VOCATIONAL EDUCATION AND SKILL TRAINING NEEDS OF HEARING-IMPAIRED STUDENTS

In some selected special Deaf schools

By

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Abstract

The aim of this study is to look into, the present conditions of educational practices that exist and prevail in primary/secondary, governmental/non-governmental, and day/boarding special schools for the deaf. The total number of the participants of the study were 166, where 115 Hearing-Impaired students of grades 7-12, 39 special school professionals, and 12 parents/guardians of the sampled hearing-impaired students.

The study revealed that the special needs educational services that are provided to the hearing-impaired students in governmental and non-governmental schools have certain disparities in terms of qualification, training and retraining of teachers, proper educational facilities and services, budget allocation, preparing and enabling deaf students to learn and work. Lack of vocational skills training guideline/strategy for deaf students' education is identified as to be the major precondition to start and continue the training.

With regard to the importance of vocational education and skill training needs for the hearing-impaired students, there is obviously a very noticeable need for it. That is, 89.9%, of the respondents (sampled students, school personnel, and parents) preferred to provide vocational skills education and training for deaf students.

CHAPTER ONE

1. Introduction

This introduction part of the study deals with basic information on background to the problem, objectives, statements of the problem, significance, delimitation, and definition of key terms used in the study.

1.1. Background to the problem

> *A handicapped child from birth to six years of age is a medical problem; from six to sixteen he becomes a two-fold problem, medical, and educational; and if left handicapped, he becomes a three-fold problem after adolescence, medical, educational, and vocational. (Miller, 1923:227)*

Miller (1923) acknowledged and indicated the magnitude of multiphase problems of the people with special needs. Among this group, deaf people have been misunderstood, and pitied for living in a hearing world. Most of them have experienced frustration, discrimination, and may continue to experience these to the extent that their language, education, and cultural needs are neither recognized nor understood. Therefore, there is a need to avoid these barriers and create with favorable conditions so that the handicapped child/adult to achieve a better quality of life.

From the historical point of view, deafness, blindness, and mental retardation have probably existed since the beginning of the human race, and early references clearly document abandonment of handicapped infants (Taylor, & Taylor, 1960). The majority of the society believed that physical deformities- impairments of vision, hearing, and mental retardation were the results of possession by demons. As the result of this, the society rejected, punished, or killed those who were affected.

In the prehistoric societies, survival depended on the fitness of each member. The society did not protect children who were born with defects. People generally left them to die at birth, or in infancy., In the Middle ages, disabled persons were often objects of amusement, and some times were used for entertainment. But, as time passed the negative attitude of the family toward handicapped child decreased step by step.

It was during the middle age that the churches began to foster human care for disabled people, and to provide asylums for them. The renaissance brought a greater belief in human life (Reynolds, and Lesterman 1987). Historically there are three stages in the development of attitudes towards the disabled persons.

Kirk, (1962:1) acknowledged these stages as follows:

> *First, during the pre-Christian era the handicapped were persecuted, neglected, and mistreated. Second, during the spread of Christianity they were protected. Third, in very recent years there has been a movement toward accepting the handicapped and integrating them in to society to the fullest extent possible.*

It is very important for people with or with out disabilities to have education and be able to work. Children with disabilities are often denied education and so they cannot find jobs when they grow up. It is obvious that the overall goals of education and rehabilitation programs are to prepare the individual to live and work in the society. If individuals with disabilities are to meet these goals, they must develop and integrate the necessary skills into a rewarding and satisfying life style. This includes learning about personal interests, needs, abilities, and realities of a modern world. This understanding can help individuals to make appropriate decisions about their vocational skills selection and training. To this end, special needs education as a scientific study and education of exceptional children can be said to have started in the 16th century. A Spanish Monk named Pedro Pounce de' Leon was successful in paving the way by teaching a small group of deaf pupils to enable them to speak, read, and write (Reynolds, and Lesterman, 1987).

The above mentioned event in the education of the hearing-impaired children has the first in the history of the special needs education (Van, 1987). Special needs education is the story of people: parents, teachers, and disabled children (Gear heart, *et.al* 1988). That is, special needs education is specifically designed instruction that meets the unique needs of an exceptional child.

According to Kokkola (1997), hearing-impaired children of the developing countries do have several problems and they lack proper education that meets their needs and enables them to compete in the society.

On the other hand, society want all school leavers to be socially competent. The demand from the hearing-impaired students is very significant in the hearing society. Most deaf students face language and communication barriers in the classroom, because teachers are poor signers and hearing impaired students are also poor oral communicators (Chimedza, 1999).

In most developed countries, steady progress is being made in giving the hearing-impaired youngsters opportunity to learn useful occupation and become contributing members of the whole community. Rehabilitaion authorities and special educators have long been aware that the increased respect for the disabled and recognition of their potentialities has in part resulted from the growing percentages of the disabled persons who can adapt to the life of the community as self-sufficient citizens.

Like in other developing countries, until recently few special schools have predominantly catered for the special educational needs of children in Ethiopia (Tirusew, 1999).

Special needs education with special schools is a very recent introduction to the educational system of the Ministry of Education of Ethiopia (Kokkola, 1997).

In fact, recognition of the problem and consequently establishing a special needs education section in the Ministry of Education had taken place over a decade ago, (MOE, 1988). The present Education and Training Policy of the country (TGE, 1994) has also shown due attention to expand the programs of special needs education for the disabled children as a whole and for the hearing-impaired in particular.

Due to the lack of adequate written documents in the field of special needs education of Ethiopia, it is not simple to look into the detailed educational and vocational training program of the disabled. Considering the educational provision of the hearing-impaired children, the highly limited literature of the special needs education of the country indicates that the first school for the hearing-impaired children was established by the Finish Missionary Society in 1955 at Keren. *Keren primary special school for the deaf* is now located in Eritrea, (which was formerly part of Ethiopia), (Rissanen, and Savisaari, 1987; Taddesse, Gebre Silasie, 1991). Currently, the first school for hearing-impaired children is *Mekanisa primary school for the deaf*. Prior to the Ethiopian Revolution of 1974, it was named as "*Ameha Desta school for the Deaf*" (Abeba, H., 1996).

The American Church of Christ established this special school in Addis Ababa at its present location in 1963. Since then, this school is run under the supervision of the American Church of Christ, which is a religious and charity organization.

Alpha primary special school for the deaf (0-8) was the second. Formerly, it was named the "*Baptist Bible Fellowship School for the Deaf*". The American missionaries established this school in 1967 at its present location in Addis Ababa. But, now it is the only governmental special day school for the deaf and it is run under the supervision of Addis Ababa education Bureau.

Another special school for the deaf, is Hosanna primary school for the deaf. The Ethiopian Evangelical Church of Mekane Iyesus established it in 1981. It is a boarding (residential) special school. *Hosanna* is a small town found in the Southern Nations, Nationalities, & Peoples Region of Ethiopia, at about 230 k.m. south of Addis Ababa.

Entoto is the first formal secondary special school/class for the hearing-impaired students in the country. It is located in Addis Ababa. The school offers only academic fields, mainly in Art stream. The school comprises hearing-impaired students of grades 9-12. This special secondary school class started its program as a special class in 1986. Since then, no other secondary school/ class has formally been opened for the hearing-impaired students as special school or class (MOE, 1997). At the beginning, the objectives to start deaf education within the primary special schools were to teach deaf children Bible, basic communication skills and academic skills i.e.,

reading, writing, and speaking, by using and developing proper sign language methods of communication.

Nowadays, the Ministry of Education of Ethiopia is giving due attention to the special needs education (TGE, 1994) by expanding the program of special needs education in public schools of the regions as special classes/ units along side with formal education. According to the latest statistical report on the special needs education of the country MOE (1998) in 1996/97 academic year there were 3 boarding special schools; 5-day special schools and 20 special classes (units) for hearing-impaired students were available in the whole country. A total of 946 and 178 hearing-impaired students were enrolled in those primary and secondary special deaf schools from grades 1 - 6 and 7 - 12 respectively (MOE, 1998).

1.2. Objectives of the Study

The deaf community constitutes a minority group. Its voice does not easily reach the decision-makers. The general public is usually unaware of the problems of the deaf (UNESCO, 1973). This is why the social status of most deaf is often quite unsatisfactory. Teaching deaf children to speak is the major concern. Eliminating the consequences of skills of communication deafness and developing the ability of deaf children to master the fundamentals of depend to a considerable degree on mastery of language. Rissanen, & Savisaari (1987) further noted that absence of hearing is an objective factor which limits to a certain degree the ability of the deaf to master a

number of professions and, at the same time determine the specific character of the content and duration vocational training. The aim here is to avoid disadvantaged young hearing-impaired from becoming disadvantaged hearing-impaired adults.

Thus the prime purpose of this study is to look into:

- The types of educational services under taken for the hearing-impaired students in governmental and non-governmental day and boarding, primary and secondary special schools/ classes.
- The predominant problems and limitations in the special needs education services and prevocational and vocational training programs (if any) of the hearing-impaired students.
- Assess the needs of hearing-impaired students concerning their Vocational Skill Training Needs and views about the new proposed first level of 10+1 vocational skill training program and.
- Explore possible ways of improving special educational needs and vocational skill training service programs for the hearing impaired students' future life.

1.3. Statement of the Problem

Vocational skills training are indispensable for many disabled persons, and beneficial to all. Such skills acquire enable students to the acquisition of self-confidence, the lack of which can lead to greater handicap and disability (UNESCO, 1988). Many professionals like Kirk and Gaallagher (1986), and Moors (1996) have also

acknowledged that the population of the hearing-impaired is more competent and capable in mechanical and vocational skills than in academic skills. Vocational and technical education training program is one of the important segments of the educational system that is geared to produce trained manpower for the different branches of the economy.

This kind of training can be formulated by equipping and enabling the students with general and specific vocational skills and necessary attitudinal changes that are essential for the world of work.

The Ethiopian government in its Education and Training Policy (TGE, 1994:16) stated that- "Parallel to general education, diversified technical and vocational training will be provided for those who leave school from any level of education".

However, the present scenario of special needs education for the hearing-impaired in Ethiopia does not seem to provide the necessary conditions for the optimal development. It is not sufficient to make the hearing-impaired to be productive and competent in the society. This is in spite of, the current policy of education of the country which gives a place for vocational skills training programs for the disabled students. In the Policy (TGE, 1994:17) it is acknowledged and indicated that "Special education and training will be provided for people with special needs".

Based on this fact and national documents, this study is geared to investigate the questions that are related to the educational vocational skill training needs of the hearing-impaired students.

To this end, the following research questions were formulated:

1.3.1 What types of prevocational and/or vocational skill training programs are provided to the hearing-impaired students in government and non-government special schools?

1.3.2. What are the major problems that impede the provision of vocational skill training to hearing-impaired students in the governmental and non-governmental special schools?

1.3.3. What are the major limitations in instructional services and facilities in the governmental and non-governmental special schools for the hearing-impaired students?

1.3.4. What are the vocational skill training needs of hearing-impaired students?

1.3.5. How does the newly developed first level of vocational skill training program (10+1 which is newly prepared by the Ministry of Education for the regular hearing students), fit the interests and the capabilities of the hearing-impaired students? That is, which type of vocational skill training fit them most and which is/are less fit?

1.4 Significance of the Study

Most of the hearing-impaired adults of the country have serious under employment problem with less payment, which forces them to live under the poverty line in their respective society.

Due to this fact, most deaf youngsters are disappointed and have problems with their parents because of the economic hardships (ENAD, 2000). Economic self-sufficiency in our society depends to a large extent on successful schooling in either a vocational program or a higher education program. To date, no detailed study has been done on education and vocational training of the hearing-impaired students of the country. Generally, chances for hearing-impaired students to obtain higher education and/or vocational educational and skill training are extremely less.

Professionals like Kirk and Gallagher (1986), and Moors (1996) believe that population of the hearing-impaired is more competent in mechanical and vocational skills than in academic skills. There can be no doubt that such programs of vocational skill education and training adjustment is permanent and reliable, because they are practical and they enable the hearing-impaired adults to work and support themselves. The skills are socially beneficial, because they fill a definite role in enabling the hearing-impaired persons to become contributing members of their social group. Therefore, it is very important to study the hearing-impaired children's prevocational and vocational skills training service conditions.

Furthermore, the study result shall provide additional rationale to special education professionals, practitioners, other researchers and decision-making bodies to engage in further investigation, and implementation on special vocational skill training service programs for disabled young people in general and for the hearing-impaired youngsters of the country in Particular.

1.5. Delimitation of the Study

Based on the latest statistical information of special needs education from the Ministry of Education, there were 3 special boarding schools, 5 special day schools, and 20 special classes/ units for the hearing-impaired students in the whole country (MOE, 1998). Had it been possible to cover all, the results gained from the assessments of these special schools could have made the study more complete.

Taking time and financial constraints into account the study includes only the first four special deaf schools of the country (for a pilot and the main study). These include governmental and non-governmental primary and secondary special schools and classes, in day and boarding special schools for the deaf.

These special hearing-impaired schools are considered as pioneers (that have rich experiences), typical, and model special schools in the history of hearing-impaired schools of the country.

1.6 Definition of the Key Terms.

Career Skill: It is a broad range of practical life skills that are part of living and working as an adult. It includes social behaviors, functional academics, and *daily living activities necessary for success on the job and in the community.*

Disability: *It refers to the reduced function or loss of a particular body Part, or organ.*

Handicap: *The problems a person with a disability or behavioral characteristic considered unusual by society encounters when interacting with the environment.*

Hearing-impaired: *A person, who has a hearing loss significant enough to require special education, training and/or adaptation. It includes both the deaf and the hard-of-hearing Heward, & Orlansky, (1988). For convenience in the paper the term* ***deaf*** *and* ***hearing-impaired*** *are used synonymously.*

Prevocational skill training: Based on the knowledge and skills necessary vocational capacity emphasis to career awareness, activities of daily living social skills and work habits. Usually at primary levels for the preadolescent child lessons.

Vocational Education and Training: It is a program of education below college grade organized to prepare the learners /trainees/ to entrance in to a particular chosen vocation or to up grade employed workers; includes divisions such as trade and industrial education. E.g. Agriculture, health, business education,(Good,1973). *It also means, an organized educational program, which is predictably, related to the preparation of individuals for paid or unpaid employment.*

Vocational skill: *It refers to the particular skills necessary for success in* specific, professional jobs or trades.

CHAPTER TWO

2. Review of Literature

This literature section of the study provides an overview of special needs of education focusing on deaf education and prevocational/vocational education and skill training for the hearing-impaired students

2.1. Education of persons with disabilities

Education is generally accepted as a means and a tool for any development. It is the total process of developing human ability and behavior. It is also a social process in which one achieves social competence and individual growth, carried on in a selected, controlled setting which can be formally instituted as a school or as a college and /or in a non formal situation. Education is any guided and independent learning to develop attitudes, skills, and knowledge and to live as fulfilling and self-reliant citizens.

According to Ipaye (1986) most young people and their parents do not want education principally as an end in itself, but as a means for getting better employment and improved conditions of living. (OSSREA, 1999) have also stated the functions of education as one of the main preparation of the youth for adult roles, which include earning a living through engagement in productive activities in the labor force.

That is the trained individual can participate either in self-employment or in wage employment. Children and young people with disabilities need education no less than their able peers do. Yet around the world very many of those with disabilities receive little or no education. Schooling is a form of preparation for all young people to adult life. The knowledge and skills acquired at school help them make their way when they leave it. A view (UNESCO, 1985) found that the twin goals of action in this area are to help young disabled, particularly deaf people, become economically active and lead a life that is as full and independent as possible.

It is also important to observe that every child has unique needs, and every child needs help in his/ her sensory, physical, mental, socio-emotional development, as well as in adjusting to her/his environment. Education therefore, is a means for promoting the growth in the individual's personality, character, creativity, self-reliance, and social abilities.

Education gives the student both general and special knowledge and skills s/he need when working and acting as a member of society. In addition education forms and reforms the person's attitudes and habits to fit the circumstances s/he will work and live in. Thus, educating young citizens, who are with disabilities, is a significant challenge for every nation, particularly for the developing countries like Ethiopia.

However, according to UNESCO (1988) whatever the pressures and the challenges may have on the education system and on public expenditure, it is imperative for every nation to secure appropriate provision for its young citizens with disabilities

specifically for the hearing-impaired. The report further noted that wide spread experiences have shown that even those with the most severe disabilities can profit from education. Thus education enhances the quality of life for those with disabilities just as for other people; if any thing, the handicapped particularly the hearing-impaired are more dependent on education and vocational skills than others.

2.2 Special Educational Needs

> *The most important rights of people with Special Education Needs (SEN) are probably the right to an appropriate education, and the right to be fully integrated into society. (Hornby, Atkinson, &Howard, 1997)*

It is a well-known worldwide fact that disability limits a person's ability to perform certain tasks in the same manner in which most non-disabled persons do. A disabled person is not handicapped, however, unless the disability exposes the person to educational, personal, social, and vocational and/ or other problems.

The majority of students with disabilities have more difficulty in learning academic skills than do the non-handicapped. According to Hallahan and Kauffman (1980), the problem is true for all categories of disabling conditions because sensory (hearing, and visually) impairments, physical disabilities and mental or emotional handicaps all tend to make academic learning more difficult. Because of language and communication barriers the problem is more severe for hearing-impaired students (Chimedza, 1999).

The historical developments of special needs education as noted by (Guilford and Upton, 1992) is that the term special needs education began to come into use in the late 1960s. Basically the emergence of the concept of special needs education is to provide exceptional children with special services that not available to them in the regular education program. Kirk, *et.al* (1993) note that special education strive to take into account the inter-individual and intra individual differences.

According to Hallahan and Kauffman (1980:6) special education is defined as a program or designed to meet the special need of an exceptional child, and it is further elaborated as:

> *Special education means specifically designed instruction that meets the unique needs of the exceptional child. Special materials, teaching techniques, equipment and/or facilities may be required. For example, children with visual impairment may require reading materials in large print or Braille. Children with hearing impairment may require hearing aids and /or instructions in manual communicating. Children with physical disabilities may need wheel chairs, ramps, and a variety of equipment available only in a special medical facility, and children with special gifts or talents may require access to working professionals.*

This shows that, the degree and types of services required depend on the extent to which the child differs from the average child and as these differences increase, the concerned child usually needs continuous prolonged and intensive intervention (Hallahan, and Kauffman, 1980).

