

**COMMUNICATIVE TEACHING PRACTICES FOR HEARING  
IMPAIRED CHILDREN: A STUDY IN GOVERNMENT  
NURSERY/SECONDARY SCHOOL, SOUTH DELHI.**

Dissertation Submitted to the Jawaharlal Nehru University  
in partial fulfillment of the requirements for  
the award of the degree of

**MASTER OF PHILOSOPHY**

**BONNY ROY**



**ZAKIR HUSAIN CENTRE FOR EDUCATIONAL STUDIES  
SCHOOL OF SOCIAL SCIENCES  
JAWAHARLAL NEHRU UNIVERSITY  
NEW DELHI-110067  
INDIA  
2008**



ZAKIR HUSAIN CENTRE FOR EDUCATIONAL STUDIES  
SCHOOL OF SOCIAL SCIENCES

Date: 29.07.2008

**DECLARATION**

I declare that the dissertation entitled "**Communicative Teaching Practices for the Hearing Impaired Children: A Study in Government Nursery/ Secondary School, South Delhi**" submitted by me in partial fulfillment of the requirement for the award of the Degree of **Master of Philosophy**, has not been previously submitted for any other degree of this or any other University. This is my own work.

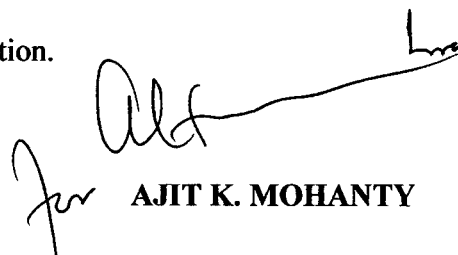
  
**BONNY ROY**

**CERTIFICATE**

To the best of our knowledge, this is a bonafide work. We recommend that this dissertation be placed before examiner for evaluation.

  
**GEETHA B. NAMBISSAN**

(Chairperson)

  
**AJIT K. MOHANTY**

(Supervisor)

**CHAIRPERSON**  
Zakir Husain Centre for  
Educational Studies  
School of Social Sciences  
Jawaharlal Nehru University  
New Delhi-110067

## CONTENTS

	Page No.
Acknowledgement	i-ii
Abstract	iii
List of Abbreviations and Acronyms	iv-v
List of Figures and Tables	vi
<b>CHAPTER-1 INTRODUCCION</b>	<b>1-44</b>
1.1 Deaf/ Hearing Impaired: An Introduction	2-6
1.2 Education of the Hearing Impaired	6-12
1.3 Teaching Programmes for the HI	12-33
1.4 Literature Review	33-42
1.5 Rationale and Objectives of the Study	42-44
<b>CHAPTER-2 METHODOLOGY</b>	<b>45-48</b>
2.1 Samples	47
2.2 Tools Used	48
2.3 Procedure	48
<b>CHAPTER-3 RESULTS</b>	<b>49-59</b>
3.1 Teaching Methods	51-52
3.2 Communication	53-55
3.3 Age	56
3.4 Parents' and Teachers' Attitude	56-58
3.5 Environmental Factors	58
3.6 Social Factors	58-59
<b>CHAPTER-4 DISCUSSIONS AND CONCLUSION</b>	<b>60-82</b>
4.1 Discussions	65-74
4.2 Conclusion	74-78
4.2.1 Findings of the Research	78-80
4.2.2 Limitations of the Research	80
4.2.3 Suggestions for future Research	81-82
<b>BIBLIOGRAPHY</b>	<b>83-90</b>
<b>APPENDICES</b>	<b>91-102</b>
Appendix-I	91-92
Appendix-II	93
Appendix-III	94
Appendix-IV	95-102

## ACKNOWLEDGEMENT

God has been unconditionally helpful to me by blessing me with the love and support of His best-chosen people. Hence, first and foremost, I thank the Almighty for blessing me with His benevolence.

My heartfelt gratitude to my supervisor, *Prof. A. K. Mohanty*, whose invaluable suggestions and expertise have always rendered a stroke of vigor and spirit that has inculcated the serious research acumen in us. His support and forbearance has enabled me to stride ahead and attain the gratification to accomplish this dissertation.

I would like to offer my thanks to *Prof. A. K. Mishra*, for his timely support and concern. I thank all the faculty members of ZHCES, who instilled the kernel of research skills in us. Their immense knowledge and support has not only supplemented to my academic pursuits but has also rendered strong research ethics, which would continue to benefit me in my future pursuits.

My heartfelt thanks to the *Mrs. Reena Gautam (Principal) and all the teachers, as well as the students of Govt. Nursery/ Secondary School (South), Delhi*, without whose support, this work would not have been possible. Each and every member of the school has voluntarily lent their support while collecting data, right from day one. This work is the outcome of their immense love and support.

