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SCHOOL OF GRADUATE STUDIES

SOCIAL AND ACADEMIC CONDITIONS OF INTEGRATED STUDENTS WITH HEARING IMPAIRMENT AT WACHEMO COMPREHENSIVE SECONDARY HIGH SCHOOL

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Tesfaye Basha

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Acronyms and Abbreviations

dB - decibel

ENAD - Ethiopian National Association of the Deaf

FDRE - Federal Democratic Republic of Ethiopia

HI - Hearing-Impaired/Impairment

MOE - Ministry of Education

SNNPR - South Nations, Nationalities, and Peoples Region

TGE - Transitional Government of Ethiopia

UNESCO - United Nations, Education, Science and Cultural Organization

Abstract

This study attempts to explore, describe and explain the social and academic conditions of integrated students with hearing impairment at Wachemo Comp. Sec. School, Hadiya Zone, SNNPR. Qualitative study design was used to investigate the social and academic conditions of HI students in integrated settings, especially when compared to their hearing peers. Data were collected from 18 respondents: six hearing impaired students, four regular teachers, four regular classmates and four administrative staff from the zone, woreda and school. The empirical data were collected through semi-structured interviews with the participants. Classroom observation and informal talks were used as supplement and complement to the interview method.

The study revealed that pre-lingual deaf students have negative attitude toward integration, but hard of hearing students, post-lingual deaf student, regular teachers and students and educational experts appeared to have positive opinions toward integration.

HI students have good social relationship with hearing school community despite the barrier of communication. This barrier of communication might lead to unfit social interaction between the HI students and the hearing school community.

The study also revealed that in academic achievement, hard of hearing and post lingual deaf students who were in favor of linguistic experience showed success in academic performance, whereas pre-lingual deaf students with deficit linguistic experiences registered less success in integrated settings.

The factors that may be contributing to low social and academic achievements of HI students are mainly related to communication problem, absence of interpreting services, shortage of trained human power, lack of preparation of teachers, unattractive teaching method, teachers inability to communicate in sign language, lack of multidisciplinary coordination and unconducive learning environment.

Finally, the situation in this study suggests that much effort have to be made to bring positive changes and facilitate the environment, which accepts inclusive learning. Therefore, government and schools must work hard and in coordination to enable hearing impaired students to integrate educationally as well as socially in all contexts of the school.

Chapter One

1. Introduction

1.1 Background of the Problem

The integration of students with disabilities (including the hearing impaired) seems to be a global trend; of course, without denying the existing controversy over it. As noted by many educators, one of the reasons for integrating handicapped students into the regular classroom was to facilitate positive relationships, among handicapped and non-handicapped students (Warren, 1979, as cited in Horne, 1985).

In its broadest sense, integration refers to the process of educating children with disabilities in regular classroom whenever the placement best fits their particular learning and/or social needs (Banbory, 1987). It is a process of integrating children with special needs into regular schools and classrooms instead of placing them in special institution. Specifically, it is the instructional and social integration of children with disabilities in a regular classroom (Schulze et al., 1991).

It is commonly held that placing disabled children in special schools leads to their segregation from their non-disabled counterparts, which in turn can isolate them from day-to-day experiences with other children, while integrating them into regular schools will help them to achieve their maximum potential in a more favorable educational and social environment. Integration is an on going process of learning to live together, and it also involves increasing knowledge about self and others. For deaf students, the question of integration is more complex than it usually appears. An integrated educational program with no special methods, prepares the students for a life in a hearing community (Webster and Ellwood, 1985). It is said that integration is the way to provide deaf student with what they cannot gain from their deaf environmental experiences. Social, business and professional contacts in life can not be fully

achieved without effective language and communication skills Therefore, integration is designed, firstly to build speech and language skills. Integration helps HI student to master new skills and encourages them to strive for greater achievement and helps them to develop a healthy and positive self-concept. Since regular schools provide a more stimulating learning environment and a wider modified curriculum with normal sign language interpreter environment, HI students will learn to find new ways of coping in a normal situation very early, and as a result, their ability to cope in a hearing world will also be greater. According to Dalvi (1992) the success or failure of an integrated child in a hearing environment initially depends not so much on whether the child is severely or profoundly deaf, as on his level of intelligence, ability to lip-read, his language development, the help and training he gets from his parents and in special school, and the availability of a resource teacher to guide him in studies in the regular school curriculum.

Integration thus involves the efforts of many people working as a team, such as teachers of regular schools and special schools, parents of the HI, other specialists like the resource teacher, social worker, audiologist and speech therapist. The identification, development and coordination of this team effort are both a challenge and critical requirement in meeting the needs of HI students (La Porta, 1978).

The emphasis is on the task of persons providing educational services to make sure that the educational settings were adjusted to accommodate the special educational needs rather than trying to make the children with disabilities fit into the given educational setting (Tirussew, 1993). The question, therefore, needs to be reformulated by asking what is wrong with the school rather than what is wrong with the child. This implies forming the question towards how schooling can be improved in order to help all children to learn successfully (Ainscow, 1994).

Of particular concern is the fact that teacher's attitude are seen as a decisive factor, for successful integration. Integration has been based on the

assumption that teachers are willing to admit students with impairments into regular classroom. They do not perceive themselves as having the appropriate training to meet the instructional needs of students with disabilities (Tirussew, 1999).

It is also important to note that studies on integration indicate that the education of the deaf children is preferable to be offered in a separate class (Kristensen, 1997). Specially, in a country like Ethiopia where the nature of sign language is not studied and where interpreter services are not available it could be realistic to think of including deaf children in the present educational scenario, calls for separate class. The result of the education of the deaf in the Ethiopian school system is not encouraging (Tirussew, 1999). The high drop out rate and the low educational achievement of the deaf children in the Ethiopian school system could be an indicator that there is a lot to be done in this area (Berta, 2000).

1.2 Statement of the Problem

It is partly through hearing that the human child acquires information and knowledge of the outer world and about the happenings within the immediate physical environments. Since hearing impairment tends to isolate the individuals, hearing impaired students are likely to face a number of social and academic and other related problems. The educational movement undertaken with the aim to integrate special needs students into general education classroom is firmly established in various countries. This can be taken in itself as "a world wide movement in educational reorganization" (Millward and Dyson, 1995, p. 109). As seen from general trend, although some evidences indicate that integrating HI students into regular classes seems to win the trust of some educationalist; its implementation is not yet fully achieved under all circumstances for various reasons. Lack of previous experiences with disabled children and lack of knowledge about handicapping conditions can lead children and even teachers to feel uncomfortable in the presence of persons

with disabilities in a regular classroom. Constraints related to shortage of sufficiently trained human power, communication barriers, scarcity of special teaching materials and instruments, the existing possible misconceptions about the academic potentiality of students with HI are some of the problems that may be obstacles to social and academic success in integrated settings.

Because of this there is a need to conduct studies in schools to identify the specific problems of the hearing impaired. This study attempts to explore the social and academic conditions of integrated students with hearing impairment at Wachemo Compressive Secondary High School in Hadiya Zone. It was guided by the following basic research questions.

1. What are the social problems observed in the education of integrated hearing-impaired students in regular classroom?
2. What are the predominant academic problems of integrated hearing-impaired students?
3. What factors contribute to the social and academic problems of HI students in an integrated setting?
4. What modifications and adaptations are necessary to provide conducive environment to facilitate the learning of HI students in regular schools?

1.3 Objectives of the Study

The study aimed at investigating the major social and academic conditions of integrated hearing impaired students. More specifically, the objectives of the study are:

1. to assess social and academic conditions of integrated hearing impaired students in the regular secondary school.

2. to explore the kind of interpersonal relationships that exist between teachers, hearing impaired and normal hearing students in regular classes.

3. to suggest possible solutions to the academic and social problems that hearing impaired students face in regular schools.

1.4 Significance of the Study

Since the study focused on social and academic conditions of integrated hearing impaired (HI) students, it lead the researcher inevitably into classrooms, documents, and teachers and where social activities were going on. It is related to hearing impaired students daily lives and academic experiences in the regular classes. Therefore, the results of the study are expected to:

1. contribute to the understanding of the social and academic conditions affected by the environmental factors and bring about relevant information for designing viable and school based intervention.

2. provide the necessary assistance for regular teachers to understand their hearing impaired students so that they can create conducive settings for healthy learning situation.

3. provide basic information for the concerned bodies like policy makers, planners and interested groups to realize and overcome barriers, which operate against the social and academic conditions of HI students.

4. serve as a stepping-stone for further research in the field.

1.5 The Scope and Limitation of the Study

1.5.1 The Scope of the Study

This study is delimited to six HI students at Wachemo Comp. Sec. High School in regular setting in Hadiya Zone, SNNP. Therefore, the HI with two hard of

hearing, the three congenitally deaf and one post-lingual deaf student were purposefully selected as the case of this study. Perhaps, a better picture would have been obtained if more schools and participants had been included in the study.

1.5.2 Limitation of the Study

As the scope of this study is limited to six HI students, the interview was made with six HI students, 4 regular teachers, who participated in teaching in integrated classroom, 4 normal-hearing peers who were attending in the same classroom and 4 educational experts, including the director of school and the psychologist. Special education, itself, is a relatively new phenomenon in Ethiopia. Hence, locally written literature particularly on social and academic conditions towards integrated HI students in scarcely available. The researcher therefore, feels that sufficient (additional) evidences were not presented to supplement the study in the Ethiopian context.

1.6 Definitions of Key Terms

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).

Attitude: an opinion, which represents a person's overall inclination towards an object, idea or institution (Good and Merkel, 1973).

Disability: Any restriction or lack (resulting from an impairment) of ability to perform an activity in the manner or within the range considered normal for a human being (Miron, 1994)

Hearing impairment: Any hearing loss from mild to severe. A hearing problem that adversely affects a student's educational performance (Ysseldyke and Algozzine, 1995).

Inclusion: involves a process of reform and restructuring of the school as a whole, with the aim of ensuring that all pupils can have access to the whole range of educational and social opportunities offered by the school (Mittler, 2000).

Integration: The placement of children with handicaps in educational programs also serving children without handicaps. A similar term is mainstreaming (Gearheart et al., 1988).

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).

Mainstreaming: The return to the regular classroom, for all or part of the school day, of handicapped children previously educated exclusively in segregated settings (Heward & Orlansky, 1988).

Regular classroom: is a classroom designated for "regular", or academic, work as opposed to classroom for "special" work (Good and Merkel, 1973).

Regular teacher: is a teacher devoting full time to instruction, not serving a probationary or practice teaching period; one officially recognized as a full-time staff member (Good and Merkel, 1973).

Resource room: Classroom in which certain student spend part of the school day and receive individualized special education services (Heward & Orlansky, 1988).

Social condition: Companionship of others or effective interactive condition with other people (Reynolds & Janzen, 1990).

Special classes: are classes located with in ordinary schools were HI students are attending their education.

Special school: a school established for the purpose of caring for the educational needs of typical children; offers special education to exceptional children of a single classification or to children with many different types of exceptionality (Good and Merkel, 1973).

Special teacher: one who teaches or directs instruction in subjects for which regular teachers are not specially trained. In special education, one who teaches particular types of children or uses certain types of methods in which regular teachers are not specially trained (Good and Merkel, 1973).

Chapter Two

2. Review of Related Literature

2.1 Historical Development of Special Education

History tells us that "prior to the late 1700s the fate of disabled individuals was likely to be a cruel one and the Greeks, Romans and other early cultures are often cited by their practices of killing the unwanted children" (Tibebu, 1995, p. 13).

As time went on, there came conviction, which considered children with special needs as different from the rest of children with a sense to develop separate educational systems (Hegarty & Packlington, 1988). Moreover, some professionals imitated the concern for the educational rights of children with disability and as a result, residential schools, special day schools and special classes were opened respectively (Moore, 1996).

At the beginning, although opinions may differ on reasons for establishing segregated schools for special needs students, it was assumed that such educational models could serve for proper utilization of instructional equipment and for maintaining a one-to-one attention. Such a model was also assumed to encourage a feeling of security among special needs children by avoiding unfair compassion with those who are believed to be more competent students (Jenkinson, 1997).

Particularly in 1950s and 1960s, people came to be aware of a continuous history and practices of segregation in their own societies with the acknowledgement that had "strong value implication". This condition, in turn has brought the idea of the integration of special needs children with their natural peers with" a wish to move away" from segregated educational practices (Millward and Dyson, 1995, p. 44).

According to Fish (1985 cited in Tibebu, 1995) it was in 1980s that revolutionary changes took place in special education with the aim to educate children with special needs. Similarly, it was indicated that one of the 1960s significant achievements in area of special education was "the conceptualization of the delivery of special educational services as a continuous of services known as "Cascade model", viewing the regular school classroom as the most natural and least restrictive option.

Hegarty and Pocklington (1988) noted that the historical development of special education seems to differ from country to country. For example, special education for pupils with special needs was a relatively recent development in Great Britain. In the United States it was at the beginning of the nineteenth century (Meijer and Hegarty, 1994).

Regarding the historical development of special education in Ethiopia, it has a relatively closer point of time reference with the establishment of the first regular school in the country. It was within time gap of less than a decade since the establishment of the first regular school (Menilik II school) that special education for the disabled was opened in its modern form in Ethiopia (Tibebu, 1995).

Like in the case of other countries, the first special school was began by Missionaries from Europe the first special school being opened for the blind in 1917 (MOE, 1994). Unfortunately, the educational system that had just begun to emerge was seriously disrupted by the brief Italian invasion (Tekeste, 1990). Thus, the first special school was closed and reopened in 1955 in Addis Ababa. Additionally other special schools were opened for children with other disability types in 1960s and 1970s (Tibebu, 1995). As indicated by Tibebu, it was in the 1980s that the Ethiopian government, through Ministry of Education, began to take part in the provision of special education.

The new educational policy of 1994 has 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, p. 9). The educational policy further confirmed, "special education and training will be provided for people with special needs" (TGE, 1994).

Furthermore, what has been stated in the educational policy also appears in the Ethiopian constitution Article 41 declares that "Every Ethiopian national has the right to equal access to publicly funded social services" (FDRE, 1995 p. 15). Moreover, Article 90, states as follows: "To the extent the country's resources permit, policies shall aim to provide all Ethiopians access to public health and education" (FDRE, 1995, p. 13).

2.2 Hearing Impairment

Researchers usually agree that listening is an important tool for the child to learn and acquire information from his/her environment through the auditory channel. It is through hearing that the child" learns to discriminate between loud and soft, high and low, and distracting and pleasant sounds". Additionally, hearing is instrumental for the child to 'determine the direction, distance and meaning of sounds" by analyzing the human voice (Gearheart, Weishahn and Gearheart, 1992, P. 40).

It is believed that hearing impairment can negatively affect the normal pattern of speech and language development thereby arresting the child's ability to develop such as communication skills-reading, writing, listening and speaking.

With this brief information in mind, the meaning, classification and cause of hearing impairment will be treated shortly under the following sub-headings.

2.2.1 Meaning/Definition of Hearing Impairment

In defining hearing impairment, two extreme points of view are represented by professionals adhering to different philosophical orientations, namely the physiological and educational approach. According to Hallahan & Kauffman

(1991, P. 266), persons who strictly maintain physiological view points are "interested primarily in the measurable degree of hearing loss" whereas educators who favour educational view point are concerned with "how much the hearing loss is likely to affect the child's ability to speak and develop language". The most commonly used and accepted set of definitions related to educational orientation are presented as follows:

- **Hearing impairment** - is defined as a "generic term indicating a hearing disability, which may range in severity from mild to profound" (Pasonella and Cara, 1981, p. 299) - including the subsets of deaf and hard of hearing.

- **Deafness** - is understood as a condition when a person's hearing disability precludes successful processing of linguistic information through audition, with or without a hearing aid, which adversely affects educational performance (Schulze et al., 1991).

- **Hard-of-hearing**- is a person who, "generally with the use of hearing aid has residual hearing sufficient to enable successful processing of linguistic information through audition (Hallahan & Kauffman, 1991, p. 266).

According to Reynolds and Janzen (1990, p. 300) due to "the interference of deafness with language acquisition, pre lingual deaf children and adults markedly differ from the post lingual deaf child. It is further noted that the post lingual deaf/hearing-impaired children have "a sensory-impairment that interferes with their ability to receive speech and other sounds", but having "normally and completely developed language function" which is not possessed by the pre lingual deaf children.

It is reported that in most cases, hard of hearing children can acquire language skills efficiently without too much difficulty and hence "most of the post lingual deaf who possess language do not join the deaf community" (p. 300). In other words, they can easily be integrated with their hearing peers.

Most importantly, educators are highly concerned about the age of onset of hearing impairment and its relationship with language development.

2.2.2 Causes of Hearing Impairment

As noted by Hallahan and Kauffman (1991), ottitismedia, malformation of outer ear, malformation of ear channel, foreign object in the external ear, excessive buildup of ear wax, and perforation of the eardrum due to excessive pressure are some common causes of conductive hearing loss.

On the other hand, the type of hearing loss that affects "frequency, intelligibility and clarity of the sounds that a person hears" is known as sensorineural hearing loss (Gearheart et al., 1992). Heredity (which is the most frequent cause of childhood deafness), bacterial infection (such as meningitis), premature birth, viral infection (such as measles and mumps) deprivation of oxygen at birth are frequently observed causes. Additionally, prenatal infection of the mother (such as rubella, congenital Syphilis, Rh incompatibility, blows to the head, some antibiotic drugs and excessive noise levels are identified as causes for sensorineural hearing loss (Hallahan and Kauffman, 1991).

Other than the type of hearing loss, the age at which the hearing loss takes place is taken as a critical factor, particularly due to the influence of hearing on the acquisition of language (Schulze & Carpenter, 1991).

2.2.3 Functional Hearing in Relation to Language and Behavior

Most students with hearing loss in regular classrooms have enough residual hearing to process language through hearing with appropriate amplification. Knowing exactly what kind of assistance is required for the teacher of his student in a variety of classroom situation helps the student to benefit from these experiences. Hearing loss has been organized traditionally into five categories, which consider the range of sounds used in speech; it may be helpful for the regular teacher to know which category best describes his particular student (Moores, 1996).

1. **Normal hearing**

Students can detect all speech sounds even at a soft conversations level. The student's hearing would be plotted in the -10 to 15 decibel range on a diagram.

2. **Minimal loss**

Students may have difficulty of hearing faint or distant speech. Peer conversation and teacher instructions presented too rapidly, particularly in noisy classrooms are likely to result in missed information. Loss is between 16 to 25 decibels.

3. **Mild**

Student may miss up to 50% of class discussions especially if voices are soft or the environment is noisy. Students will require the use of a hearing aid or personal FM system. Loss is between 26 to 40 decibels.

4. **Moderate**

Classroom conversation from 3 to 5 feet away can be understood if the structure and vocabulary is controlled. Hearing aids and/or personal FM systems are essential. Specific attention will need to be directed to language development, reading and written language. Loss is between 41 to 55 decibels.

5. **Moderate to severe**

Without amplification students with this degree of loss can miss up to 100% of speech information. Full time use of amplification is essential. They will probably require additional help in language based academic subjects. Loss is between 56 to 70 decibels.

6. Severe

Students can only hear loud noises at close distances. They require individual hearing aids, intensive auditory training and specialized instructional techniques in reading, language and speech development. Loss is between 71 to 90 decibels.

7. Profound

For all practical purposes these students rely on vision rather than hearing for processing information. If you have a student in this category, he or she is usually a candidate for signing systems and specialized instructional techniques in reading, speech, and language development. A loss of 91 decibels or more is described as profound.

2.3 Education of Hearing Impaired

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

Initially, the major concerns were centered on defining the legal and religious rights of the hearing impaired and "Education for the hearing impaired was not a consideration in societies in which the majority of the population was illiterate" (Moores, 1996, p. 32)

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 hearing impaired children began to attend their education

separately "either in residential schools or in day school for the deaf" (Moores, 1996, p. 8).

However, around the beginning of 1968, there came a reaction against increasingly segregated educational provisions for hearing impaired children (Moores, 1996). In fact, referring to its historical background "for more than three hundred years, the primary emphasis among educators of the hearing impaired has been communication" by giving secondary attention to academic achievement. Today, the majority of hearing impaired children are educated in schools where hearing students are attending as well (Moores, 1996). Currently, legislation, technological advances, improved educational services, and the growing public awareness have brought a remarkable progress in the area of deaf education (Moores, 1996).