On the other hand, Heward and Orlansky (1988:27) describe some of the major challenges faced by special education to day as follows:

> *(a) Educating children with handicaps in the least restrictive environment. (b) Making early intervention programs more widely available to infants and toddlers who are handicapped or at risk. (c) Improving the ability of young adults with disabilities to make a successful transition from school to community life. And, (d) improving the relationship with regular education in order to serve the many students who have not been identified as handicapped; but who are not progressing in the general education program.*

The special needs education for the disabled children was implemented in special schools. These special schools in many countries were first founded by religious organizations as a form of charity. In relation to this, bringing the disabled children to the special schools to give educational and vocational skills training services that enable and prepare the needy for future life. Kokkola (1997) described and acknowledged that *'United Nations' Year of the disabled* is a milestone in the recognition of persons with disabilities for many developing countries.

Special needs education is different from the regular educational program in significant ways. It involves specialized materials and equipment, teaching methods and approaches, and additional content to the regular curriculum depending on the nature of the special needs of the disabled child.

2.3. Vocational skills Education.

One aspect of education is vocational education. Vocational education and vocational skill training are synonymous, and they refer to mean the organized educational programs, which are directly related to the preparation of individuals for paid or unpaid employment. People have learned to work, and earn in different ways. Vocational education that has formal and informal nature has a great contribution for the self- support and efficient working life. According to Maurice Holt (1987), the first informal type of vocational education started by accident. The trial and error approach was the second. Finally after many years as labor became socially required, division of labor started. The basic program components for vocational education are recognized as basic skills, specific job training, personal and social adjustment skills, career information, modified content in subject areas, and on the job training.

The growing emphasis on preparing students with skills is to function as independently as possible. Across a wide variety of domestic community recreational and vocational domains has heightened the need for students to learn these skills not only in specific teaching situations, but to be able to generalize them across appropriate non-trained environments, people, and activities as well.

According to UNESCO (1973) at present vocational training programs consist of three stages in all types of schools. The stages are the *first stage*, manual work where the pupils acquaint themselves with the simplest materials and instruments and acquire some knowledge and skills.

The second stage, the general technical training where the pupils are taught to master elementary processing techniques, and acquire some knowledge of technology and become acquainted with, various kinds of labor. *The third stage*, professional technical training that consists of the mastery of definite industrial specialties/skills.

Based on these facts, Ipaye (1986), and Dessalegn (1996) have indicated that many countries have introduced productive or, practical work to their educational programs. These countries intend to employ both as a teaching method, and as a means of relating education to the world of work. For instance, including socially useful work in general education, and general education in vocational education is one way of linking general special educational needs with vocational training.

2.4. Vocational Special Training

Vocational special training is primarily concerned with the efficient learning of a large number of job-related skills. As to Robert (1990), the major challenge in vocational education is to make sure that skills learned in a training setting will transfer to a real work setting, as well as be maintained after the student has graduated.

UNESCO (1973) reported that at present vocational training consists of three stages in all types of schemes. These are:

The First stage, it is manual work where the simplest pupils acquaint themselves with the simplest materials and instruments and acquire some knowledge and skills.

The Second stage, is the general technical training where the pupils are taught to master elementary processing techniques. They acquire some knowledge of technology and become acquainted with various kinds of labor. *The third stage is a* professional technical training that consists the mastery of definite industrial skills.

Different strategies and options are also used in the vocational special training of the disabled individuals by different countries and service delivery agencies. According to Sarkees and Scott (1986), there seem to be a series of five vocational education delivery options. They are:

1. Regular vocational education programs that allow learners/trainees to participate in the existing vocational programs on a full-time basis with slight modification to ensure success.
2. Adapted vocational education program requires specific adaptations in the program, curriculum, teaching techniques and/or instructional materials for learners to experience successes.
3. Special vocational programs, which are developed for learners who are unable to succeed in a regular vocational education program on a full-time basis. Instruction is usually provided in self-contained classroom. This program could have to be modified and individually prescribed to meet the specific needs of each learner.

4. Individual vocational training programs are prescribed to meet the specific special needs of learners/trainees who can not succeed in regular vocational education programs. These programs are developed to provide learners with appropriate prerequisite skills for specific jobs.
5. Prevocational training / evaluation programs are developed for learners whose abilities are so severe that they are unable to participate.

However, disability limits a person's ability to perform certain tasks in the same manner in which most non-disabled persons do. According to Heward and Orlansky (1988), all disabled young students in general and hearing-impaired students in particular who are in the process of school-to-adult life need to be trained and acquire an appropriate functional vocational skill training, which enables them to hold a job and earn a living.

Many special needs education writers agree that one of the basic tasks of special schools is to prepare the pupils for practical activity, and for their participation in a suitable productive labor.

This task is to a considerable degree accomplished with the help of a system of vocational training, which allow the pupils to learn various trades which corrects and compensates for the defects of their mental and physical development (UNESCO, 1973; Sarkees, and Scott, 1988).

Preparation for work and daily living can include career-education and guidance, prevocational training and work experiences. The UNESCO review describes that in some cases schools provide direct special vocational training, though substantial programs in this area would normally be the responsibility of post-school agencies (UNESCO, 1974). The transitional process for many students begins and develops during their early years as they move from one school setting to the next. This implies that vocational education or career awareness does not necessarily begin when the individual deaf student is enrolled in higher education. In this regard, the community and the schools should endeavor to bring about a gradual adjustment covering the period from primary grades to high schools graduation of hearing - impaired students.

The act of special needs education as reviewed by McLaughlin, and Wehman (1992), includes vocational education, which consists of specially, designed instruction focusing on the unique needs of the disabled child. Different types of jobs/career such as watering plants, cleaning blackboards etc. need to be practiced in classrooms/schools starting from the primary/elementary special school level. Hearing- impaired student may also need to visit community work sites where hearing-impaired adults are employed and work.

In addition, teaching of job/skills can be accomplished within the elementary-school age through prevocational work training samples, which provide practice on skills. For example, counting packages, following direction etc. are available jobs in the community.

Middle-school disabled children, students need to begin to spend some time at actual community job sites, with an increasing amount of in school instruction devoted to the development of associated work skills such as, being on time, staying on task, and using interpersonal skills.

Secondary school students need an increasing amount of time on actual community job sites with the remaining hours of in-school instruction focusing on the acquisition of functional skills that is basically needed in the community. All of the above mentioned models stress the importance of vocational education and training programs. Heward & Orlansky (1988:554) have summarized the importance /significance/ of special vocational training service program as follows:

> All young adults face important questions about what to do with their lives- whether to attend college or technical school, whether to work as a brick layer, or as an accountant, for the non-handicapped the difficulty lies mostly in choosing from a number of options. By contrast the handicapped adult often has few, if any options to choose from. Occupational choices are decreased if the handicapped person has limited skills.

In this respect, vocational training is highly considered, as the most helpful to the disabled particularly to the hearing impaired students. Because it helps them to develop, and to engage in self-supporting productive work in their post school life.

Disabled adults are able to merge into the community and work at a variety of semi-skilled and service positions. Most can partially or totally support themselves.

The major goal of many disabled persons, particularly that of the hearing impaired individuals is to obtain and to hold a job. In this regard, Kokkola (1997) has stated that one of the main objectives of vocational special training is to provide the disabled with vocational skill for independent living of the disabled individual.

In designing the content of vocational and technical training for the disabled, the training must take account of the local labor market and industrial infrastructure.

According to a UNESCO report (1974:55) the curriculum for vocational training in the special educational needs in Cuba comprised three main stages:

1. *In schools for children, the emphasis was on manual work in elementary workshops and educational excursion to productive centers.*
2. *In schools for adolescents, prevocational workshops which is focussed on enabling pupils to familiarize themselves with the materials, tools, and basic operations of machines.*
3. *In vocational schools, specific branch of work with greater stress on the vocational subjects like Wood work, Metal work, Needle work, Photography, Gardening, Art, Carpenting, Garment working, etc.*

This shows that, training the disabled young adults in prevocational and vocational skills found very significant and determinant for their future working life. Prevocational training is a training program, which is devised for the preadolescent disabled children.

As Kirk, *et al,* (1993:199), further stated: For the preadolescent child, lessons often take the form of prevocational experience, focusing on the knowledge, and skills that are the basis for vocational competence.

The transitional stages of young students from school-to-work life of the community are critical and depend on the good characteristics of the secondary school vocational education service programs. There are three stages of transitional instructional strategies of curricula that are indicated by Heward and Orlansky (1988). They are:

(a) The curriculum must stress functional skills. That is, disabled students must learn vocational skills, which they will actually need and use in local employment situations.

(b) School- based instruction which must be carried out in integrated settings as much as possible, and;

(c) Community- based instruction: which should also begin early at about age 12 for students with severe disabilities, and must be used for progressively extended periods of time as the student nears to graduation.

Moreover, handicapped students at secondary school level need to train and work in a certain proper special vocational skill to which the community gives value, and also that fits the interest and capacity of the hearing-impaired student.

This basic specific observable behavior often is the axis of the individual's special need education program that must be completed for all disabled children, particularly for the hearing-impaired students.

The development career awareness and special vocational skills should begin in the early years for children with disabilities as a form of prevocational training. Heward and Orlansky (1988) have also indicated that the establishment of the vocational skills training institution depending on the objective conditions of the special vocational training schools (centers) which can be established in special schools, or as a unit in the regular vocational training schools.

The underlying assumption of special vocational training program is that handicapped students need special help if they are to succeed in the normal world. Whenever possible, this special help is designed to teach handicapped students but through different or more intensive methods than non-handicapped students use.

According to Kokkola (1997) in many countries the objective and policy of the establishment of special vocational training is preferred to use the integration of special vocational units within the vocational training schools. In most cases the special vocational units are integrated into ordinary trades units. These are also training institutes that the students share, the facilities with the "*mainstream*" students. Integration has been encouraged through awareness increasing workshops where special vocational training programs have been introduced to the staff.

2.5. Education of Hearing-Impaired children

The whole point of special needs educational provision is to ensure that children and young people with disabilities receive an appropriate education, and every thing must be directed to achieving that.

This can be considered in terms of the curriculum and in terms of the schooling and other structures needed to translate the curriculum into practice. As described by McLaughlin and Wehman (1992), economic self-sufficiency depends on good performances in educational and vocational skills. The ultimate aim of education for hearing-impaired children needs to be similar as to those for hearing children (Gowan and Demos, 1965). Children with hearing loss need special needs education services because of their hearing defects and communication problems. Educational programs and techniques for the hearing-impaired need to be "special" primarily because it fosters maximum development of their personal knowledge, skill, ability, and the many other aspects in teaching and facilitating communication. To accomplish this, hearing-impaired students should be provided with a well-structured program for speech and language training. Proper educational supportive materials, equipment, and methods of teaching and methods of communication are also highly basic (UNESCO, 1973). To this end, designing and planning early detection and intervention programming with the hearing impaired are recognized to be the critical.

In intervention services, provision of special assistance of assessments, amplification or training until the age of 5 or 6 will undoubtedly be a great advantage in communication and in general development of the needy child, Gear heart, *et.al* (1987).

The educational programs of the hearing impaired children are available and can be run in different placements of special needs education. These are residential/ boarding/ special schools, special day schools, and regular schools in special classes/ units/ or as fully integrated approaches.

In most cases, the severe and profound and pre lingual impaired students can be served in residential schools. While the rest - mild, moderate and post-lingual can be served in a regular school as of a special class (Taylor and Taylor, 1960; and Moors, 1996).

Although students with hearing-impairment have different learning styles and abilities, the limited ability of the hearing-impaired results in language deficiency. (Chimedza, 1999) have remarked that deaf students' disability in the classroom is not their hearing-loss but language and communication barriers. Due to this fact, hearing-impaired students are not good in cognitive, academic, behavioral and communication characteristics, when compared to their hearing peers (Kirk, *et.al*, 1993). So, as moors (1996) indicates that school programs must be designed properly to enable hearing-impaired students to increase their academic achievement.

In order to facilitate the teaching learning process effectively, the modes of communication used in the classroom of hearing-impaired students generally fall into three main categories.

(a) Oral,

This includes, the oral-aural method, which uses amplified sound, lip reading, speech reading and the auditory method, which uses residual hearing with extensive use of sound amplification,

(b) Sign language

Manual Method, which uses sign language, finger spelling (Manual) and cued speech approach (Kirk *et.al*, 1993).

(c) Total Communication Methods

It is an approach that blends oral and manual techniques, i.e. it combines both oral method and the sign language approaches. It is the way to improve language and secure better speech among hearing-impaired people, the way to their better emotional and mental health, the way to their capabilities for higher level of training and consequently, the way to more challenging and satisfying employment and community evolvement. The total communication method is sometimes called the simultaneous method or combined method.

Hallahan & Kauffman (1988) acknowledged that most educators of the deaf students prefer to use total communication method.

These special teachers use the total communication method depending on the particular child and the situation. There is a difficulty in deciding where a particular approach should be assigned. Total communication for example, is seen by some as essentially an oral approach while others may see the system as being more closely related to sign language.

Moreover, whatever method is adapted, and whether the priority is given to oral speech or sign language, the common goal of these specialists and special schools of taught is to enable children with hearing-impairments acquire the mastery of language needed to assert their personality. This helps to make hearing-impaired children literate and paves the way for them to reach the degree of academic achievement corresponding to their intellectual capacities and personal motivation. This attracted the education of hearing-impaired to be much greater today than in the past (Moors, 1996).

The substantial growth in disciplines such as, audio-logy, electronics, linguistics, psychology, and speech sciences contributed a lot to the field. As Winzer *et.al* (1987), the developments of these disciplines may soon significantly help to improve the prospects of hearing-impaired children's future life. Thus the deaf need to be educated to read and write and to learn to their maximum ability. Regarding this issue, Rissanen and Savisaari (1987) have further noted that the deaf need to be self-reliant, to work for themselves and to solve there own problems. In order to attain these personal capabilities they need to be trained in trade, (vocational skills) administration and in social interaction too.

2.6. Vocational training for hearing-impaired students

Differences in language ability that results from deafness affect a student's ability to perform in traditional academic areas. According to Kirk and Gallagher (1986), many of the problems that are facing the hearing-impaired people are job related under employment.

This is the result of the limited education and vocational skills training that they have acquired. Taylor, *et.al* (1995) have pointed out that hearing-impaired students have difficulty in achieving well academically because of their problem in grasping the morphological and syntactic aspects of language. So, there is a tendency to assign them to vocational special training programs.

Thus, vocational special training has become an important goal for people with disabilities in general and for deaf persons in particular (Batshaw, 1997). It is a particularly important element of preparation students of schools to adult life. According to Linari and Belmont (1986), designing and providing proper vocational training is considered as a necessary factor in preparing the deaf for a meaningful adult life. Lack of training opportunities has frequently meant that people with hearing-impairment have not been economically active or have had to work at a level of below their real ability. A program needs to be designed to introduce hearing-impaired students to a variety of vocational opportunities while still in school (Hallahan and Kauffman, 1980).

The hearing-impaired youngster can receive vocational skill training- either in a special school that includes both an elementary program and post elementary vocational training program, or in a separate special vocational school as a unite /special classes.

To conduct efficient and effective vocational skill training, the training program needs to be an organized educational program, and it must be directly related to employment or to the additional preparation of individual for career. In this regard UNESCO (1985:1) has pointed out that:

> *Many hearing-impaired children leave schools without proper qualification to compete with other school leavers. For this and many other reasons, such as ignorance, prejudice, and fear by hearing people, hearing impaired persons are unemployed.*

From another point of view, society wants all school leavers to be socially competent. Barton (1988) states that among the prominent possible approaches of future education for social competency is in the increase in vocational training, which is gradually filtering down the age-range, which would theoretically lead to a more competent work force.

Different research reports have revealed that hearing impaired students benefited little from academic education compared to their hearing peers. Many special education professionals like Moors (1996) suggested that much attention should be given to vocational skill training program for the disabled children particularly for the hearing impaired children.

In the same vein Taylor & Taylor (1960:34) have noted as follows: "Some kind of vocational training is available for the deaf and hard-of hearing in every country. It is usually given along with or as a continuation of the compulsory elementary program".

The majority of the hearing-impaired were unable to obtain adequate secondary, post secondary or/and post-school vocational skill training prior to 1965.

But at present, as indicated in UNESCO report (1973:128)

> *Pupils of schools for the deaf children successfully master numerous specialties in metal working, (milling- machine operators, drivers, turners, fitters etc,), wood workings, in printing and publishing (type setters, printers), and many other branches. It is possible to select for the deaf a number of specialties, which involve working with a high level of noise*

2.7. Vocational placement issues in training

Hearing-impaired individuals are people, and what is true about the biological and social needs of hearing people is also true for them. Hearing-impairments have long known that it is necessary to have a complete set-up of vocational guidance services in training, placement, and follow-up work programs to help attain the better results of the work.

It is only a few years ago that special needs educators, parents, and legislators focused attention on the disabled children's problems, especially after the children move from school to adult life. According to the view of Heward and Orlansky (1988), to overcome these crucial and fundamental problems, different meanness for schools-to-work transition models have been proposed and developed by different professionals.

All these models stress the importance of a functional secondary /post secondary school curriculum that provides work experience in integrated community job sites. To make it more purposeful and effective training program, systematic coordination between the school and adult service providers as well as parental involvement and support are important.

The problems involved in placing hearing-impaired youngsters in job are usually those facing other types of disabled youngsters. These include a limited range of vocational preparation preference of employers or trade masters for the non-disabled. Special schools may provide vocational placement services, like guidance services, by voluntary societies, government agencies, or by combination of the two.

Professionally assisting hearing-impaired individuals to select an occupation/ vocational skill, prepare for it, and succeed in it is the basic and the major principle of vocational training program. The vocational status, interest, and the work capacity of the hearing-impaired student must be established to successive work yield.

According to Moors (1996) the student must initially be made aware of his/her abilities and disabilities and how s/he cope up with the educational and physical demands of various occupations. Usually there are psychological processes that are necessary to bring about self and social understanding, which is so vital for good vocational adjustment. Like any body else each hearing-impaired individual person has certain abilities and interests. It is the belief of Ipaye (1986) that if these characteristics are known together with their potential values, and if these values can be put into appropriate uses the individual is more likely to become a happier person, a more effective worker and a more useful citizen.

In other words, knowing oneself and knowing the opportunities existing in one's environment and, in particular, knowing what one can do to help the hearing - impaired individual to make a good vocational adjustment before, and during the process of vocational training are all important. After all, self-knowledge is a very important means of ensuring accurate and adequate occupational choice.