Here, I would also like to thank the officials of R.C.I., who offered valuable suggestions and information for my research and also allowed me to access their library. My special thanks to *Dr. Ashok Sinha, Member Secretary of R.C.I. and Prof. Mishra* for their timely support and advice. Also my heartfelt gratitude to *Meera ma'm* for helping me to get permission for my Fielwork.

“There is no friendship, no love, like that of the parent for the child”.

Words can never suffice for, but my heartfelt thanks to *Maa, Baba, Didi, Dada* (Brother-in-law) and *Nannu* (nephew), who bore all the afflictions at those crucial moments of life and made my journey possible to this end.

“When trouble comes your soul to try, you love the friend who just ‘stand by’...”

My special thanks to *Ramya. Anu* and *Puru* has always been the source of inspiration and endurance since my graduation days. Along with them, *Nitu, Sharmishtha, Deepa, Hemango, Arup and all my Cotton College friends* have significantly contributed in achieving success in most of my endeavours. I thank them all.

Continuing my M. Phil would have been a tedious task without the timely and incredible suggestions of *Teju, Tanni and Shivani*. Apart from them I am ever indebted to Lisa and Swati for their support and concern. I am thankful to my seniors as well, especially *Ruchi-di*, whose advices were of immense help. Of course, my *M. Phil classmates'* encouragement and help also needs a mention here. They have stood by me in every possible situation and bestowed me with the priceless gift of their friendship.

But, the person who deserves the foremost acknowledgment and to be thanked most is *Subbu*, my soul mate. It was Subbu, who withstood the torments of my reckless mind and stood by me like a saviour of all ills. His selfless love and support cannot be plausibly expressed by mere words of praise. Neither do I intend to diminish his significance by giving overt statements. I thank Almighty for all His blessings.

**Finally, I would like to dedicate this work to all the *Deaf children of India*, whose silence speaks a million but remains unheard.**

*Bonny Roy*

## ABSTRACT

In recent past, Deaf Education and Deafness has emerged as a significant area of research. In this regard, the core area, which always gained and captured the highest point of interest among researchers, is the aspect of language development among these Hearing Impaired or deaf children. With this theme, numerous researches and reviews have been brought in to raise the problems faced by the deaf and the Hearing Impaired children in the social and formal set-up. With a similar theme in mind, this study was conducted to understand the problems faced by the Deaf and Hearing Impaired Children in a Special school for the Deaf Children, particularly in the Indian context. The study mainly focused on the teaching interventions and communicative practices in developing the linguistic competence of these deaf and HI children. Classroom observations, starting from pre-school to 5<sup>th</sup> standard, were made and interviews with the teachers were conducted to identify what kind of differences exists in the theory and its practices in the real situation. A general language test was conducted among the students of the 5<sup>th</sup> standard to evaluate how far the teaching practices have been effective in preparing these children for social circumstances. Parents were also interviewed to understand their attitude towards their children's language development. Results showed that the present teaching methods are restricted to only one form, which is the Total Communication method. The educational objective seems to have reduced to mere academic achievement than catering to their individual and linguistic needs. The study found that the present system of educational curriculum is not designed according to the needs of the Deaf children and thereby their communicative development is negligible.

## LIST OF ABBREVIATIONS AND ACRONYMS

<b>APPLE TREE</b>	A Patterened Programme of Linguistic Expansion Through Reinforced Experience and Evaluation
<b>ASL</b>	American Sign Language
<b>AYJNIHH</b>	Ali Yavar Jung National Institute for Hearing Handicap
<b>B.Ed</b>	Bachelor of Education
<b>BSL</b>	British Sign Language
<b>CAPD</b>	Central Auditory Processing Disorder
<b>CWSN</b>	Children With Special Needs
<b>DPEP</b>	District Primary Education Programmes
<b>DSE (HI)</b>	Diploma in Special Education (Hearing Impairment)
<b>DSS</b>	Developmental sentence Scoring
<b>HI</b>	Hearing Impaired
<b>HOH</b>	Hard-of-Hearing
<b>IEDC</b>	Integrated Education for the Disabled Children
<b>IEDC</b>	Integrated Education for Disabled Children
<b>ISL</b>	Indian Sign Language
<b>LASS</b>	Linguistic Analysis of Speech Samples
<b>MLU</b>	Mean Length of Utterance
<b>N.A.D</b>	National Association of Deaf
<b>NCERT</b>	National Council of Educational Research and Training.
<b>NSSO</b>	National Sample Survey Organization
<b>P.W.D</b>	Persons with Disability
<b>R.C.I.</b>	Rehabilitation Council of India
<b>SE</b>	Signed English
<b>SEE1</b>	Seeing Essential English
<b>SEE2</b>	Signing Exact English
<b>SSA</b>	Sarva Shiksha Abhiyan
<b>TC</b>	Total Communication

<b>TSA</b>	Test of Syntactic Abilities Syntax Program
<b>UEE</b>	Universalization of Elementary Education
<b>UNESCO</b>	United Nations Educational, Scientific, and Cultural Organization
<b>UNICEF</b>	United Nations Children's Fund
<b>WFD</b>	World Federation of the Deaf