However, 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 a below what it should be (Moores, 1996). Furthermore, Smith and Luckasson (1995, p. 478), on their part stated, "the best educational 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, p. 483).

On the other hand, Smith and Luckasson (1995) noted that for students who use sign language as their primary means of communication, "the regular school environment where administrators, teachers, and classmates are not fluent in sign language can result in considerable isolation".

Aside from the existing constraints, depending upon the severity and type of disability, regular education classrooms, resource rooms, special classes, special day schools and residential schools were used as placement options to

educate children with special needs (Smith and Luckasson, 1995). In addition, while discussing about this same issue, researchers informed, "along with acquiring educational benefits, students with hearing impairment acquired social skills in regular classrooms".

Biklen (1992) noted that being integrated into regular classes can play a crucial role in advancing better academic performance-for children with disability will do better when they sense that they are accepted and valued by their 'normal' peers. This suggests that there can be a situation where the hearing impaired students can benefit from their being integrated into regular classes; provided that the situations are well structured to facilitate social interaction.

In the case of hearing impaired education in Ethiopia, special schools for the hearing impaired were first opened by the non-governmental organization, in 1963 E.C (in Addis Ababa-Mekanisa) and 1967 E.C (in Addis Ababa around Bole) by the Church of Christ Mission and by the American Mission respectively (Berta, 2000)

✓Recent evidence as mentioned by Tilahun (1991 E.C), shows that residential schools, special day school, special classes and regular classes are forms of educational provision available for hearing impaired students in Ethiopia. Currently, it appears that the opening of special classes, and some integrated classes for hearing impaired students is at a growing rate bringing students into closer physical proximity for a possibly better social interaction.

Even though, as Stainback and Stainback (1990, p. 19) indicated, "care must be exercised to ensure that any organized grouping of people does not violet, their interest, needs and basic rights". Hence, to ensure better educational provision, it will be highly pertinent to examine the attitudes of teachers and students in order to make fair integrated educational placement.

2.4 Social and Emotional Conditions of Hearing Impaired

Impaired hearing can influence a child's social and emotional development. Moores (1987) revealed that the social emotional adjustment of the deaf is similar to that of the hearing, with great individual variation. Most individuals cope with the reality of deafness and deafness itself has no direct either negative or positive impact on the social emotional development of a mentally healthy individual.

Recent studies suggest that those who are deaf prefer to be with others who are deaf and tend to cluster in groups, socialize, and marry (Yssledyke & Algozzine, 1995). They indicated that hearing impaired students may have more positive perceptions about their relationships with other hearing impaired peers than about those with hearing ones. Because many people who are deaf see the experiences and signed language of deaf communities as the most important factors in their lives. The obvious barrier to hearing impaireds' relationships is communication.

On the other hand, it appears that the extent to which a hearing impaired child successfully interacts with family members, friends, and people in the community depends largely on the attitudes of others and the child's ability to communicate in some mutually acceptable way. Feelings of depression, withdrawal, and isolation are frequently expressed by hearing impaired persons, particularly those who experience adventitious loss of hearing. Most hearing impaired people are fully capable of developing positive relationships with their hearing peers when a satisfactory method of communication is used. Even so, a number of deaf children do have serious behavior disorders that require treatment.

Bench (1992) suggested that the greater the hearing impairment, the greater is the degree of relative social isolation, even within the most caring, and sympathetic environment. Such relative isolation affects the communication behavior of the hearing impaired child, the education and remediation. Winzer

(1990) noted again, the barriers of deafness and limited language appear to increase a sense of frustration, loneliness, helplessness and despair. The severity of social maladjustment patterns often depends on the severity of hearing loss and type of impairment. Severe hearing losses are more likely to result in severe social isolation.

Deaf people can show unusual personal characteristics in childhood and in adulthood. It is reported that the deaf tend to lag behind the hearing in social maturity (Garwood, 1983, cited in Tirussew, 2000). Some evidences show that self-concept and social adjustment is lower with hearing impaired children (Taylor & Sternberg, 1986).

It has been argued that hearing loss leads to problems of adjustment in children, because problems of communication produce barriers to social development, which are difficult to overcome (Moores, 1996). These barriers cause problems in social adjustment and interfere with development of a concept of self (Bench, 1992). Warren and Hasenstass noted hearing impairment might lead to adjustment problems in children. This is not to say that the HI child lacks the potential for normalcy, but that hearing impairments often results with impairments in language and communication, which may produce barriers to normal social interactions.

Furthermore, it is important to bear in mind that the age at which an individual becomes hearing impaired affects the degree of language difficulty. If the impairment is a congenital loss, its impact on verbal language acquisition is likely to be more severe. Impairment acquired some time after birth is an adventitious loss, the later it occurs and the less it affects acquisition of language. Adventitious deaf children are more likely to have knowledge of their native language, clear oral speech, understanding of oral speech of the others, ability to read with speech and comprehension, and understanding of abstract concepts (Taylor and Sterberg, 1986).

2.5 Academic Achievement of Hearing Impaired Students

Many academic skills draw on a student's 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 correspondences (Anastasiow, 1993). Because of their conceptual limitations, they may have problems of interpreting the language of others and expressing themselves in oral and written modes.

Lasass and Davey (1987) cited in Winzer (1990) added that many deaf students demonstrate restricted vocabulary. Most cannot comprehend even the most commonly used words. This is probably due to syntactic deficits rather than inadequate word recognition or knowledge of word meanings. Other researchers also stress that children with limited vocabularies may experience great difficulties in language and reading. Moreover, deaf children are less educationally retarded in more mechanical skills such as arithmetic computation and spelling. Surprisingly, the spelling ability of deaf children has hardly been studied. It does appear, however, that deaf children may be superior in spelling performance. Mathsematics computation is an area in which deaf children also seem to achieve well. They are less successful at mathsematical problem solving which is predicated on a language base.

A hearing impairment that delays language development seriously limits association between sounds and written symbols. Therefore, reading may be an area of considerable difficulty for such a student, particularly, for a young child who is in the process of acquiring reading skills while simultaneously developing language. This is in addition to academic difficulties that may result from a hearing loss (Gearheart et al., 1992).

The severity of the hearing loss, the age of its onset, the socioeconomic status of the student's family, and the hearing status of the students parents are related to the academic success experienced by students with hearing impairments (Yosseldyke, James and Algozzine, 1995).

Other researchers revealed that children and young adults who have mild hearing losses generally perform better academically than those with severe losses. Students who are deaf from birth tend to have more difficulty acquiring academic skills than those who later lose their hearing. Students with hearing impairments from families of high socioeconomic status and those who have hearing parents tend to experience fewer academic difficulties than students from families of low socio economic status or those whose parents are hearing impaired (Tirussew, 2000).

Furthermore, Tirussew suggested that we couldn't make firm generalizations about the ways in which students that are deaf and hard of hearing function academically. They do not perform as well as hearing students on standardized tests of reading and writing, and research suggested that children who are deaf have much more difficulty acquiring reading skills. Nevertheless, differences in language ability that result from deafness affect a student's ability to perform in traditional academic areas.

To put it more simply, three factors are related to the academic achievement of children with hearing impairments; the degree of hearing loss, the presence of language and experiences in the environment with people and things. If integration and home can provide a rich linguistic environment in terms of experimental language activities, these children need not fail in school (Anastasiow, 1993).

Moores (1989) attributed some of these gains to movement toward teaching, reading and writing in a more functional and semantic manner. Many also affirmed that placing students with hearing impairments in regular classrooms has also increased their academic achievement.

On the other hand, the academic achievement levels of students who are deaf are substantially lower than those of their peers without disabilities (Jensema, Karchmer and Trybus, 1977). By age 20, half of the students tested read below the mid-fourth-grade level. They stated, "at best, only 10 percent of hearing

impaired eighteen-year-olds nationally can read at or above an eighth grade level" (p. 19).

The reasons for such academic difficulties vary, but most researches point to two interactive theories or possibilities. The first is that students with hearing impairments have some type of cognitive deficit, which, in itself, contributes to problems in language development and academic performance. The second is the inverse of the first; that is, because of the language deficits of students with hearing impairments, their academic abilities are somewhat diminished. Most research indicates that the second possibility is more accurate and most often involves specific deficits in the language related areas of reading and writing (Taylor et al., 1995).

2.6 Communications and Language of Hearing Impaired

Learning to speak is difficult if one cannot hear. Hearing impairment is primarily a communication problem (Webster & Ellwood, 1985). The degree and kind of impairment greatly affect the ability to communicate. Hearing children typically acquire a large vocabulary and knowledge of grammar, word order, 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.

As a rule, students with hearing impairments experience a lag in vocabulary skills when compared with hearing students of comparable age. Once again, children who are deaf show a more noticeable lag than do children who are hard of hearing. This lag in vocabulary development worsen's, as the child with hearing impairment grows older (Taylor & Sternberg, 1995).

Furthermore, problems with general vocabulary lead to problems associated with more specific vocabulary demands (Taylor et al., 1995). For example, students with hearing impairments often have problems with abstractions

because they are frequently taught in a one-word-one meaning way. Also apparent are difficulties associated with syntax and morphology. Children who are hard of hearing appear to experience developmental delays in syntactic and morphological development when compared to children without hearing impairments of the same age.

On the other hand, Ysseldyke and Algozzine (1995) indicated that the vocabulary deficiency affects the communication. These communication problems can also 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, that they communicate in ways that are different from those around them can inhibit their social interaction and development. It is argued that the effects of hearing loss are pervasive and can create psychological stress (Moores, 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 develop slowly.

2.6.1 Methods of Communication

Development of language and communication skills is the primary emphasis of educational programming for students with hearing impairment. Educators have disagreed concerning the most effective and efficient method of communication for such students. Three methods have been advocated (a) the manual method (b) the oral method, and (c) total communication (Gegrheart et al., 1996; Taylor et al., 1995; Schulze and Carpenter, 1988; Smith and Luckasson, 1995).

2.6.1.1. Manual Communication

Manual communication may be divided into two main categories; sign language and sign systems. The most common sign language is American Sign Language

(ASL). It 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". ASL has its own grammar, syntax, idioms, and vocabulary. Finger spelling, or manual alphabet, is another form of manual communication. In finger spelling, or various finger positions represent individual letters of the alphabet and are used to spell out words (Smith and Luckasson, 1995; Geaheart et al., 1992, 1996).

2.6.1.2 Oral Communication

The oral-aural method of communication makes uses of oral and auditory training and speech reading. This method encourages the use of residual hearing while the presentation of material emphasizes the student's visual and auditory attention. Of course, use of amplification is stressed. Earlier diagnosis, fitting of hearing aids, it can be argued, have enabled severely and profoundly deaf children to make better use of their residual hearing since the 1980s (Moores, 1996). The oral method emphasizes speech reading and oral speech as the primary means of communication. Gestures and other movements are generally not used other than those ordinarily used by hearing individuals to supplement conversation.

2.6.1.3 Total Communication

A third approach, called total communication (TC), combines the manual and oral-methods according to the abilities, interests, and needs of the student who has a hearing impairment. Total communication is a philosophy of flexibility - a flexibility that encourages and supports the right of these students to choose and use a system that is most appropriate for them. The total communication method teaches the student to use amplification, residual hearing, speech reading, and oral speech in combination with manual systems (Gearhert et al., 1992, 1996).

2.7 The Concept of Integration

"Integration" in its widest usage entails a process of making whole, of combining different elements into a unit. As used in special education, it refers to the education of pupils with special needs in ordinary schools. Integration provides a 'natural' environment where these pupils are along-side their peers and one freed from the isolation that is characteristic of much special school placement (Hegarty, Pocklington and Lucas, 1988).

The principle of educating handicapped children with non-handicapped children is described as "integration" in Britain, "mainstreaming" in the United States of America, and "normalization" in Scandinavian countries and Canada. These three terms reflect the same concept, i.e. the participation of the handicapped in regular educational system (Warnock, 1981).

According to the Snowdon (1976) integration for the disabled means "the absence of segregation, social acceptance being able to treated like every body else, right to work ... to be educated with one's unhandcaped peers..." (p. 40).

Soder (1980) also provides some elaboration on similar concepts. He outlines four different forms of integration: physical, social, functional and societal integration. The main idea is the reduction of distance between the handicapped and non-handicapped groups. For example, physical integration, which corresponds to locational integration, means to reduction of physical distance between the handicapped and non-handicapped by means of facility, organizational and structural integration. Societal integration means the creation of opportunities for handicapped and non-handicapped groups to get to know each other and functional integration means the reduction of functional distance between these two groups by joint utilization of educational resource.

On the other hand, Warnock distinguishes three main forms of integration in terms of association: locational, social, and functional. Locational integration

exists where special units or classes are set up in ordinary schools or where a special school and ordinary school share the same site. Social integration is 'where children attending a special class or unit eat, play and consort with other children, and possibly share organized out-of-classroom activities with them'. Functional integration is the fullest form of integration and is achieved when locational and social integration lead to 'joint participation in educational activities ... where children with special needs join, part-time-or full-time, the regular classes of the school, and make a full contribution to the activity of the school' (pp. 100-1).

As a whole, 'integration', on the other hand, implies the association, but not necessarily the identical treatment, of handicapped and non-handicapped students in a regular school setting.

2.7.1 Integration of the Hearing Impaired Students in Regular School

Review of educational trends during the past decade has indicated that movement is in the direction of unifying or merging special and regular education. There are a number of changes occurring at the present time that will propel us forward further eliminating the special and regular education dichotomy (Lipsky and Gartner, 1989). A growing number of researchers, parents, and educators are beginning to advocate that all students be integrated into a mainstream of regular education, including those who have traditionally been labeled severely and profoundly handicapped (Lipsky & Gartner, 1989).

Nowadays, the placement of hearing impaired students into regular classes has become an important educational practice in some countries. Recent data indicate, in the USA that 75.53 percent of hearing impaired students population is served, at least part time, in regular classroom settings (Lucker, Rude and Sisco, 1989). There is such an increasing trend toward mainstreaming hearing impaired students in the educational experiences.

On the other hand, Katz (1997) suggested 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 it is taken. And he asked a question "what is meant by an integrated setting for a deaf child?" He answered with some important points about integration. Integration, as used by educators involved in the education of the handicapped, usually refers to the placement of handicapped children in the same classroom with non-handicapped children in a school. Integration of deaf children with hearing children in regular classroom is usually based on the following assumptions.

- Those because of certain skills and abilities the children have no problem in the setting.
- That the teacher, even though not specially trained will be able to provide an appropriated, education for the child; and
- That proximity to hearing children will help the deaf child become more at ease in a hearing world.

Unfortunately, the assumptions are not always true as Katz suggested. Many deaf children do not have the communication skills or academic background to keep up with their hearing peers. Furthermore, over worked and untrained teachers may ignore or poorly teach a deaf child.

In fact, Hegarty, Pocklington and Lucas (1988) stressed that educating pupils with special needs in the ordinary school is not simply a question of importing special education to the ordinary school. What is required is that the school adapts its educational provision so as to be able to cater for a wider variety of pupils. This means a highly flexible range of provision, planned as a whole – since the school is a single entity – but incorporating a multitude of possibilities and not just a simple choice between ordinary and special tracks.

On the other hand, Winzer (1990) noted that there are both advantages and disadvantages inherent in the educational integration of students with hearing

impairments. On the plus side, students, no longer suffer socially or educationally from long separation from their families while they attend residential schools. In the regular classroom, they are exposed to excellent language models and most learn to use speech to interact with teachers and peers. In the psychological domain, children in regular schools are not further handicapped by abnormal surroundings. In some studies, integrated hearing impaired students have been academically more successful than those not integrated (Kluin and Moores, 1985).

There are also disadvantages to mainstreaming, especially for children with severe disabilities. Children with hearing impairments may feel lonely or socially rejected. They may be unable to bear the stress of daily competition with hearing peers, especially if their families are not supportive. Communication ability and academic achievement are important factors in the decision to integrate deaf children into regular classes. Apart from these rather global factors, determining the criteria that make for successful integration is extremely difficult (Bench, 1992).

Other researchers suggested that including children in general education without a critical examination could also result in the failure to meet the included child's needs and promote her or his development. Dewey was very clear in his belief that teachers have the responsibility to develop the kinds of environments that provide growth-enhancing-not growth inhibiting-experiences. The placement of a child with a disability in a classroom that has not been designed to facilitate positive social, emotional, physical, aesthetic, and intellectual experiences or that does not offer the resources and supports the child needs may provide experiences that are, in fact, "mis-educative" (Dewey, 1938, p. 38 cited in Berres, 1996).

2.8 The Physical Environment for Hearing Impaired

Information regarding the appropriate physical environment for teaching is somewhat different from students who are deaf versus for those who are hard of

hearing (Schulze et al., 1991). For the most part, results from various research studies indicate that the physical teaching indicate that the physically teaching environment for students who are hard of hearing should be very like the physical environment for hearing students. That is, students who are hard of hearing should received their education within an integrated and mainstreamed teaching environment. Similarly, the more serious the hearing loss, the greater the probability that school performance will be deficient. The quotient, which comprised measures of residual hearing, central processing abilities, intelligence, family support, and socio economic status, were helpful in predicting which students could be mainstreamed successfully (Taylor et al., 1995 see also Ross, 1976)

2.8.1 Learning Environment Situation of HI Students in Secondary School

Gearheart et al., (1992) indicated that teachers in secondary schools said that they needed more strategies related to their problems and the secondary school setting. Some of their frustration relates to the fact that secondary level teachers often teach so many students each day that they have little time to get to know anyone student. Also, if they use some version of the lecture approach to instruction and students do not have the skills and knowledge base assumed by the teacher, both the students and the teacher feel failure and frustration.

In contrast, Kirk, Gallagher and Anastasiow (1993) demonstrated that it is difficult to integrate high school students with serious hearing losses because they are often several grade levels behind their age mates in achievement. When they are mainstreamed, these students need sign language interpreters in the classroom as well as supplementary resource assistance. In addition, many school administrators in the field of education for those with serious hearing losses believe that state residential schools day programs are the most variable settings in which to offer secondary education.

On the other hand, Katz (1997) noted that some deaf students who have received such an early training/ intervention actually achieve in secondary

school at nearly the same rate as their hearing peers. Without exceptional language facility or such early special training/intervention, a deaf child will probably not, learn as rapidly as a hearing child.

2.9 Attitudes of Teachers towards Integration

Although the issue of integration and its implications for education appears to be debatable during the past thirty years, societies have become increasingly concerned with ensuring the educational rights of all children irrespective of the severity of their disability. As a result, the integration of students with hearing impairment into the regular educational setting as ordinary class students has become the concern of educators, governments and the society at large (Millward and Dyson, 1995).

As a matter of fact, several studies conducted so far have failed to produce a clear cut picture of the most appropriate educational placement of students with disabilities, particularly those with hearing impairment.

Millward and Dyson (1995) reported "maintaining students with hearing impaired in regular education depends crucially on the attitudes and the actions of the regular teacher and the school team" (p. 99). They further noted that, although organization, financing, regulations, teacher training and so on can all play their own part to facilitate integration, the placement of students with special needs in regular settings will remain problematic unless teachers actively support the effect to achieve effective integration.

Sharing the same view, Schulze et al., (1991, p. 214) also affirmed "teacher attitudes have been identified as being crucial to the success of any mainstreaming program". They further declared that teacher attitudes "not only set the tone for the relationship between teachers and handicapped students, but they also substantially influence the attitudes of non-handicapped classmates" (p. 414). Additionally, it is noted that the attitudes and knowledge of teachers concerning children with handicaps "are highly influential in

determining the social, intellectual and emotional adjustment of these children" (Tibebu, 1995, p. 46).

Some research findings have indicated that regular education teachers are becoming more positive towards integration. In some cases, it has been reported that some regular educators have displayed "an enthusiastic professional dedication to the development and implementation of inclusive school practices" (Giangreco et al., 1993; as cited by Padeliadu & Lampropoulou, 1997, p. 174).

Regarding the perceived workload of teachers, Gearheart et al., (1992) reported that 81.6 percent of 610 regular classroom teachers agreed that mainstreaming integration would create "additional work". On the issue of professional competence, results in 10 surveys indicated that, overall, 29.2 percent of 2900 respondents agreed that general education teachers have sufficient training for mainstreaming and 22.8 percent of 355 special education teachers responded that general education teachers had sufficient training.

As to the effects of placement of students into regular classrooms, 60 percent of teachers were in support of the opinion that mainstreaming of handicapped students into the regular classroom can be beneficial to regular students. On the other hand, 70.3 percent of 128 teachers agreed, "placement in the regular education classroom will hurt the educational progress of the handicapped students". In other aspect, 63.7 percent, out of 777 teachers, believed that the integration model would reduce the negative social stigma attached to disabilities (Scruggs & Mastropieri, 1996, p. 66).