Vocational guidance is best defined as a process of assisting an individual to select an occupation, prepare for it, enter upon it, and progress in it. Ipaye, (1986) further noted that vocational guidance and counseling attempt to ease the frictions that occur on a job by helping the individual adjust to the job demands.

Vocational guidance of the disabled particularly of the hearing- impaired is defined in the same way. There are several functions that must be performed when any program of guidance is put into practice. The most important job in different skills- commerce, service, and mechanics need to be analyzed.

The requirements, the training facilities, the duties, the conditions of work, the remuneration, and the avenues of advancement should be studied. These analyses should be supplemented with details on the sensory impairments, physical disabilities feasible or not feasible on the job in order that the guidance of the disabled may become more valid. The defect analysis should extend from a study of the defect in relation to training, to the duties, to the first job, and on to the jobs in promotion.

The entire vocational career should be analyzed in relation to the defects of the individuals. In the guidance and counseling processes, the second function that is applying only to the disabled in general is the determination of the feasibility.

According to Ipaye (1986) the determination of feasibility is counseling, then training supervision, placement, and follow up become important. Counseling is the imparting of vocational information. Training supervision is the careful check on training progress to insure full utilization of the training facilities. Placement is the obtaining of a job wherein the training is best utilized. Follow up is job supervision to ease the difficulties that often crop up. These functions implement vocational guidance with a definite program.

Parents of children with disabilities can play a major role in their education by assisting in school activities contributing to assessments and curriculum planning, implementing programs at home and monitoring progress. UNESCO's documents further summarize the roles of the parents as parents are the child's first and natural teachers, and it makes sense to help them discharge this role to the best of their ability.

Further more, parents are the very important agents in the intervention work for the disabled, particularly for the hearing impaired children. According to Heward and Orlansky (1988:546) the importance of parents' involvement in their children's training affairs is that "Parents can become active in determining their children's educational needs and goals. And given some guidance and training, parents can teach their handicapped children at home and even at school".

Other studies revealed that the majority of parents of the hearing impaired students preferred that post-school vocational skill training for young hearing impaired adults be provided in a facility for hearing students with modification, including additional staff introduced to serve the hearing impaired trainees.

The statements mentioned above, suggest that parents stand to gain from a good school program of vocational guidance. A good vocational guidance and counselor can help parents collect, analyze, and interpret relevant data about their children with clearer perceptions of their children's abilities, interests, and potentialities offered through a school's program of vocational guidance and counseling.

Parents can come to a good understanding of their children, accept their limitations, and no longer have to remain in any illusions about their children's capabilities.

Generally, all special schools need to cooperate with other voluntary organizations, governmental agencies, or both, which provide some guidance and placement services for the hearing-impaired students along with other groups of disabled youngsters. In order to yield efficient and productive graduates and competent young adults technological advances are already having a significant impact on the educational programs of many hearing-impaired students. For example, electronics and computers technology are making the telephone and television accessible to people with hearing- impairments. Future technological advances may enable teachers, parents and professionals of the hearing impaired students to analyze and track.

The future of the hearing-impaired children's education mainly depends on finding equitable solutions to problems. Professionals need to work hard and must continue to focus on increasing the means for early identification of hearing loss, and on evaluating the effects of the medical model of deafness. The field needs to incorporate more input from the deaf community. Competent, self-reliant, successful hearing handicapped adults are the goal of the education of the hearing impaired. Having the skills and tools required to reach this goal is the daily responsibility of those who educate hearing-impaired children.

In this regard, the Ministry of Education has a lion's share in modifying and planning and implementing the proper special vocational skills training programs for the hearing-impaired students to bring them to the position of self-reliant, productive, and competent school graduates.

Inaddition to the government, effort improvements in science and technology coupled with a concern for individual needs and rights will enable the hearing-impaired participate more fully in a broad range of educational, vocational, social and recreational activities in their schools and communities.

2.8. Provisions of Special Needs Education in Ethiopia.

Ethiopia provides little service to the destitute and the disabled (Tirusew Et.al, 1995). However, concern for the disabled seemed to have existed in the country through out the centuries. Traditionally, the extended family has been the responsible agent for all members of the family in terms of economic and social support to the needy.

The family took care of the elderly and disabled persons. The developments of urban centers with their social ailments have weakened the family support system to carry out its traditional duties and responsibilities. Even in the rural areas, evidences show that there is a lot of migration of disabled people in search of care and medical treatment and other facilities.

Traditionally, the education of the disabled particularly the education of the blind and the physically handicapped has a long history in Ethiopia.

On the other hand, the modern education for disabled persons was started in Ethiopia by voluntary and religious missionary organizations in 1944 when the first school for the blind was established in Dambidolloo (Taddesse, 1991, and Kokkola, 1997). These educational services cater to visually impaired, hearing-impaired, and mentally retarded children of the country.

It is clear that Ethiopia, like many other developing countries, has not been able to provide special needs education for all its disabled children. But, the present Education and Training Policy of the country (TGE, 1994:29), gives a recognition to the disabled children's education, and to vocational training strategy which paves the way for the better life of the disabled children of the country. Stating that "Special attention will be given in the preparation and utilization of support input for special education."

As stated above, it is hopped that the present Education and Training Policy of Ethiopia (TGE, 1994) gives a good recognition, and due attention for special needs education and vocational provisions, which enables and prepares the handicapped citizens to self reliant, productive and competent in their respective society. Teaching deaf children to enable to read, write, and understand work and be productive is the major concern for this generation.

2.9. Hearing-impaired Education in Ethiopia.

In Ethiopia, Special Needs Education service started recently. The trend of development of education of the disabled in general and the hearing-impaired in particular is similar to that in other developing countries. Missionaries established almost all of the special schools for hearing-impaired children in Ethiopia, (Taddesse, 1991, and Ababa Hagos 1996).

At present, in Ethiopia, the educational program for the hearing-impaired is in its infancy stage. More than 95% of the deaf children do not get the chance to go to school (Tirussew, 1999, and ENAD, 2000). The program lacks ways and means of applying.

Particularly the hearing-impaired children's special needs education lacks the means of identification or assessment. Most importantly, the possibilities for various alternatives of educational environments (e.g.. resource rooms, special classes, supportive materials, trained special teachers, and vocational skills training services) are not well entertained.

Historically, as indicated earlier, Keren special school for the deaf was the first school for hearing- impaired students of the country. It was established in 1955 (Rissanen, & Savaari 1987), by one of the Finish missionaries in Keren- Eritrea (which was formerly part of Ethiopia).

The American church of Christ missionaries established Mekanisa special school for the deaf (formerly known as Ameha Desta School for the deaf), in 1963.

The third special school for the deaf is Alpha special school for the deaf, (formerly known as Baptist Bible fellowship school for the deaf). The American missionaries established it in 1967 in Addis Ababa Felekech, (2000).

Hosanna primary boarding special School for the deaf is the fourth school. The school includes grades of 0-8. The Ethiopian Evangelical Mekane Eyesus church established it in 1981.

Entoto technical and vocational secondary special school/class is the first and the only secondary school for the deaf. The class services started in the school in 1986 for students of grade nine. The school still offers only academic education for hearing-impaired students in their respective special classes of grades 9 -12.

Regarding the structural development of special educational programs, there are favorable trends that can have a profound impact on the future development of special needs education in the whole country. First, the government has shown concern for the education of the disabled since 1974, and established the special education section within the Ministry of Education in 1976 to assume the responsibility of coordinating and promoting the education of the disabled. Second, the special needs education has gained attention and recognition along with and as an integral part of the overall educational development programs of the country, in line with the objectives to provide education to all step-by-step (MOE, 1987).

Third, special needs education is included in the new Educational and Training Policy of the country.

The central point about the provision of Special Needs Education in the country stated in the policy of training and education is "special education and training will be provided for people with special needs" (TGE, 1994:17).

Most often in connection with ordinary regular schools the flourishing special classes/units for the disabled children education in today's of Ethiopia. However, Kokkola (1997) observed it is the non-governmental schools that are the most advanced both in theory and practice of special education.

Regarding the vocational skills training service program, it appears that written materials on the vocational special training of the disabled particularly of the hearing-impaired students in Ethiopia are either highly limited or inaccessible. However, the future of the disabled may be better, because the new Education and Training Policy (TGE, 1994) recognizes the importance of vocational training for the disabled students.

Currently, however, these are very few non-governmental special schools and rehabilitation centers that offer educational and vocational skills training programs.

In Alpha special school for the deaf, there were different handicrafts/prevocational education and training programs, such as: woodworking, metalworking, tailoring and embroidery, and typing, which were provided for deaf students above grade six.

This was done continuously for 12 academic years from 1986-1998 (Ato Belew Taye, the principal of the school).

But these prevocational or (handicraft) skills special training were stopped/cancelled without the willingness and the consent of the school community.

Among the total educational provisions for the hearing-impaired at elementary school level, the education in the area of handicrafts or pre-vocational is probably the most important one. The curriculum should be devoted to manual skills because the deaf can be trained as manual workers in various areas. ENAD (1999) has reported on the present status of the hearing-impaired students' education of Ethiopia, particularly on the importance and the necessity of vocational skills training program.

The academic achievement of students with hearing-impaired in the Ethiopian educational system hitherto is not encouraging. Most of the impaired of hearing students tend to discontinue their education early these few students who continue are not happy with the objective of their education. They face a lot of hardship to be employed both in governmental and non-governmental organizations.

Regarding the job opportunity and work places for deaf people, UNESCO's literature also reveals the Ethiopia's past experiences as follows:

> *Ethiopia has a quite well known umbrella factory (it also makes dry batteries), set up ten years ago in Addis Ababa and employing some two hundred handicapped adults in 1981. Some of its new employees came from one of the Country's few special schools. Ethiopia also reported that deaf students learn vocational education at one of its technical school. (UNESCO, 1988:87)*

The technical school reported for deaf education during that time may be Entoto secondary technical school, but the reality now exist in the school shows is different.

CHAPTER THREE

3. Method of the study

In this section, the study method is described in terms of source schools and respondents/participants, instruments and the tryout of instruments employed, procedure of data collection for the main study, and methods of data analysis. The study is essentially descriptive and it attempts to delineate the conditions of educational provision services for the hearing-impaired students and their present vocational skills training needs.

3.1. Schools, and respondents/participants

Four special schools for the deaf were selected for the study. Among these, one (Mekanisa) was assigned for pilot study work and the rest three, Alpha and Hosanna primary schools and Entoto secondary school/special classes for the deaf were selected for the main study. The choice of the schools was with a view to include special deaf schools of the are the following type: residential (boarding)/day, primary/secondary, and governmental/non-governmental special schools/classes.

- In this academic year (2000-2001), Alpha primary special school for the deaf had a total of 161 deaf students (81 males and 80 females).

- In the same academic year, Entoto technical and vocational secondary school /of special classes has a total of 157 students (96 males and 61 females).
- Similarly, Hosanna primary special school for the deaf (0-8), and first year vocational skills training program (vocational year I) of grade nine deaf students it has a total of 166 students (84 male and 82 females).

The respondents participants involved in the study included hearing-impaired students, their parents/guardians, and school professionals/personnel.

The hearing-impaired students consisted of a sample from grades seven to twelve (7-12) in the sampled three special schools/classes. The students were first stratified according to their sex, and a sample was then randomly selected. The school professionals comprised of teachers, unit leaders, counselors, and school principals/deputy principals of the sampled special schools/classes and, Parents/guardians of the hearing-impaired students were also included in the study.

The number of sampled student respondents selected for the study was 140 (70 males and 70 females). Similarly, the number of school professional and parents initially identified for the study was 40 (6 principals/deputy principals, 3 unit leaders, 28 teachers, and 3 counselors). Regarding parents/guardians, 15 of them (5 from those parents sending their deaf children to each sampled special school) were purposefully selected for the study in consultation with the schools.

3.2. Instruments and try out of instruments employed

Four types of instruments were developed for the study. They are two kinds of questionnaires, an interview question, and observation checklist. Because of the absence of any previous local research of the type, the investigator developed all the items of the questions.

3.2.1. Questionnaires

Two different kinds of questionnaires were developed for student respondents and school professionals in Amharic. The two questionnaires had both open and close-ended questions.

(a). Questionnaire for students: (01/93)

The questionnaire developed for hearing-impaired students had 49 question items in the three sections. The first, section dealt with biographical/background information of the respondent students. The second, section inquired about the students' learning and educational conditions. Finally the third section focused on their vocational skill Training needs and views on the newly proposed 10 + 1 vocational skills training program by the Ministry of Education.

(b). Questionnaire for school professionals.

A questionnaire developed for school professionals- principals, teachers, unit leaders, and counselors of the schools. It consisted of 53 questions, which were divided into three parts.

That is, background information of the school professionals, teaching-learning methods and potential of the students for vocational education training including the appropriateness of the various types of the new 10 + 1 vocational skills training program.

3.2.2. Interview guide for parents/ guardians

The interview guide was designed for parents or guardians of the hearing-impaired students in Amharic. It included questions about the parents' bio data, the parents' views about the education of their hearing-impaired children. The capacity and vocational training needs for their deaf children.

3.2.3. Observations check list and data Collection form.

An observation checklist was designed and developed to collect schools' statistical information on students, teachers, and educational materials/facilities that are available in the concerned special schools.

3.3. Pilot Study

Copies of the instruments were given to two judges (graduates of Special Needs Education). The judges were asked to give their reaction on each item of the instruments. The purpose was to get professional feed back about the content of the instruments, the order of the questions, and to check on some possible omissions. Using the comments and suggestions from the two judges, slight corrections were made. After the refinements on the proposed instruments pilot study was conducted.

All instruments were pre tested before the actual fieldwork. The purpose of the pilot study was to find out the clarity and validity of each item of the four instruments. In this process, the main focus was made on identifying ambiguities, omissions, and misunderstandings.

The pilot study was conducted in Addis Ababa at two different sites representing primary and secondary special schools/classes. These sites were Mekanisa primary special school for the deaf and the Ethiopian National Association for the deaf. Mekanisa primary special school for the deaf was selected for the pilot study to represent primary special schools for the hearing-impaired students of grades 7-8. The main reasons to select this special school as a candidate for the pilot study area are:

(a) It is similar to other schools of its kind where the main study was going to be conducted and

(b) It was relatively easy to get cooperation readily from this school for the short try out

Regarding the secondary school for the deaf, there were no other special secondary school besides Entoto school/special classes (where the main study was going to be done) to be used for the pilot study. So, dropouts from secondary special school were approached as an alternative. With the help of the Ethiopian National Association for the deaf, 5 male deaf dropouts of grades 9,10 and 12 were traced for the pilot study.

Based on the result of the pilot data, it was found that almost all items had adequate reliability and usefulness few items of the instruments' reliability changes were observed. However, these items were corrected, rejected and certain sequences of the items in the instruments were rearranged during the editing process. The Interview time was also estimated to 20-25 Minutes during the process for a single respondent.

All in all, 29 items were rejected from the four instruments. The rest of the items of questions were corrected, refined and made ready for the final study. Thus, the pilot work had given a good corrective lead to all instruments that were developed for the study.

3.4. Procedures, & data collection for the Main Study

The procedure followed to collect data for the main study was similar to that of pilot study work in Mekanisa special school for the deaf. Before administering or using the instruments for data collection in the selected special schools, all participants/respondents were informed about the objective and purpose of the study and how to complete the questions. Both kinds of questionnaires (student's and school personnel's were distributed to the sampled population of the two groups, in class rooms and in the understudy special schools.

Interview was conducted with parents/guardians in special classes arranged by the school principals of the three special schools.

With regard to the checklist, the writer checked and observed all the learning classrooms, record offices, counselors offices, handicraft education training rooms/work shops. With these, systematic arrangements and careful, observation the targeted data was secured.

3.5 Methods of Data Analysis

All data were collected, organized and processed separately for each item in a way appropriate to answer the questions in the problem statements. Descriptive statistics was used to analyze the collected data.

CHAPTER FOUR

4. Findings and Discussion

In this chapter, the results of the study are analyzed and discussed based on the problem statements in five sections. The sections are: background information; educational provisions and services; major problems and limitations, vocational education training needs of the hearing-impaired students, and finally, the suitability of the view of students and school personnel in the 10+1 vocational skill training program which, prepared by the Ministry of Education.

4.1. Findings

4.1.1 Background information

This study was conducted in three special schools for the deaf (two governmental, and one non-governmental) in Addis Ababa, and in Hosanna. The total number of the participants is 166. The study population has three groups, which consists of hearing-impaired students of grades 7-12, school personnel/professionals, and parents/guardians (See Table 1, below). Generally, the samples consisted of 54.5, 80%, and 54.9 percent of the students, care and staff actual population, respectively. Out of those sampled groups for the study, the percentage of the actual participants was 85% for the study group (students, school professionals, and parents).

Table I: Population of the Study by Schools.

School				Study Groups																	
				Hearing-Impaired Students							School Personnel							Parents		Total participants	
Name	Grades	Type	Service nature	Actual population			Sampled	Participants			Actual Population			Sampled	Participants			Sampled	Participants		
				M	F	T		M	F	T	M	F	T		M	F	T			No	%
Entoto	9-12	Gov	Day School	96	61	157	60	44	28	72	27	6	33	11	15	3	18	5	5	95	57
Hosanna	7-9	NGOV	boarding	16	13	29	40	15	12	27	13	5	18	15	8	2	10	5	2	39	24
Alpha	7-8	Gov	Day school	11	14	25	40	7	9	16	7	13	20	14	4	7	11	5	5	32	19
Total				*123*	*88*	*211*	*140*	*66*	*49*	*115*	*47*	*24*	*71*	*40*	*27*	*12*	*39*	-	*12*	*166*	*100*
% /out of the category/group				*58*	*42*	*100*	-	*57*	*43*	*100*	*66*	*34*	*100*	-	*69*	*31*	*100*	*100*	*80*	-	-
% of the actual population				-	-	-	-			*54.5*							*54.9*		*80*		

*Key: M= Male, F= Female, T= Total, GOV= Government, NGOV= Non-government.

4.1.1.1 Student Participants/respondents

Detailed demographic information on student participants is presented below in Table 2.