### **Scientific**

#### **Abbreviations**

<b>dB</b>	Decibel
<b>Hz</b>	Hertz



**LIST OF FIGURES AND TABLES**

	<i>Page No.</i>
<b>Figure 1.</b> Educational Programmes for Children with Hearing Impairment in India	15
<b>Figure 2.</b> Features of Teaching Learning Process	19
<b>Figure 3.</b> Basic conversational sentences taught to HI students	61
<b>Figure 4.</b> Home task given by the teacher to a 3 <sup>rd</sup> standard HI student	62
<b>Figure 5.</b> English words taught using Hindi Synonyms to 3 <sup>rd</sup> standard HI student	63
<b>Table 1.</b> Prevailing Teaching Curriculum in the School for Hearing Impaired children	50

# **CHAPTER 1: INTRODUCTION**

**1.1 DEAF / HEARING IMPAIRED: AN INTRODUCTION**

**1.2 EDUCATION OF THE HEARING IMPAIRED**

**1.3 TEACHING PROGRAMMES FOR THE HI**

**1.4 LITERATURE REVIEW**

**1.5 RATIONALE AND OBJECTIVES OF THE STUDY**

## INTRODUCTION

Under the Persons with Disability Act (1995) and the National Trust Act (1999), following disabilities are listed in it: Blindness, Low vision, Leprosy cure, Hearing Impairment, Locomotor disabilities, Mental Retardation, Mental illness, Autism, Cerebral Palsy and Multiple disabilities. These Acts are aimed to provide free access to education for all the children with disabilities till they attain the age of eighteen years. Post Independent Education Commissions like Kothari Commission (1964-166) stressed and recommended the establishment of special schools in every district following which the Government of India had launched a scheme of Integrated Education for the Disabled Children (IEDC) in 1974 (Mathew, 2006). With this growing concern in the area of special education for the children with special needs, it has been felt that education of the Hearing Impaired (HI) is an area of serious concern, because unlike other disabilities, hearing impairment leads to serious educational handicap due to its language curtailment. Mathew (2006) explains that earlier, children with hearing impairment were considered retarded and were isolated from the society and denied their rights, as a result of which no special efforts were taken to educate them. Baker (2006) also explains that Deaf people constitute the neglected language minority and have historically often been regarded as 'problems' within the education system, the social welfare system, among doctors and psychologists, and in the employment market. It is this stigma attached to the Deaf people and disability as a whole that incites for in-depth research in the area of Deaf and their education. With this concern, this study was initiated to understand the educational and the communicative aspect of the Deaf or the Hearing Impaired children in a formal set up.

### **1.1 Deaf / Hearing Impaired: An Introduction**

According to James and Woll (2004) (as cited in Baker, 2006), “To be deaf is to have a hearing loss; to be Deaf is to belong to a community with its own language and culture”. Hence, the usage of the term has its definite significance in varied contexts. As per the definition adopted by Ministry of Social Justice and Empowerment, Government of India and Persons with Disability Act (P.W.D.-1995-96), “hearing handicap” refers to hearing loss of 60 dB HL or more in the better ear (Rangasayee, 2006). The term ‘deaf’ refers to those who are unable to hear well enough to rely on their hearing and use it as a means of processing information. Although the terms deaf, hearing impaired, hard-of-hearing (HOH) are often used interchangeably, but each of them are significantly different in their nature. Stevenson states (as cited in Barbe, 1963, p.49), “ deaf person...is one who does not react understandingly to spoken language. A hard of hearing person is one who reacts to spoken language understandingly, provided the source is brought within his hearing range either through a loud voice, amplification of sound, or through some other mechanical device.” Hard of hearing can denote a person with a mild to moderate hearing loss. Their inability to decipher the speech sounds and language modes enmesh them into deafness. The term ‘deafness’ refers to hearing disabilities that preclude successful processing of linguistic information through audition, with or without hearing aid (Rangasayee, 2007). Moreover, deafness is said to be the result of damage to any part of the ear and the degree of hearing loss depends on the severity of that damage. The implications of a hearing loss vary from person to person and are related to the individual’s circumstances. Myklebust points out (as cited in Barbe, 1963) that there are two critical variables in the psychological consequence of deafness:

“the age of onset and the degree of the impairment”. However, there are seven categories that are used to measure the degree of hearing loss. The numerical values are based on the average of the hearing loss at three frequencies, 500 Hz, 1000 Hz, and 2000 Hz in the better ear without amplification.<sup>1</sup>

Normal range or no impairment = -10dB to 15 dB

Slight loss/ minimal loss = 16 dB to 25 dB

Mild loss = 26 dB to 30 dB

Moderate loss = 31 dB to 50 dB

Moderate/ Severe loss = 51 dB to 70 dB

Severe loss = 71 dB to 90 dB

Profound loss = 91 dB (or more).