In the Ethiopian context, a research conducted concerning attitudes of teachers and students towards the integration of hearing impaired students into regular classrooms appears to be very scarce. The study conducted by Tibebu (1995) revealed that the special and regular teachers have a means below the neutral value, thereby indicating their negative attitudes towards the integration of children with disabilities. In contrary, from the discussion held with school

personnel, special class teachers and hearing impaired students in Ethiopia, it has been reported that some school principals and some special education teachers were not in favor of integration principle (Tilahun, 1991 E.C).

As a whole, there seems to be a lack of consistency in studies on teacher's attitudes. The global trend towards the integration of students with hearing impaired and different disability types into regular classrooms appears to be favoured positively. This is in part for it helps to secure social and academic benefits to children with special needs.

2.10 Attitudes of Hearing Impaired and Hearing Students towards Integration

According to Schulze, Turnbull and Carpenter (1991, p. 425) "Integration among handicapped and non-handicapped students usually does not occur spontaneously in mainstreamed classes" for it requires, structuring experiences systematically to create favorable conditions under which students can work or enjoy leisure activities together.

It is suggested that integration experience will be more effective and enable handicapped children develop a positive feeling about their personal values if their peers in the school socially accepted them (Tibebu, 1995).

As indicated by Tibebu (1995), the majority of study evidences /data indicate that positive acceptance is not always the case. Confirming this fact, a research done by Elser (1959) cited in Horne (1985) indicated that hearing impaired students were not accepted by their hearing classmates. It is noted that "the degree to which an individual is accepted by his/her peers and teachers during his/her early years at school is of special importance" for it will have a significant consequence on his/her "subsequent adjustment" (p. 95).

Recent evidences suggested that, particularly attitudes of hearing impaired children towards integration or regular class students seem to be very limited. Concerning this issue, Schulze et al., (1991) informed that most of the research

and general literature related to the "subject of social integration among handicapped and non-handicapped students is aimed strictly at improving the attitudes of non-handicapped children and youth towards handicapped peers" (p. 418).

A research conducted by Jones (1985) as cited by Bench (1992, p. 200) indicated that the attempts of hearing impaired children "at social interaction are rejected relatively often by the potential hearing peers". Another observer has also noted that a consistent theme in the literature is that handicapped students are frequently rejected and alienated in regular class setting partly by their "normal" peers (Schulze, et al., 1991). In some instances, possibly, there can be negative reactions on the part of hearing students in the social interaction, which may predispose hearing impaired students develop negative attitude towards integration.

Furthermore, the social status of the hearing impaired children in regular classrooms has been studied on several occasions. Elser (1959) cited in Horne (1985) found that the hearing children apply mainly negative attitudes to the hard of hearing and deaf children. In a British study the deaf youngsters complained of being teased by their hearing peers (Cole and Edelmann, 1991). Kennedy and Bruinks (1974), however, did not find any difference between the social acceptances of the hearing children compared to that of their hearing impaired peers when integrated in regular classrooms. Moores (1989) suggested that the best method to change any adverse attitudes towards the deaf is to create the possibilities of structured contacts between the hearing and the deaf.

In the Ethiopian context, a study indicated that 65 percent (out of 40 of regular students) claimed that they are willing to accept if hearing impaired students were placed in their classroom (Abebe, 2000). This may indicate the positive side of placement in regular setting of the hearing impaired child.

Chapter Three

3. Method of the Study

3.1 Research Design

The intention of this study was to collect empirical data specific to social and academic conditions of integrated students with hearing impairment. In order to meet this purpose, a qualitative study design was employed to investigate a contemporary phenomenon within its real life context of the hearing impaired students (Yin, 1994;Gall et al., 1996). The research was conducted through in depth discovering of the condition of integrated hearing impaired students at Wachemo Comp. Sec. School.

Qualitative method and ecological perspective were employed as the basis for the detailed assessment of the integrated HI students in regular setting. Qualitative data and limited quantitative figures of comparison of each HI's first semester average results and hearing whole average results of the classes were categorized and compared.

3.2Populations and Sampling

The sampling procedure for this study was purposive sampling. All of them, hearing impaired & hearing students, teachers who participated in teaching HI students in regular class, experts and the director of the school were purposefully sampled. This study was concerned only with six hearing impaired students of Wachemo Comp. Sec. School integrated in regular class. The hearing impaired participants were purposefully selected after audiometric examination. From these two of them are hard of hearing, one is post lingual deaf and the remaining three are pre lingual deaf. Audiometric examinations were conducted in order to identify the deaf from hard of hearing. This was very important to identify and describe their capacity of academic achievement and how much they use their residual hearing. The hearing impaired participants

were selected from grade 9 and grade 10 integrated classes. Two language (Amharic and English) teachers, two Maths and Biology teachers from integrated classes were also purposefully selected to serve as a source of data. Again, from the school administration the director of the school and the guidance and councilor officer were involved in the study. The researcher selected one educational expert from Hadiya Zone Educational Department and one from Woreda Educational Office because they were directly engaged in monitoring educational issues in government schools. The numbers of respondents are summarized in the following table:

Table: 1 Demographic Characteristics of the Participants

	Teachers	Hearing Impaired	Hearing students	Guidance & Counselor	Director	Educ. experts	Total
Male	3	4	2	1	1	2	13
Female	1	2	2	-	-	-	5
Total	4	6	4	1	1	2	18
%	22.22	33.33	22.22	5.55	5.55	11.11	100

The total number of respondents is 18 (5 females and 13 males). 33.33 of the respondents were hearing impaired. Teachers and hearing classmates were equally 22.22% respectively. The remaining i.e. 22.22% of the respondents was the administrative staff (the director of the school, guidance counselor and Zonal and Woreda educational experts).

3.3 Data Collection Instruments

As indicated above the study used qualitative case study method. The study is concerned with the social and academic conditions of integrated hearing-impaired students in regular class sittings.

Qualitative research method invites the researcher to investigate different theoretical and practical problems of the students in naturalistic condition

such as in the classroom, school and the environment in its totality. Therefore, data gathering technique used was a combination of interview, observation, review of academic achievement results, informal talks and self-report of deaf students.

3.3.1 Instruments

To obtain adequate information or considering the relevance of the information about the study, a multiple method triangulation approach was used. These multiple methods included interviews, observations, and review of academic results, informal talks. The semi-structured interviews were the main data collection instruments. Comparison of academic result also the second data collection instrument. Observation, informal talks were supplementary data collection methods. In this respect, the HI and hearing students, teachers, director of the school, guidance and counselor, and educational experts were interviewed on the school situation and facilities for hearing impaired in the regular settings.

3.3.1.1 Semi-structured Interviews

The interviews with the six hearing impaired students were conducted at school, using semi-structured interview guides. Amharic sign and English sign communication methods were used during the interviews with sampled hearing impaired students. The interpreters were used for the interviews conducted at school settings. Hearing-impaired students were interviewed using sign language and written languages. The interviews that were done in oral language with teachers, students, and experts were tape-recorded, transcribed, and translated into English. The interview was conducted in Amharic.

3.3.1.2 Observation

Observation was made to gather further information for the study. Key themes for observation had been developed prior to fieldwork, during the pilot study and during the course of study. To confirm information obtained from

interviewing the hearing impaired students, teachers and hearing students, observation was conducted of the HI students' interaction with teachers and hearing peers at school. Observations were also conducted during language, maths and science classes and out side the classroom during breaks. The observations were focused on the general classroom situation and communication behavior with different students in different settings. Furthermore, the instructional condition, classroom situation, school compound situation, teaching and learning situation were observed. Information were recorded as field notes first, and systematically elaborated each time after fieldwork.

Finally, the researcher recorded the specific units of behavior that were observed as related to the goals of the study in the natural setting.

3.3.1.3 Review of Academic Achievement Results of the Semester

Qualitative data and limited quantitative figures of comparison of average hearing impaired first semester results, and average of grade 9 and 10 results collected from all sources were categorized and compared. Their relevance to the different components of the study was described and interpreted. Hearing impaired student's personal file and first semester master sheet were checked. This is to compare their academic achievements with their hearing peers achievements.

3.3.1.4 Informal Method

The informal talks with teachers were very important for complementing the main method and providing additional interviews and observation guides during data collection processes. The informal talks with teachers, hearing students, and administrators. With hearing impaired students, there were frequent and extensive talks before and after classes. The informal talks were carried out in sign language about different issues to discover their feelings and opinions on general school and academic condition. With teachers, informal

talks mainly focused on improving classroom and school environment situation, for HI students and academic affairs of integrated hearing impaired students.

3.4 Pre-pilot Work

The pre-pilot work was done on two major phases-instrument development and translation phase and instrument correction and finalizing phase. The first phase involved the following procedures.

- First, the interview guide was prepared in English and then translated in to Amharic by the researcher.
- Second, both the Amharic and the English preliminary version were given to an Amharic language expert for correction of the flows that were committed in the first translation. This expert then made all the necessary thematic and grammatical inspections and corrections.
- Third, this Amharic version of the instrument was given to an English language expert to translate it back into English.

Finally, the researcher took the necessary notes during the discussion and then made appropriate modification on the instrument. In the second phase, copies of both the Amharic and English versions of the interview guide were given to my advisor for approval.

3.5 The Pilot Study

The interview was tried out on two hearing impaired students and two teachers for a pilot test. The HI students age ranges from 15-20 years. They were contacted at Minilk Comp.Sec. High School. The main purpose of the pilot test was to improve some important aspects of the interview, for example, to determine whether the items are worded properly, and to check on the best sequence of the questions.

Furthermore, all the necessary add and drop words, spelling errors, consecutive flow of interview questions and ideas were improved. At last, the researcher thoroughly read the interview questions, which research questions will have relevant data and which has not. The important research questions were added and not relevant and repetitive items were dropped out from the interview questions.

3.6 The Main Study

In the main study, the following procedures were followed:

The final interview schedule: The final interview schedule evolved mainly from the pre pilot work and the pilot study. Regarding the actual data collection from HI students, a male special educator and long experienced in teaching deaf students in HI school was trained as an interpreter. Things like how to establish rapport before proceeding on to interview, how to simplify words that could be difficult to understand for some of the HI respondents written on the interview schedule were discussed between the researcher and the interpreter. Second, permission from all the research sites was secured based on ethical clearance obtained from Hadiya Zone and copies of a letter from the Department of Psychology. Finally, the process of data collection was commenced up on securing oral permission from each of the respondents.

The Interview: Data were collected from four professionals who are working in areas related to the issues of the study. One is the school psychologist, the other is the school principal and the other two are experts from Woreda Education Desk and Zonal educational expert. Each of these individuals were interviewed in their respective offices for about an hour each.

The second group were teachers of the high school, specifically; who participated in teaching integrated hearing impaired students in regular settings. Amharic, English, Maths and Biology teachers were selected purposefully because they were teaching in integrated classroom.

The third group of participants was hearing students who are learning in integrated settings with HI students.

The case studies: As mentioned before, six cases representing hearing impaired students from grade 9 and 10 classes' four males and two females participated in the study. From these two of them are hard of hearing, one is post lingual deaf and the remaining three are totally deaf. Accordingly, in-depth information was gathered in six sessions (a five hours stay in each one) from six cases. The data collected in such a manner have been employed to explain and interpret qualitative analysis of the study.

The document analysis: Achievement scores of the grade 9 and 10 HI and the whole class (both grades) were obtained. Averages were calculated and some comparisons made.

3.7 Organizing and Analyzing Qualitative Data

The collection of data was organized, handled and processed in an interactive way between different activities and processes. Miles and Huberman's (1994) interactive model was adapted and used in the process of collecting, organizing and analyzing the data. This included transcription and translation, categorizing, data reduction, data display, conclusion drawing and verification.

The data gathered from hearing impaired students by sign language were transcribed in Amharic written form as interpreted by sign language interpreter, and then translated in to English. The interview conducted with teachers, hearing students and experts in the Amharic language were also transcribed into English. The researcher's experience in school sign was also used in interpreting and confirming the sign based interview with the deaf students under study. The transcription and translation were carried out immediately after data were collected and before the next data collection day. Then information collected through multiple methods from different sources was categorized, reduced, displayed, verified and analyzed in words.

Finally, the transcribed data were then organized theme by theme and used to explain and substantiate the qualitative analysis. The analyzed data was systematically reorganized and presented.

Chapter Four

4. Findings

The purpose of this study was to identify and describe social and academic conditions of integrated hearing impaired students in regular school. Information/data were collected mainly from integrated HI students in grade 10 and 9, hearing students, regular teachers, and educational experts. Two of the six cases of the HI students are hard-of-hearing. One is postlingually HI. The remaining three are prelingually HI students. All of the HI students are selected from Wachemo Comp. Sec. High School, Hadiya zone.

As mentioned in Chapter One, a qualitative research design and analysis were applied to respond for the statement of the problem, or the major research question of the study. In this chapter, the findings of the study will be presented and analyzed accordingly.

Presentation of the interview report as given by HI students:-

A. their attitudes toward integration in regular class

B. their social condition in integrated settings

C. and their academic condition, especially when compared to their hearing peers.

General analysis of the major findings or factors are compared and selected by their commonalities and differences.

Presentation of the findings

The following data are about integrated HI students' social and academic conditions in regular settings which was collected and organized in the form of table followed by statements of the findings.

Table 1: Background Information about the HI students

	Name of the HI students	Sex	Age	Educational Level	HI Student's hearing level	Parental economic Level	Parental Educational Level	Family Size	Degree of IM	Age of onset	Cause of HI	HI in family
1	Idilu Ideg	M	18	9	Profound	Low	Reading & Writing	8	96	7 years	Meningitis	1
2	Tirsit Aga	F	17	9	Profound	Low	12	8	105	3 years	Falling	1
3	Gezu Desu	M	17	10	Profound	Low	4	6	110	From birth	Hereditary	4
4	Masebo Kobro	M	16	10	Profound	Middle	12+2	7	110	From birth	Hereditary	2
5	Bezu Ayou	F	17	10	Moderate	Very low	Illiterate	7	70	in 3 years	Measles	1
6	Boru Dando	M	17	9	Moderate	Low	Illiterate	14	60	From birth	Hereditary	5

All of the HI Students started sign language in deaf school

4.1.A Presentation of the Findings from the interview of the HI students

Case - 1

Case - 1 is a 18 years old young man who totally lost his hearing at the age of 7. Though he doesn't hear, he can speak and express his ideas verbally. He has good speech flows. He had attended a local primary school up to grade 2 before he became deaf. After he became deaf, he attended primary and junior school education at Hossana School for the Deaf. The cause of his hearing impairment is Meningitis. His parents visited different modern hospitals up to Tikur Anbesa Hospital, in Addis Ababa to cure his impairments. After they proved his deafness, they took their child to deaf school.

When asked whether he likes placement of HI students in regular school, he responded that learning along with hearing peers is good for deaf personality. When HI attend in boarding school, it may be good for their identity but it puts them at a distance from getting adequate information from the surrounding. Integration also has advantages for social interaction, exposition to new language, to make friendship and to respect each other.

Even though for academic purposes, integration without adequate interpreter is meaningless to HI students. The reason is that teachers talk, deaf can't hear; teachers discuss lessons with hearing, but deaf are non participant. They sit idle. No mediators between them. Class works, assignments

and other activities are told verbally to be done. When some hearing students come without doing activities, teachers furiously drove away HI from the classroom together.

This student said that in calculation subjects, teachers jump steps telling verbally to hearing students. When steps are jumped it is difficult to HI students unless it is elaborated. Fast talking and jumping the steps doesn't work for HI student. The other greatest problem in regular settings is stress of daily competition in academics. Therefore, placement of HI in regular school without appropriate readiness doesn't function. Integration is better when appropriate interpretation services are given, otherwise, it is a place of misunderstanding.

He also said that integration is suitable to hard of hearing students because these students could understand by and large hearing people's speech and can exchange ideas. Even, the ideas slipped from speech, they can be aware in writing. The best educational system to deaf students is the resource room situation in regular school. He doesn't support the boarding school for deaf students because it isolate them from social relation, parental affection and hearing friends. Even, it is no good for later life.

He reported that to make integration more effective, there must be an interpreter. The teachers have to use teaching aids. They should follow up whether the subject is clear or not. They should know deaf psychology. The teachers should perceive in every preparation the HI students. Otherwise, deaf cannot built self confidence to later life. When the subject is not clear to them, they become hopeless and fragmented.

He suggested that HI people are fully capable of developing positive relationship with the hearing peers. If the environment is facilitated for effective communication, he believes that hard of hearing students may develop good relation with the hearing. Deaf students may have difficult to cope up with hearing. Understanding and comparing surrounding environment through conditions challenging hearing peoples ideas may be difficult. This may contribute towards deaf people not to make good relationship with the hearing. He reported that it is possible to overcome language and communication barriers from regular classroom for hard of hearing student. Roughly, hard of hearing students can hear and share ideas with hearing. But there are several factors which affect deaf communication in regular settings. Moreover, to overcome communication problem from regular setting training language to hearing classmates and teachers might solve the problem. He believes that inability to communicate with hearing delays

his academic achievement. This student prefers to make friendship both with the hearing and non hearing. The reason, he reported, "I am postlingually deaf, I am able to speak with hearing. In contrast, I am deaf I like to make friendship with deaf because I can't deny myself. We are identical.

He interacts in regular school with those who speak to him. In order to interact with hearing peers, he uses different methods. First, he himself taught a few close friends the sign language. Now they are helping him. Second, he himself speaks and so they listen. However, he has difficulty of listening, they give him feedbacks and information by writing and signing. Hence, sign language is equally accessible to both hearing and non-hearing, but more useful for the deaf.

When asked whether he likes hearing peers and teachers, he answered, "since their opinion and their support is good, I like them".

Finally, he explained that effective interaction of HI students will take place when they communicate as they wish with hearing and when hearing people's opinions toward HI is good.

When asked if integrating HI in regular classroom increases his academic achievement, he replied that his academic results decreased from boarding school results as well as hearing students. The reason is inability to listen regular classroom information correctly. Absence of the interpreter is one of the reasons. He rarely discusses with his teachers to overcome academic problems. The reason is communication problem. Some teachers are not willing to discuss and to give feedback for homework and class work activities except English teacher.

During the process of instruction, he asks questions, but some teachers responded, some have no patience to discuss in writing. Therefore, he hesitates to ask questions. He has some discomfort in his studies in regular class. He feels hopeless. If they haven't got the residential schoolteachers support every evening, all of the HI would drop out from the school. While teachers are teaching, they are not teaching in a way understandable to HI students. They do not encourage HI to participate in discussion. They don't know how to treat HI students.

This student reported that for the enquires concerning the major problems for academic success in regular school, he answered that inability to listen, absence of interpreters, inadequate transmission of information from teachers to HI students, teachers inability to communicate with

sign language, unattractive teaching method, lack of follow up of HI students and un-conducive environment are some of the major problems.

He reported that he has no difficulty of reading, writing and spelling. He likes English language more than other subjects because in primary level the foreign English teacher taught him in detail. Hence, English is his favorite subject. Maths is the most difficult subject because most of the time teachers jump the steps.

Furthermore, the student explained that the textbooks are not suitable for the HI students. For example, calculation subjects, how to solve, is hidden from him. HI students need brief clarification. In contrast, privately published books are clearer than regular textbooks. They briefly discuss the points without jumping. He liked them.

He suggested that for better academic achievement treating hearing and non-hearing students equally is the first and the most important one. The government must give due attention to interpreters. Teacher should know deaf character and that inability to listen influences academic achievement.

He speaks, "some teachers do not know whether HI students are in the classroom or not. They forget us. Some teachers believe that we are dull and stupid. They ignore us". He also reported that teachers did not use teaching aids. According to him they have no habit of using them. Or it could be argued that the time was too short to use teaching aids. Their teaching method is not inclusive of HI student; therefore their teaching method is not attractive. He also said that the school did not provide the HI students with necessary support since the students need are not known in depth as they are new to the school. He further said, "we are not encouraged to participate in the non-academic activities that hearing students do in the school because we are not considered to be of any quality".

His responses to the questions that enquire whether he uses hearing aid in and out of the classroom, he replied, he did not use it because it didn't help him.

When asked to indicate the learning problem he observed, he said, "unable to understand every subject as he wish."