Table 2: Student Participants by School Grade and Sex

Grades	No. and % of Student Respondents															
	Alpha				Hosanna				Entoto				Grand total			
	M	F	T	%	M	F	T	%	M	F	T	%	M	F	T	%
7	4	3	7	70	4	8	12	100	-	-	-	-	8	11	19	86
8	3	6	9	60	7	1	8	100	-	-	-	-	10	7	17	74
9	-	-	-	-	4	3	7	78	16	8	24	46	20	11	31	51
10	-	-	-	-	-	-	-	-	8	5	13	46	8	5	13	46
11	-	-	-	-	-	-	-	-	7	8	15	46	7	8	15	46
12	-	-	-	-	-	-	-	-	13	7	20	46	13	7	20	46
Total	**7**	**9**	**16**	**64**	**15**	**12**	**27**	**93**	**44**	**28**	**72**	**46**	**66**	**49**	**115**	**55**
%	**44**	**56**	**100**	**-**	**56**	**44**	**100**	**-**	**61**	**39**	**100**	**-**	**57**	**43**	**100**	**-**

As shown in the table 2, out of 115 participant students of the study, 68.7% were from Grades 9-12, while 31.3% were from grades 7-8. Overall, among the 115 student participants 16, 27 and 72 are from Alpha, Hosanna, and Entoto special schools, respectively.

The age distribution of the student participants is displayed in Table 3 below.

Table 3: Age of Students by School and Sex

Schools	Age of Participants																		Total
	15 and below			16			17			18			19			20 & above			
	M	F	T	M	F	T		F	T	M	F	T	M	F	T	M	F	T	
Entoto		-	-	5	1	6	6	6	12	9	5	14	11	7	18	13	9	22	72
Hosanna	5	2	7	5	4	9	2	5	7	2	1	3	1	-	1	-	-	-	27
Alpha	1	1	2	1	2	3	-	3	3	3	2	5	2	1	3	-	-	-	16
Total	*6*	*3*	*9*	*11*	*7*	*18*	*8*	*14*	*22*	*14*	*8*	*22*	*14*	*8*	*22*	*13*	*9*	*22*	*115*
%			***8***			***16***			***19***			***19***			***19***			***19***	***100***

The above table shows that, the great majorities (92.2%) of the student respondents were above the age of 15, while 7.8% of them were below the age of 16. Student participants of age 19 and above years old were 38%. The average age of the student respondents as a whole was 18 years (SD= 1.7), with a range of 14 to 24 years.

The hearing status and the time of onset of the handicap of the student participants is summarized below in Table 4.

Table 4: Hearing Status of Student Participants and Time of Onset.

School	Hearing Status				Time of Onset				
	Deaf	H.H	No Response	Total	born deaf	Between birth & 6 years.	*After the age of 6 years*	Not known	Total
ALPHA	11	5	-	16	5	6	3	2	16
HOSANNA	13	12	2	27	7	5	2	13	27
ENTOTO	40	29	3	72	23	17	22	10	72
TOTAL	64	46	5	115	35	28	27	25	115
%	55.7	40	4.3	100	30.5	24.3	23.5	21.5	100

H.H= Hard-of- Hearing

As shown in the above table, most of the participants (i.e., 55.7%) were deaf. Only a few (i.e., 4.3%) failed to give an answer about their hearing status. In Hosanna special school, the number of deaf and hard-of-hearing participants is very similar, but not so in the other two schools.

With regard to the time of onset, (54.8%), of the students became deaf/pre lingual i.e., lost their hearing before they were able to speak. While 23.5% of them were post lingual /became deaf after hearing and speaking/ now can speak but not hearing. The rest, i.e., 21.5% of the participants did not know when and how they got the problem.

The educational level of the students' parents/guardians is presented in Table 5 below.

Table 5: Parents Education Level

Levels of Education	No & % of Parents at each Level of Education					
	Mothers/female guardians		Fathers / male guardians		Grand total	
	No	%	No	%	No	%
Illiterate	29	25.2	16	13.9	45	19.6
Basic Literacy (grades I-4)	20	17.4	20	17.4	40	17.4
Primary 1-8	21	18.3	28	24.3	49	21.3
Secondary 9-12	20	17.4	21	18.3	41	17.8
Above grade12 but below college diploma	14	16.5	17	14.8	36	15.7
Diploma and above	5	4.3	7	6.1	12	5.2
No Response	6	5.2	6	5.2	12	5.2
Total	***115***	***100***	***115***	***100***	***230***	***100***

The table indicates that 25.2% of the students' mothers are illiterate. Also, the majority of the parents have an educational level of grade 8 or below.

With regard to income, most of the student respondents did not indicate the monthly income of their parents. Either they did not want to reveal the information or did not know the income size of their parents. However, 101(87.8%) of the respondents have indicated the occupations of their parents (see Table 6 below).

As shown in the Table 6, the students reported 11 different occupational fields. Concerning the mothers about 39% are housewives, 16% merchants, and 11% are teachers.

Table 6: Reported Parental Occupations by School and Sex

Occupation	Parents/Guardians by Associated School							
	Mothers/ Female guardians				*Fathers / male guardians*			
	Alpha	Hosanna	Entoto	Total	Alpha	Hosanna	Entoto	Total
House Wife	5	8	26	39 (41.5%)	-	-	-	-
Merchant	1	5	10	16 (17.0)	3	5	10	18 (19.1%)
Teacher	1	2	8	11 (11.7)	1	2	4	7 (7.4%)
Office worker	2	3	10	15 (16,0)	3	8	9	20 (21.3%)
Farmer	-	-	-	-	-	3	5	8 (8.5%)
Soldier	1	-	1	2 (2.1)	-	1	8	9 (9.6%)
Nurse	-	-	1	1 (1.1)	-	1	1	2 (1.1%)
Daily laborer	1	-	9	10 (10.6)	5	2	14	21 (22.3%)
Mechanic/ Driver	-	-	-	-	1	2	6	9 (9.6)
Total	**11**	**18**	**65**	**94 (100)**	**13**	**24**	**57**	**94 (100)**

Regarding the fathers/male guardians, about 21% are daily laborers, and 21% are office workers and 19% are Merchants.

4.1.1.2. School Personnel/Professionals

The term school personnel/school professionals, as described earlier, comprises-samples of teachers, unit leaders, principals/deputies, and counselors in the relevant special schools.

According to demographic information about the school personnel, 61.5 % are teachers. In addition, 84.6% of the sampled school personnel have no hearing-impairment. The rest 15.4% are hearing-impaired who are from Alpha and Hosanna special schools.

Table 7: School Personnel Professional Types, and Hearing Status by Sex and Schools

Schools	Profession/Types												Hearing status				Grand Total			
	Teachers			Unit leaders			counselors			Principals/ Deputies			"Normal"	H. H	*Deaf*	T	M	F	T	%
	M	F	T	M	F	T	M	F	T	M	F	T								
Entoto	9	1	10	3	1	4	1	1	2	2	-	2	18	-	-	18	15	3	18	46.2
Hosanna	4	2	6	2	-	2	-	-	-	2	-	2	6	1	3	10	8	2	10	25.6
Alpha	1	7	8	1	-	1	1	-	1	1	-	1	9	1	1	11	4	7	11	28.2
Total	14	10	24	6	1	7	2	1	3	5	-	5	33	2	4	39	27	12	39	100
%	-	-	61.5	-	-	18.0	-	-	7.7	-	-	12.8	84.6	5.1	10.3	100	69	30.8	100	-
Rank order	-	-	**1**	-	-	**2**	-	-	**4**	-	-	**3**	**1**	**3**	**2**		**1**	**2**	-	-

Key: M= male, F= Female, T= total H.H= Hard-of-Hearing

Educational qualification and Certification of school personnel is displayed in Table 8. Out of the total number of respondents of the school personnel 21% have TTI certificate, 26 % have a college diploma, 49 % BA/BSC degree, and the rest (5%) have MA/MSC degree.

Regarding the qualification of the sampled school personnel in the three special schools, the large majority (89 %) degree holders were from Entoto. Alpha had a good number of diploma teachers (55%). In Hosanna school, the distribution of certified teachers, 30% each from TTI certificate diploma, and degree levels of qualification. In terms of training in special needs education, there were few teachers that are qualified at diploma or higher level. Among these 8 special needs education professionals, 6 (4 diploma, and 2 MA holders) were from Hosanna, and two (one BA and one MA holders) were from Entoto secondary special classes. Alpha had no such qualified special educators.

Table 8: Certifications and Qualifications of School Personnel.

School	Qualification, and Certification of School Personnel									
	TTI Certificate		*College diploma*		*BA/BSC*		*MA/MSC*		*Total*	
	No	**%**	**No**	**%**	**No**	**%**	**No**	**%**	**No**	**%**
Alpha	5	45	6	54	-	-	-	-	11	100
Hosanna	3	30	3	30	3	30	1	10	10	100
Entoto	-	-	1	6	16	89	1	6	18	100
Total	**8**	**-**	**10**	**-**	**19**	**-**	**2**	**-**	**39**	**-**
%	21	-	26	-	49	-	5	-	100	-

Table 9, shows the work experiences of school personnel's, in terms of the number of years of service, together with the number of years of service in special schools. All (100%) of the participants had below twenty years of service.

Table 9: Teachers' Work Experience, and Service Years

Service years	No & % of School Professionals With the Indicated Service Years									
	Alpha		*Hosanna*		*Entoto*		*Total*			
	Total service	Service In SNE	Total service	service In SNE	Total service	Service In SNE	Total Teaching service		Experiences In SNE.	
							No	%	No	%
1-5 years	-	1	1	2	-	3	1	2.26	6	15.4
6-10 years	1	2	2	4	1	11	4	10.3	17	43.6
11-15 years	2	5	3	2	2	1	7	17.9	8	20.5
16-20 years	3	3	3	2	4	-	10	25.6	5	12.8
More than 20 years	5	-	1	-	10	-	16	41.0	-	-
No Response	-	-	-	-	1	3	1	2.6	3	7.7
Total	11	11	10	10	18	18	39	100	39	-

SNE =Special Needs Education

However, the majority of them (66.6%) had served for at least sixteen years. The range of service years is between 2 and 19. The table also shows that the great number of participants 30 (76.9%) had six and above years of service. Out of these 30 respondents 10 are from Alpha, 8 from Hosanna, and 12 from Entoto special schools. (Three respondents from Entoto did not indicate their years of service in teaching hearing–impaired students).

The types of the training the school personnel respondents have undergone are indicated in Table 10 (below).

Table 10:Types of Training Received by School Personnel

School	No & % School Personnel with Different Types of Training in SNE				
	No training	*In service training seminar, and workshop*	*Pre-service training below diploma*	*Diploma, BA/BSC/ MA*	Total
Alpha	4	6	1	-	11
Hosanna	-	1	3	6	10
Entoto	14	1	1	2	18
Total	18	8	5	8	39
%	46.2	20.5	12.8	20.5	100
Rank order	(1)	(2.5)	(4)	(2.5)	

Table 10 reveals that out of the total number of 39 school personnel participants, 18 had no special training on deaf education, and did not attend any orientation, seminars or workshops regarding the nature and teaching methods of deaf students. From this group 77.7% were from Entoto School, while the rest 22.3% were from Alpha special school.

Only 33.3 % of the respondents reported that they had pre-service training in special needs (deaf) education lasting 6 months to two years (MA levels), The majority of those (69.2%) are from Hosanna school. 20.5% of the school personnel respondents said that they have received short training in the forms of seminars, workshops and in-staff training programs (Alpha).

The distribution of teachers who are trained to teach deaf students widely differed from school to school. For instance, in Alpha special school there is no teacher that has a diploma or degree in special needs education. On the other hand, in Hosanna special school, 60% of the school personnel were holders of diploma and degree in special needs education. In Entoto School, 77.8% of the school personnel had no training in special needs education even in terms of orientation.

The feeling of the participant school personnel towards deaf education is reflected in Table 11.

Table 11: Teachers' Attitude and Feeling Towards Educating Hearing-Impaired Students by Schools

Feelings	No & % of Teachers Showing Feeling							
	Alpha		Hosanna		Entoto		Total	
	No	%	No	%	no	%	No	%
Very happy	6	54.5	8	80.0	1	5.5	15	38.5
Happy	4	36.4	1	10.0	2	11.1	7	18.0
Less happy	1	9.1	1	10.0	3	16.7	5	12.8
Not happy	-	-	-	-	10	55.6	10	25.6
No Response	-	-	-	-	2	11.1	2	5.1
Total	**11**	**-**	**10**	**-**	**18**	**-**	**39**	**-**

As shown in the Table, about 26% of the participants indicated that teachers are not happy with teaching the deaf. Only 38.5% of the participants the majorities of which are from Alpha and Hosanna, said they are very happy. A large percentage of Entotos' school personnel 72.2% said they are not happy or get drive only a little happiness with their job.

4.1.1.3. Parents/ guardians involved in the study

Out of the 15 sampled parents, 12(80%) are involved in the study. All (100%) the sampled parents from the two governmental schools participated.

(The writer could not meet 3 parents of the students of Hosanna non-governmental boarding special school). Among these 12 parent participants, 7 were females (6 mothers and one grandmother), and 5 males (two fathers, two elder brothers and one guardian).

The educational level of the parents/guardians of the deaf associate students is indicated in Table 12.

Table 12: Educational Level of Parent Participants

Levels of Education	**Mothers/ female Guardians**		**Fathers / Male Guardians**		*Parents/Guardians* **Both**	
	F	**%**	***F***	**%**	***No***	**%**
Illiterate	2	28.6	-	-	2	16.7
Basic Literacy/religious.	-	-	1	20.0	1	8.3
Grades 1-8	3	42.9	2	40.0	5	41.7
Grades 9-12	-	-	1	20.0	1	8.3
Above secondary & below college diploma	1	14.3	-	-	1	8.3
Diploma and above	1	14.3	1	20.0	2	16.7

The above Table shows that, 25% of both groups (mothers/female guardians, and fathers/male guardians) are illiterate and had basic education of grades 1-4. On the other side, 16.7% of both parents/guardians were above college level. Over all, 41.7% of the two groups of the participant parents/guardians had a primary level of education.

All the interviewed parents (100%) were hearing parents. With respect to their family size, the average family size was 6.8. Out of different occupations parents placed in, 41.7% of them were housewives. 25% were working in teaching profession. While, 16.7% of them were drivers (technicians).

Six of the 12-parent/guardian participants said that they discovered that their children became deaf before the age of two years. With regard to the cause for their children's deafness, 9 of the parents said that Meningitis is the main cause. Using Holy waters, prayers in church and, taking to traditional healers and to clinic/Hospitals were the treatment practices reported by the respondent parents.

4.1.2 Educational provisions and services

Table 13 (below), shows the periods allotted per week for different subjects offered to the hearing-impaired students in the concerned schools.

Table 13: Allotted Periods Per Week for Subjects and Skills Offered by Schools and Grades

Subject Area	Distribution of Periods Allotted per week by School & Grade								
	Alpha		Hosanna			Entoto			
	Grades		Grades			Grades			
	7	8	7	8	9	9	10	11	12
Academic subjects	-	-	-	-	Students integrated in grade nine of Wachamo secondary school. Offered vocational training during remaining time	-	-	-	-
Amharic	4	4	5	5		2	2	3	3
English	5	5	5	5		5	5	6	6
Mathematics	5	5	5	5		5	5	6	6
Social studies	4	4	4	4		-	-	-	-
Geography	-	-	-	-		2	2	3	3
History	-	-	-	-		2	2	5	5
Civics	-	-	-	-		2	2	-	-
Biology	3	3	3	3		4	4	4	5
Chemistry	3	3	3	3		4	4	-	-
Physics	3	3	3	3		3	3	-	-
Physical Education	2	2	2	2		1	1	1	-
Pre- Vocational training	**none**	**None**	-	-		-	-	-	-
Computer	none	None	1	1					
Mechanical Drawing	-none	-none	2	2			-	-	-
Hand crafts/home science	-none	-none	5	5		-	-	-	-
W. Working (work-shop)	closed	closed	working	work		-	-	-	-
M. Work (work-shop)	closed	closed	Working	Work		-	-	-	-
Tailoring & embroidery (room)	closed	Closed	working	"		-	-	-	-
Typing	Close d	closed	None	none		-	-	-	-
Vocational skills	None	None	offered	Offer.		-	-	-	-
Wood Work	-	-	-	-		-	-	-	-
Tailoring & embroidery	-	-	-	-	✓	-	-	-	-
Sign Language	1	1	-	-	✓	-	-	-	-
Religious /Bible	-	-	2	2	-	-	-	-	-
Total	**30**	**30**	**40**	**40**	**15+30**	**30**	**30**	**30**	**30**

In Hosanna special school students attend the school full day. They learn 40 periods per week, i.e., 8 periods per day, from Monday to Friday. In Alpha and Entoto schools the students attend classes 30 periods per week, i.e., for half a day from Monday to Friday.

Table 13, also reveals that those students from Entoto and Alpha governmental special schools are taught only pure academic subjects while students of Hosanna non-governmental special school are provided with academic and (prevocational/vocational) skills training. That is with the extra 10 periods eight (8) periods are allotted for prevocational and vocational training. As it indicated in the table handicrafts-consisting of wood work, metal work, tailoring and embroidery, and home science (as observed by the writer the training mostly, focused on food preparation) was allotted 5 periods per week. "Computer" and Mechanical drawing were taught one and two periods were allotted per week, respectively, to all students in grades 5-8.

Beginning the 2000/2001 academic year, Hosanna special school started a two years new extended and advanced vocational special training program for its grade nine and grade 10 students of wachamo secondary school in Hosana.

According to the principal of the school, Ato Zerihun Haile Mariam the program was designed to provide functional proper skill training in two areas (woodwork and metal work; and tailoring and embroidery).

Based on the data collected from the Hosanna participants and records from school documents the prevocational and vocational skills that are provided to students from grade 5 are presented below as follows:

- Wood work
- Metal work
- Tailoring and embroidery
- Home science (on food preparation)
- Computer orientation and training
- Mechanical Drawing.

The schedule of timetable (Appendix-05) also shows that students of grades 5 to 8 are offered an orientation and training in these skills. While grade 9 students (vocational year I) are offered only woodwork and metalwork or tailoring and embroidery outside regular classes.

With regard to the content of the academic subjects, 100% of the school personnel reported that the curriculum they use in classrooms is the same with the curriculum for regular students of similar grades. However, the books and guides used in the schools understudy are the same with those used in regular schools.

None of the hearing-impaired student respondents from Alpha and Entoto special schools are allowed to take vocational training.

All of the students from Hosanna responded that they receive prevocational and vocational skill orientation and training in addition to the academic subjects.