Likewise, there are three basic types of hearing loss, such as, conductive hearing loss, sensorineural hearing loss and Central Auditory Processing Disorder (CAPD). The Conductive hearing loss is caused by a reduction of the intensity of sound reaching the auditory pathways in the inner ear. In this type of hearing loss the sound is not conducted efficiently through the outer and the middle ears. However, such type of disorder can be corrected through medicine or surgery. Sensorineural hearing loss occurs when damage to the inner ear (cochlea) or the nerve pathway from the inner ear to the brain has occurred. Person with this type of hearing loss faces reduction in sound level, hear faint sounds, as well as, speech understanding is also affected. It may be caused due to exposure to loud noise, viruses, head trauma, aging and tumor. It can also be caused due to drugs that are toxic to the auditory system or due to genetic syndrome. CAPD is

---

<sup>1</sup> [http://www.deafexpressions.4t.com/custom4\\_1.html](http://www.deafexpressions.4t.com/custom4_1.html)

caused due to injury to the auditory centers of the brain, disease, tumor, heredity or unknown causes. Central auditory processing involves sound localization and laterallization, auditory discrimination, auditory pattern recognition, the temporal aspects of sounds, and the ability to deal with degraded and competing acoustic signals.

One of the major effects of hearing impairment is on the auditory and linguistic development of the individual. It poses a barrier in the process of language development as a result of which the child's overall development- social, cultural, academic and individual developments are restricted. The deaf world is oblivious and devoid of the essence of language that constitutes the nucleus of human existence, the thought process and social independence. Since the majority of the social system is language-centric, it poses significant amount of pressure and threat to the deaf community, which exists as a minority component of the society. Hearing impairment is often stated as the hidden problem. In most cases, it remains unnoticed by the parents till the child is two years old and fails to produce any meaningful utterance. Hence there is a delay in the early identification of the impairment, which thereby delays the initial process of language development. The effects of hearing impairment depend on various factors such as:

- Types of impairment.
- Degree of impairment
- Type of onset-gradual or sudden
- Age of identification
- Age and type of intervention
- Support received from the environment family, school society.

- Other factors associated with the affected individual such as intelligence, other sensory or motor impairments, etc.

Hearing impairment, which is present from the birth or occurs before the child acquires speech and language is said to be 'pre-lingual hearing impairment', and if the impairment occurs after the child has acquired speech or language or in adulthood, it is termed as 'post-lingual hearing impairment'. Pre-lingual hearing impairment, effects the individuals' verbal communication, social-emotional development, academic achievement, cognitive functioning as well as vocational opportunities. On the other hand, post-lingual hearing impairment also poses difficulty in establishing mutually satisfying peer relationships, learning and reading difficulties, academic and vocational achievements. Therefore, early intervention is essential to reduce the adverse effects of hearing impairment.

Early identification enables the effective use of critical period of language development, thereby restricting the effect of the hearing impairment. As Rangasayee (2006) talks about Lenneberg's theory of critical period, which states that there are certain periods in development when the organism is programmed to receive and utilize particular types of stimuli and subsequently the stimuli will have gradually diminishing potency in affecting the organisms development in the function represented<sup>2</sup>. Thus early identification of hearing impairment is necessary for the following reasons (Rangasayee, 2007):

- It offers the opportunity to initiate management procedures prior to the onset of the effects of the impairment.

---

<sup>2</sup> There have been opponents as well to this theory, where it has been subsequently established that language development occurs even after the critical period (Rangasayee, 2006)

- Subsequent early intervention enables effective use of the critical periods of language development; thereby facilitating quick learning of language and verbal communication skills.
- It can facilitate better social, emotional, educational and personality development by helping in early communication development.
- In a country like India where 21,000 babies with hearing impairment are born every year, early identification and intervention is a must to reduce the impact of hearing impairment and the economic burden of the impairment.

The major problem faced by the Hearing Impaired child is that, they do not receive any auditory input during the critical years of language development. Considering the growing severity of the problem, the Joint committee of Infant Hearing (2000) has recommended screening babies in whom there is a presence of one or more of the causative factors of hearing impairment.