When asked what kind of provisions/modifications should be done in the future, he stated that the following be done:

- Traditional opinions towards deaf should be changed;
- If integration is needed, facilitated environment to HI students in regular school should exist;
- Equal citizenship be considered to HI students and improving influential conditions from regular classes;
- Understanding deaf learning condition and planning the way of improving, if needed integration be applicable;
- Expanding technologies in the country that support deaf learning.

Case - 2

Case - 2 is a 17 years old girl who totally lost her hearing at the age of 3. Though she doesn't hear at all, she communicates solely in sign language. She is a deaf girl of hearing parents. She became HI after she fell from her sister's back on the floor. After they had tried a number of options to cure her, especially her mother found a deaf school. She had attended her primary and junior secondary school education, i.e., grades 1 to 8, at Hossana School for the Deaf. Her parents separated at her early age. Their academic background was that the father had 12^{th} grade and the mother had 10^{th} grade education. She used to dream of having a great childhood and recounts how she believed that her deafness would be cured when she grew up.

When asked whether she likes placement of HI students in regular school, she responded, "I don't like integrating HI students in regular school in our current situation. In the regular school there is no interpretation services and sign language knowledgeable person. If the two conditions are improved in regular schools, I like to learn with hearing students in integration". In addition, she states, "the disadvantage I got in integrated regular school was stress of daily competitions and communication barriers". Similarly, she said "to deaf students with out sign language interpreter and without readiness of regular teachers it is difficult to compete in regular settings".

According to her view, in current conditions the best educational place for the deaf students is the special class in regular school. She said, "I prefer to learn with out separation from hearing students. Completely separation from hearing people is not advantageous to our later life. In our situation, integration cannot be implemented because the school condition and its totality is not ready to admit the HI students".

She speaks that there are some advantages she gains in integrated setting like social relation and exposition to excellent language models.

She reported that integration is more appropriate for hard of hearing students. Because they can understand parts of classroom conversation and the rest lost information compensated by reading and asking peers.

This student suggested that to make integration more effective in the regular classroom, interpretation services with conducive school environment will be required. Naturally, she believes that integration enables students with HI and without to live together, to share their experiences and to respect one another. Furthermore, she added integration has big contribution to reduce the negative social stigma attached to disability. On the contrary, there are many problems that would hinder integration: the awareness of the people, the negative attitudes towards disability, shortage of professionals, lack of interpreters, lack of multidisciplinary coordination and poor school administration with little or no attention to HI are some of the problems that would hinder integration.

When asked whether HI people are fully capable of developing positive relationship with the hearing peers when satisfactory communication is used, she answered, "Yes, they do." When satisfactory communication and the totality of the school environment is facilitated they can build good relationship". In order to overcome these language and communication barriers from regular classroom, teachers and hearing peers should have the knowledge of sign language.

Furthermore, she was asked, whom do you prefer to make friendship with and she answered that it was possible to make friendship with both hearing and non-hearing. However, because of communication barrier, it is not easy to make relationship with the hearing. She states: "I prefer friendship with HI people. We have no communication problem with each other. Similarly, we are identical. In regular school we (HI) always discuss with each other. With hearing peers we

This student reported of rare communication with her teachers by writing. "The teachers do not take the initiative to help us. Most of the time, they forget us whether HI students are in the classroom". They usually depend on talking and writing on the blackboard. Unfortunately, she is not able to read lips of others. The teachers did not use teaching aid that supports them. She reported that Hossana School for the Deaf school teachers does not support them in the evening and all of them cannot be successful in academic work in the regular school.

Case - 3

Case - 3 is 17 years old congenitally deaf young man from his birth. He is a deaf child of hearing parents. His brother and two sisters are all deaf. The deafness probably runs in the family. He started to use sign language after he joined an elementary school. He had attended his primary and junior secondary school education at Hossana School for the Deaf. At his early age there was no parental help in sign language training and academics. They live together with low economic status. Their academic background is that the father attended up to grade four. His mother is housewife and illiterate.

This student was asked whether he likes placement of HI students in regular school, he responded that he doesn't support placement of HI students within present situation. He said, he is learning in this condition because there is no other alternative place. He attended for many years the deaf school and present practice of integration with hearing students put him in a problem. He reported that there is no interpreters, verbally dominated teaching conditions, uninitiated teachers, un-conducive teaching situation created the problems. He feels that he is not lucky. As he states, "wishing information, wondering my eyes here and there in the classroom made me confused. By asking hearing peers, I gain a little. I write a little. I understand a little. The information I am gaining is that much limited. The academic achievement is that much decreasing. I faced a stress of daily competition in academics. I usually feel depressed when I couldn't understand what the teacher is teaching. The hearing burst with laughing while teachers tell stories. They discuss, talking with each other. The classroom mood changes with teachers and hearing peers exchanges of information. But I feel frustrated, exhausted, dizzy and have headache. He sates: "How could I like integration in such condition".

On the other hand, he explained that the advantages he got in integrated settings are exposition to new languages, socialization, respect and hearing peers' desire to support him. Furthermore, he

explained, integration by itself is a good idea. Learning in integration is excellent. However, un-conducive environment make integration puzzled. He believes that integration reduces the negative social stigma attached to disabilities.

He speaks that integration is good for hard of hearing students. They can understand classroom information more or less. For profoundly deaf students the best educational place is special class in regular classroom with sign language knowledgeable person. In integration classroom, the teachers did not provide an adequate education for him.

He forwarded for effective integration, there must be interpreter, the teacher should know sign language as well as hearing peers, because they help them a lot.

When asked if HI people are fully capable of developing positive relationship with hearing peers when satisfactory communication is used, he responded, "Yes, they did". Communication is the key for socialization. Our biggest predominant problem for social relation is inability to communicate, in ability to listen, inability to interact with preferable words, which so satisfy the hearing people.

His responses to the questions that enquire on the possibility to overcome language and communication barriers from the regular classroom, he stated that only by training classroom teachers and hearing peers in the sign language. Otherwise, it is difficult to overcome the problem.

He speaks that because of communication barriers, most of the teachers forget them whether they are in the classroom or not. Some of them don't know that they are hearing impaired. They don't identify them. If a kind of disturbance happened in the classroom, they punish them together. Sometimes, they ask to leave the classroom. When the teachers order all the students to stand in the class, HI stay still seating. They punish them not understanding their inability to listen. Even some teachers use long lectures verbally when hearing peers told them that HI students are in the classroom. They hesitate to explain again.

He said also the most important thing, he has done in his classroom is training sign language to his close friends. These hearing friends explain the topic, which is not clear, new vocabularies and information from the school.

He believes that integration enables students with HI and without to live together to share their experiences and to respect one another. He also believes that his social experience with hearing peers in regular classroom is good. When he needs help, he asks them by writing and signing. In turn they are supporting in many other ways. He explained that sign language is equally accessible to both hearing and non-hearing.

When asked if placement of HI students in regular classroom increases his academic achievement, he replied that his academic achievement is not improving. Even, it is getting worse. In deaf school, the teachers explain everything, which is not clear to them. However, in regular school it is different. Lack of interpreters and unconducive environment are the major problems.

He speaks that the teachers teaching methods are not attractive because they use mostly verbal way of teaching, so he can't understand what they are saying. The contents they present are usually not clear. Even the textbooks are not suitable to HI students because in most parts they do not consider the deaf.

This student said that the teachers gave them home works and class activities, however, they don't follow or give feedback to their efforts. He asks questions by writing the teachers, the teacher tries to elaborate by writing but no patience. He also said that regular teachers have no habit of using teaching aid don't consider HI students in their preparations. During instruction hearing peers and teachers exchange ideas, he is reserved from verbal knowledge participation.

His responses to the question that enquired what subjects are difficult to him, Amharic is very difficult. English is very simple because by foreign teachers, he learned in deaf school very well. In addition, spelling is difficult. He reported making of a lot of spelling errors.

Finally, he said that in order to provide an adequate educational environment, provision of classroom support is the biggest challenges. For effective mainstreaming there should be an interpreter, teachers devotion to support at every situation and facilitating school environment to share equally with hearing the educational advantages.

Case - 4

Case - 4 is a 16 years old young man who was born deaf to hearing parents. His hearing impairment was from birth. The cause of his impairment is probably from the family. He has five brothers and sisters from these two males are deaf. Parental marital condition is divorced. The reason is bearing additional deaf child. Academic background is the father has 12+2 and the mother is elementary education. After they confirmed his deafness, mother looked for deaf school. He attended the primary and junior secondary schools at Hossana School for the Deaf. The time he started to use sign language was after he entered boarding school for the deaf.

When asked whether he likes placement of HI students in regular school, he said, "I don't like the placement of HI students in regular school because the teaching method is verbal. This doesn't work for the deaf. We only copy without understanding its meaning. After copying, we sit idle. We only observe peers and teachers discussing, and talking with one another. Unless interpretation services is given, I don't support integration". He reports the disadvantages they faced in regular school include loneliness and some isolation. But the serious problem is stress to daily competition in academics. The sources of all these problems are absence of interpreter and barrier of communication.

When asked of the advantages he gains from regular school, he mentioned social relationship with hearing and exposition to different new language models to learn.

He prefers that the best educational place to deaf students is special class in regular school. In special class there is the possibility of learning in sign language. At break time, they can make social relation with hearing students.

He reported that integration is more appropriate to hard-of-hearing students. The reason is that they can understand partially by hearing, common sense and asking friends. They can compensate the rest by reading. However, for profoundly deaf children the problems are rather broad. This student said that the main problem in regular school is barrier of communication between teacher and HI and HI and non-hearing students. If the barrier of communication is eliminated, he believes that integration really will reduce the negative social stigma attached to disabilities.

When asked if HI people are fully capable of developing positive relationship with the hearing peers when satisfactory communication is used, "yes, of course", He said that in current situation there is a communication barrier to develop good relationship in school community. It is only possible to overcome language and communication barriers from regular classroom settings by providing interpreter, by training regular teachers and hearing peers the sign language. He explained that he feels loneliness and helplessness and frustration in regular settings. He states: "I always sit idle like an observer while the hearing are discussing, talking and chatting with each other".

This student prefers to make friendship both with the hearing and non-hearing. He states: "Hearing people could help me in environmental information. With HI people we have the same identity. We have common language in the regular school sometimes he interacts with the hearing by writing. He has also good social experience with hearing people. He likes hearing teachers and students because both are important in regular school. He likes hearing students more than teachers because they are supporting more closely. He said that the predominant problem for social interaction is communication and unconducive environment of the regular school. If it is needed to develop good relationship with regular school community, it is better to facilitate sign language accessibility. Sign language is a language that is equally accessible to both hearing and non-hearing. Undeniable point is that integration enables students with and with out HI to live together, to share their experiences and to respect each other.

When asked if placing him in regular classroom increased his academic achievement, he said, "No, it does not". The reason is that there is no interpreter and the existence of communication problem. Further, he indicated that they were silent observing, idle and non-participant persons. In such conditions better achievements are not expected.

When asked how often he and his teachers discuss to over come academic problems, he responded that he has a desire to ask questions always, but because of communication barrier, he hesitates to ask, doubting he might not get adequate responses. The teacher talks writing on the black board, jumping steps and get out of the classroom. Some teachers make a rambling conversation, which is not heard to him. He doesn't benefits by reading lips.

Besides, teachers do not give feedback to home works and class activities. This indicates that they don't bother about them. He usually relies on vision during instruction instead, appropriate

teaching aids are not prepared to compensate his hearing problems. He added that he has hearing buddies who can help him in interpretation but their helping is not satisfactory. He believes that inability to communicate with hearing people can retard his academic achievement.

He reported that to him reading is more difficult. In reading, understanding the meaning of the sentences is very difficult. English language is very simple from other subjects. He likes it. In lower grade level an English lady taught English in detail. This helps him still.

The regular schools teachers teaching methods are not attractive and usually not clear whether their teaching methods are attractive or not, the communication methods made their teaching nonsense. His teachers are not motivated to help when he doesn't understand. Even, they don't remember whether he was in the classroom. In some occasions hearing students tell them that HI students are in the classroom and can support each other by comparing one's notes with another. He reports that if Hossana School for the Deaf teachers evening support is not present, all of them would have left the regular school. We are continuing with the help of these teachers. In short, in the future, the following provision should be considered in regular school; interpreter, trained specialist, teachers should have sign language knowledge and conducive school environment to HI is required.

Case - 5

Case - 5 is a 17 years old young girl who had hard-of-hearing at the age of 3. She is a hard of hearing child of hearing parents. The cause of her impairment is measles. Her parents visited different clinics to cure her. However she is not cured from her long treatment. Her father died in her early age. They live in poor economic condition. Both parents are illiterate. She had attended her primary and junior secondary schools education, i.e. grade 1 to 8 at Hossana School for the Deaf.

When asked whether she likes placement of HI students in regular classroom, she answered that for hard-of-hearing students, like her, the regular school is preferable educational settings. Being with hearing students has many advantages, to make hearing friends, social interaction and exposition to excellent language models and not suffering from long separation from families. To her, interacting with hearing peers is not that much difficult. She can use her residual hearing capacity. She can understand classroom discussion, teacher talks, and buddies talking with the

help of hearing aid. The hearing aid is very essential to her. She likes it. She always uses it. However, a lot of classroom information escapes.

Her responses for the questions that enquire what she thinks about placement of deaf students in regular class, she replied that it is difficult to them. In regular school there is no sign language interpreter. Students always sit idle, quietly without participation. She added that they feel sometimes, hopeless, lonely and condemn themselves.

On the other hand, the disadvantage of regular placement of HI students in regular classroom is stress of daily competition with hearing students in academics. She agreed that integration reduces the negative social stigma attached to the disabilities. It also helps to understand each other, to respect each other and to share experiences. But the main possible problems that hinder integration of HI in regular classrooms are communication barriers, absence of interpreter, readiness of regular teachers to accept HI students and shortage of specialist in the area. Furthermore, she suggested that to make integration more effective in regular classroom in the future, all the above problems should be removed. Or else integration cannot be implemented as expected.

This student reported that HI people are fully capable of developing positive relationship with the hearing people when satisfactory communication is used. For social interaction, communication barrier is a predominant problem to HI students in regular school. She suggested, in order to overcome these language and communication barriers from regular school teachers and hearing "buddies" should have sign language training. Sign language is equally accessible to both hearing and non-hearing to exchange ideas. Or else the communication problem continuous

She interacts with hearing peers in both verbal and writing method, nevertheless, deaf use only written method of communication. She observed that they are suffering in communication barrier. In regular school, she prefers to make friendship with both hearing and non-hearing. However, she often interacts in regular school with hearing people. She states "I am hard of hearing student, I am partially hearing and partially not. Thus, I am hearing at the same time I am deaf".

This student said that she would enjoy playing or to be friend with the hearing students. When asked whether she believes that integrated school helped her in her social development, she answered: "Yes, I believe, but is not satisfactory".

When asked whether regular classroom placement increased her academic achievement, she replied, "No, it didn't". She said, "In integrated classes I miss a lot of information which pass verbally by the teachers. Lack of interpretation services and communication barriers are the possible reasons for the low achievement. In addition some of the contributing factors are weak motivation of teachers, unconducive environment, low expectations of teachers from HI students". Furthermore, she explained that lack of understanding the hidden meanings of the words; phrases, sentences and steps, which jumped in calculation subjects, are some of the problems. This student said that when she tried to ask questions, regular teachers ignore her questions. On such times she got tense and blamed herself. She added, her regular teachers rarely give feedbacks for the home works and class activities. They rarely follow-up whether they did or not.

On the other hand, she reported that she has hearing friends. Those she has trained sign language. These hearing friends helped a lot for in her academic successes. She suggested that inability to communicate with hearing people can limit her academic results.

She thought reading is more difficult to her. She faces new vocabularies with new meanings and spellings. They confuse her to identify one from the other. In contrast, she likes Amharic from other subjects. She states: "I share speech with hearing people. This made me to like it".

When asked whether the teaching methods of her teachers are attractive, she answered that it is not attractive. They usually rely on verbal explanation. They rarely consider HI students. The subjects they are teaching are not clear most of the time. Even the textbooks are not suitable to HI.

When asked whether regular classroom teachers use teaching aids, she answered, "Yes, few of them, they do. They use periodic tables, models, they take us to laboratory". However, this student-does not believe that all regular classroom teachers are wholeheartedly willing to teach HI students. Some are willing and some are not. She thinks that it is so because there is a difference in interest among the teachers. The biggest problem is communication problem. If we

are not helped in residential school in evening program, we can't success in regular settings. We continue in regular class because of this help. This student explained that general education teachers forget them whether they are in class or not. "we sit idle. We are out of discussion and participation. When the teacher and hearing students verbally exchange ideas, we are exempted from all verbal information".

This student-doesn't believe that the HI students are given equal learning opportunity in the school, compared to the hearing students. She also doesn't believe that she is good in her work for which she blames the insufficient provision of facilities for the HI students in the school and inadequate textbooks' distributions.

When asked about what kind of provision and adjustment is required in regular school, she said, "if effective integration is needed, the following things should be considered: interpretation services, resource room with resource teachers, regular teachers readiness and others".

Case - 6

Case - 6 is a 17 years old young man who was hard of hearing from birth. He is hard of hearing child from hearing parents. In the family, from 12 brothers and sisters 5 of them are hearing impaired-three females and two males. The cause of his impairment is genetical. He has moderate hearing capacity. His speech is heard to hearing people, but spells unusual sound. His father is a farmer. His mother is a housewife. Both are illiterate. During the early childhood, his parents trained speech, how to produce. This helped him to develop speech further. He had attended primary and junior secondary education at Hossana School for the Deaf.

When asked whether he likes placement of HI students in regular school, he responded that he likes integration. Integration to him is nothing. Understanding of the subject differed according to individual teachers behavior. Some of them are fast speakers. Some are slow. When the slow speakers teach slowly, he could understand easily.

He added, "I always use hearing aid. This hearing aid amplifies sounds. Therefore, I could distinguish different sounds easily".

His responses for the questions that enquire what kind of advantages he gains in integrated settings, he responded that social interaction and learning different new vocabularies are the

advantages. In contrast, when he is not able to compete with hearing students, he feels depressed. Regular classroom teachers usually instruct verbally and he loses a lot of information. He added that the other stress in regular classroom is inability to compete with hearing students with daily competition in academics. The reason is that he misses to get adequate information from classroom instructions.

He speaks that integration by itself is a wonderful thing. In integration settings, deaf students learn a lot of things, but the absence of interpreter, qualified resource teacher and communication barriers made learning difficult to HI. To him, in regular setting more or less, no serious problems. He shares information through speech and speech reading. For the missed information, he could ask hearing friends. However, deaf children are not like this. The best educational place for deaf student is the special class with the special resource teacher. If an interpreter is in integrated setting, no other alternative to them. In un-facilitated environment, it is too difficult to expect that deaf students are obtaining proper knowledge. They miss a lot of verbally explained information.

He said that hard of hearing students in integrated situation, could improve vocabulary skill and develop speech abilities in communicating with hearing peers.

He believes that integration will reduce the negative social stigma attached to disabilities. It also enables students with and without HI to live together, to share their experiences and to respect each other. This student suggested that for effective integration professional interpreter and facilitated environment will be required.

When asked if HI people are fully capable of developing positive relationship with the hearing peers when satisfactory communication is used, he answered, "Yes of course". If language and communication barriers are corrected and the living environment is facilitated, they could develop good relationships. He added that it is possible to overcome language and communication barriers from regular settings by training sign language to teachers and hearing classmates. Sign language is also equally accessible to both hearing and non-hearing. To overcome social interaction problems sign language interpretation services should be developed in the regular classrooms.

This student-didn't feel frustration, loneliness and helplessness in regular school, because he could communicate with hearing students by and large. He prefers also to make relationship with hearing and non-hearing. He likes hearing peers and teachers since both of them are important to him. He interacts with hearing and acts again with deaf with sign language. When he is with hearing people he develops the natural language.

When he is with deaf it is useful to improve sign language. This social experience with hearing student was preferred. He always interacts with hearing students in regular school. He wants to live and deal with hearing. He reported that to overcome social interaction problems in regular settings: first, the sign language interpreter, second, training or orienting the sign language to teachers and hearing peers are needed.

When asked if integrating him in regular classroom would increase his academic achievement, he answered, "Yes, of course". "There is an improvement in academic achievements. I got chances of developing language and awareness about the environment in regular school".