The student participants were also requested to indicate the most liked and disliked subjects. Table 14, shows the subjects preferred by deaf students themselves.

Table14: Subjects Most Preferred by Hearing-Impaired Students and by Grades

Subject	No and % of Students Expressing Preference for the Subject by Grade and rank.								
	7	*8*	*9*	*10*	*11*	*12*	*Total*		*Rank*
							No	*%*	
English	12	5	14	10	7	10	58	50.4	1
Mathematics	10	7	18	7	4	8	54	47.0	2
Biology	12	8	11	3	3	4	41	35.7	3
Amharic	6	3	10	7	4	5	35	30.4	4
Chemistry	7	9	11	2	1	2	32	27.8	5
History	-	-	7	-	3	6	16	13.9	6
Social Studies	7	5	-	-	-	-	12	10.4	7
Geography	-	-	-	1	4	6	11	9.6	8
Physics	3	2	2	-	-	-	7	6.1	9
Sign Language	3	2	-	-	-	-	5	4.3	10
Civics	-	-	3	-	1	-	4	3.5	11.5
Physical education	-	3	-	-	1	-	4	3.5	11.5

As Table 14 shows, English and Mathematics are by far the subjects most preferred by the respondent students. Mathematics was the subject most liked by the great majority of the respondent students of grade nine (58.1%) while English was most liked by the respondent students of the same grade (45.2%).

Subjects that are disliked by the respondent students were also displayed in Table 15, (below).

Table 15: Subjects Not Preferred by Hearing-Impaired Students by Grades

Subject	No. of Students Expressing Subjects not Preferred by Grades								
	7	*8*	*9*	*10*	*11*	*12*	*Total*		*Rank*
							No	*%*	
Physics	6	8	19	6	-	2	41	35.7	1
Amharic	7	7	10	2	5	2	33	28.7	2
Biology	4	3	10	3	4	3	27	23.5	3
Mathematics	6	3	8	-	4	3	24	20.9	4
Chemistry	2	5	11	3	-	1	22	19.1	5
Geography	-	-	11	4	3	3	21	18.3	6
History	-	-	7	5	4	1	17	14.8	7
Civics	-	-	7	4	-	-	11	9.6	8
Social Studies	2	4	-	-	-	-	6	5.2	9
English	-	-	2	-	2	-	4	3.5	10
Phy. Education.	1	-	-	-	1	-	2	1.7	11

Table 15 displays that Physics is the most disliked subject by the majority of respondent students.

With regard to the conditions and facilities of teaching-learning materials/visual aids in each school the responses obtained from the student participants are summarized in Table 16.

Table 16: Facilities of Visual Teaching-Learning Materials by Schools

Condition	No. & % of Respondents by School							
	Alpha		*Hosanna*		*Entoto*		*Total*	
	No	*%*	*No*	*%*	*No*	*%*	*No*	*%*
Adequately available	1	6.3	24	88.9	1	1.4	26	22.6
Available but in adequate for use	5	31.2	3	11.1	10	13.8	18	15.7
Available but not in used by teachers	8	50.0	-	-	12	16.7	20	17.4
Not available at all	2	12.5	-	-	45	62.5	47	40.9
No response	-	-	-	-	4	5.6	4	3.4
Total	***16***	***-***	***27***	***-***	***72***	***-***	***115***	***100***

As shown in Table *16* (above), most 40.9% of the respondents (except from Hosanna) said that no relevant and adequate visual teaching aids are found in their special schools. But the great majority of Hosanna School respondents reported that the school has adequate and relevant teaching-learning visual materials. Overall, only 22.6% of the respondents said that they have adequate teaching-learning materials.

The methods of communications teachers' use in class as reported by students and the teacher participants are summarized in Table 17, below.

One hundred twenty seven (95 students and 32 school personnel) reacted to a question about using sign language. Out of these respondents 17 teachers said that they use it, and 43 students preferred to use the sign language.

Over 67 of them (43.5%) (15 teachers and 52 students) reported that they do not use sign language at all times in schools.

Regarding the oral/speech/lip reading method of communication, 122 (79%) of the total respondents said that teachers use oral, lip reading method, and 11.7% said that they do not use oral commutation method at all.

Total communication is another method of communicating with the hearing-impaired students of the study. Out of these respondents, 108 of them (33 teachers, and 75 students) reported that teachers use it in classrooms. Only 15.6% of them responded that teachers do not use the method in classrooms.

The other method, which is mostly used in Entoto technical and vocational secondary school, was written communication method (65%).

Table 17: Methods of Communications Used in Classrooms

Conditions/ status	**Methods of Communication/Instructional Media used**															
	Sign language				**Oral/lip reading**				**Total communication**				**Others- written**			
	No. & % of Respondents indicating the condition/status of using.															
	* T	* S	Both (T+S)		T	S	Both (T+S)		T	S	Both (T+S)		T	S	Both (T+S)	
			No	%			No	%			No	%			No	%
In use	17	43	60	39	37	85	122	79	33	75	108	70	20	80	100	65
%	**44**	**37**	-	-	**95**	**74**	-	-			-	-	-	-	-	-
Not in use At all	15	52	67	43	2	16	18	12	6	22	28	18	-	-	-	-
%	**39**	**45**	-	-	**5**	**14**	-	-	**15**	**19**	-	-	-	-	-	-
No responses	7	20	27	18	-	14	14	9	-	18	18	12	19	35	54	35
Total	39	115	154	100	39	115	154	100	39	115	154	100	39	115	154	100

Key:S=Students,T=Teachers

Methods of communications that are relatively more favored to hearing-impaired students as reported by the sampled (students and school personnel) indicated in Table 18, below.

According to Table 18, 89 respondents (75 students and 14 school personnel) said that the deaf students favored most sign language in classrooms. That amounts to 57.8% of the two groups. When the two groups are considered together, 27.3% and 13.6% reported using total communication and oral/ lip reading methods of communications, respectively. The table further indicates that the majority of student participants preferred to use sign language than the other Methods of communication.

Table 18: Communication Methods that Hearing-Impaired Students favor by students and school professionals

Method	No. & % of Respondents Indicating Preference of Students																		
	Entoto				*Hosanna*				*Alpha*				*Overall*				S & SP combined (Grand Total)		
	Students		Teachers		Students		Teachers		Students		Teachers		Students		Teachers				
	No	%	no	%	No	%	No	%	No	%	no	%	no	%	no	%	No	%	Rank
Sign language	48	66.7	6	33.3	16	59.3	4	40.0	11	68.8	4	54.5	75	65.2	14	35.9	89	57.8	1
Oral/ speech/LR	10	13.9	2	11.1	5	18.5	1	10.0	1	6.3	2	18.2	16	13.9	5	12.8	21	13.6	3
Total com.	14	15.3	8	44.4	6	22.2	5	50.0	4	25.0	5	45.5	24	20.8	18	46.2	42	27.3	2
Others- written /Reading	-	-	1	5.6	-	-	-	-	-	-	-	-	-	-	1	2.6	1	0.7	4.5
No Responses	-	-	1	5.6	-	-	-	-	-	-	-	-	-	-	1	2.6	1	0.7	4.5
Total	72	-	18	-		-	10	-	16	-	11	-	115	-	39	-	154	100	

S= Students, SP= School Professionals.

4.1.3. Major problems and Constraints

According to the information secured from the sources of the study, that is, from the sampled schools and respondents, the major factors and reasons as to why hearing-impaired students are not provided with vocational skill training are as follows. Table 19, displays the major problems and constraints of vocational training services of the special schools of the deaf, (below).

Table 19: Suggested Factors that impede the Provision of Vocational Skill Training for the Deaf Students by schools

Reasons	*No. & % of Respondents Citing the Reasons*			*Total*		*Rank order*
	Alpha	*Hosanna*	*Entoto*	*No*	*%*	
Lack of guidelines /vocational training policy and strategy for SNE/deaf education.	11	7	12	30	76.3	1
Lack of trained, and vocationally skilled teacher competent to teach the deaf	10	-	16	26	66.7	2
Inadequate awareness of the concerned bodies about education of the deaf	10	3	12	25	64.1	3
Lack of appropriate curriculum for the deaf.	9	3	10	22	56.4	4
Shortage of budget	11	-	5	16	41.0	5.5
Lack of appropriate materials	5	-	11	16	41.0	5.5
Ignorance of the school administrators.	-	-	8	8	20.5	7
Inadequate efforts made by ENAD*	2	1	4	7	17.9	8
Not known	-	2	1	3	7.7	9

Key**: ***ENAD= Ethiopian National Association of the Deaf

As shown in table 19, (above) the absence of guidelines (vocational special training policy and training strategy for the deaf education) is the most serious factor that hinders the education of the deaf. Lack (shortage) of trained and vocationally skilled special teachers to teach the deaf and inadequate awareness about the education of the deaf is next in importance to impede. Shortage of working capital (budget) was also indicated as a vital problem to start and manage the training program in the two governmental schools. However, in Hosanna special school budget was not a significant problem.

With regard to the relevance of educational provisions for livelihood/employment, the respondents' views about the adequacy of the contents and objectives of the education offered to the deaf students for preparing the students for future life are summarized in Table 20 (below).

As indicated in Table 20, 40.4% of the participants felt that the education currently being provided to the hearing-impaired students does not prepare the students for future working life. In this case, the views of the three-study group (students, school personnel, and parents) indicate similar. The percentages of participants from the three sampled special schools, who said that the educational provisions do not prepare the students for future life were 67% (Entoto), 9% (Alpha) and 0% (Hosanna).

The views of students, regarding opportunities for work after schooling or further studies are indicated in Table *21* (below).

Table 21: Views of Students on Future Job and/or Further Studies

View	**No & % of Students Expressing their view**								
	Majority		**Some**		**None**		**No response**		***Total***
	No	***%***	***No***	***%***	***No***	***%***	***No***	***%***	***No***
No Job (Jobless)	100	60	10	6.0	3	1.8	53	77.0	166
Continue education at college level.	-	-	-	-	161	99.0	5	3.0	-

As shown in the Table above, the great majority of them 110 or 95.7% of the respondents said that after studying, hearing-impaired are left with no Job. 161 or 99.0% of the respondents said that the chance of deaf students to continue their higher education at college level is none (low).

Similarly, school personnel also indicated the types of Jobs or the opportunities that the hearing-impaired young adults are likely to get after schooling. Out of 39 school personnel respondents 21 or 53.9% said that the deaf school leavers can not get a Job. The rest indicated that very few of such school leavers may get a job after having additional functional vocational training in non-governmental organizations like as, in Misrach training center, and Sigma Vitae and provide a job. Most of the graduates of these training centers are hired or placed in woodworking, tailoring, and eyeglass working.

Both school personnel and students gave their assessment of teachers' effort in teaching and helping the hearing-impaired. Table 22 (below), displays the views of the two group respondents.

Table 22: Views of the Participants on the Teachers' Effort to Teach and to Help Deaf Students

Level of Teacher Effort	No. & % of Teachers and Students Expressing Teachers' Efforts											
	Alpha		*Hosanna*		*Entoto*		*Sub Total*				*Grand Total*	
	S	*SP*	*S*	*SP*	*S*	*SP*	*Students*		*SP*		*No.*	*%*
							No	%	*No*	*%*	*No*	*%*
Very big effort	4	5	10	6	3	-	17	14.8	11	28.2	28	18.2
Big effort	7	4	8	3	12	5	27	23.5	12	30.8	39	25.3
Moderate efforts	3	2	8	1	23	5	34	29.6	8	20.5	42	27.3
Little efforts	2	-	1	-	34	8	37	32.1	8	20.5	45	29.2
Total	***16***	***11***	***27***	***10***	***72***	***18***	***115***	***100***	***39***	-	***154***	***100***

S= Students, SP = School professionals.

As shown in the Table, 61.7% of the student respondents said teachers' effort in teaching and helping deaf students is either moderate or little. But only 41% of the teacher respondents said so. The difference in the view of students and teachers concerning the issue was small. Still most of the teachers (about 59%) reported that teachers' effort is moderate or big. While only 38.3% of the students accepted this view.

With respect to individual schools, most of the respondents (92.6%) from Alpha school said that the efforts of the teachers in their school were moderate or big medium level. The same was true about Hosanna school. To the contrary, in Entoto only 51% of the participants indicated that teacher effort to teach and help hearing--impaired students.

Besides these educational problems, the major problems that the hearing-impaired students frequently bring to school counselors, teachers, unit leaders and school directors, as reported by School personnel are:

a) Educational Problems:

- How to learn and study - (33.3%)
- Failure in doing home work- (28.2%)
- Under estimating the benefit of education (23.1%)

b) ***Psycho social Problems***:

- Future Job Placement (43.6%)
- Breaking school discipline (38.9%)

- Worrying about cost of living & learning (33.3%)
- Conflict with students, teachers, family (30.8%)
- Home school distance (20.5%)
- Heterosexual love (7.7%)

c) Health problems

- Head ache and ear-ache, (17.9%)
- Other pains/illness (7.7%)

With regard to the guidance and counseling services provided in the school, the data reveal variation from school to school. In Hosanna primary (boarding) non-governmental special school for the deaf, professional guidance and counseling services are not available. But in Alpha para-counseling service is undertaken by non-trained teacher.

However, the counselor in Alpha, is mostly engaged in disciplinary activities. In Entoto School, guidance and counseling service is provided with the involvement of a Psychologist, sociologist, and defectologist.

As reported by the school personnel respondent, school counselors indicated that the major problems that hampered the expansion of counseling services in the schools is, lack of knowledge of sign language (to communicate with the deaf), limited acquaintance with the science of deaf education, and the shortage of trained counselors.

Ignorance of school administrators about the value of the deaf education and the required services has also affected guidance and counseling services negatively and considerably.

Table 23: Problems that Limited the Expansion of Guidance & Counseling Services in Special Schools

Problem	No. of School Personnel Cited the problem	Rank on problem
-Lack of sign language knowledge,	21	1
-Shortage of trained and skilled psychologists.	20	2
-Shortage of budget to conduct research on deaf education and problems.	17	3.5
-The absence of in-service retraining orientation, seminars, work shops conferences for counselors on SNE (Deaf Education).	17	3.5
-Ignorance of the school administrators about the special needs education (Deaf Education)	15	5
-Lack of interest in counselors to help deaf students.	10	6
-The absence of different vocational skill training programs, (for vocational guidance services).	8	7
-Lack of interest in the service by students	3	8
-Limited awareness of the school community, about the counseling service and about deaf students.	2	9

4.1.4. Vocational Skill Training Needs

Out of a total of 166 participants from all groups, 89.8% respondents said that it is important to educate and train deaf students both in academic and vocational skills (mixed type, academic and vocational skill). More specifically, 102 (88.7%) of the students, 92.3% of the school personnel, and 91.7% of the parents expressed their view. 9.6% of the student participants indicated their preference is only to be trained in vocational skills alone.

Participants' opinion about the importance level of vocational skill training for the hearing-impaired students is shown in Table 24, (below)

Table24: Views of Students and School Personnel about the Desirability of Vocational Skill Training for the Deaf

View	No. & % of Participants Expressing the View					
	Students		*Teachers*		*Total*	
	No	*%*	*No*	*%*	*No*	*%*
Highly desirable	81	70.4	32	82.0	113	73.4
Desirable	23	20.0	5	12.8	28	18.2
Desirable to some degree	9	7.8	1	2.6	10	6.5
Not desirable	-	-	1	2.6	1	0.6
No response	2	1.8	-	-	2	1.3
Total	***115***	***100***	***39***	***100***	***154***	***100***

As shown in Table 24 above, most of the two groups of the participants agree that vocational skill training should be provided to deaf students. Among the student respondents it is 70.4% that indicated that, they highly agree. Among the school personnel, it is 82.0% who gave the same opinion. Over all, about 98% of the respondents agree with the provision of education and training of vocational skills to the hearing-impaired students.

The importance of vocational skill training to the deaf was explored in another way by asking respondent students if the deaf can earn living without having vocational education and training. Table 25 (below), summarizes the responses, and the views of the respondent students.

Table 25: Views of the Student Respondents on the Importance of Vocational Education and Training to earn a Living

School	No. & % of Participants Expressing the View						Total
	Can earn living		Can't earn Living		No Response		
	No.	%	No.	%	No.	%	
Entoto	10	13.9	59	81.9	3	**3.7**	72
Hosanna	4	14.8	23	85.2	-	-	27
Alpha	3	18.8	13	81.3	-	-	16
Total	***17***	-	***95***	-	***3***	-	***115***
%	***14.8***		***82.6***		***2.6***		***100***

As shown in Table 25, the great majority of the student 82.6% said that hearing- impaired students who have no vocational skill training could not earn a living in future. The percentage of participants who indicated this view was similar across the three schools, i.e., 85.2% (Hosanna), 81.9% (Entoto), and 81.3% (Alpha),

Parents /guardians also identified the special abilities/ visual activities of their deaf child in his/her extra time. Table 26, summarized and stated the responses below.

Table 26: Special Abilities/Hobbies of Deaf Children Viewed by their Parents

Abilities/Hobbies	**No. of Respondents citing the Abilities/Hobbies**					*Rank order*
	Alpha	*Hosanna*	*Ent-oto*	*Total*		
				No.	*%*	
Wood work/carpentry	3	2	3	8	66.7	1
Tailoring-embroidery, sweater Making etc.	3	1	2	6	50.0	2
Metal work	-	2	3	5	41.7	3
Mechanical work-auto-mechanics, Bicycle repair, and Garage works	-	1	2	3	25.0	4
Commercial activities	1	-	2	2	16.7	6
Shoe making and repairing	-	-	2	2	16.7	6
Drawing –Making arts	-	1	1	2	16.7	6
Reading hobby	-	-	1	1	8.3	8.5
Agriculture – E.g. gardening	1	-	-	1	8.3	8.5

As shown in the Table, 66.7% of the respondent parents have pointed out that their deaf children show interest in woodwork or do have the potential and ability to engage in it. Tailoring and metal work appear to be similarly popular, although, not as popular as woodwork.

The participants have also identified the vocational skills that can prepare and enable the deaf child for future working life, see Table 27 below.

