your school? _____
3. What kind of academic problems do you think such children face? _____

4. Do you know how to communicate using sign language?
4.1 Yes 4.2 No
5. If your answer is 'No' how do you communicate with hearing impaired students?

6. Do parents cooperate with the school in matters relation to the education of their children?
6.1 Yes 6.2 No
7. Do teachers complain about teaching hearing impaired students?
7.1 Yes 7.2 No
8. If your answer is 'Yes' what is the main problem that they rise? _____

9. Do you encourage integration of deaf students in regular class?
9.1 Yes 9.2 No
10. Have you ever tried to offer sign language training for teachers teaching hearing impaired students?
10.1 Yes 10.2 No
11. Does communication problem affect academic achievement of hearing improved students?
11.1 Yes 11.2 No
12. If 'Yes' How? _____

13. Does communication problem affect the social development of hearing impaired students?

13.1. Yes

13.2. No

14. If yes how? _____

15. Does your school have guidance and counseling service for hearing impaired students?

15.1 Yes

15.2 No

16. Do you arrange tutorial programs for hearing impaired students?

16.1 Yes

16.2 No

17. If your answer is 'Yes' how often?

17.1 Always

17.2 Sometimes

17.3 Rare

18. Does your school have educational interpreter for hearing impaired students?

18.1 Yes

18.2 No

19. If your answer is 'Yes' how many interpreters?

Please specify _____

20. For which subjects does your school offer interpreter services?

Please specify _____

21. If your school has an interpreter service which organization assigned them for your school?

21.1 Zonal education bureau

21.3 Hearing impaired students parents

21.2 Non-governmental organization

21.4 Other (please specify)

22. How is their qualification and efficiency in interpreting different subjects?

Thank you for your cooperation!