His teachers rarely give feedback for his homework and class activities. He also rarely discusses with regular teachers to overcome academic problems. The boarding school teachers play a role for their academic success in integration class. Otherwise, as he reported they can't compete with hearing. They briefly discuss the problems. During instruction, he depends on vision and hearing.

When asked if inability to communicate with hearing people could reduce his academic achievements, he responded, "Yes, it did. The major problems for academic success in regular settings are domination of verbal method. Likewise, HI students miss a lot of important information. Through discussion and interaction much knowledge is transmitted. HI students most of the time do not participate in classroom discussions. In this, they are in academic disadvantages".

His responses for the question that enquires what is difficult to him in academics, he said, "spelling is more difficult to me because of differentiating one word from other similar words is very difficult. Again English subject is not simple to me".

When asked whether the teaching method of his teachers is attractive, he replied that to him the teaching method is "not bad-not good". He added, "It differs from teacher to teacher". The clarification of the content while they are teaching is some times clear, but not always.

This student said that the textbooks contents are suitable to him. He communicates with his teachers by writing and speech. He benefited also by lip reading and hearing peers support. The regular classes mostly use conversation rather writing on the black board. Few teachers use teaching aids.

He explained that except few teachers, most of the teachers are not motivated to help us. Hearing students are more motivated than teachers. If the subject matter is not clear to him, he uses other alternative methods such as reading supplementary books and asking hearing friends.

Finally, when asked what kind of provisions he needs in regular class, he said, "a resource room and a resource teacher, interpreter, facilitated environment and government's due attention in facilitating conducive environment".

4.1.A.1 Summary of the Cases

Lectures are conducted in such away that the regular classroom teacher presents it verbally and absence of sign language interpreter and communication barriers leaves HI students in difficulty.

With regard to placement of HI students in regular classroom, three of respondents, case- 2, case -3 and case- 4 totally deaf students said it was not good integrating HI students in current situation. Case-1, post lingual deaf student prefers resource room situation for HI students. However, Case -5 and case- 6 hard of hearing students have supported integrating themselves in regular class.

Considering social interaction, all of the informants basically agreed that HI people are fully capable of developing positive relationship with the hearing peers in regular settings when satisfactory communication is used. However, there are different factors, which affects the social relation of HI in integrated settings such as communication barriers, unconducive environment and so on.

Their social experience with hearing student is so better. They are not complaining about social life in general education. All of them like hearing students and regular teachers, especially hearing students more, because they are closest and they are always wishing to help them. Case-1 especially, explained that effective interaction of HI students take place when they communicate as they wish with hearing and when hearing people's opinions toward HI is good.

All informants, except case-6 complaining that the regular classroom placement decreases their academic achievements from boarding school achievements as well as hearing students. They suggested that the reason for their academic decrement was absence of interpretation service; communication barriers and inability to listen the classroom information are the major factors to low achievement.

All of the informants said that if the integration is wanted to be applicable, the following provision and modification would have to be considered:

- Interpretation services;
- Traditional opinions toward deaf should be changed;
- If integration is needed, facilitated environment to HI students in regular schools;
- Equal citizenship be considered to HI students and improving influential conditions from regular classes;
- Understanding deaf learning condition and planning the way of improving, if needed integration applicable;
- Expanding technologies in the country that support deaf learning.

4.1.B Interview Report From Regular Teachers Who Participated in Teaching HI Students

When asked about their attitude toward integration of HI in regular school, all of the subject teachers replied that HI students are disadvantaged in regular settings. Amharic teacher said: "I don't accept HI in regular classroom. If you teach them, you will have to teach what is important to them. How much they understood, I could not follow up. We have communication barrier between us". Maths teacher also added, "they are suffering in regular classroom settings because the teachers use mostly in the "safe side" of hearing students. They use verbal and lecture methods. It is advisable to create interpretation service, if that is not possible resource room with resource teacher is preferable. These students need special support with repetition and more explanation in special class". Biology teacher also added, "In integrated setting to help HI is very difficult. They are unable to listen correctly what the teacher verbally spoke". They need special class with sign language teacher. English teacher also have the same idea. It is difficult to teach in current situation. All informants explained that integration setting is important for social relation, to live together, to work, to share their experiences and to know their way of life. English teacher also added, since they are human beings they should start to share experiences as early as possible to live together and to work. They should not be separated. However, in current situation, they are suffering in academic achievement.

All the respondents indicated that they like to teach students with HI with hearing peers in regular school despite the communication barriers. Maths teacher said, "I like to teach HI students in integration but teaching HI need more explanation and takes additional time. It also creates disadvantage to hearing students. Amharic teacher added that in integrated classroom separately helping at the same session is difficult. It is also difficult to involve HI in comprehension reading. English teacher again said, "It is difficult to write all I talked. If I am able to sign I will communicate with them and solve the problems". Biology teacher also has an interest to teach them. Communication barriers hindered HI to know what they want to know. This also disappointed me". Except Amharic teacher all the respondents know that it is the right of children with HI to learn in regular setting. Especially, English teacher said that they are human beings and citizens and have the right to learning, working and using public funds equally with hearing people.

When asked whether HI students have better results in academic achievement when compared with hearing students. Biology and Mathss teacher replied that their academic achievement is low because of media of instruction Amharic and English teachers also added that their achievement may not be equal with hearing. Inability to listen influences their academic achievement.

Two teachers, Amharic and Biology teachers believed that if it is needed to integrate HI students in regular class, special classes should be adjusted with sign language teachers. Maths teacher suggested if they are integrated there is the shortage of time, the time must be prolonged. English teacher also suggested orientation or awareness to regular teachers and how to handle these HI students in regular class.

When they were asked about the positive attitude of teachers that play a role for effective integration, they replied that it does. The problem is media of instruction. All of the teachers are not capable of using sign language. According to the Maths teacher some teachers do not like to teach integrated classes.

Their response to the questions that enquire if they are using teaching aids in class, they answered and they are not using teaching aid for the benefit of HI. In general, they are using for benefit of hearing students. When hearing aid is available HI can understand a lot. Amharic teacher reported that when teaching aid is available by tape recorder it is difficult to HI.

All the respondents said that they are facilitating hearing classmates to sit closely who are able to sign to them. HI students themselves train these students in sign language. But Maths teacher always tries to help them. However, the hearings students complain about they are lagging behind from other sections.

Maths teacher reported that coming without doing homework and disturbing are some little problems from HI students. However, the other teachers did not report the same problem.

English and Biology teachers haven't made any interaction in and out of the classroom with HI students. Amharic teacher reported that they ask him when they need help. Most of the time, they come with classmate helpers. Maths teachers also added, "when they did not understand they would ask me by writing, I will explain in writing".

These teachers suggested, resource room with a specialist is the proper educational place to educate HI students. All of them do not support separate classroom or special school to these students.

These regular teachers reported that they rarely discuss their academic difficulties with HI students. Biology teacher said, "Indirectly, I discuss in writing. They come and ask me with buddy". All of the teachers said, "we are giving class work and homework, but we believe that we rarely give feedback to their activities because of class size. We are teaching in one-class 110 students. In such condition to follow up each student is too difficult. Even, in the middle of explanation we forget them".

When asked what they usually face while teaching HI student in regular setting Maths teacher replied that grasping the concepts is very difficult. Explaining concept and terminology is also very difficult. Amharic teacher also added, "if class activity is reading, it doesn't function to HI students. They can't ask, they can't respond". In addition English teacher explained that the biggest problem is inability to listen; teachers inability to consider HI in each preparation is the other problem. After they have talked a lot of information verbally, they remember them; in many preparations they forget them. Books are not delivered to each of them; it is also the additional problem. Biology teacher further said that inability to understand what is taught in the classroom is one of the common problems.

These teachers explained that learning problems they observed among their HI students, especially, Biology teacher explained that note taking, not participating in discussion, not asking questions, not responding in the classroom and weak participation are the problems. Amharic teacher added inability to perceive his ideas as the other problem. In contrast, Maths teacher said their problem is not different from others if we know sign language.

When asked what kind of strategies they are using to solve the problem, they replied in different ways. English teacher explained writing the important points on the blackboard. Amharic and Maths teacher reported they haven't tried any strategy to solve HI students' problem. Biology teacher said that he is following their exercise books.

When asked what kind of modification and adjustment are necessary for successful integration, Biology teacher indicated preparing interpretation services, giving orientation to regular teachers,

providing resource room with resource teacher. English teacher again said repeating and revising the topics; providing opportunities to help HI for the classmates, facilitating conditions to work together with and without HI students; explaining new words before entering to the topic. Mathss teacher also added reducing the class size; the school should provide all the necessary teaching aids and textbooks and providing the opportunities to regular teachers in sign language.

English teacher explained instructional materials; specifically textbooks are not appropriate to HI students. In English book listening and spoken skills doesn't consider HI students. It is not available in textbook and nothing is mentioned in teacher guide about how to treat the HI. In this area HI children are forgotten. He also added communication; verbs and agreement are the common problems. Moreover, for HI "phrases" are very difficult and they need modification of curricula. Amharic teacher also added, discussion and practicing in speaking doesn't work for HI. The biology teacher said that the major academic problem of HI students in regular school involves discussion of topics without pictures. Both Amharic and Maths teacher do not make any modification on curricula because they are preparing modification for the sake of hearing students. All of the informants agreed that if the curricula is not modified these student are facing serious problems.

All of the respondents said that HI students do not have any social problems in school, with teachers or regular students. Hearing people like them and want to approach them. They believe that social problem affect academic achievement. This is common to hearing and non-hearing population.

All of them agreed that it is the responsibility of teachers to create circumstances for students with and without HI to have positive relationships and love one another.

The teachers informed that factors that contribute to social problems of HI in integrated setting are communication barriers; inability to listen; rejection; isolation; oral method of teaching many times in integrated class, not participating in groups are some of the contributing factors.

Contributing factors to the academic problems are: regular teachers being highly dependent on verbal, absence of interpretation, communication problem, not using teaching aids, and inability to listen are some contributing factors.

Table 3: Background of Teachers Who Were Interviewed from Grade 9 & 10

No	Name	Sex	Age	Service year	Areas of study	Educ. Level	Subject Teaching	Teaching grade Level
1	A.1	F	40	20	Amharic	12+4	Amharic	9
2.	B.2	M	48	27	English	12+2	English	10
3.	C.3	M	42	22	Maths	12+2	Maths	9
4.	D.4	M	41	21	Biology	12+2	Biology	10

4.1.B.1 Summary of Interview Report of Regular Teachers

With regard to their attitude toward integration of HI in regular school, all of the informants said HI students are disadvantaged in regular setting in current situation. All informants explained that integration setting is important to social relation, to live together, to work, to share their experiences and to know their way of life. In integrated classroom the most common problem is communication with HI students, therefore, they are suffering in academic achievement. All of the respondents like to teach students with HI with hearing peers despite the communication barriers.

All of the respondents reported that the HI do not have any social problems in regular settings with teachers or hearing peers. However, they indicated that some of the contributing factors to social problem are barriers of communication, inability to listen, rejection, isolation, verbal method of lecture and non-participation in-group discussion. In addition, absence of interpretation, poor teaching aid, inability to listen are some factors that contribute to academic problem.

Finally, all the informants forwarded the following modification and adjustment for successful integration; interpreter, facilitating regular school environment to HI, maximizing class size and raising the awareness of regular teachers.

4.1.C Interview Report from Regular Classmates

When students were asked about attitudes toward being integrated with HI students in regular school, all of the informants responded that they have positive relationship with HI students. However HI students are disadvantaged in their classes.

Student - A said, "they are not able to do any activity by themselves, may be only English & Amharic. Otherwise, classmates are helping them. Some teachers even do not know whether HI students are in the classroom or not. When few teachers started to support them, hearing students started to complain on him because they are lagging behind from other sections".

The other student - B said, "integration is interesting but most of the support is from us, from the teachers they get nothing. "Student-C added, "they don't know what the teacher said, I wish if they learned in special class". Further, student-C said, "most of the teachers in the classroom use verbal method, therefore, by asking, we can understand which is not clear to us. When teachers tell us some references, we use them. HI students are barred from this information. I admire, their passing from class to class". The teachers didn't follow up and give feedback to HI students, even to the hearing attributing the problem to large class size.

These students like integration of HI students in regular classroom. Student-A said, "I like it because I am learning sign language from them. Sometimes when the teachers want to dictate, because of HI presence, the teachers are compelled to write on the blackboard, and we are saved from spelling errors". Student-B added, "When the teacher is explaining to them we are getting an advantage. The other advantage is students who are weak in note taking take notes in the presence of HI. All of them suggested that HI are not in advantage being with us. It is preferable if they learn in special class with a sign language teacher.

From four informants three of them don't know if it is the right of HI students to attend together with normal students.

When asked about the main problems that hinder integration, all of them explained that absence of interpretation, teachers and hearing students' inability to sign, and absence of verbal information exchanges with HI and hearing people are the main ones.

These students observed the disadvantage that the HI is facing in mainstream setting. They speak with them by writing when they need information from them.

All of them believe that integration will reduce the negative social stigma attached to disability. Student-B explained that before he met them in class, he assume that HI people are useless people. Now his opinion is changed. They are learning and competing with them. If integration begins from early, integration has the power of changing the normal people's mind. The other informants' idea is not different from B's.

When they were asked whether they are helping HI students in mainstream classroom, student-B said, "I am trained sign language by HI student himself, and am helping in interpreting. I am telling them, the exam schedule, the assignment and other school information. Student-A added, "I am supporting them by writing". Student-C said, "I briefly explain when they did not understand the subject matter". Student-D said, "I have communication barrier, I can't help them".

From four respondents, two of them said that they did not do group works, homework and assignments with HI student because they did not get chances to take part. The other two who got chances of working, replied that HI student are active participants when effective communication is used. Similarly all of the informants make interaction in and out of the classroom with HI students by writing and by signing.

When asked whether it is possible to overcome language and communication barrier between hearing and non-hearing in regular setting. Student- A replied, if hearing peers and teachers know sign language the problem will be solved.

Student-B added those who are participating in teaching HI in regular classroom know sign language it is better. Student-C explained, it is not simple to overcome language and communication problem of HI in regular school. It takes time.

These students informed that the major academic problems of integrated HI students are spelling error; depending on written materials, attention problem, hesitate to ask questions, difficulty of calculation subjects like physics, maths and chemistry symbols. In language area, verbs agreement and phrases are some of the few problems. Moreover, most of the teachers do not

involve and consider HI students during teaching and learning processes. These are some of the problems HI are facing.

These informants did not face any social problem with the HI students in regular school, except the communication problem. However, some factors contributing to social problems of HI students are: poor consideration of teachers, language problem, not involving these HI students in activities may contribute to social problem.

When asked what kind of improvement they would suggest for successful integration, they responded that interpretation service, sign language orientation to regular teachers, providing resource room, every consideration to HI just as hearing peers and writing every school information on notice board are some of the points which need to be considered in regular school.

4.1.C.1 Summary of Interview Report from Regular Classmates

All the four informants forwarded that the attitude toward being integrated with HI student in regular school creates a positive relationship with HI students. Hearing students do not have social problems with HI students except communication problem. However, they indicated that the main problems that hinder integration are absence of interpreter and communication problem. Therefore, HI students are disadvantaged in their classes because of verbal media of instruction in social and academic areas.

These regular students suggested that the following be done for successful integration; provision of interpretation service, sign language orientation to teachers, providing resource room with resource teacher, special class in regular school and equal consideration with hearing students in the same settings.

4.1.D Interview Reports of Educational Experts

When asked about their attitudes toward integrating of HI children in regular school, all of the four educational experts agreed that HI Children could learn with regular students. However, Woreda expert explained that HI students depend on sign language and may not be properly challenged in verbally dominated regular setting. Zonal educational expert added that when they

didn't properly understand the classroom oral information they may be frustrated. He also added that teachers might not treat HI equally with hearing peers. This influences in academic achievements. He added that a unit class, if not a resource room with specialist, is preferable to these HI students. The school principal suggested that regular teachers may not give due attention to HI students. They may not be devoted to help. HI might not understand orally transmitted information. Therefore, they may not equally compete with hearing students. There are many other factors, which hinder integration. It is good to HI to learn in special class with sign language teacher. If this is not possible resource room is advisable. Furthermore, they added that communication is a key problem to these HI students for socialization. These children also may suffer in social relationships.

When asked whether they know that it is the right of children with HI to learn in regular setting, the school principal said, "Yes, I do, they are citizens. All disabled children have the right to learn equally in mainstreams". The zone desk expert added, since they are citizens they have equal right to learn. The other expert also has similar views. "They have their own share from their country".

These educational experts suggested that possible measures be taken to integrate HI students in regular class. Woreda expert said, "elevating awareness to hearing community in the school and training sign language to regular teachers, especially, who are participating in teaching HI students". Zonal expert also added, "teachers should follow student-centered teaching approaches". The school principal also stated teachers should try to use any possibilities that HI students could understand classroom information as much as possible.

Textbooks should be delivered to every HI student. The school psychologist again added, "providing interpretation services and close working condition with psychologists" should be facilitated. All of the experts believed that positive attitudes of teachers play a role for effective integration. The school principal said teachers should be sympathized to HI students. They should be devoted to work with these pupils. Hearing impaired needs brief, repeated and elaborated explanation each time. The teachers should always instigate by giving activities and making follow up.

They were enquired on what to do to help these students in regular settings. Woreda expert recommends up grading regular teachers' awareness in order to help HI students. The zone expert

also suggested, "in near short, incentives conditions should be created for those who are teaching disabled children in regular school". He also forwarded that there is a plan to train specialists in the area. The school principal said that in each school information should be written to HI in the notice board. The school should try to push regular teacher to give due attention to HI students. Facilitating the conditions for teachers to use overhead projectors, to involve HI students in different school clubs; the psychologist also added, "he has a program, to create awareness of how to treat handicapped students in regular settings.

These experts have observed some of the problems HI are facing in regular school. The school principal listed low academic achievement, inability to compete in the classroom, absence of interpreter, dominated verbal lecture methods and lone-lines as major problems. Zonal expert also added that shortage of professionals in the area who support HI students and lack of devoted teachers as problems. The school psychologist also explained that all these above problems lead HI children to drop out of school. They suggested that in order to solve these problems, the communication barriers should be solved. All the necessary information should be written on the blackboard. Information passed by mini media should be stuck on board. Facilitating school environment to HI students, encouraging teachers and classmates to learn sign language. The two experts added providing interpreter in regular classroom might solve the problems.

When asked about the responsibility of the teachers to create conducive environment for students with HI in regular school, the Zone expert said, "It is not only the teachers' responsibility but also the school administration, the community, educational experts and governmental and non governmental organizations responsibilities. The principal added that first the teachers have responsibilities. Second, the society has the responsibility to create conducive environment. If all people participated, it is possible to create conducive environment to these disabled children. The psychologist also added that similar points the community has the highest responsibility, particularly changing its awkward prejudice toward disabled people. In addition, he said that the psychologist also has some responsibility in changing the opinions of the community.

These experts have made additional comments for the improvement of the learning environment of HI students in regular school. The principal said that the government has the responsibility since these children were mainstreamed; they should be shaped in theory and practice. Therefore conducive environments should be created; encouraging HI students to vocational schools. The

zonal expert also added that providing special supporting class with specialists and organized school educational systems also preconditions to be given. The experts believed that these children have not received equal opportunity to learning in regular settings. However, the conditions are improving from time to time. Furthermore, they added that early intervention program should be started from kindergarten on wards.

Table 4: Background of Educational Experts

No	Name	Sex	Age	Service Year	Areas of study	Educational Level	Job Title
1	A-1	M	39	20	Pedagogy	12+4	Zone Desk
2	B-2	M	40	22	Biology	12+2	Woreda Desk
3	C-3	M	43	26	Geography	12+4	School Principal
4	D-4	M	22	1	Psychology	12+4	School Psychologist

4.1.D.1 Summary of Interview of the Educational Experts

All of the four educational experts attitude toward integrating of HI children in regular school is positive. However, because of different unfulfilled conditions HI students are suffering in academic achievement and are psychologically frustrated. All of them suspected that these HI students properly understand verbally transmitted information in the classroom.

The experts, especially the director of the school have observed problems of HI facing in regular school such as absence of interpreter, low academic achievement, communication barriers and loneliness. They added that the source of all these problems is communication. All of them believed that it is not only the responsibility of teachers to create conducive environment to HI students in regular school. It is the responsibility of school administration, educational experts, the whole community, governmental and non-governmental organizations responsibility. If all participated, it is possible to create conducive environment for disabled children.