## **1.2 Education of the Hearing Impaired**

In India, the concept of special education is a recent evolution. It was only in 1884, the first school 'Bombay Institute for Deaf and Mutes', started by Dr. Leo Meurius, was established in Mazagaon Mumbai. The second school 'Calcutta Deaf and Dumb School' was established by Stalwarts like Mr. E. D. Dutt, Mr. J.N. Banerjee in 1893. This was followed by the establishment of the third school in Palayamkotai, Tamilnadu by Ms. Florence Swainson in 1897 (Mathew, 2006). The Eduaction Act, which came into force on 1<sup>st</sup> April, 1945, made provision for the education of the deaf children from the age of two years (Singh, 2004). Post independence, few landmarks had been achieved in



the area of education for the disabled. Mathew (2006) chronologically highlights the major achievements in this area, as in, the formation of the Constitution of India (1950), which took disability into serious concerns and emphasized in its Article 15 and 14 on the protection of the rights of persons with disability. This was followed by the U.N. adaptation of Declaration of Rights of the child, wherein the Government of India established National Institutes in the specific disability areas. Later, Kothari Commission (1964-66) also stressed and recommended the establishment of special schools in every district. It was in 1974, when the first Diploma in Special Education course was started at the University of Bombay. As Special Education and the individual disabilities started gaining attention, the year 1977 marked its importance by establishing the first secondary school for children with Hearing Impairment at Government Lady Noyce School, New Delhi. With the growing number of schools and demand for special teachers, the Ali Yavar Jung National Institute for Hearing Handicap (AYJNIHH) was established in 1983. The National Policy of education 1986, further stressed the need for education and mainstreaming of the disabled. In 1986, the Rehabilitation Council of India (R.C.I.) was established which further helped in the development of the manpower. This was followed by the establishment of the Little Flower Convent in 1987, a Junior College for children with Hearing Impairment in Madras. In 1992, the R.C.I. Act was passed with the objective to recognize the qualification of professionals and to regulate the standards of institutions offering Teacher Training Programmes. By 1993, Madras came up with another college for children with Hearing Impaired at St. Louis. By 1995, the Persons with Disability Act came into being, wherein free and compulsory education was demanded for all the children with disabilities up to 18 years of age. In 2001, R.C.I. in

association with Mahya Pradesh Bhoj Open University, introduced the foundation course of teacher training programme through Distance education. As per RCI report 1996 on manpower development, there are around 500 schools operational for children with hearing impairment in our country<sup>3</sup>. The implementation of the R.C.I. Act has definitely given hope for increased manpower and has helped to improve both quality and quantity of rehabilitation professionals (Mathew, 2006).

Of all other disabilities listed under the Persons with Disability Act (1995) and the National Trust Act (1999), the children with hearing handicap suffer most due to their communicative incompetence. According to Northern and Downs (1991), there are four goals that should be considered important in the education for the hearing impaired. They are:

- Include achievement of adequate language skills
- Establishment of sound mental health
- Intelligible speech, and
- Easy communication with peers.

As stated by A.L. Gesell (1956) (as cited in Northern & Downs, 1984), “ the ...aim should not be to convert the deaf child into somewhat fictitious version of a normal hearing child, but into a well-adjusted non-hearing child who is completely managing the limitations of his (or her) sensory deficit.” The common educational needs of children with hearing impairment are that of attitudinal change, need for non-discrimination, appropriate educational set-up, need for a least restrictive environment for learning, need

---

<sup>3</sup> The directory of Rehabilitation Resources for persons with hearing impairment in India published by AYJNHH 2000, lists out only 431 school addresses (Mathew, 2006).

for preserving and utilizing the residual hearing, need for developing language skills for communication, adaptation of curriculum, need for ancillary services, vocational training and need for educational technological advancement<sup>4</sup>.

Hearing impairment or hearing handicap has serious impact on the linguistic and cognitive development of the individual. Due to their inability to access language (spoken form of language), their social and academic life also remains impaired. On one hand, where language comes easily to a hearing child, on the other, it stands as a barrier for a Hearing Impaired child. In such a situation, their mode of communication is constructed by other distinct modes of linguistic communication, such as, the aural/oral mode, the sign language mode, visual and graphic mode and speech reading. The concept of each of these modes is developed on certain philosophies. As Huddar (2006) explains, the philosophy, which desires to develop verbal language in the deaf children through aural/oral mode, is called as oralism. The philosophy that desires to develop verbal language in the deaf students with the support from visual/manual mode is called as Total Communication. And the philosophy, which desires to develop manual language in the deaf children through manual mode, can be called as educational bilingualism. However, sign language (also known as visual/ manual method) is considered to be the mother tongue and the first language (by default) of the deaf/ hearing impaired.

Language, therefore, poses the greatest barrier and inconvenience in the social, mental and educational development of the hearing impaired. Language and communication constitutes the major concern in the education of hearing impaired. Even,

---

<sup>4</sup> However, there are two basic sets factors affecting the educational needs of children with hearing impairment, intrinsic and extrinsic factors (Mathew, 2006).

the pre-literacy skills like reading and writing are based on language. Therefore, the objective of education for the Hearing Impaired relies on developing the strong foundations of language. Unlike hearing child, the process of developing language competency among the Hearing Impaired is a difficult task. Northern & Downs (1963), states that the Hearing Impaired children with limited language skills will have additional difficulties in subjects other than language studies, since each new step in education requires mastery of the previous step. Hence careful and efficient formulation of curriculum is required for them.