Table 27: Vocational Training Needs of the Hearing-Impaired Students as Indicated by Different Groups

Skills	*No. & % of Respondents*					
				Total		*Rank*
	S	*T*	*P*	*No*	*%*	*Order*
Wood work	85	28	8	121	72.9	1
Tailoring and Embroidery	74	26	4	104	62.7	2
Metal work	67	21	5	93	56.0	3
Eye glass work	41	20	-	61	36.7	4
Hair dressing /beauty salon	42	16	2	60	36.1	5
Computer-Typing & technical operation	40	12	5	57	34.3	6
Mechanical work: Machinist, garage work,	-	-	-	-	-	-
and electricity	11	18	6	45	27.1	7
Sweater making	17	9	6	32	19.3	8
Shoe making and repairing	13	14	4	31	18.7	9
Arts/drawing, Gold smith	16	10	3	29	17.5	10.5
Camera-Video and Photo technician,	19	8	2	29	17.5	10.5
Home sciences food preparation etc.	4	11	3	18	10.8	12
Massage/physiologist	10	7	-	17	10.2	13
Printing and binding	3	11	1	15	9.4	14
Teaching the deaf students	5	2	-	7	4.2	15
Commercial activities	3	-	3	6	3.6	16
Farming	-	1	4	5	3.0	17
Weaving	1	2	-	3	1.8	18

In Table 27, the three skills most frequently cited, by the student respondents and which are reported by over 50% of the participants are woodwork, Tailoring and embroidery, and Metal work. Other different vocational skills were also identified and reported.

With regard to the improvements needed to be considered, the school personnel have indicated the kinds of improvements that should be made in the existing services for the betterment and efficient teaching and training of hearing-impaired students, Table 28 below, displays the suggested possibilities.

Table28: School Personnel's view regarding the Improvements Needed in the Education of the Deaf

Areas of improvement	**No & % of Suggesting the Improvement**		**Rank**
	No.	**%**	
Assigning specially trained and qualified special teachers	29	74.4	***1***
Assigning an interpreter to each class/assistant teacher, or strengthening resource center teacher.	27	69.2	2
Designing special prevocational and vocational skills training curriculum/ guideline.	26	66.7	3
Assigning vocationally skilled special teachers/that can teach and help the deaf	23	59.0	4
Developing dictionaries for sign language/preparing guide book and glossaries for each subject and grade.	20	51.3	5
Empowering teachers by expanding the training and retraining programs particularly on deaf education.	13	33.3	6

It is evident from Table 28, that the special teacher training is very important in the education of the deaf, 74.4% of the school personnel feel that the matter should be the topmost agenda.

The demand for an interpreter was also indicated by about 70% of the school personnel (where the majority of them are from Entoto). With regard to the objective and content of the curriculum, the need to include proper handicrafts/prevocational/ and vocational skill special training was also identified by about 67% of the school personnel. The importance of in-service training and retraining programs-workshops, conferences to the teachers on special needs education, in general and on deaf education in particular is also underlined by the respondent school personnel.

According to the school personnel, the preconditions that are important to start vocational skill training for hearing-impaired students are presented in Table 29.

As shown in the Table, 87% of the school personnel said that the presence of strategy for training vocational skill for deaf is a singularly important prerequisite to start and continue a vocational training program for the deaf. Identifying vocational skill training needs, for the deaf, equipping, the special schools with the proper training materials equipment, and employing competent professionals were also important preconditions for the training.

Table 29: Preconditions that Help to start Vocational Training Program as Identified by School Personnel

Precondition	No. & % of School personnel Respondents					Rank order
	Alpha	Hosanna	Entoto	Total		
				No	%	
Vocational skills training policy/strategy for the deaf	11	7	16	34	87	1
Identification of the special vocational skill training needs of the deaf students and the market.	10	6	14	30	77	2
Training and assigning competent skilled special teachers that can communicate with deaf students	10	3	16	29	74	3
Equipping and facilitating the schools with proper special training materials and equipment.	5	-	11	16	41	4
Allocating budget to run the training program.	4	2	7	13	33	5
Opening/using all workshops in the schools.	11	-	-	11	100	6

4.1.5. Views on the new 10+1 Vocational Skill Training Program.

The current policy of one-year vocational skill training program prepared by MOE for students that complete grade ten comprises 28 different skills, which are grouped under five streams (see appendix 06/2001).

The streams of the skill areas are:

1. Business Education	-	Six types of skills
2. Home science	-	Eight types of skills
3. Agriculture	-	Four types of skills
4. Construction	-	Three types of skills
5. Industrial Technology	-	Seven types of skills

According to the information from ICDR -(MOE) the program will start 2001/2002 academic year. The program is prepared only for hearing students; i.e., special needs students in general, and hearing-impaired students in particular are not considered in this skill-training program. To assess which parts of the program available for the hearing-impaired, the sampled student and the teachers were requested to give their views, and the results are summarized and presented in Tables 30-32. (*See also Appendix 06/2001).*

The top ten skills those teachers considered to be appropriate for the hearing-impaired are shown in Table 30 below.

Table 30: Skills in the 10+1 Program Considered to be Most Relevant for the Hearing-Impaired Students by Teachers

Skill	*Vocational Stream*	*No. & % of school personnel identified the Relevant Skills*		
		No	*%*	*Rank order*
Wood working	**Construction**	39	100	3.5
Hair-dressing & beautification	**Home science**	39	100	3.5
Bakery and confectionery	"	39	100	3.5
Dress Making	"	39	100	3.5
Tailoring men's Garment	"	39	100	3.5
Hotel Service Management	"	39	100	3.5
Textile Craft	"	38	97.4	7
Cooking & food processing	"	36	92.3	8
Surveying	**Industrial**	35	90.0	9
Drafting	"	33	84.6	10

The Table reveals that all school personnel participants mark six skills stated and ranked accordingly to the most top 6 skills; i.e., woodwork is an important area of training as of Hair-dressing, Bakery and confectionery, Dress making, Tailoring Men's Garment, and Hotel service management. According to respondent school personnel, three vocational streams are particularly, Home science skills are the most viewed important.

Table 31: Top Ten Skills in the 10+1 Program Considered to be the Most Preferred by Student themselves

Skill	Vocational Stream	No. & % of Student Respondents showed their preference		
		No.	%	Rank order
Wood working	Construction	112	97.4	1
Dress Making	Home science	105	91.3	2
Hair-dressing and beautification	"	103	89.6	3.5
Tailoring Men's Garment	"	103	89.6	3.5
Bakery and confectionery	"	100	87.0	5.5
Plant production	Agriculture	100	87.0	5.5
Cooking and food processing	Home science	97	84.3	7.5
Building construction	Construction	97	84.3	7.5
Home Manager	Home science	95	82.6	9
Accounting	Business	94	81.7	10

As Table 31 shows, 10 most desirable skills in 10+1 vocational training program from four streams are indicated. Woodwork skill is again identified to be the most desirable skill for the hearing-impaired as viewed by the student themselves. The views of respondent students about the kinds of skills that are relevant for them are indicated also in Table 26. As displayed in the two Tables (26, & 31) the choices and views were found similar.

When the views of both teachers and students about the relevance of the 10+1 program to the hearing-impaired students, the result is displayed in Table 32 below.

Table 32: Top Ten, Suitable Skills in the 10+1) Vocational Skills Training Program as Viewed by the Respondent Students and Teachers.

Skill	Vocational Stream	No. & % of Students and Teachers Viewed 10+1 training program.		
		No	%	Rank order
Wood working	Construction	151	98.1	1
Dress Making	Home science	144	93.5	2
Hair-dressing and beautification	"	142	92.2	3.5
Men's Garment tailor	"	142	92.2	3.5
Bakery and confectionery	"	139	90.3	5
Cooking and food processing	"	133	86.4	6
Textile crafts person	"	130	84.4	7
Plant production	Agriculture	127	82.5	8
Surveying	Industrial technology	125	81.2	9
Building construction	Construction	123	79.9	10

The table shows the top ten of10+1 vocational skills training program that viewed and selected in meeting the hearing-impaired students need, and potential. Table 32 is very similar to Tables 30 and 31, because the views of the students and teachers correspond well.

Woodwork is also again found to be the most skill viewed, and selected by the most Majority of the participants (98.1%) of the study group. As viewed by both respondents, Information Technology skill, which is included in the 10+1 program, is to be considered the least desirable.

4.2. Discussion

Generally, it is important for people with or with out disabilities to have education and training to be able to work. However, disability limits a person's ability to perform certain tasks in the manner most non-disabled do. To over come or minimize this problem, special schools provide special needs education to enable this group become effective. Yet, around the world, particularly in developing countries like Ethiopia, very many of the children with disabilities receive little or no education (Kokkola, 1997).

Like other forms of special needs education, education for the hearing-impaired was introduced to Ethiopia a few decades ago. As the result, there are few non-governmental and governmental special schools for the deaf in the country (MOE, 1987).

The objective of education of the deaf particularly at the secondary level is not clear and lacks a goal. This is one general observation that can be made from the study.

Another general observation is that there are limited programs for the hearing-impaired in the country's special schools, and as Kirk & Gallagher (1986) noted the job opportunities and capabilities of the hearing-impaired are at stake.

Less generally, the results show that all the schools included in the study provide academic subjects for students of grades 7 to 12. The curriculum and the allotted periods per week for each grade is similar to those in other regular schools. Revealingly, however, in the two governmental special schools (Alpha & Entoto) the students are offered only academic subjects. Where as in non-governmental school, (Hosanna) students are provided with handicraft/ Pre vocational and vocational/education and training. The varieties of training areas in this school include woodwork, metal work, tailoring and embroidery, home science mechanical drawing, and computer orientation program for students of grades 5 to 8. The school has started new vocational skill training program vocational years I and II for ninth and tenth graders. However, at the end of two years training program the school provides work equipment (tool kits and tailoring machine) for each trainee.

So, that the trainee can be assisted and be able to be even self-employed. As to information secured from the school principal during the informal discussion more than 60% of the x-students of the school were self-employed, and are managing their living productively.

Another issue emanating from study relates to teacher training communication with the deaf. As indicated by others (Chimedza, 1999, for e.g.), the major problem in the education of the deaf is not their hearing loss, but the problem of communication skills. In educating hearing-impaired students it is important to know their special problems. Most deaf students face language and communication barriers particularly in the classroom. Untrained teachers are poor signers and hearing- impaired students are poor oral communicators. Because of these barriers, internationally, the academic achievement of deaf students is generally very low. The results of the present study also show that the hearing-impaired students involved in the study have considerable communication problems with their teachers.

Though, variations exist among the three schools in the communication or methods they use, generally, they use sign language, oral speech/lip reading, total communication and writing and reading method of communications.

Total communication, which involves signing, amplification lip reading and finger spelling, needs the application of all and it requires a good deal of teacher training, which is not available.

As indicated in the study, teacher-students interaction is very poor (particularly, in Entoto special school/classes. Most teachers give notes and write on the black board.

That is the only method used by unskilled (sign language) teachers. Most of the teachers complained that they are very frustrated in teaching the deaf students. During the informal discussion with a teacher of deaf students, the teacher expressed his negative/sorrow-full feelings in his own terms: " My deaf students are unlucky. I am unlucky too. I am qualified and have rich experience in teaching regular hearing students. I have a great interest in the teaching profession. How can I communicate and help these students (deaf) without being trained (even with a day of orientation on deaf education). I have asked the school for a change and to hand the assignment over to some one who can try to teach. But, I couldn't succeed. Usually I go to class and write a note on a black board. The students copy it. No further interaction. What kind of education do you think is this? So, I feel guilty".

From the above views respondent teacher, one can easily understand the problem that arises when a teacher goes to teach a class that does not understand the language s/he speaks or under stands very little of what s/he says. In this regard, the study further indicates that the teachers of the governmental schools Alpha and Entoto are less skilled trained and qualified in comparison to those in Hosanna non-governmental special school. The teachers of the hearing-impaired have to learn first and foremost a new language, i.e., sign language, and secondly the specific technique for teaching the impaired of hearing children effectively.

In addition, the major reasons that impede prevocational and/or vocational skill educational and training particularly in governmental special schools for the hearing-impaired students are indicated in the study. In this respect, lack of policy or guideline for the vocational skill training of disabled students in general and for hearing-impaired students in particular is found to be one main problem. All special schools share this problem. Actively Hosanna school needs the guideline for the legality and certification of the training program it runs.

The other main factors, that impede vocational education and training of the hearing-impaired, as indicated by the study include, lack of vocationally skilled and competent special teacher in communicating hearing- impaired

students. Lack of proper curriculum, dictionary for sign language, less awareness to deaf education, and the ignorance of school administrators were the major impeding factors described in the study. Lack of adequate budget reported by the two governmental special schools is also the other major problem that pushed out the vocational skills special training for the impaired of hearing students.

Not surprisingly, in general, the study has also shown that the great majority of the respondents of the study feel that the education currently provided to the deaf students in special schools does not prepare and enable them for their future productive life. The data from Entoto secondary special school is especially indicative of the problem. Many students of the senior grades of Entoto special school/classes complain that the educational services currently provided for them do not prepare them for work. A student of grade 12 of Entoto special/class expressed the seriousness of the problem as follows:

> *No hearing-impaired student attended or graduated from the higher education institutions of the country. No higher institution is available and ready for deaf students of the country. Had these students been provided with vocational skill training during their school life, they would not face the serious problem of joblessness and they would not live in the abject poverty.*

The inadequacy of the education of the hearing-impaired obviously affects employment. 95.7% of the student respondents confirmed the acuteness of the problem which is confirmed to UNESC, (1973). The teachers and parents showed their disappointment about education and Job opportunities, because deaf students/ children can not join higher education institutions or get employment after schooling.

Generally, though few, the parents of Hosanna special school's appeared to be more satisfied with education of their deaf children, than parents of students of the two governmental schools. This is, probably because (a) the students of Hosanna live and learn in the school, (b) parents come and visit them occasionally, (c) the school provides all the necessary support (academic subjects, and vocational skills education and training services etc.).

Vocational skills training needs of the hearing-impaired students is also focussed in the investigation process. Because of deafness, the difference in language ability affects students' performance in academic areas. With these academic difficulties, it is very common for hearing-impaired students to be placed in vocational preparation. Due to these facts, more than ever before, now it is becoming increasing clearer that education and vocation are found fundamental and powerful influences on the hearing-impaired individuals future life.

The present findings also agree with other literatures of (UNESCO, 1988) that pupils of schools for the deaf successfully master numerous specialties in woodworking and many other types and kinds of skills. Vocational skills training needs for hearing-impaired students selected and preferred by the deaf student themselves, their teachers, and parents.

The result shows that according to the needs of the students the top 10 vocational skills of training needs identified by the groups are: woodworking, tailoring and embroidery, metal working, Hair-dressing/beautification, eyeglass working, computer training, camera technique, sweater making, Arts- drawing, gold smith, and shoe working and repairing. The result shown from the side of school personnel is found similar to that of students.

In general, the study confirmed that wood working skill of training is the most suitable for hearing-impaired students, which is found similar to the vocational skill training need identified by the whole participants of the study. This finding confirmed to the Astute, (1982), UNESCO, (1988), study reports on vocational education and training for hearing-impaired persons.

CHAPTER FIVE

5. *Summary, Conclusions, and Recommendations*

5.1. Summary

The study investigated the vocational skill training needs of the hearing-impaired students of grade seven to twelve. The study was conducted in Addis Ababa, and in Hosanna. Four special schools for the deaf (one for the pilot and the remaining three for the main study) were involved. A total of 166 participants (115 students, 39 teachers, and 12 parents) took part in the study. Using four kinds of instruments (two different questionnaires, for the students and teachers, an interview guide for parents and Observation checklist). The study was a descriptive type used qualitative and quantitative Method. It is organized in five chapters that are Introduction, literature review, Method of study, Data presentation and discussion, and finally the last chapter is summary, conclusion and recommendation part. The statements of the questions are answered properly in the study.

5.2. Conclusion

The education of hearing-impaired is very limited and at an early stage of development in the country. As it is stated in the Education and Training Policy of the country, (TGE, 1994), one of its objectives is "to enable both the handicapped and the gifted learn in accordance with their potential and needs". Yet a strategic plan is not available concerning special needs education. Further elaboration on the direction of special needs education in the country by the concerned authorities/ bodies is therefore important.

The study revealed that the special needs educational services that are provided to the hearing-impaired students in governmental and non-governmental schools have certain disparities in terms of qualification and retraining of teachers, educational facilities and services, budget allocation, preparing and enabling deaf students to learn and work.

Based on the data secured from the study group and observations made, the supports, educational facilities and service available to the students in Hosanna (non-governmental) special school for the deaf is by far better than those of the governmental special schools (Alpha and Hosanna) posses and provide.

The study also indicated that the factors that impede the provision of prevocational and/or vocational skill training. As mentioned earlier, lack of the special vocational skills training guideline/ strategy plan for vocational skill's special training is identified that to be as the major preconditions. Other specific problems are also indicated and described in the study. It may, therefore be concluded that special needs education has a long way to go. With regard to the importance of vocational skill training needs for the hearing-impaired students, there is obviously a very noticeable need for it, as indicated by respondent students, school personnel, and parents. However, different types of vocational skills have varying appeals to the students. In relation to this, the new 10+1 vocational skill-training program is too global when it is viewed from the point of view of the needs of the hearing-impaired.

Generally, hearing-impaired students in governmental schools are not provided with skills that will enable them to be productive for their lively hood. The goal of the secondary level of deaf education in Entoto is not clear. The educational inputs like teachers' preparation, instructional methods, and curriculum etc are not properly organized and provided, according to the needs and potential of the students. As to the result of this, the output is not satisfactory.

The chances the deaf students to continue their education at the higher education institutions and to get employment in governmental institutions or to self-employment are low. All the participants of the study,(the students, the parents, and the school personnel), see serious deficiencies in the training program of hearing-impaired students.

5.3. Recommendations

In order to address more satisfactorily the hearing-impaired educational service program, it seems very important to consider the following recommendations.

In view of the objectives of education stated in the current Education and Training Policy (TGE, 1994), and the results of this study, i.e., educational services, in the governmental and non-governmental special schools for the hearing-impaired students should be reviewed seriously and reconsidered as fast as possible.

In this regard:

1. The Ministry of Education and other concerned authorities should make every effort to improve the educational services of the hearing-impaired students (based on the students need and potential), so that hearing-impaired and the society at large can benefit from education. That is:

- A strategy that guides, the special needs education should be devised. This includes vocational skills training guidelines and manuals for the hearing-impaired.
- Training and retraining programs for vocational special teachers and other education workers with children of hearing-impaired should be encouraged. The programs should include communication skills, pedagogical methods, and the nature of special needs education in general and deaf education in particular.
- The curriculum for the hearing-impaired should be modified or adjusted on the basis of their needs, choices, and potential of the deaf students. So that, it can prepare them for higher education or skill training and working for future life.