4.2 Discussion of the Findings

This part of the analysis is presented based on the different perspectives of the participants. It involves the analysis from the perspectives of HI students, regular teachers, hearing peers and educational experts toward integration and social and academic condition of integrated HI students in regular school.

4.2.1. Opinions of Hearing Impaired Students

With regard to placement of HI students in regular classroom, all severely hearing impaired informants did not agree with integrating HI students in regular classroom in current situation. However both hard of hearing informants have supported integration of HI students in regular class. One of the hard-of hearing said that integration has many advantages like to make friendship, social interaction and exposition to excellent language model. Further, they made some academic improvements in regular classes. They liked integrated regular settings because there is no serious problem to them in integration. Similarly, Winzer (1990) indicated that in the regular classroom, they are exposed to excellent language models and most learn to use speech to interact with teachers and peers. In contrast, adventitiously deaf student prefers the learning place to HI student be the resource room with resource teacher. He prefers the resource room because special class isolates him from hearing people further and is not good for later social life. But congenitally deaf students prefer the special class/unit classes in regular school because in these classes they could get the chance of learning with sign language specialists. This finding is consistent with the finding of Kristensen (1997) that learners who are deaf have to be taught in units in ordinary school setting.

As seen from the given responses, the indicated benefits that integration could contribute to the HI students appeared to be more of social benefit rather than

academic benefits. The six HI students, who favored integration, for instance, stated that they support integration not because it is academically beneficial to them but to live together, to respect each other, to share experiences and for later social life.

As can be seen from this finding, the supporters of integration supported it because they were partially able to hear and share communication with hearing people. This shows that what a matter is the fulfillment of students' desire with respect to support they need. Hence, emphasis should be given to providing them with the necessary support so that they will develop a better attitude towards integration.

The opponents of integration, opposed it mainly because of the communication problem in the school, which has affected acquisition of knowledge from their teachers, hearing peers and their interaction with the hearing community as well. If their problem, in this regard, is solved perhaps they would accept integration.

On the other hand, hearing-impaired students commonly complained that in integrated classroom, they got stress of daily competition in academics with normal-hearing peers. Kluin and Moores (1985) also confirmed that children with HI may be unable to bear the stress of daily competition with hearing peers, especially if their families are not supportive. All of the HI participants suggested that without solving communication barriers, without sign language interpreter and without regular teachers' readiness, it is difficult to compete in regular settings.

In this study it was found that all these students were tense about the lack of adequate educational achievement and the inability to understand classrooms interactions. They were nervous and had worried about their ability to cope with the ordinary school settings.

4.2.2 Opinions of Regular School Teachers in Integration

The present study is the first study in Wachemo Sec. School regarding teacher's attitudes toward the integration of HI students into mainstreamed educational environment. This study revealed that all of the informant teachers did not have formal training nor did they attend workshops regarding integrated teaching of children with hearing impairment. A majority of teachers indicated that they had little prior hands on experiences in teaching children with HI. In addition, they were unable to secure literature and information concerning how to handle integrated HI students in regular classroom. From this point of view the current situation in Ethiopia is similar to the problems faced in the USA soon after public law 94-142 was passed into law before 30 years ago. Bird and Gansneder (1979) reported that by then the teachers had not been adequately prepared to the appropriate legislation, had not had specific knowledge about the handicapping condition and had little formal training in special needs education. Therefore, the higher level of working specific experience and the lower level of perceived knowledge, the less favorable was the attitude. Full information about disability problem can improve attitudes toward individuals with disabilities.

The data from the interview and researcher's observation about the regular teachers opinions showed that they have positive attitude towards integration of HI students. They explained that integration setting is important to social relation, and to reduce social stigma that others may have toward HI. However, in current situation, HI are disadvantaged groups in regular classroom settings because of the media of instruction and unconducive learning environment. In integrated classroom the most common problem is communication problem with HI students. Hence, the regular classroom teachers suggested that resource room with resource teacher is the proper educational place to educate HI students. All of them do not support separate classroom or special school because of fear of isolation. In contrast, this finding is opposed to ENAD (Ethiopian National Association of the Deaf) recommendation. ENAD (2000)

noted that the preferable educational place to HI in ordinary school is special class with sign language specialist.

It was found that the teachers of the regular classroom did not know much about different aspects of deafness. Some informants felt tense about how they would make the deaf students understand their teaching because of communication barriers. HI students need repetition and brief explanation which takes time of normal-hearing peers. Some of their frustration relates to the fact that secondary level teachers often teach so many students each day and at the same time large class size that they have little time to get to know any one student. Also, if they use some version of the lecture approach to instruction and students do not have the skills and knowledge base assumed by the teacher, both the students and the teacher feel failure and frustration. One teacher felt that the only place for the HI students was a special school and that the special school should not create problems for the teachers of regular schools by encouraging integration. The other teachers expressed sympathy for the deaf children, as they were different from normal children. They felt that since deaf children have communication problems, it would be difficult for them to understand the teaching, and to mix with other normal children. Bilek (1973) cited some reactions of teachers of regular schools, "How can I help a HI child without special training", "We are not specially trained - we need to know more", If hearing is their problem, how can I help?" Such reactions reveals that it is important to work with the teachers of regulars schools in order to broaden their experiences with deaf children, so that they are able to facilitate the children's adjustment in their school.

On the other hand, this finding indicated that regular classroom teachers believed that it is the responsibility of teachers to create conducive environment to HI and non-hearing in regular setting. These findings are consistent with the findings of Mittler (2000) who says that integration implies, that all teachers are responsible for the education of all children. Berres (1996) also found that

teachers have the responsibility to develop the kinds of environment that provide growth-enhancing-not growth inhibiting-experiences.

4.2.3 Opinions of Classmates of the Integrated Hearing Impaired Students

The regular students have expressed feeling that they welcome the placement of HI students in integrated settings. They revealed that with the presence of HI students, teachers were forced to write on the blackboard instead of dictating. They were free from making a lot of spelling errors. In addition, students who are poor in note taking were advantaged in the presence of HI students because the teachers were compelled to give notes in writing. Furthermore, they got the chances of learning sign language and to be acquainted with each other. These findings are also consistent with the findings of Abebe (2000) who indicated that 65 percent (out of 40 regular students) claimed that they are willing to accept if HI students were placed in their classroom. Kennedy and Bruiniks (1974) however, did not find any difference between the social acceptance of the hearing children compared to that of their HI peers when integrated in regular classroom. However, these findings differ significantly from the findings of western researchers. Jones (1985 as cited by Bench 1992) indicated that the attempts of HI children" at social interaction are rejected relatively often by the potential hearing peers" (p. 85). Another observer has also noted that a consistent theme in the literature is that handicapped students are frequently rejected and alienated in regular class settings partly by their "normal" peers (Schulze, Turnbull and Carpenter, 1991). I would therefore, disagree with western researchers because Ethiopian context of socialization is different from the Western. Ethiopians sympathization may affect hearing peers to like HI in regular settings.

On the other hand, regular class students supported the integration of HI students believing that integration would enable HI students to develop better relationship with hearing students. It avoids feeling of loneliness, gain assistance from hearing students in academic activities, improve their language through interaction with hearing students, develop self-confidence and improve

their academic performances. On the contrary, hearing classmates sympathized that HI students have disadvantaged in their classroom because of medium of instruction. Verbal communication is the dominant way of instruction. Inability to listen is the major problem of these students. Therefore, they miss a lot of classroom information passed by teachers and hearing peers. The responses from the classmates showed that they had some ideas about deafness due to the impact of the media. They informed that the main problem that would hinder integration was the absence of interpreter and communication barriers. This finding agreed with the finding of Katz (1997) that without exceptional language facility a deaf student will probably not learn as rapidly as a hearing student. In addition, Kirk et al., (1993) further demonstrated 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. ENAD (2000) demonstrated in its report also that deaf students could learn in elementary school in special class but in secondary school level with interpreter they can attend in integrated classroom. This finding is also confirmed by Tirusew (1999). To facilitate the development of sign language, communication skills, active interaction and self identity among deaf children, providing them with education in special classes in pre-school and primary school years seem to be feasible and practical.

From the interviews of hearing students it was discovered that these regular students believed that integration reduces the negative social stigma attached to disability. One of the informant hearing students stated:

> **Integration has the power of changing the minds of hearing people. Before I met HI students in my integration classroom, I assume that HI people are dull and useless. But now my opinion is changed, they are learning and competing with us.**

This finding is consistent with the findings of Scruggs & Mastropieri (1996) who indicated that 63.7 percent, out of 777 teachers, believed that the integration model would reduce the negative social attitudes toward disabilities. The finding also suggested that it would be essential to remain cognizant of the fact

that regular education system is structured or equipped to successfully change the minds of all students in regular school. Therefore, to gear up, integration activities, special and regular educators will need to join together as one group with the purpose of organizing strong and comprehensive regular system of education that can meet the needs of all students.

4.2.4 Opinions of Educational Experts

The educational experts suggested that well-structured support systems to meet the HI social and educational needs should be developed in an integrated school setting. It is the quality of support system, which will determine progress in implementation of inclusive education in the ordinary school. They added that the teachers' attitude towards and understanding of inclusive education is crucial. Teachers must also have training. This gives them the tools to teach all learners in the same class. Continuous training of teachers in special needs education is therefore vital. If more is expected of teachers in ordinary schools to meet pupils' special education needs, then they are likely to require more training. Mittler (1992) has commented on the need to include a relevant component in the initial training of teachers, and that those responsible for the training must have the necessary competence themselves. Initial teacher training also has the important task of shaping teacher's attitudes to pupils.

4.2.5 Factors Affecting Integration of HI Students in Regular Classes

Educating pupils with special needs in the ordinary school is not simply a question of importing special education to the ordinary school (Hegorty et al., 1988). What is required is that the school adapt its educational provision so as to be able to cater for a wider variety of pupils. This means a highly flexible range of provision, planned as a whole. The school is a single entity - but incorporating multitudes of possibilities and not just a simple choice between ordinary and special tracks.

According to the findings of this study, the teacher and the teaching situation are someone of the factors affecting integration of HI students. Aside from deaf parents, the person most responsible for a student's educational progress is his teacher. Regardless of the school, curriculum, facilities, or other aspects of the setting, if the hearing impaired's teacher is not qualified, sensitive, and able to communicate with them, the HI students will not achieve as they should.

Before integration is practiced, it should be made sure that the special needs of the HI students are well understood by the school administrators, regular classroom teachers and the hearing peers. This finding was confirmed by Katz (1997) suggesting 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.

The data from the interview and researcher's observation about factors affecting HI in regular settings showed that all of the respondents basically support integration in general educational classroom. However, hearing impaired students informed that there are many factors that would hinder effective integration such as, the communication barriers, the awareness level of the people, the negative attitudes toward the disability, absence of interpreters, lack of multidisciplinary coordination, readiness of regular teachers and poor school administration's attention to HI are some of major problems of integration.

Regular teachers, educational experts and regular students further explained that communication barrier, absence of an interpreter and shortage of trained professionals are the most common factors that affect integration.

This finding is consistent with the finding of Moores (1987) who reported that teacher's lack of potency to help, poor encouragement and low motivation of HI

to learning, large class size, poor administrative follow up and unattractive school environment to HI 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 observation of this study showed that HI students are not progressing well in an integrated setting: repeated confusion over directions, announcements and assignments, consistently poor academic achievement; inability to understand the basic vocabulary of a particular grade level; poor interaction with classmates and teachers; establishment of lower standards of achievement for the deaf child; and growing disinterest by the students in their classes or the school.

4.3 Analysis of the Findings about Social Problems

Social and personality development in the general population depends heavily on communication. Social interaction is the communication of ideas between two or more persons. In the hearing population, language is by far the most common way messages move between people. Because of society's heavy dependence on language, it is no wonder that many investigators have found hearing impaired individuals to have personality and social characteristics different from those of people who have normal hearing ability (Meadow, 1984). The need for social interaction and acceptance is probably most important for many hearing impaired persons. Hard of hearing and especially deaf individuals, more than any other handicapped group, tend to mix socially with people.

In this study, all HI informants explained that their social experience with hearing students was good. They were not complaining about their social life in general education classroom. All of the respondents regular teachers and hearing peers confirmed that HI students haven't got any social problems in

school with teachers and regular students except the communication barriers. But post lingual deaf student stated:

> **Effective interaction of HI students will take place when they communicate as they wish with hearing and when hearing people's opinions toward HI is good.**

Basically, HI students agreed that HI people are fully capable of developing positive relationship with hearing peers when satisfactory communication is used. However, the deaf students suggested that communication is the key for socialization. Therefore, communication and unconducive environments are the predominant problems for socialization in regular school settings in current situation. Yssledyke & Algozzine (1995) in their findings indicated that most HI people are fully capable of developing positive relationships with their hearing peers when satisfactory communication is used. Even so, a number of deaf students do have serious behavior problems that require treatment. Warren and Hasenstas also noted HI might lead to adjustment problems in children. This is not to say that HI child lacks the potential for normality, but language and communication problems may produce barriers to normal social interactions.

From the interviews with HI, teachers and hearing students, it was discovered that to overcome the language and communication barriers hearing peers should have the knowledge of sign languages in order to solve the problem.

Kyle and Woll (1989) suggested that teachers and pupils must share a means of communication, which is equally accessible to both parties, and is a fundamental principle of education. When communication exists between teacher and pupil, then learning can begin and sign language can be such a shared problem solving language.

Butler (1994) also stated that the two groups of children most likely to be successfully mainstreamed are those with mild to moderate hearing losses and those with severe HI who have benefited from early intervention.

This finding also suggested that students who are integrated must be competent in both comprehending and discourse and will need to function well in the classroom's communicative environment. The student must be able to produce intelligible, well-formulated question as well as comprehend the questions asked by the instructor in order to produce intelligible responses. The language of the classroom must be understood so that directions can be followed. 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 hearing people (Alemayow, 2003).

To make friendship, hard of hearing students prefer hearing people. In contrast totally deaf students prefer to make friendship with similar identity group with HI people. On the other hand, post lingual deaf student wants to make friendship with both hearing and non-hearing people.

All of the relations were determined by communication abilities. Here, the relation and making friendship were according to their degree of hearing losses. Totally deaf students prefer their similar groups because through sign language they can communicate easily with similar groups. Hard of hearing students prefer hearing people to make friendship because they are partially lingual, they could communicate with hearing people. Post lingual prefers both, because he can speak with hearing, he prefers hearing because of inability to hear and he prefers deaf to make friendship.

In regular classroom settings also hard of hearing students interact with hearing peers and the result of HI students interact with hearing students rarely by writing, but mostly they interact with HI students. This finding is consistent with Wade & Moores (1994) findings that friendship groups are usually made up of people who share similar interests and attitudes. They like each other because they do things together. They stated that pupil's definite

ideas on the qualities of friendship include people who stick by them, cooperate with them and share their world.

On the other hand, the observation of this study indicates that HI students interact more frequently with hearing peers and less frequently with teachers. HI students communicate more with HI because they have similar identity and common languages.

There are different factors that are directly or indirectly related to communication problem, which seems to be major obstacles to social integration of HI students into regular classes. As seen from the given study responses, the social benefits of integration were more emphasized than educational benefits in favoring the integration of HI students into regular classes. However, the social benefits are not fulfilled because HI students rarely interact with teachers and hearing peers because of communication barriers among them. As identified by one study, "Deaf people have isolated themselves for the social and emotional demands as a result of their communication difficulties and ineffective interaction strategies" (Ayodele, 2000, p. 189).

Moores (1996) indicated that if the student doesn't communicate well, falls behind academically, looses confidence, or doesn't relate freely with his peers, an 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.

In this study the hearing impaired students complained that there was no joint activity planned by the school to enhance social interaction with hearing students. They also confirmed that no orientation program has been arranged by the school to create awareness and better relationship among teachers, hearing peers and non-hearing students.

Finally, this study stressed that language and common communication problems are the most predominant problem of social relationship in integrated regular settings.

4.4 Academic Problems of Hearing Impaired Students in Regular Classroom

Table 5: Grade 9 First Semester Average Score

No	Name	Age	Sex	Character	Degree of Hearing Loss	Average of HI Students	Average of Class Students	Rank of HI students
1	TA	17	F	TD	105dB	55.6		67
2	II	17	M	PL	96dB	63		22
3	BD	17	M	HH	60dB	60	$\overline{X}$ = 60.46	34
4	EM	16	M	TD	110dB	53.4		79
5	NB	16	F	TD	102dB	54.5		75
N=5						$\overline{\chi}$ = 57.3	N = 110	

TD = totally deaf HH = Hard of hearing PL = Post Lingual deaf

Statistically, it is difficult to compare the academic performances of HI students who are below 30 in sample size. However, for the purpose of observation and comparison, the academic performance of HI students is provided.

As shown in Table 5, all of the totally deaf students have scored below average class achievement results of 60.46. It seems that totally deaf students cannot attend their education as equally as regular classmates. There are different factors contributing to their low academic achievements. Inability of regular teachers to use sign language, lack of interpreter, communication problem, fear to cope with hearing students in academic matters are some of the factors.

Table 6: Grade 10 First Semester Average Score

No	Name	Age	Sex	Character	Average of hearing loss	Average of HI students	Average of Class Students	Rank
1	AK	17	F	TD	115dB	57.7		43
2	AH	17	M	TD	104	57.6		44
3	DT	17	M	TD	120dB	58.6		38
4	MK	16	M	TD	110dB	54.2	$\overline{\chi}$ = 63.18	72
5.	GD	17	M	TD	110dB	61.65		25
6.	BA	16	F	HH	70	62.95		21
7.	LT	16	M	TD	110dB	58.6		38
X =7						$\overline{\chi}$ = 58.36	N = 95	

TD = Totally deaf HH = Hard of hearing

As indicated in Table 6, all of the totally deaf students have performed below average class achievement score of 63.18. From the result, it generally appeared that totally deaf students are disadvantaged in academic performances. As the same time, they have not benefited from integrated settings. However, one of the deaf students scored almost the nearest class average of 61.65. From the observation of the study of special school academic performance, it was understood that, he was the ranked and the first student in his boarding school. However, in integrated classroom his performance was below average class performances. From the findings it seems likely that because of lack of interpreter in the regular settings his academic performance was below average.

On the contrary, hard of hearing students performed almost the average of class (63.18). This indicated that the hard of hearing student benefited from integrated settings. Further, these findings are consistent with the findings of Anastasiow (1993) which showed that two factors are related to the academic

achievement of students with hearing impairment. These are degree of hearing loss and the presence of language. Freland, (1987) and Gearheart et al., (1996) concluded that students who have mild hearing losses generally perform better academically than those with severe losses. Students who are deaf from birth tend to have more difficulty acquiring academic skills. Similarly, students who are hard of hearing in grade nine performed better than totally deaf students. In the same way in grade 10, hard of hearing student scored 62.95, which is better than totally deaf students.

However, we cannot make firm generalization about the way in which students who are deaf and hard of hearing function academically. Research suggested that students who are deaf have much more difficulty acquiring reading skills. Nevertheless, differences in language ability that result from deafness affect a student's ability to perform in traditional academic areas.

Unfortunately, hearing-impaired children are frequently handicapped in varying degrees in educational achievement. Reading ability, which relies heavily on language skills is probably the most important aspect of academic achievement (Hallahan & Kauffman, 1988).

A number of researcher in the field have confirmed that children with HI have major difficulties with academic achievement

4.5 Factors Contributing to Social and Academic Achievement Problems

Language deficits of HI students their cooperative abilities and achievement performance are some what limited. This indicates that lack of meaningful language in the early years may contribute to the low school achievement of deaf students (Moores, 1987). Language development is very important to success in school. The hearing impaired students are able to learn and profit from instruction in the regular classroom through the adequate language and communication. If the HI student doesn't communicate well, falls behind

academically, loses confidence, or doesn't relate freely with his peers. Integrated settings can be very negative learning experiences. Even, in a good integrated setting, the deaf student misses a great deal of the interchanges between and among the teacher and students, which, in a special school or classroom, he would be able to pick up.

Yosseldke et al., (1995) in his findings indicated that there are different factors, which contribute to academic and social problems: the severity of hearing loss, the age of onset, the socio-economic status of the students' family, and the hearing status of the student's parents.

Hearing impairment often brings with it communication problems, and communication problems can contribute to social and behavioral differences. Social development is dependent on the communication and interaction with others in all situations, in a play and in their learning. Therefore, communications abilities are highly responsible for the social success of the student. In this study cite also the predominant problem for social relationship with hearing school community was communication barrier. On the other hand, communication affects the social relation of the hearing impaired students.