Sign languages, on the other hand, are independent languages. Like any other spoken language, Sign languages also have well defined structure and grammar. There exists a big number of sign language and it differs from country to country. It even differs from region to region. It is a naturally evolving language, which is not formally standardized. As we use verbal language for expressing varied emotions and thoughts, sign language can also be used for all such expressions. It is not only hands that are used but whole body and facial expressions are also a part of sign language. Briefly the features of sign language are (Huddar, 2006):

- Designator- the hand shape;
- Tabula- the location of sign
- Signation- hand movement of the sign
- Orientation- the direction of the movement relative to signer's body.

Almost every country has a specific sign language and they also differ from region to region, thereby evolving as dialects of sign language. Sign languages like the American

Sign Language (ASL), the British Sign Language (BSL), Indian Sign Language (ISL) and many other sign languages are well defined and well documented sign languages. However in case of Indian Sign Language (ISL), it is not well studied and adequately documented. It is important to mention here that there exists a significant difference between the terms Sign Language and Sign System. Sign language (for example ISL) being an independent language has one manual sign for either word or concept- it does not and need not have one sign for each English or Hindi word; while, in sign system, each manual sign represents a morpheme. Sign system is an artificially made system unlike sign language, which is naturally evolved. In western developed countries, one verbal language has many parallel sign systems like Seeing Essential English (SEE1), Signing Exact English (SEE2), Signed English (SE) etc. developed by different scholars. However, verbal languages in India do not have as many parallel sign systems as that of English. It was due to a UNICEF funded project at AYJNIHH, Indian Sign Systems have been created like any other sign systems (Huddar, 2006). However, one can never claim that one particular mode or method of communication is better than the other. As stated by Huddar (2006), 'there isn't' a single method of communication that can be held best for all deaf children in all situations.

Oral system of communication overtly emphasizes on the verbal/oral mode of communication. Proponents of Oralism emphasize on the use of verbal/oral language through the means of lip-reading and speech and completely discard the use of Sign language (manual mode of communication.). Oralism is a philosophy, which advocates the aural-oral mode of communication. According to oralists, fulfillment of social goals is more important than the individualistic goals (Huddar, 2006). Oral communication is

committed to the development of listening and speech skills in Hearing Impaired children. They insist on the maximum use of the residual hearing of the deaf and hearing-impaired child. The oralists thereby concentrating on the oral development of language overtly justify the motto of achieving speech through speech.

Hence, in the field of education for the hearing impaired, the main objective is focused on the development of their linguistic competence and chances of social acceptance. As Huddar (2006) points out that language is required for cognitive development and cognition is required for language development. In the case of children with hearing impairment, both language and cognitive development becomes next to impossible due to their inability to process auditory language. Rather it stands as a barrier in the full realization of their academic, intellectual and social potentials. Moore (1978) also supports the fact that although deafness itself may have no effect on intellectual potential, the deafness will lead to impoverished communication skills that themselves may limit development severely, unless the children are provided compensatory tools. Hence, comprehending the complexity of educational and language development of the hearing impaired, the system of special education helps in realizing the common education needs of the children with hearing impairment.

### **1.3 Teaching Programmes for the HI**

Post independence, Government of India has been quite active in developing awareness and promoting educational programmes for the children with special needs (CWSN). Article 45 of the constitution states that the state shall promote free and compulsory education for all up to 14 years of age (Mathew, 2006). It was in 1994, when

the Ministry of Human Resources Development launched District Primary Education Programmes (DPEP), which was funded by the World Bank and other foreign agencies. It mainly emphasized on the Universalization of Elementary Education (UEE) through various participatory processes and developmental management. However, due to the failure in achieving the target UEE, the Government of India launched Sarva Shiksha Abhiyan (SSA), which aimed at providing rehabilitation services to the persons with disabilities through various schemes and programmes of the Government of India (Rao, 2007). In India, two types of educational programmes exist, formal and non-formal education. Currently, the prevailing educational programmes for the children with hearing impairment are running parallel in integrated and segregated set ups (Mathew, 2006). According to Rao (2007), the integration is to support the children in the content and process of teaching besides physical adjustments and rearrangements. In India, the Integrated Education for Disabled Children (IEDC) was introduced by the Ministry of Welfare in 1974.<sup>5</sup> The action plan, stated by the Honorable Minister for Human Resource Development in Rajya Sabha on 21<sup>st</sup> March, 2005, for the inclusive education of the children and youth with disabilities included following objectives (Rao, 2007):

- To ensure that no child is denied admission in mainstream education.
- To ensure that every child would have the right to access an Anganwadi and school and no child would be turned back on the ground of disability.
- To ensure that mainstream and specialist training institutions serving persons with disabilities, in the government or in the non-government sector, facilitate the growth of a cadre of teachers trained to work within the principles of inclusion.