2. The concerned governmental and non-governmental bodies that are involved in deaf education and rehabilitation services/programs need to work closely together to learn from each other and to improve their services.

3. Special education professionals and others in related fields should help in designing and conducting further detailed need assessment regarding hearing-impaired students.
4. Functional vocational skill training program for hearing-impaired persons need to be started and strengthened at different proper sites (post-school vocational training centers) which should consider the need and potential of the hearing-impaired persons and the need of the society.
5. Counseling services, in special schools for the hearing-impaired should be strengthened, by assigning competent and voluntary professionals.
6. Parent-school relationship should be handled effectively and smoothly. Parents have to be involved in their child's educational services and decisions. Special schools, ENAD and other concerned bodies need to train parents in sign language that can enable them to communicate effectively with their deaf child.
7. Higher Institution like A.A.U. need to prepare them selves to teach and help the capable deaf students to continue their higher education.
8. Further research work for special needs education in general and for deaf education in particular need due attention.

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Instrument

Appendix - 01/93

Addis Ababa University School of Graduate Studies

Department of Educational Psychology

Special Needs Education

Questionnaire to be filled by hearing-impaired students only

Purpose

The aim of this questionnaire is to look in to the educational services and training programs given to hearing-impaired students of grades 7-12 who are enrolled in government, and Non-government special schools for the deaf.

In addition to this, the questionnaire aims at identifying the vocational skill Training needs of the hearing-impaired students and viewing the 10+1 vocational skills training program and to get first hand information that can assist the future process of special education and training for the deaf students.

Understanding the importance of this study to the further social and future working life of the hearing-impaired persons you are sincerely requested to answer the questions provided here under.

Thank you for your sincere co-operation.

Dagne Belachew

2001

Name of the school _____

Note: 1. Answer the following questions by circling the letters or by putting (✓) or by writing answer on the spaces provided.

2. Writing your name is not necessary.

Section One: Biographical Data

1.1. Grade _____ 1.2 Sex _____ 1.3. Age _____

1.4. Hearing Status:

A. I do not hear completely (Deaf)

B. Partly I do not hear (hard-of-hearing)

1.5. When was the problem of hearing occurred?

A. immediately after birth/ born deaf

B. Before 6 years of age

C. After the age of 6

D. I do not exactly know the time

1.6. Identify your parents/guardians educational status

Educational Level	***Mothers/Female Guardians***	***Fathers/Male Guardians***
A. Can not read and-write		
B. Church education/ Quran(1-4)		
C. Elementary Education (1-8)		
D. Secondary Education (1-12)		
E. Above Secondary but under College Diploma level		
F. Diploma and above		

1.7. Your Parents/guardians profession/occupation and monthly income

S.No.	Parent/guardian	Profession/ occupation	Monthly income
1.	Father's or Male guardians		
2.	Mothers or Female guardians		

SECTION TWO: ON EDUCATION

2.1. What do your teachers frequently use for instructional media?

S. No	*Instructional media*	*They use it*	*They do not use it at all*
1	Sign language		
2	Speech/ lip reading		
3	Total communication		
4	Other method		

2.2. Which one of the following instructional media is more comfortable to you?

A. Sign language

B. Speech and lip-reading

C. Total Communication

D. Write if there is any other_____

2.3. Have you ever taken handicrafts or vocational education and skill training

A. Yes, I have taken

B. No, I did not have

2.4. If your reply to No 2.3 is yes, which type of handicrafts or vocational training's interest you more? _____

_____

2.5. Is what you have learned in school so far enough to assist /enable you in your future life?

A. Yes, It has fully prepared me

B. Partly it has prepared me C. No it has never prepared me

2.6. Amidst the subjects you are currently taking which ones are easier for you? Most preferred subjects? Write 3 in order of priority?

1. _____

2. _____

3. _____

2.7. Amidst the subjects you are currently taking which ones are uncomfortable not preferred to the hearing-impaired? Write 3 subjects.

1. _____

2. _____

3. _____

2.8. Are there appropriate visual teaching materials that can assist the hearing-impaired, available in your school?

A. Yes, in large amount C. Not at all

B. Yes, in small amount D. Even if available not utilised

2.9. How is the interest of the majority of teachers in teaching and assisting hearing-impaired students?

A. Very high C. Average

B. High D. Low

SECTION THREE: On Skills Training Needs

3.1. Do you think the hearing-impaired students can work and live productively even if they don't get any vocational skill training?

A. No, I don't think

B. Yes, I think

3.2. Which skill do you think will be more helpful for your future life?

_____ _____ _____ _____

3.3. What do you know about the fate of the hearing-impaired Students when they finish or dropout of schooling? put (✓) once for every conditions.

S.No	***Conditions***	***All of them***	***Most of them***	***Some of them***	***None of them***
1	No work/Jobless				
2	Go to colleges				
3	Other alternatives				

3.4. To prepare the hearing-impaired students to the practical world of work there are groups, who say, " It is necessary to give handicrafts, and vocational skills training for the hearing-impaired students while they are in school life". To what extent do you agree with the above idea?

A. Highly agree C. Partly agree

B. Agree D. Disagree

E. Write if there is any different idea_____

3.5. If you feel vocational education and skill training is necessary for you which skill do you prefer? _____

3.6. Based on the Education and Training Policy of the country (TGE, 1994), it has been decided by the Ministry of Education of Ethiopia that by September 2001, regular students are given vocational skill training in 28 different fields. How far do these skills of training meet the needs of the students with hearing-impairments and prepare them for life? Please, indicate for each skill.

No.	The first year 10+1 Vocational Training program	Appropriate /Suitable	Not appropriate/ Not suitable
A	**Business Education**		
1	Accounting		
2	Banking and insurance		
3	Marketing and salesmanship		
4	Purchasing and supplies		
5	Secretary and office management		
6	Information technology		
B.	**Home Science**		
1	Hairdressing and beautification		
2	Bakery and confectionery making		
3	Dress making		
4	Men's garment tailoring		
5	Textile crafts		
6	Cooking and food processing		
7	Home management		
8	Hotel service management		

No.	The first year 10+1 Vocational Training program	Appropriate /Suitable	Not appropriate/ Not suitable
C	**Agriculture**		
1	Animal Husbandry		
2	Plant production		
3	Natural resources protection		
4	Agro-mechanics		
D	**Construction**		
1	Building construction		
2	Road construction		
3	Wood Work		
E	**Industrial Technology**		
1	Electricity		
2	Electronics		
3	Drafting		
4	Surveying		
5	Machine Technology		
6	General Mechanics		
7	Auto mechanics		

Instrument

Appendix - 02/93

Addis Ababa University School of Graduate Studies

Department of Educational Psychology

Special Needs Education

Questionnaire to be filled only by Education professionals,

(Head teachers/principals, unit leaders, Teachers and students' Guidance and Counsellors).

Purpose

The objective of this study is to investigate the conditions of education and training being given to students with hearing-impairments found in both government and non-government special schools in Grades 7-12. Moreover, the study makes the needs assignment of vocational skill training of the students and towards important recommendations for the betterment of their future life. In addition to this, the 10+1vocational training program shall be viewed on the base of the hearing-impaired students' interest.

Although it is known that you are busy at this time, it has been considered that your contribution to the study is paramount. Therefore, I would like to ask you to fill out the questionnaire carefully and return it on time.

Thank you in advance for your co-operation.

Dagne Belachew

2001

Name of the school _____

note:

1. Respond to the following questions by circling the correct answer or by putting (✓) mark, or by writing your answers on the spaces provided.
2. Although all your responses are kept credential, please, do not write your names.
3. After you have finished filling the questionnaire, don't forget to retum to the person who gave it to you.

Part One Biographical Data

1.1. Sex M ☐ F ☐

1.2. Your present position and responsibility

a. head teacher

b. unit leader

c. only teaching/teacher

d. students' guidance and counsellor

e. If any other please identify _____.

1.3. How is the level of your Learning ability /hearing status/?

a. completely Learning /"Normal Hearing"

b. partially hearing /Hard - of-Hearing/

c. Totally not hearing /Deaf.

1.4. Your qualification

a. TTI certificate c. A/BSC degree

b. Diploma d. If any other, please specify _____

1.5. How long have you been teaching? _____ Years.

1.6. How long have you been at this school? _____ Years.

1.7. Have you got any special training that helps/enables to teach the hearing-impaired students?

a. No

b. I had on-job training

c. I had in presence training.

d. If any other, please specify _____

1.8. To teach the students with hearing-impairment, for how long have you been trained on the following methods of communications?

1.8.1. By sign language for _____ months

or for_____ years

1.8.2. By lip-reading for _____ months

or for _____ years

1.8.3. By total communication, for _____ months.

or _____ years.

1.8.4. If any other, please specify _____

1.9. If you have got special training, where did you get the training? (Please specify the place or the country).

1. _____ _____ 2. _____ _____

1.10. What do you feel in being a teacher /worker of students with hearing- impairments?

a. I am very much happy c. I am happy to some extent

b. I am happy d. I am not happy with the job at all.

Part Two With regard to Teaching-learning Conditions

2.1. There are groups who say, "It is possible to make the hearing-impaired persons hearing-impairments productive and capable of self-sufficient by giving them appropriate academic and vocational training".

To what extent do you agree with the above idea?

a. I strongly agree
c. I partly agree
b. I agree
d. I disagree

2.2. If vocational skill training or Handicrafts skills development has not been given to the students with hearing-impairment at this school, What are the reasons? State at least four of the reasons.

1. _____
2. _____
3. _____
4. _____

2.3. How often do you use the following communication methods at your school? Put (✓) mark where necessary.

Communication methods	***Responses***		
	Very often	***Sometimes***	***Never***
Total communication			
Sign language			
Lip-reading /oral speech			
Others			

2.4. Which one is the most suitable means of communication for your students?

a. using total communication

b. lip-reading or oral speech

c. sign language

d. other, please specify _____

2.5. Which curricular materials do you use to teach the students with hearing-impairments?

a. curriculum of formal/regular education

b. curriculum of formal education but the one adapted to be suitable for students with hearing impairments

c. if any other, please specify _____

2.6. Do you think that the materials being taught and the methods used at your school help students to be capable for world of work?

a. Yes, it does fully b. Yes it does, to some extent

c. No, it doesn't

2.7. If your answer to item 2.6 is "No, it doesn't", what do you suggest to improve the condition?_____

_____

2.8. How is the interest and effort of the teachers at your school to help hearing-impaired students?

a. Very high c. medium /average

b. High d. low

2.9. To help the needy students in all aspects, do you have guidance and counsellor at your school? How far is the counselling satisfactory?

a. Yes, there is. Always available at their disposal.

b. Yes, there is. but gives service sometimes and not satisfactorily

c. No there isn't No special service is given

d. If there is any other comment, please specify _____

2.10. What are the problems that students with hearing impairments come up with when they approach you for consultation? Identify at least three of the main problems.

1. _____

2. _____

3. _____

2.11. From the reasons that hinder of the provision of and the expansion of guidance and counselling service, for the students with hearing-impairments at your school, mention at least three of them.

1. _____

2. _____

3. _____

Part Three With regard to needs-based skill training

3.1. The students with hearing impairments, after completing their education at the specified level or after dropping out of school, which types of job do they usually join? Specify the first five jobs frequented by the students.

1. _____

2. _____

3. _____

3.2. Which subject area or field do you think is more suitable for the students with hearing impairments to help them become ready for world of work and for productive life?

a. giving only academic education

b. giving only vocation education

c. giving both academic and vocational education in an integrated way.

d. please specify if there is any other _____

3.3 From your experience in special needs education, which areas of study vocational skill training are more appropriate for the students with hearing impairments?

3.3.1. _____

3.3.2. _____

3.4.To provide vocational skill training for students with hearing-impairment, What conditions should be fulfilled at your school? State at least three of them.

1. _____

2. _____

3. _____

3.5. Based on the Education and Training Policy of the country (TGE, 1994) it has been decided by the Ministry of Education of Ethiopia that by September 2001 regular students with no visual or hearing impairments are given vocational skill training in 28 different fields. How far do these skills of training meet the needs of the students with hearing-impairments and prepare them for life?

No.	The first year 10+1 Vocational Training	Appropriate Suitable	Not appropriate Not suitable
A	**Business Education**		
1	Accounting		
2	Banking and insurance		
3	Marketing and salesmanship		
4	Purchasing and supplies		
5	Secretary and office management		
6	Information technology		
B.	**Home Science**		
1	Hairdressing and beautifying		
2	Bakery and confectionery making		
3	Dress making		
4	Men's garment tailoring		
5	Textile crafts		
6	Cooking and food processing		
7	Home management		
8	Hotel service management		

No.	The first year 10+1 Vocational Training	Appropriate Suitable	Not appropriate Not suitable
C	**Agriculture**		
1	Animal husbandry		
2	Plant production		
3	Natural resources protection		
4	Agromechanics		
D	**Construction**		
1	Building construction		
2	Road construction		
3	Wood Work		
E	**Industrial Technology**		
1	Electricity		
2	Electronics		
3	Drafting		
4	Surveying		
5	Machine Technology		
6	General Mechanics		
7	Auto mechanics		

Instrument

Appendix -03/93

ADDIS ABABA UNIVERSITYSCHOOL OF GRADUATES

Department of Educational Psychology

Special Needs Education

Interview Guide Question to the parents/Guardians of the hearing-impaired students

Name of the school _____

Purpose:

The main purpose of this instrument is to collect relevant data on Hearing-Impaired education in government/non-government special schools of the sampled students of grades 7 to 12 Parents/guardians.

The researcher of the study will interview Parents/Guardians of the deaf students of the sampled schools,. Parents (Guardians) are kindly requested to give their genuine responses on the deaf child education.

1. Personal Information Biographical Data

1.1 With regard to the respondent hearing-Impaired child student.

SEX		Age	Grade	Hearing status		Causes	Efforts made to cure
M	F			Hard-of-hearing	Deaf		

1.2 With regard to the respondent parents/ Guardians

Sex		Age	Relation ship	Educati on Level	Living conditions			Hearing status	
M	F				Type of work	Monthly income	Family size	Hearing	Hard-of Hearing

2. General Information Conditions

2.1 When the child became hearing-impaired? At what age of the child, the problem occurred?

2.2 The special abilities/hobbies your hearing- impaired child has?

2.3 Types of skills the deaf child usually show/ practices during the extra time

2.4 Does the education offered to your deaf child prepares and enables for his/her future working life?

2.5 Which types of vocational skills are most preferable to your deaf child for future productive life?

_____

_____

2.6. To prepare the deaf students for their future life, the types of education should be offered to them is/are?.

a) Only academic subjects

b) Only Vocational skills training

c) Mixed type (academic and vocational skills).

Thank you

2001

Appendix-04/93

ADDIS ABABA UNIVERSITY SCOOL OF GRADUATESTUDIES

DEPARTMENT OF PSYCHOLOGY

SPECIAL NEEDS EDUCATION

Observation Checklist and Data Collection form

The objective of this check list and data collection form is to assess the present status and educational conditions of hearing-impaired students and their vocational training needs.

Using the form, the researcher shall collect information about the educational services for the hearing-impaired in the relevant school.

Name of the School_____ **Date:**_____

1. Back ground Information about the School.

1.1 Year of establishment_____

1.2 The major objective/s of the school _____

_____

2. Periods of vocational training program/subjects offered per week in each grade

S/N	List of subjects & training programs in the school	Periods allotted per week by grades						Remark
		7	8	9	10	11	12	
I	**Academic subjects**							
1.1	Amharic							
1.2	English							
1.3	Maths							
1.4	Social studies							
1.5	Geography							
1.6	History							
1.7	Civics							
1.8	Biology							
1.9	Chemistry							
1.10	Physics							
1.11	Physical Education							
2	**Pre-vocational training**							
	2.1.1.							
	2.1.2.							
	2.1.3							
	Total periods per week							

3. Enrollment of Hearing impaired students by grade and sex

S. No.	Academic Year	Grade & Gender																				
		1-6			7			8			9			10			11			12		
		T	F	M	T	F	M	T	F	M	T	F	M	T	F	M	T	F	M	T	F	M
3.1	1992 E.C																					
3.2	1993 E.C																					

T= Total, M= Male, F= Female

4. Staff qualification & Experiences /services in years

S/N	Field of specialization	Qualification														Work Experiences in years					
		MA/MSC		BA/BSC		12+3		12+2		TTI		Others		Sp. Ed. Training for Deaf students		No. Sp. Training for Teaching deaf students		1-5		6-10		11+	
		F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	No	%	No	%	No	%
1	Teaching staff																						
	1.1 Academic Subject Teachers																						
	1.2 Sp.N Education																						
	1.3 Voc. Subjects																						
	1.4 G.Counselor/s																						
	1.5 Admi. staff																						
	1.5.1 Principal																						
	1.5.2. Deputy Prin.																						
2	Required staff																						
	2.1																						
	2.2																						
	2.3																						
	2.4																						
	2.5																						
	2.6																						
	2.7																						
	2.8																						

5. Capacity-Building programs offered to the teachers of hearing-Impaired Student

S.N	Training programs	Since 1990 E.C	Topics covered	The Program was organized by
1	Scholarship/s			
2	Orientation programs			
2.1	workshop/s			
2.2	Instaff training			
2.3	Seminars			
2.4	Other/s_____			

6. Capacity of services and facilities of the school

S/N	Facilities /Resources	Number/ Capacity	Adequacy			Remarks
			Sufficient	Not sufficient	Not Available	
1	Adm. Offices					
2	Class rooms					
3	Resource rooms					
4	Library services					
5	Visual learning aids					
6	Hearing aids					
7	Text books					
8	Laboratory					
9	Work shops					
	9.1 _____					
	9.2 _____					
	9.3 _____					
	Voc. Training equipment's Machines.					
10	Clini services					
11	Dormitory					
12	Source of fund.					
13	Budget					
	13.1 Only Govt.					
	13.2 Govt. & Others					
	13.3 Only Others					
14	Any other that are required					
	14.1					
	14.2					
	14.3					
	14.4					
	14.5					