Delayed speech and language influence a child's ability to develop communication skills such as reading, writing, listening and speaking. As a result, these skills develop at a slower rate than those of normally hearing child. The extent of difficulty depends on the students command of the language, degree of hearing loss, age of onset of loss, and age of intervention (hearing aids, systematic language in structure and auditory training). Thus inability to communicate with hearing delays their academic achievement again in ability to listen influences academic achievement.

HI students explained that inability to listen or in ability to communicate with hearing in regular settings affect their academic achievements. Anastasiow (1993) concluded that many academic skills draw on student's general

awareness of language. Because of their conceptual limitations, they may have problems of interpreting the language of others and expressing themselves in oral and written modes. Similarly, all of the HI informants explained that the major contributing factors to low academic achievements were absence of interpreter, teachers' inability to communicate with sign language, unattractive teaching method, lack of follow up, lack of readiness of regular teachers and unconducive environments.

4.6 Provision and Adaptation of Regular Classrooms for Successful Integration

Before integration is practiced, it should be made sure that the special needs of the HI students are well understood by the administrators, regular classroom teachers, the hearing peers and the school environment. The school must realize that the needs of students who are HI vary according to the details of their particular degree of hearing losses. Various research studies indicate that the physical teaching environment for students who are hard of hearing should be like the physical environment for hearing students. That is, students who are hard of hearing should receive their education within an integrated and mainstreamed teaching environment. Similarly, the more serious the hearing loss, the greater the probability that school performance will be deficient. This study also reflected that hard of hearing students didn't show serious problem in integrated setting like deaf students.

According to the finding of this study, hard of hearing students liked integration settings. In contrast, totally deaf students preferred to learn in special class in ordinary school. They preferred special class because of the fear of academic competition with hearing students in unconducive classroom situation. The current condition doesn't allow HI students to attend with normal hearing students. Regular teachers also forwarded that HI students are disadvantaged in integrated setting because of barrier of media of instruction. Then, what should be done for successful placement? For successful placement

of HI student in regular classroom this finding suggests the following two supportive strategies to be taken into consideration facilitating social interaction and educational environment.

4.6.1 Facilitating Social Interaction

Mainstreaming may be judged in the extent to which a student with disability is accepted, interacted, chosen as a friend and liked by other students. The findings of this study indicated that social interaction between hearing students and students with HI is much less than that among hearing students and even less or no interaction with teachers. Poor interaction is attributed to lack of communication skills of hearing students and teachers. This finding consistently agrees with the finding of Gearheart et al., (1996) that insufficient social skills, such as ability to initiate, interchanges, and continue conversation or discussion in classrooms, in play ground and after school are limited because of communication problems. Facilitating interaction in order to avoid communication barriers between teachers, the environment and the hearing student is the most crucial.

If the regular classroom teachers maintain supportive climate, they should have sign language skill that reward social interactions. In this finding from HI, hearing students and teachers that it was reported that in order to obtain successful integration, teachers and hearing students should have the knowledge of sign language. This fosters socializations. Teachers should encourage and develop procedures to enhance such interactions. If the objective is the successful integration it is better to increase and facilitate interactions with hearing students, then systems must be developed to foster and enhance these interactions. Fish (1985) concluded that it is the responsibility of regular classroom teachers to design specific interventions to facilitate communication and interaction by helping hearing students become more proficient at communication skills.

4.6.2 Facilitating Educational Environment

Deaf and hard of hearing students were forced to join hearing high school without any assistance from sign language interpreter. The hearing teachers lack proficiency in sign language and tend to promote orals or their spoken language. HI students lacked strong role models for their academic achievements. The deaf may be disadvantaged in getting good quality education.

The use of a classmate as helpers can be of considerable assistance to a student who has a HI. The peer may sit next to the HI student and turns to the correct pages or takes notes, may clarify something the teacher has said by repeating it facing the student who is HI or by writing it down. As can be seen in this study, the HI themselves train close friends the sign language, and were being helped by these buddies. The regular teachers have the responsibility of creating conducive environment in coordinating the students and arranging the seating in classroom settings. Taylor et al., (1995) in their finding demonstrated that appropriate seating of a student with a HI depends partially on the type of hearing loss. The second row placement is helpful to hard of hearing to listen and deaf students to read lip.

Alternative teaching strategies such as curricular adaptation, previewing new materials and preteach-teach-postteach considerable points while teaching HI students in regular classrooms. Professionals in the area, such as Taylor et al., (1995) and stressed that easier reading materials combined with captioned films, vocabulary lists presented before verbal presentation, study guides that focus on critical concepts, and visual representations help students who are HI learn along with their hearing peers. Whenever possible, the teacher should briefly discuss the topic with the student who has difficulty of hearing before the actual class presentation. When giving an assignment, teachers should write it on the board in addition to giving it orally. The preteach-teach-postteach strategy assumes that the resource teacher and regular class teacher

have a cooperative, mutually respectful working relationship. The regular teachers inform the resource teacher the difficult concept to be taught.

Finally, this study suggests that for improving the learning environment, the community, governmental and non governmental organizations have the responsibilities creating conductive environment since the HI students continued to join in regular schools. They should be shaped in theory and practice. All relevant persons should participate in creating conducive learning environments.

Chapter Five

5. Summary, Conclusion and Recommendations

A. Summary of the Study

This research explored the social and academic conditions of integrated HI students in regular classes. It sought to assess the opinions of HI students, regular teachers, regular classmates and administrative staffs. It also assessed HI students' social and academic problems. Qualitative case study method and ecological perspective were employed for the detailed assessment of the situation of integrated HI students in regular setting. Purposive sampling technique was used to select the participants.

Sample of the study consisted a total of 18 respondents - 13 males and 5 females. The sample school was Wachemo Comp. Sec. School in Hadiya Zone, Hossana, SNNPR. Sample of HI students divided into three-division - pre-lingual deaf, post lingual deaf and hard of hearing students. Supportive key informants were four regular teachers who have participated in teaching integrated classrooms, four classmates and administrative staffs (educational experts).

Four research questions were raised in this study

a) What are the social problems of integrated hearing-impaired students in regular classroom?

b) What are the predominant academic problems of integrated hearing-impaired students?

c) What factors contribute to social and academic problems of HI students in integrated settings?

d) What modifications and adaptations are necessary to provide conducive environment to facilitate the learning of HI students in regular schools?

All severely HI informants were not agreeing in mainstreaming HI students in current situation. Prelingual deaf students prefer the special class /unit in ordinary school because of poor media of instruction in regular classroom. Post lingual deaf student prefers the resource room with resource teacher because special class isolates them from hearing people. Furthermore, it is not good for later social life. However, hard of hearing students preferred integration of themselves in regular class. They reported that regular classes are appropriate to hard of hearing students.

In addition, regular teachers, and students and administrative staff informants showed positive opinions with regard to the integration of HI, explaining that integration setting is important to social relation at the same time to reduce negative social attitudes to wards HI people.

However, the findings of this study show that there are different factors discouraging integration of HI student, such as the communication barriers, absence of interpreter, the awareness level of hearing school community, shortage of trained man power, and lack of multidisciplinary coordination.

All of the participant HI students agreed that HI people are fully capable of developing positive relationship with hearing peers when satisfactory communication is used. As it is confirmed in this study except the barrier of communication, their social experiences with hearing school community was good. However, barriers of communication and unconducive environment made problems for socialization and to cope up with good relationship with school community. In this study, it was discovered that to avoid language and communication problem from the regular settings sign language skill training of teachers and hearing peers might solve the problem.

Furthermore, inappropriate placement of HI students in regular classroom decreased their academic achievements. This was indicated in Tables 5 and 6 where academic comparisons of class averages were made. In addition, the teachers and hearing peers indicated that HI students in regular classroom are

disadvantaged in traditional academics. It was discovered that due to verbally dominated classroom situation, HI students were non-participant in classroom discussion and exchange of information with their teachers and hearing peers. Thus, they miss a lot of valued information, which are passing from the teachers and classmates. This means, the deaf may be disadvantaged in getting good quality of education because communication is at the heart of the educational process. However, one of the hard of hearing students said that his academic achievement improved in regular classroom because he used amplification effectively and he got chances of developing hearing people language.

The academic performance of HI in Tables 5 and 6 indicated that the mean score of HI is below the mean average of the class, except post lingual deaf student and hard of hearing students. Furthermore, this finding suggests that the severity of hearing loss, the age of its onset, and the hearing status of the students are related to academic success and failures. And also, the major contributing factors to low academic achievements are absence of interpreter; teachers inability to communicate with sign language, unattractive teaching methods, unconducive learning environment.

This finding is consistence with finding Taylor et al., (1995) that the physical teaching environment for the students who are hard of hearing should be like the physical environment for hearing students. That is, students who are hard of hearing and post lingual deaf students should receive their education with in an integrated teaching environment. In contrast, the more serious the hearing impairment the greater the probability that school performance would be deficit. Furthermore, Ross (1979) added that hearing loss also leads the HI students to communication gap with the hearing community around them, which deprives them of social growth and education. Teachers and hearing peers' inability of sign language aggravates the problem further with respect to both their socialization and academic work.

Additionally, this study found that for successful placement of HI students in regular classroom, teachers and hearing peers should have the knowledge of sign language. This fosters inclusive education. It is also better to increase and facilitate interactions systems with hearing students. Teachers should encourage and develop procedures to enhance such social interaction in school community, because the central resource for an integration program is its staff. When integration takes a form of special center to an ordinary school the staffs of that school occupy a key place.

The teachers in the high school lack proficiency in sign language. Therefore, HI students lacked strong role models at their academic achievements. Hence, they lacked good quality of education. Equitable treatment of deaf and hearing students would be attained only if deaf students get their education using sign language as a medium of instruction. When successful integration is expected not only benefit of socialization is looked but also benefits of academics will be carefully observed. The hearing students in this study complained about the lack of the sign language interpreter in their secondary school. The presence of skilled sign language interpreter has been a significant benefit to HI students in integrated settings. Moreover, Schulze et al., (1988) stressed that HI students require adaptive instructional methods, such as a sign language interpreter within this general education classrooms.

At the end, this study suggests the use of classmates as helpers and preferential seating can be also of a considerable assistance to facilitate deaf education. Furthermore, alternative teaching strategies such as, curricular adaptation, previewing new materials, and preteach-teach-postteach are considerable responsibility of teachers in regular classrooms. A total coordination of the program will be a key to a successful academic achievement and social relationship.

B. Conclusion

Assessing the social and academic conditions of integrated HI students in regular classes, using the opinions of HI students, regular teachers, regular peers and administrative staffs were the major concerns of this study.

There seems to be a general agreement that integration is favored for its social and academic benefits particularly for students with special needs. The obtained result in this study did not confirm this understanding.

As it was seen from the result, though the totally deaf students indicated negative attitude toward integration, the hard of hearing students, regular teachers and students and administrative staffs appeared to have somewhat positive opinions toward integration.

The major factors for discouraging the integration of HI students were mainly related to communication problem, unconducive environment and to feeling of incompetence in facing challenges that may be encountered in the integration process.

Adherents of integrated school for the HI children presuppose: the presence of adequate well qualified teachers; presence of individualized curriculum; availability of qualified sign language translator; and conducive physical environment for the hearing impaired children (Taylor et al., 1995).

Hence, there appears to be no conducive situation to promote the integration of HI students in to regular classrooms particularly in the school that was studied. Thus, the situation in turn suggests that many efforts have to be made to avoid the existing communication barriers between the HI and the learning school community.

Furthermore, hearing impairment causes psychological and social difficulties because it interferes with a person's ability to communicate effectively. Moores (1996) argued that the effects of hearing loss are pervasive and can create

psychological stress. Communication plays an essential role in maintaining relationships and quality of life, and hearing loss deprives not only the individual but also family and friends of easy communication. Repeated instances of unheard or incorrectly heard communications are frustrating for the individual and every one who converses with.

Hearing loss limits a person's ability to enjoy many forms of entertainment, discussions and dialogues. It also limits access to classroom information that is normally available through personal communication.

This study finding suggested that, HI students have good social experience with hearing school community, despite the communication barriers to develop appropriate relationship in regular settings. Absence of sign language skills among teachers and other hearing people may lead to poor social interaction pattern between the deaf students and hearing people.

Classroom observation and the interview data consistently showed that HI students interact more frequently with hearing peers and less frequently with teachers. There was, more communication among those with hearing impairment, because they have similar identity and common language. This stress of social integration means that the educational needs of the HI were neglected in the classroom.

From the findings it appears that hard of hearing, post lingual and prelingual deaf students showed academic achievement differences in integrated settings. Their differences may be due to their language and communication ability to interact with the surrounding environment. Therefore, students with linguistic experiences succeed educationally, whereas students with deficit in linguistic experiences succeed less. Besides, Anastasiw (1993) in his study explained that HI students lacked one of the main channels for the accusation of information. This HI problem leads them to difficulties in acquiring information given in the class as effectively as do the hearing students. This affected their academic achievements. Therefore, we cannot make firm generalization about the way in

which students that is deaf and hard of hearing function academically. Research suggested that students who are deaf have much difficulty in acquiring reading skills. Therefore, academic performance differences happened because of deafness' influences. The other factors like communication barriers, lack of interpreter, multidisciplinary coordination and unconducve environment may also affect the academic performances of HI students.

From the finding it appears that language and communication problems are the most predominant problems for social relationship.

On the other hand, language is an important means of establishing and solidifying social and personal ties between the child and his/her parents, teachers and all in the social milieu.

Deafness could have enormous effects on the individual's holistic development. Children may have slow language development in all linguistic experiences, less success educationally, problems of adjustment socially and other environmental restrictions (UNESCO, 1984). Such delayed and slow developments can influence a deaf child's ability to develop communication skills, such as reading, writing and speaking / signing. The extent of these difficulties in language arts depends on the child's degree of HI, and age at the onset of loss (Gearheart et al., 1992).

This study indicates that deprivation of language and communication resulted in deaf students' lagging radically behind the normal development, in educational, social and linguistic functions. It may be difficult to generalize the findings of this study to the population of deaf in Ethiopia from such qualitative study consisting of a small number of informants. However, from experiences and observations of similarities in Ethiopia such as the poor socio-economic situations, poor teacher training in special needs, absence of interpreters, barrier of communication, absence of early intervention and assessments, poor educational provision and other relevant factors may be possible to generalize of the findings of this study to the HI students in Ethiopia. Furthermore, some

of the previously done researches (Ababa, 1996; Alemayow T/M, 2000; Tibebu, 1991; Alemayew T/M, 2003) also come with similar discouraging results regarding communication, social, and academic developments of deaf students.

Finally, it was found that provision and adaptation of social and educational environment of the regular classroom is the first and foremost important condition if successful integration is expected. Schools must work hard to enable HI to integrate educationally as well as socially in all contexts around the school.

C. Recommendations

The prevailing conditions within the regular school, dominant presence of lectures verbally, absence of sign language interpreter and communication barriers leave HI students in difficult situation.

Therefore, effective measures need to be taken to tackle the prevailing problems that work against the integration of HI students. Depending upon the scope of the problems and areas of emphasis for taking actions, measures can be taken at several levels.

I. Measures to be taken by the Government

- Even though policies and legislations are issued, there appears to be lack of clarity and specification. Therefore, there must be clearly stated guidelines to provide special education to children with different types of disabilities. Legislations, educational policies, and teacher training programs also need to be progressively updated to realize integration as an education modality.

- Several studies have indicated that early intervention for HI children can facilitate their successful integration with their hearing peers (e.g., Moores, 1996). The government should encourage the preschool and elementary provision for special education for HI children at a

sufficient level. This may serve as a foundation to successful social and academic integration.

- Regardless of the school, curriculum, facilities, or other aspects of the setting, if the hearing teacher is not qualified, sensitive, and able to communicate with the hearing impaired, the students will not achieve, as they should. Hence, relevant teachers in ordinary schools should receive special training.

- Before integration is practiced, it should be made sure that the special needs of the HI students are well understood by the school administrators, regular teachers and the hearing peers.

- Textbooks were not suitable to HI students; calculation subjects on how to solve the problems; reading, speaking and listening skills in language did not consider the deaf. Even, in teachers guide nothing was mentioned how to treat HI students. Therefore, special consideration would have to be given by curricula designers to make the curriculum compatible with the special needs of the hearing impaired.

- To overcome language and communication problem between teachers and HI students and to enhance the integration process, sign language skill training should be given for teachers through pre and in service programs.

- Experts, administrative staff from Zone, Woreda and the school must play a significant role in improving, organizing, and planning the learning environment of HI in integrated settings.

- Government can facilitate (or collaborate) the involvement of NGO's to help develop schools for the need.

II. Measures to be taken at School Level

Since HI children are parts of the school community, they should enjoy a rewarding social and academic life with their hearing peers. Therefore, it is highly pertinent to remove the existing barriers between the HI and the hearing school community. To do so, the preconceived beliefs to wards HI students, the social and academic achievement problems need to be improved. To achieve this end, at least the following measures should be taken at the school level.

- The school should create awareness among the school community about the nature of hearing impairment and of the HI children. This would help regular classroom teachers and students to perceive HI students as persons with a potentiality to grow up.

- In order to improve HI students' achievement, complete and clear communication must exist between the teacher and other hearing students. The school system should pay attention to getting an interpreter in the regular classroom.

- Equitable treatment of deaf and hearing children would be attained only if deaf students get their education using sign language as a medium of instruction. Therefore, the presence of skilled sign language interpreter and knowledgeable sign language personnel would be a significant benefit for HI students in integrated settings.

- Continuous assessment of HI students social and academic achievement should be made by the teachers and school administration.

- There should be collaboration between special schools and regular teachers for sharing experiences and to provide ongoing support to the hearing impaired.

III. Measures to be taken by Teachers

- Teachers should be oriented about HI students so that they can have better understanding to promote integration.
- To teach, HI student in regular education is not at the present time structured or equipped adequately to meet the unique needs of these students. Therefore, special and regular teachers should work hand-in-hand for successful integration through sharing of experiences.
- In integrated classrooms the most common problem is communication problem with HI students. Therefore, regular classroom teachers should have the skill of sign language to interact with HI students.
- Since HI students are mainstreamed in regular classrooms, these students need sign language interpreter as well as supplementary resource assistance in the classroom.
- If HI students could not get appropriate provisions from the school and the social system, they can't succeed in academic and interpersonal relationship. Hence, teachers have the major responsibility of creating conducive learning environment and coordinating pupil's instruction integrated settings.

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Appendix A

Addis Ababa University

School of Graduate Studies

Department of Psychology

A Semi-structured Interview Guide for Hearing Impaired Students

The principal purpose of this interview is to obtain data for a study intended to investigate social and academic conditions of integrated students with hearing impairment in regular school.

The study will be useful for various professionals, organizations and policy makers who are working in the area of hearing impaired children. You were selected for this study because you could provide adequate enough information on the issue. Therefore, your unreserved co-operation in providing the most genuine information will be appreciated. Thank you for the willingness to complete this questionnaire.