---

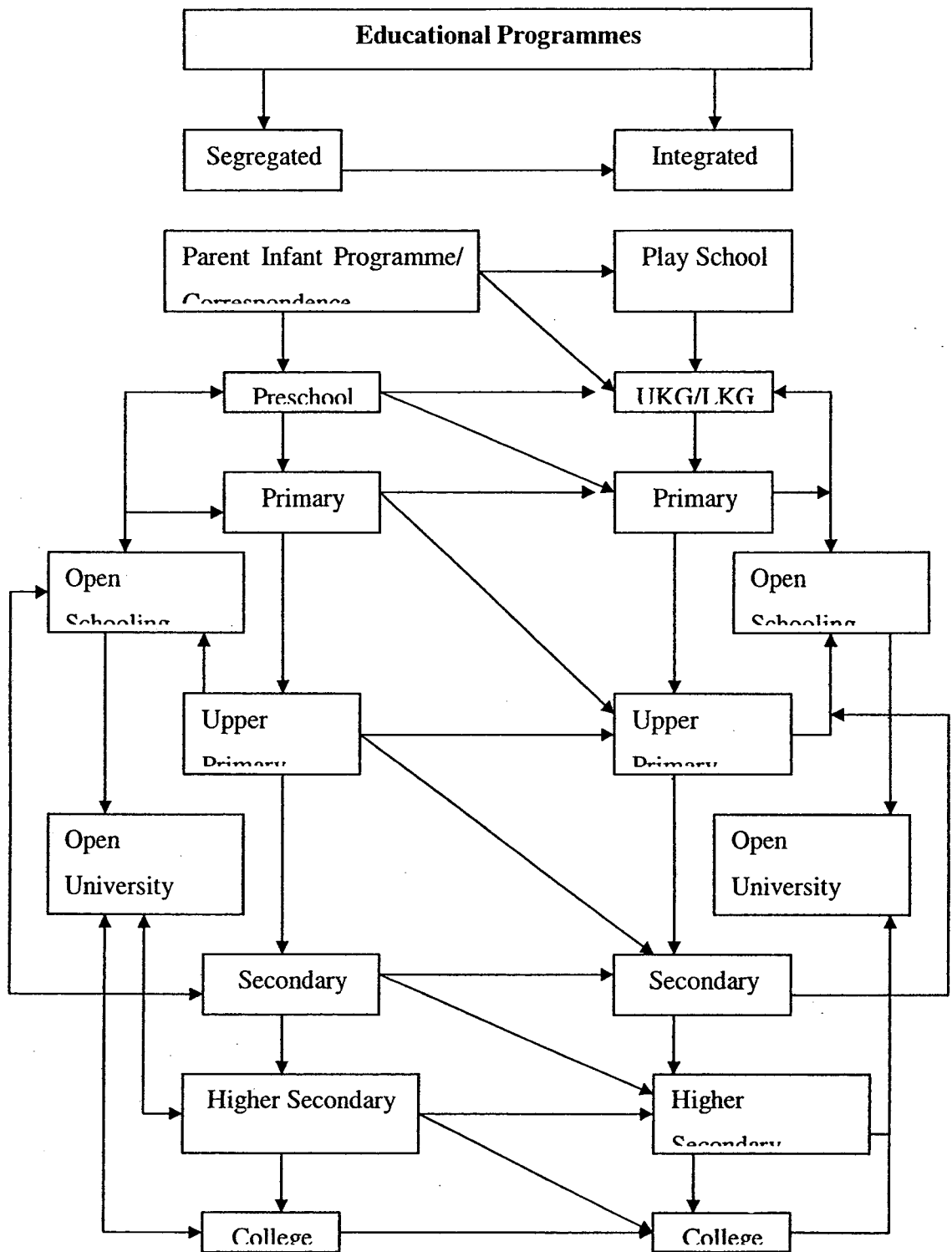
<sup>5</sup> This was later handed over to the ministry of Human Resource Development, Department of Education.

- To facilitate access of girls with disability and disabled students from rural and remote areas to government hostels
- To provide for home based learning for persons with severe, multiple and intellectual disability.
- To promote and distance education for those who require an individualized pace of learning.
- To emphasize job-training and job-oriented vocational training, and
- To promote and understanding of the paradigm shift from charity to development through a massive awareness, motivation and sensitization campaign.

Along with these objectives, the quality of education for these special children was also in the action plan. Mathew (2006) gives an insight into the prevailing educational programmes for children with hearing impairment in the following flow chart in Figure 1.1:



**Figure. 1. Educational Programmes for Children with Hearing Impairment in India (Mathew, 2006).**



Through this flow chart, in figure 1.1, Mathew (2006) explains that both segregated and integrated programmes are running parallel wherein programmes like parent-infant programme, correspondence programme and preschool programme provides early childhood education to the children with hearing impairment. These early childhood programmes helps to provide a strong foundation in developing the necessary skills required for primary/ secondary/ college education. He further explains that once these foundations are laid, the students are able to avail the option of continuing their study in integrated or segregated set ups. The parent infant programme emphasizes on the parent empowerment. A child with hearing impairment below two years having entered in level-1 could proceed through any of these linear programmes wherein options are open to them to switch from segregated to integrated or vice versa at any point of time. However, those children whose hearing impairment is identified later, they fail to utilize this early childhood educational programmes and thereby open school/ universities are the next option left for them to continue their education (Mathew, 2006). This flow chart thus shows the various options available to fulfill the educational needs of the children with hearing impairment.