Appendix 06/2001

የኢትዮጵያ ወንጌላዊት ቤተክርስቲያን መካነ ኢሱስ መስማት የተሳናቸው ት/ቤት

የ፩፱፱፫ ዓ.ም የትምህርት ዘመን የትምህርት ሰሌዳ ሆሳዕና

ቀን	ሰዓት	ጀማሪ		1ኛ ክፍል		2ኛ ክፍል		3ኛ ኛፍል		4ኛ ክፍል		5ኛ ክፍል		6ኛ ክፍል		7ኛ ኛፍል		8ኛ ክፍል		9ኛ	
	2.30-3.10	ም.ቋ	መመ	ሂሳብ	ሚሪ	ሂሳብ	መዳ	አማርኛ	ታደ	አ/ሳይ	ያዕ	ሂሳብ	ምህ	ሂሳብ	አጉ	አማርኛ	ተሸ	ሂሳብ	መኮ		
ሰ	3.10-3.50	አማርኛ	አ/መ	እንግ	ሚሪ	እንግ	ሀብ	እንግ	ተሸ	ሂሳብ	ታደ	አማርኛ	መዳ	ሙያ	ብር	እንግ	እሸ	ባዮ	መኮ		
	3.50-4.30	ሂሳብ	መ/ሚ	ም.ቋ	ስማ	አማርኛ	ታደ	ሂሳብ	መዳ	ም.ቋ	ሀብ	እንግ	አጉ	ሙያ	ብር	ሂሳብ	ምህ	እንግ	ጸጋ		
	5.00-5.40	ንግግር	ሚሪ	አማርኛ	አጉ	እ.ሥራ	ብ/መ	ኮምፕ	ሀብ	አማርኛ	መዳ	ጎብረት	ያዕ	አማርኛ	እሸ	ባዮ	መኮ	ሙያ	እቴ		
ኛ	5.40-6.20	ንግግር	ሚሪ	ሳይንስ	ያዕ	እ.ሥራ	ብ/መ	ኮምፕ	ሀብ	እንግ	እሸ	ሳይንስ	ተሸ	እንግ	ታደ	ኬሚ	መኮ	ሙያ	እቴ		
	8.00-8.40	ሙዚቃ	ብር	ሙዚቃ	ብር	ሙዚቃ	ብር	ሙዚቃ	ብር	ሙዚቃ	ብር	ኮምፕ	ወዳ	ሳይንስ	ተሸ	ፊዝ	ምህ	ጎብረት	ጸጋ	ሙያ	እ/እዳ
	8.40-9.20	መጽ.ቅ	መመ	ጎብረት	ብር	ጎብረት	ሀብ	አ/ሳይ	ምህ	ንግግር	እሸ	ኮምፕ	ወዳ	ጎብረት	ያዕ	ጎብረት	ጸጋ	ፊዝ	ምህ	ሙያ	እ/እዳ
	9.20-10.00									ንግግር	እሸ			መጽ.ቅ	ሀብ	መጽ.ቅ	ታደ	አማርኛ	እሸ	ሙያ	እ/እዳ
ማ	2.30-3.10	አማርኛ	አ/መ	እንግ	ሚሪ	እንግ	ሀብ	አ/ሳይ	ምህ	አማርኛ	መዳ	ጎብረት	ያዕ	እንግ	ታደ	ሙያ	እቴ	አማርኛ	እሸ		
	3.10-3.50	ም.ቋ	መመ	ሂሳብ	ሚሪ	አማርኛ	ታደ	ሂሳብ	መዳ	እንግ	እሸ	ሂሳብ	ምህ	ሂሳብ	አጉ	ሙያ	እቴ	ሂሳብ	መኮ		
ክ	3.50-4.30	ስዕል	ሚሪ	አማርኛ	አጉ	ሳይንስ	ያዕ	እንግ	ተሸ	ም.ቋ	ሀብ	አማርኛ	መዳ	አማርኛ	እሸ	ሙያ	እቴ	ኬሚ	መኮ		
	5.00-5.40	ሂሳብ	መ/ሚ	አ/ሥራ	አ/ብ	ሂሳብ	መዳ	አማርኛ	ታደ	አሳይ	ያዕ	እንግ	አጉ	ሳይንስ	ተሸ	ሂሳብ	ምህ	እንግ	ጸጋ		
ሰ	5.40-6.20	አማርኛ	አ/መ	አ/ሥራ	አ/ብ	ም.ቋ	ስማ	መጽ.ቅ	ሀብ	ሂሳብ	ታደ	ሳይንስ	ተሸ	ጎብረት	ያዕ	ባዮ	መኮ	ፊዝ	ምህ		
	8.00-8.40									መጽ.ቅ	መዳ	መጽ.ቅ	ሀብ	ገ/አ	ሳሙ	እንግ	እሸ	ባዮ	መኮ	ሙያ	ብ/ስ
ኛ	8.40-9.20	ስፖርት	መመ	ስፖርት	መመ	ስፖርት	ኢዮ	ስፖርት	ኢዮ	ስፖርት	ኢዮ	ስዕል	እሸ	ኮምፕ	መኮ	አማርኛ	ተሸ	ጎብረት	ጸጋ	ሙያ	ብ/ስ
	9.20-10.00	ስፖርት	መመ	ስፖርት	መመ	ስፖርት	ኢዮ	ስፖርት	ኢዮ	ስፖርት	ኢዮ	ስዕል	እሸ	ኮምፕ	መኮ	ጎብረት	ጸጋ	መጽ.ቅ	ተሸ	ሙያ	ብ/ስ
	2.30-3.10	ሂሳብ	መ/ሚ	አማርኛ	አጉ	ሳይንስ	ያዕ	አማርኛ	ታደ	እንግ	እሸ	አማርኛ	መዳ	ሳይንስ	ተሸ	ሂሳብ	ምህ	ሙያ	ብር		
ረ	3.10-3.50	ም.ቋ	መመ	እንግ	ሚሪ	እንግ	ሀብ	ሂሳብ	መዳ	አ/ሳይ	ያዕ	እንግ	አጉ	እንግ	ታደ	ኬሚ	መኮ	ሙያ	ብር		
	3.50-4.30	አማርኛ	አ/መ	ሂሳብ	ሚሪ	አማርኛ	ታደ	እንግ	ተሸ	አ/ሳይ	ያዕ	ሂሳብ	ምህ	አማርኛ	እሸ	ጎብረት	ጸጋ	ሙያ	ብር		
	5.00-5.40	ስዕል	ሚሪ	ጎብረት	ብር	ሂሳብ	መዳ	አ/ሳይ	ምህ	ሂሳብ	ታደ	ሙያ	እቴ	ሂሳብ	አጉ	እንግ	እሸ	ሂሳብ	መኮ		
ቡ	5.40-6.20	ሂሳብ	መመ	መጽ.ቅ	ሚሪ	መጽ.ቅ	ሀብ	ም.ቋ	ታደ	አማርኛ	መዳ	ሙያ	እቴ	ጎብረት	ያዕ	አማርኛ	ተሸ	እንግ	ጸጋ		
	8.00-8.40	ግንኙነት	መመ	ስዕል	ሚሪ	ንግግር	ያዕ	ስዕል	መዳ	ኮምፕ	ዓይ	ሳይንስ	ተሸ	መጽ.ቅ	ሀብ	ፊዝ	ምህ	አማርኛ	እሸ	ሙያ	እ/እዳ
ሰ	8.40-9.20	ግንኙነት	መመ	ስዕል	ሚሪ	ንግግር	ያዕ	ስዕል	መዳ	ኮምፕ	ዓይ	መጽ.ቅ	ሀብ	ስዕል	ተሸ	ሚ.ድ	ዘር	ኬሚ	መኮ	ሙያ	እ/እዳ
	9.20-10.00													ስዕል	ተሸ	ሚ.ድ	ዘር	ኮምፕ	ጸጉ	ሙያ	እ/እዳ
	2.30-3.10	ም.ቋ	መመ	ሂሳብ	ሚሪ	እንግ	ሀብ	ሂሳብ	መዳ	ሂሳብ	ታደ	እንግ	አጉ	ጎብረት	ያዕ	አማርኛ	ተሸ	አማርኛ	እሸ		
ሐ	3.10-3.50	ሂሳብ	መመ	አማርኛ	አጉ	ሂሳብ	መዳ	አማርኛ	ታደ	እ.ሥራ	ብ/እ	ሳይንስ	ተሸ	አማርኛ	እሸ	ሂሳብ	ምህ	እንግ	ጸጋ		
	3.50-4.30	አማርኛ	አ/መ	ም.ቋ	ስማ	ጎብረት	ሀብ	አ/ሳይ	ምህ	እ.ሥራ	ብ/እ	ጎብረት	ያዕ	ሳይንስ	ተሸ	እንግ	እሸ	ጎብረት	ጸጋ		
	5.00-5.40	ኮምፕ	ዘር	እንግ	ሚሪ	አማርኛ	ታደ	መጽ.ቅ	ሀብ	አማርኛ	መዳ	ሂሳብ	ምህ	ሂሳብ	አጉ	ሙያ	ብር	ሂሳብ	መኮ		
ሙ	5.40-6.20	ኮምፕ	ዘር	ሳይንስ	ያዕ	መጽ.ቅ	ሀብ	እንግ	ተሸ	እንግ	እሸ	አማርኛ	መዳ	እንግ	ታደ	ሙያ	ብር	ባዮ	መኮ		
	8.00-8.40	መጽ.ቅ	መመ	ኮምፕ	ጸጉ	ስዕል	ሀብ	ንግግር	አዲ	አ/ሳይ	ያዕ					ባዮ	መኮ	መጽ.ቅ	ተሸ	ሙያ	እ/ስ
ስ	8.40-9.20			ኮምፕ	ጸጉ	ስዕል	ሀብ	ንግግር	አዲ	መጽ.ቅ	መዳ	ስፖርት	ጸጋ	ስፖርት	ስፖርት	ስፖርት	ጸጋ	ስፖርት	ጸጋ	ሙያ	እ/ስ
	9.20-10.00											ስፖርት	ጸጋ	ስፖርት	ጸጋ	ስፖርት	ጸጋ	ስፖርት	ጸጋ	ሙያ	እ/ስ
	2.30-3.10	አማርኛ	አ/መ	ሂሳብ	ሚሪ	ም.ቋ	ስማ	አማርኛ	ታደ	አማርኛ	መዳ	ሂሳብ	ምህ	አማርኛ	እሸ	አማርኛ	ተሸ	ሂሳብ	መኮ		
ዓ	3.10-3.50	ሂሳብ	መ/ሚ	ሳይንስ	ያዕ	አማርኛ	ታደ	እንግ	ተሸ	እንግ	እሸ	አማርኛ	መዳ	ሙያ	ብር	ኬሚ	መኮ	እንግ	ጸጋ		
	3.50-4.30	ም.ቋ	መመ	እንግ	ሚሪ	ሳይንስ	ያዕ	አ/ሳይ	ምህ	ሂሳብ	ታደ	እንግ	አጉ	ሙያ	ብር	እንግ	እሸ	ጎብረት	ጸጋ		
ር	5.00-5.40	እ.ሥራ	መ/ሚ	አማርኛ	አጉ	እንግ	ሀብ	ሂሳብ	መዳ	አ/ሳይ	ያዕ	ሙያ	እቴ	እንግ	ታደ	ሂሳብ	ምህ	ኬሚ	መኮ		
	5.40-6.20	እ.ሥራ	መ/ሚ	መጽ.ቅ	ሚሪ	ሂሳብ	መዳ	ም.ቋ	ታደ	አ/ሳይ	ያዕ	ሙያ	እቴ	ሂሳብ	አጉ	ጎብረት	ጸጋ	አማርኛ	እሸ		
ብ	8.00-8.40			ንግግር	ተሸ	ኮምፕ	ዓይ	እ.ሥራ	አ/ሚ	ስዕል	ሀብ	ጎብረት	ያዕ	ባልትና	መመ	መጽ.ቅ	ታደ	ፊዝ	ምህ	ሙያ	ብ/እዳ
	8.40-9.20			ንግግር	ተሸ	ኮምፕ	ዓይ	እ.ሥራ	አ/ሚ	ስዕል	ሀብ	ገ/አያ	ሳሙ	ባልትና	መመ	ፊዝ	ምህ	ሚ.ድ	አጉ	ሙያ	ብ/እዳ
	9.20-10.00															ኮምፕ	ዘዳ	ሚ.ድ	አጉ	ሙያ	ብ/እዳ

Appendix 06/2001

Summary report Views and Responses of Students and Teachers on (10+1) vocational skill Training Program.

ሀ.	10 +1 Vocational skills Training	Appropriate (Suitable)						Not appropriate (satiable)						No Response		
		Student		Teachers		Both total		Student		Teacher		Both (Total)				
		Fre.	R.	Fre	R	Av.	Rank	Fre	Rank	Fre	Rank	Av.	Rank	S	T	Total
	(Baseness Education)															
1	(Accounting) የሂሣብ አያያዝ ሥልጠና	94	10	27	16	121		3		3		6		18	9	27
2	(Banking and Insurance) የባንክና የመድህን ሥራ ሥልጠና	71		12		83		5	8.6	6	6.5	11	6	39	21	50
3	(Marketing and salesmanship) የገበያ ጥናትና የመሸጥ ጥበብ	61		5		66		5	8.6	7	4.5	12	4	49	27	76
4	(Purchasing and supplies) የአቅረቦትና የግዥ ሥራ አመራር	72		10		82		6	5	8	3	14	1.5	37	21	58
5	Secretary & Office Management የጽህፈትና የቢሮ ሥራ	72		23	20	95		4	13	1		5		39	15	54
6	Information technology/ እንፎርሜሽን ቴክግሎጂ	50		5		55		3		11	1	14	1.5	62	23	85
ለ.	Home Science Average የኑሮ ዘዴ															
1	Hair-dressing and Beautification/ የፀጉር ሥራና ሥነ ውበት	103	3.5	39	3.5	142	3.5	-		-		-		12	-	12
2	Baker & confectionaery maker/ የዳቦ መጋገራና ብስኩት አሠራር	100	5.5	39	3.5	139	5	-		-		-		15	-	15

Fre = Frequency, R= Rank, Av= Average, S= Students, T= Teachers

Table 30 continued

	10 +1 Vocational skills Training	Appro Priate (Suitable)						Not appropriate (satiable)						No Response		
		Student		Teachers		Both total		Student		Teacher		Both (Total)				
		Fre.	R.	Fre	R	Av.	Rank	Fre	Rank	Fre	Rank	Av.	Rank	S	T	Total
3	Dress Maker የሴቶች የልብስ ቅድና ስፌት	105	2	39	3.5	144	2	1		-		1		9	-	9
4	Men's Garment tailor/ ይወንዶች ልብስ ቅድና ስፌት	103	3.5	39	3.5	142	3.5	-		-		-		12	-	12
5	Textile Crafts Person የጨርቃ ጨርቅ እደጥበብ	92	12	38	7	130	7	1		1		2		22	-	22
6	Cooker and food processor/ ይምግብ አዘገጃጀትና አቀራረብ	97	7.5	36	8	133	6	-		3		3		18	-	18
7	Home Manager የቤት አያያዝና አስተዳደር	95	9	26	17.5	121	12.5	3		3		6		17	10	27
8	Hotel Service Manger የሆቴል አገልግሎት ሥራዎች	81	19	39	3.5	120	15.5	6	5	3		9	9	28	-	28

	10 +1 Vocational skills Training	Appro Priate (Suitable)						Not appropriate (satiable)						No Response		
		Student		Teachers		Both total		Student		Teacher		Both (Total)				
		Fre.	R.	Fre	R	Av.	Rank	Fre	Rank	Fre	Rank	Av.	Rank	S	T	Total
ሐ	Agriculture Average የግብርና ትምህርቶች															
1	Animal husbandry የእንሳስት እርባታ	85	17	31	11	116	17	6	5	1		7		24	7	31
2	Plant production የእጽዋት እርባታ	100	5.5	27	16	127	8	2		2		4		13	10	23
3	Natural Resource and Protection ተፈጥሮ ሀብት ጥበቃ	93	11	28	13.5	121	12.5	4	13	3		7		18	8	26
4	Agromechanics እግሮ መካኒክስ	83	18	28	13.5	111	18	3		3		6		29	8	37
መ	Construction የኮንስትራክሽን ሥልጠና															
1.	Building consecution የህንፃ ኮንስትራክሽን ሥልጠና	97	7.5	26	17.5	123	10	1		2		3		17	11	28
2.	Road construction የመንገድ ኮንስትራክሽን ሥልጠና	80	20	27	16	107	20	4	13	6	6.5	10	8	31	6	37
3.	Wood working የእንጨት ሥራ ሥልጠና	112	1	39	3.5	151		3		-		3		-	-	-

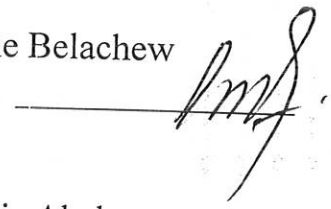
	10 +1 Vocational skills Training	Appro Priate (Suitable)						Not appropriate (satiable)						No Response		
		Student		Teachers		Both total		Student		Teacher		Both (Total)				
		Fre.	R.	Fre	R	Av.	Rank	Fre	Rank	Fre	Rank	Av.	Rank	S	T	Total
ሠ.	Industrial technology Average የኢንዱስትሪያል ቴክኖሎጂ													-		
1	Electricity ኤሌክትሪስቲ	91	13	29	12	120	15.5	5	8.6	1		6		19	9	28
2	Electronics ኤሌክትሮኒክስ	89	15	21		110	19	5	8.6	7	4.5	12	4	21	11	32
3	Drafting የንድፍ ሥራ ድራፍቲንግ	88	16	33	10	121	12.5	5	8.6	1		6		22	5	27
4	Surveying ቅየሳ	90	14	35	9	125	9	7	3	1		8	10	18	3	21
5	Machine technology ማሽን ቴክኖሎጂ	60		6		66		-		10	2	10	8	55	23	78
6	General Mechanics ጠቅላላ መካኒክስ	64		16		80		9	1	3		12	4	42	20	62
7	Auto Mechanics አውቶ መካኒክስ	71		25	19	96		8	2	2		10	8	36	18	54

Addis Ababa University School of Graduate Studies

Declaration

This thesis is my original work, has not been presented for a degree in any other university and that all sources of material used for the thesis have been duly acknowledged

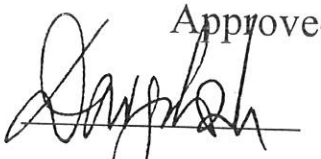
Name Dagne Belachew

Signature 

Place Addis Ababa

Date May 25,2001

Approved by

Darge Wole 

Advisor Signature