Direction: Listen to the following items and the alternatives containing your possible reactions, opinions and feelings. And then provide the necessary information signing to the person

Part I:- Background Information of Hearing Impaired Students

1. Sex _____ Age _____ School _____ Grade _____
2. Woreda _____ Zone _____ Region _____
3. Language you speak _____ Your family speaks _____
4. Ethnic group _____
5. Religion
   - 5.1 Orthodox Tewahido Christian
   - 5.2 Islam
   - 5.3 Catholic
   - 5.4 Protestant
   - 5.5 Other, specify _____

6 Age of onset (of the hearing Impairment)
   - 6.1 During the birth
   - 6.2 After 3 years
   - 6.3 After 6 years or language experienced

7 Causes of your hearing impairment
   - 7.1 Please specify _____

8 Early treatment of HI
   - 8.1 Local treatment (Local medicines)
   - 8. 2 Medical treatment
   - 8.3 Spiritual treatment (Holy Waters & Wretches)

8.4 Others (specify) _____

9 Current status of hearing Capacity

9.1 Mild 9.2 Moderate

9.3 Moderate Severe 9.4 Profound

10 Current auditory examination result _____

11 Average hearing loss _____

12 Academic background of your parents

12.1 Father

12.1.1 Illiterate

12.1.2 Reading and writing

12.1.3 Primary school (grade 1-6)

12.1.4 Junior primary sec. school (grade 7-8)

12.1.5 High school (grade 9-12)

12.1.6 12+1/ +2

12.1.7 Degree or above

12.2 Mother

12.2.1 Illiterate

12.2.2 Reading and writing

12.2.3 Primary school (grade 1-6)

12.2.4 Junior primary sec. school (grade 7-8)

12.2.5 High school (grade 9-12)

12.2.6 12+1/ +2

12.2.7 Degree or above

13 Parental occupation (clearly specify)

13.1 Father _____

13.2 Mother _____

14 Average monthly income of your family _____

15 Parental living condition

15.1 Living together

15.2 Divorced

15.3 Separated

15.4 Father dead

15.5 Mother dead

15.6 Both dead

16 Parental hearing condition

16.1 Both are normal

16.2 Mother only has hearing loss

16.3 Both of them have hearing loss

16.4 All brothers and sisters are normal

16.5 Father only has hearing loss

16.6 One of my brother or sister has hearing loss

17 The time you started to use sign language

17.1 After you entered elementary school

17.2 Before you entered elementary school

18 School you attended previous years

18.1 Special residential school 18.2 Special day school

18.3 Special class in regular school 18.4 Integrated regular school

18.5 Other (Specify) _____

19 How do your family members view your hearing impairment? _____

20 Early parental help in training sign language and academic assistance

20.1 Very good 20.2 Good 20.3 Poor 20.4 No help

Part II: Integration of Hearing Impaired in Regular School

1. Do you like placement of HI students in regular school?

   1.1 Yes 1.2 No

2. If your answer in question number 1 is 'yes', explain why? _____

3. If your response is 'no' in question number 1, what factors are required for successful integration _____

4. What kind of advantages do you gain in integrated setting?

   4.1 Social interaction

   4.2 Academic achievement success

   4.3 Exposed to excellent language model

   4.4 No suffer long separation from my families

   4.5 All mentioned above are advantages

   4.6 No advantages

5. What disadvantages did you face in integrated regular school?

   5.1 I feel lonely 5.2 Socially rejected

   5.3 Stress of daily competition 5.4 All above mentioned are disadvantages

   5.5 No disadvantage

6. To whom is integration more appropriate in regular school?

   6.1 Hard of hearing 6.2 Deaf 6.3 Other (specify) _____

7. Why do you think that integration is more appropriate for hard of hearing? _____

   _____

8. Where is the best educational place for the deaf student? _____

   8.1 Residential school 8.2 Special day school

   8.3 Special class in regular school 8.4 Regular school

   8.5 Resource room 8.6 Itinerants program

8.1.1 If your answer is question number 8.1, briefly specify the reason _____

8.1.2 If your response is question 8.3, briefly explain the reason _____

8.1.3 If your response is question number 8.4, briefly explain why? _____

8.1.4 If your response is 8.5, briefly give the reason _____

9. Do you use hearing aid? 9.1 Yes 9.2 No

9.1.1 If your response is "Yes", when? _____

9.1.2 If your response is "No", why not? _____

10. If you say integration cannot be implemented, please explain your reason? _____

11. What would you suggest to make integration more effective in the regular classroom in the future? _____

12. If you don't support the integration of HI students, what are the main possible problems you expect that would hinder integration? _____

13. Do you believe that integration will reduce the negative social stigma attached to disabilities?

13.1 Yes 13.2 No

13.1 If you believe, how? _____

13.2 If don't believe, specify the reason _____

Part III: Social Interaction of HI Students

1. HI people are fully capable of developing positive relationship with the hearing peers when satisfactory communication is used?

   1.1 Yes 1.2 No 1.3 Do not know

2. Do you feel frustration, loneliness and helplessness in regular settings?

   2.1 Yes 2.2 No 2.3 Sometimes

3. If your response is 'Yes', mention some of your reasons? _____
4. If your response is 'No' mention some of the reasons. _____
5. Is it possible to overcome language and communication barrier from regular classroom? Explain briefly _____
6. How is it possible to over come language & communication barriers from regular classroom setting?

   6.1 Teaching sign language to teachers

   6.2 Teaching sign language to students

   6.3 It is impossible to teach for both

   6.4 Teaching for both

   6.5 Other methods (specify) _____

7. Who do you prefer to make friendship with?

   7.1 Hearing people 7.2 HI people 7.3 No body

8. With whom do you often interact with in regular school?

   8.1 Teachers 8.2 Hearing students

   8.3 Hearing impaired student 8.4 Others (specify) _____

9. How is the social experience with hearing student in regular school? _____

10. What solution would you suggest to overcome social interaction problems in regular setting?

11. What methods do you use in order to interact with hearing peers in regular school? _

12. Do you think that sign language is equally accessible to both hearing and non hearing?

    12.1 Yes 12.2 No 12.3 Do not know

13. Did regular hearing students develop good relationship with HI students

    13.1 Yes 13.2 No

    13.1.1 If your response is 'yes' explain the reason? _____

    13.1.2 If your response is 'no' explain the reason._____

14. Some times HI children show social maladjustment problem. Would you tell me why it is so?

    _____

15. Will integration enable students with and without HI to live together, share their_experiences and respects one another?

    15.1 Yes 15.2 No 15.3 Do not know

16. For whom is it better to know sign language in order to help?

    16.1 Teachers 16.2 Students

17. Do you like hearing peers and teachers?

17.1 If you like them tell the reason._____

17.2 If you don't why not? _____

18. What factors contribute to social problems of HI students in integrated setting?____

19. What factors contribute to effective social interaction of HI students? _____

Part IV:- Academic Achievement Problem

1. Does placing you in regular classroom increase your academic achievement?

   1.1 Yes 1.2 No

1.1.1 If your answer is 'no' please specify the reason? _____

2. How often do you and your teachers discuss on how to overcome academic problems?

2.1 Always 2.2 Sometimes 2.3 Rarely 2.4 Never

3. If your answer is "3" and "4" how do you solve your academic problems? Indicate in brief___
4. How do you evaluate the environment of your home family support? _____
5. How do you attend your classes?

5.1 Regularly 5.2 Sometimes 5.3 Rarely 5.4 Not at all

6. Do your teachers usually give you feed back for the home work and class work?

6.1 Yes 6.2 No

7. On what do you rely on during the process of instruction?

7.1 Hearing 7.2 Vision 7.3 Both 7.4 Other

8. Do you ask questions when you are not clear about what the teacher teaches?

8.1 Yes 8.2 No

8.1 If your answer is 'yes' how does your teacher treat you? _____

9. Do you have hearing classmates who can help you in interpreting?

9.1 Yes 9.2 No

10. How often do they help you?

10.1 Sometimes 10.2 Always 10.3 Rarely 10.4 Occasionally

11. Do you think that inability to communicate with hearing people can delay your academic achievement? 11.1 Yes 11.2 No

11.3 How? Specify the reason? _____

12. Which one is more difficult to you?

12.1 Reading 12.2 Writing 12.3 Spelling 12.4 All

13. If one of the skills in question 12 is difficult to you please mention the reason _____
14. Which subject more you like?

14.1 Amharic 14.3 Science subjects
14.2 English 14.4 Social studies

15. During the examination or when you don't understand the subject, how do you communicate with teachers or hearing students?

15.1 By writing 15.3 Sign language
15.2 By indicating 15.4 You don't ask

16. Is there any one who discourages your learning at home?

16.1 Yes 16.1 No

16.1.1 If "Yes", why? _____

16.1.2 Are there in school? Who are they? _____

17. Is the teaching method of your teacher attractive?

17.1 Yes 17.1 No

17.1 If not, specify the reason? _____

18. The subject matters your teachers present are usually

18.1 Clear 18.2 Sometimes clear 18.3 Not clear most of the time

18.4 Others (Specify) _____

19. Are the textbooks suitable for the HI students?

19.1 Yes 19.2 No

19.1.1 If you say no, what do you suggest _____

20. What are the predominant problems for you academic achievement? _____

21. What factors contribute to your low academic achievement? _____

22. What factors contribute for better academic achievement? _____

Part V: Provision and Adaptation of School Environment

1. Do you communicate with your teachers?

1.1 Yes 1.2 No

1.1.1 If your response is 'yes' how do you communicate?

1.1.1.1 Sign language 1.1.1.3 Body language

1.1.1.2 Writing 1.1.1.4 Other (specify) _____

1.1.2 If your answer is 'No', please explain briefly why you don't communicate? _____

2. Do you benefit by reading lips of teachers and hearing peers?

2.1 Yes 2.2 No

3. Most of the time in the integration classroom, the teacher uses:

3.1 Writing on the blackboard 3.2 Talking only

3.3 Reading 3.4 Other methods (specify) _____

4 Do your teachers take the initiative to help, when you don't understand?

4.1 No 4.3 Try to help in free time

4.2 Ignore 4.4 They don't want to help

4.5 Others (specify) _____

5 If the subject is not clear to you what kind of methods you use personally?

6 Do your teachers use visual aid? 6.1 No 6.2 Yes

7 Do you use a hearing aid? 7.1 Yes 7.2 No

7.1.1 How much does it help you? _____

8 Who supports you in regular setting? _____

9 Who takes the more initiative to help you in regular setting? _____

10 Is there an interpreter in the regular class? 10.1 Yes 10.2 No

11 Do you get some support at home? 11.1 Yes 11.2 No

12 Do you get some support out of school? 12.1 Yes 12.2 No

12.1 How much does the support help you? _____

13 What kind of learning problems have you observed in your classes? _____

14 What kind of modifications do you suggest be in regular classes? _____

Appendix B

Addis Ababa University

School of Graduate Studies

Department of Psychology

Interview Guide for Teachers

Dear Sir/Madam, first of all I would like to think you for your willingness to be my interviewee this morning.

The principal purpose of this interview is to obtain data for a study intended to investigate the social and academic conditions of integrated students with hearing impairment in regular school. The study will be useful for various professionals, organizations and policy makers who are working in the area of hearing impaired children. You were selected for this study because you could provide adequate information on the issue. Therefore, your unreserved cooperation in providing genuine information will be appreciated. The interview will be tape recorded in order not to miss any relevant information to transcribe it easily. However, the information will be kept confidential.

Direction: Listen to the following items and the alternatives containing possible reactions, opinions and feelings expected from you. And then provide the necessary information orally to the person reading the questions to you.

Interview Questions for Teachers

1. What is your attitude toward integration in regular school?_____
2. Is it possible for HI students to learn in regular classroom?

2.1 If you say 'Yes' why? (Specify the reason) _____

2.2 If you answer is 'no' why not? (Specify the reason) _____

3. Do you like to teach students with HI with hearing peers? _____
4. Do you know that it is the right of children with HI to learn in regular setting? _____
5. Did you find that HI students have better results in academic achievement when compared with hearing students? _____
6. If you think that it is good to integrate HI students in regular class, what measures would you suggest be taken? List the measure to take? _____
7. Do you think that positive attitudes of teachers play a role for effective integration? _____
8. How capable are you in using sign language?

   8.1 Low ability 8.3 Moderate ability

   8.2 High ability 8.4 No ability
9. Do you use teaching aids in class? 9.1 Yes 9.2 No
10. How often do you help HI students in your regular class?

    10.1 Always 10.2 Sometimes 10.3 Never 10.4 Other _____

11. Which of the following do your HI students show?

    11.1 Coming without doing exercises

    11.2 Not willing to take part in class activities

    11.3 Disturbing the class

    11.4 Other (Specify) _____

12. Do you have any interaction out of the classroom with HI students?

    12.1 Yes 12.2 No

13. From the following places, in your opinion, where is the best place to educate HI students?

    1. Residential school 2. Special day school

    3. Special class in regular school 4. Resource room

    5. Itinerant teaching program

14. How often do HI students discuss their academic difficulties with you?

    14.1 Frequently 14.2 Sometimes 14.3 Rarely 14.4 Never 14.5 Other

15. Do you give them class work, homework and assignments? 15.1 Yes 15.2 No

15.1.1 How do they perform? _____

15.1.2 If not, how do you help them? _____

16. What problems do you usually face while teaching HI students? _____

17. What kind of learning problems do you observe among your HI students? _____

18. What kind of modification and adjustments are necessary for successful integration? Please list the points _____

19. What kind of strategies do you use in solving the problem? _____

20. Are the instructional materials, specifically textbooks, appropriate for the hearing impaired student? 20.1 Yes 20.2 No

20.1 If they are not appropriate, list the reason _____

21. Do you make any modification on the curricula when you teach the HI students?

    21.1 Yes 21.2 No

22. If not, what are the problems faced because of lack of modification? _____

23. In your opinion, what are the major academic problems of HI students in regular class? ____

24. What are the major social problems of HI students in integrated setting?

25. Do you think that social problems affect academic achievement?

26. Is it the responsibility of teachers to create circumstances for students with and without HI to have positive relationship and love one another? 26.1 Yes, it is 26.2 No, it is not

27. What factors contribute to the social problems of HI integrated students? _____

28. What factors contribute to the academic problems of integrated HI students? _____

Thank you for the assistance

Appendix C

Addis Ababa University

School of Graduate Studies

Department of Psychology

Interview Guide for Hearing Students

Dear Students, first of all I would like to thank you for your willingness to be my interviewee this morning.

The principal purpose of this interview is to obtain data for a study intended to investigate social and academic conditions of integrated students with hearing impairment in regular school. The researcher kindly requests you to express your views and suggest the possible measures the school should take in order to improve the social and academic conditions for the hearing impaired students in integrated setting. The interview will be tape recorded in order not to miss any relevant information and to transcribe it easily.

Direction:- Listen to the following items and the alternatives containing your possible reactions, opinions and feelings. And then provide the necessary information orally to the person reading the questions to you.

Interview of Regular Hearing Students

1. What is your attitude toward being integrated with hearing impaired students in regular school?
2. Do you like integration of HI students with regular students?

   2.1 Yes 2.2 No
3. If you support the integration of HI students in regular class specify the reason why you support it? _____
4. If you don't support the integration of HI students in regular class, specify the reason why you do not support it? _____
5. What conditions are required for successful integration? Please list the points._____
6. Do you know that it is the right of HI students to attend together with normal students?

   6.1 Yes, I know 6,2 No, I don't know
7. What do you think are the main problems that hinder integration? _____
8. What disadvantages do the HI face in integrated setting?

   8.1 They feel lonely 8.2 Socially rejected

   8.2 Stress of daily competition 8.4 All above mentioned are disadvantages

   8.3 No disadvantage 8.5 Any other disadvantage _____

9 Do you believe that integration will reduce the negative social stigma attached to disability?

10.1 Yes 10. 2 No

10 Do you help HI student in your class? 11.1 Yes 11.2 No

10.1 How often do you help HI students in your class?

10.1 Always 10.2 Sometimes 10.3 Never 10.14 Other _____

10.2 If you don't help, why not? _____

11 Do you do your group work, homework and assignments with HI students?

11.1 If you do, why? _____

11.2 If you don't , why not? _____

12 Do you make any interaction in and out of the classroom with HI students?

12.1 Yes 12.2 No

13 What method do you use to interact with hearing impaired students in regular school?

13.1 Reading 13.3 Sign Language

13.2 Writing 13.4 Speaking

14 What problems have you observed that integrated HI students face while in the learning and teaching process? _____

15 Do you think that sign language is equally accessible to both hearing and non hearing?

15.1 Yes 15.2 No

16 How is it possible to overcome language and communication barrier between hearing and non-hearing students in regular setting? _____

17 What are the major academic problems of integrated HI students that you have observed? __

18 What factors contribute to the academic problems of integrated HI students? _____

19 What are the major social problems of HI students in regular school? _____

20 What factors contribute to the social problems of integrated hearing impaired students? ____

21 What kinds of improvements do you suggest for to successful integration? Please list the points? _____

22 If you have additional comments for improving the learning of HI students in regular school, please specify them _____

Thank you for the cooperation

Appendix D

Addis Ababa University

School of Graduate Studies

Department of Psychology

Interview Guide for Experts

Dear sir/Madam, first of all I would like to thank you for your willingness to be my interviewee this morning.

The principal purpose of this interview is to obtain data for a study intended to investigate the social and academic conditions of integrated students with hearing impairment in regular school. The study will be useful for various professionals, organizations and policy makers who are working in the area of hearing impaired children. You were selected for this study because you could provide adequate information on the issue. Therefore, your unreserved cooperation in providing genuine information will be highly appreciated. The interview will be tape-recorded in order not to miss any relevant information to transcribe it easily. However, the information will be kept confidential.

Direction: Listen to the following items and give your opinions and feelings. Provide the necessary information orally to the person reading the question to you.

Interview for Experts

1. Is it possible for HI students to learn in regular school? _____
2. What is your attitude toward integrating of HI children in regular school?_____
3. Do you know that it is the right of children with HI to learn in regular setting? _____
4. If you think that it is good to integrate HI students in regular class, what measures would you suggest be taken? _____
5. Do you think that positive attitudes of teachers play a role for effective integration?__
6. If your response is 'yes' indicate briefly how teachers can play a role of integration?__
7. As a professional, what do you suggest to help these children in integrated setting?___
8. Have you observed the kinds of problems HI children face in a regular school? _____
9. If you have observed some problems, what kind of strategies do you suggest to solve the problem?_____
10. What kinds of modification and adjustments are necessary for successful integration? Please, list the points? _____

11. Is it only the responsibility of the teachers to create conducive environment for students with HI in regular school? _____
12. Who are additional responsible persons in creating conducive environment? _____
13. If you have additional comments for improving the learning of HI students in regular school, please specify them._____
14. These HI students are integrated in regular classes without professional help. What are your comments on this issue? _____
15. Who is responsible for the training of the professionals? _____
16. The new Education and training policy, Article 41, declares that "Every Ethiopian nationals has the right to equal accesses to publicly funded social services" Do you think that these HI citizens are appropriately treated in regular class? _____
17. From the following, in your opinion, where is the best place to educate these HI children.

    17.1 Residential special school 17.2 Day special school

    17.3 Special class in regular school 17.4 Resource room

    17.5 Itinerant program

Thank you again!

Appendix E

Classroom Observation Check List

Date: _____ Grade: _____

Subject: _____ Period: _____

1. Encouraging and motivating HI students learning

   Excellent ☐ V. good ☐ Good ☐ Not good ☐

2. Teacher's communication with HI students

   Frequent ☐ Sometimes ☐ Rare ☐ Never ☐

3. Teacher using sign language Frequent ☐ Rare ☐ None ☐

4. Teacher's use of teaching aid Frequent ☐ Rare ☐ None ☐

5. Teacher's potency to help HI

   Excellent ☐ V. good ☐ Good ☐ Not good ☐

6. Giving class work and checking

   Frequent ☐ Some times ☐ Rare ☐ None ☐

7. Environmental sounds that disturb HI students

   Somewhat ☐ Not at all ☐ Yes, it does ☐

8. Environmental condition attracts attention of HI students

   Less available ☐ Not available ☐ More available ☐

9. HI students working initiatives

   Less active ☐ Average ☐ More active ☐

10. Number of students in the classroom

    Less than 50 ☐ More than 70 ☐ More than 80 ☐

11. HI students interaction with hearing students

    Always ☐ Sometimes ☐ Rare ☐ Not at all ☐

12. HI completion of class works Always ☐ Frequently ☐

    Sometimes ☐ Rare ☐ Never ☐

13. HI completion of homework Always ☐ Frequently ☐

    Sometimes ☐ Rare ☐ Never ☐

14. HI students participation compared to hearing students

    Always ☐ Sometimes ☐ Rare ☐ None ☐

15. Performance in academic subjects (of HI)

Better ☐ About the same ☐ Lower ☐

16. Interaction with hearing students out of classroom

None ☐ Below Average ☐ Average ☐ Above average ☐

17. Interaction with teachers out of classroom (of HI)

Less active ☐ Average ☐ More active ☐

18. HI students interaction with each other

Less active ☐ Average ☐ More active ☐

19. HI student's helping each other

Never ☐ Often ☐ Always ☐

20. Textbooks' availability to every student

Inadequate ☐ Adequate ☐ Highly adequate ☐

21. Time spent to do class work compared to hearing

Less than average ☐ Average ☐ More than Average ☐

22. Psychologists follow up

Frequent ☐ Sometimes ☐ Rare ☐ Not at all ☐

23. Administrative follow up

Frequent ☐ Sometimes ☐ Rare ☐ None ☐

Declaration

I, the undersigned declare that this thesis is my original work and has not been presented for a degree in any other university and that all source of materials used for this thesis have been duly acknowledged.

Name: Tesfaye Basha

Signature: _____

This thesis has been submitted for examination with my approval as University Advisor.

Dr. Habtamu Wondimu, Associate Professor

Signature: _____

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