The Planning Commission of India at their sixth Plan Framework states “Attention should be paid to all children during the crucial development years. The Pre-school years of a child is the period of its maximum learning and intellectual development and hence of gross potential educational significance” (Mathew, 2006). However, there exists no specifically designed curriculum for the pre-school programmes. It is only at the primary education level, that formally designed courses are made available for the educational instruction of the hearing impaired. But unfortunately,

the curriculum for hearing-impaired children is same as that of the curriculum designed and proposed for the education of the hearing children.

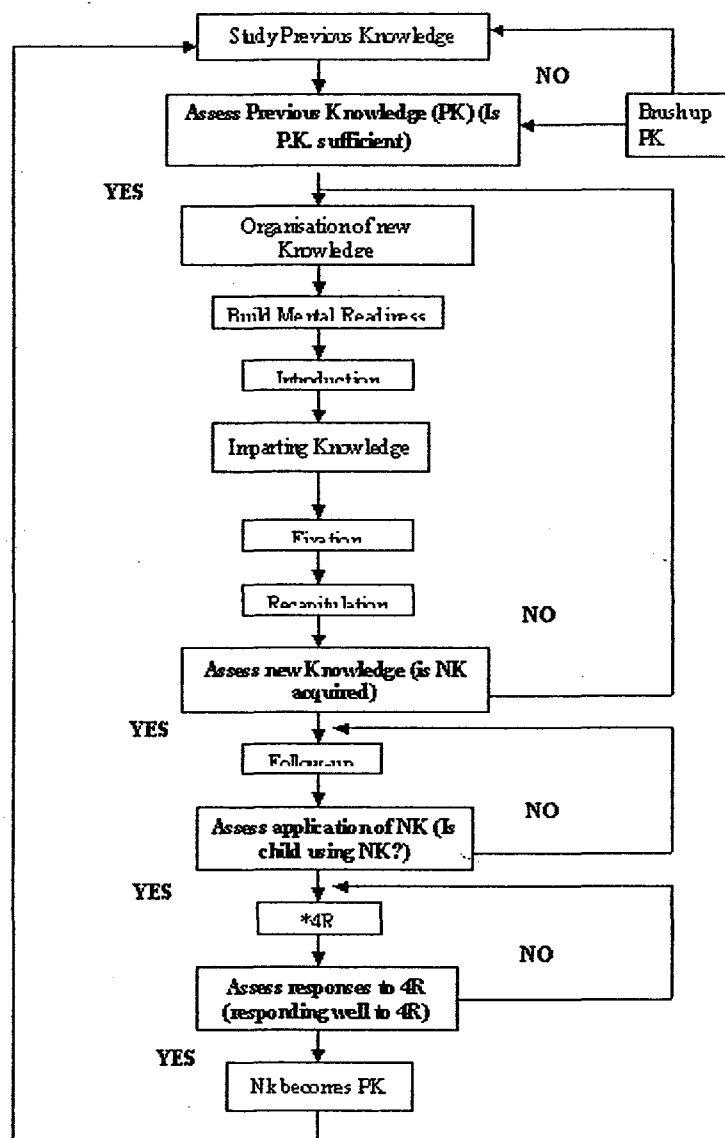
Comenius states (as cited in Mathew, 2006). "Education is a development of the whole man. If the superstructure is not to totter, the foundation must be laid well; studies should be adapted to the capacity of the pupil." The major concern in the education of the Hearing Impaired is to develop strong foundations of language and communication. Hence, these pre-school programmes are designed that are aimed at developing the language and speech in the Hearing Impaired children starting with a minimum of 2 ½ years of age to 5 ½ years of age. Mathew (2006), points out the major objectives of the pre-school programme for the children with Hearing Impaired in India as follows:

- Make maximum use of their residual hearing for language development.
- Facilitate language and speech development.
- Develop communication skills.
- Facilitate development of concepts and number concepts.
- Lay foundation for literacy development.
- Facilitate physical, cognitive and social development.
- Prepare for formal schooling.
- Prepare for integration.
- Empower the parents.

Thus the main focus of the pre-school education is to enable the children with hearing impairment with some amount of linguistic competence and understanding so that it can help to meet their future educational and social needs. It is evident that all over the world,

literacy is marked by the knowledge of language. And language development is dependent upon the complete input of the raw material of language to enable a child to abstract and internalize the system of the language spoken around him. But in the absence of any specially designed curriculum for the education of the hearing impaired, the focus has been shifted towards the manpower development thereby enriching the aspects of teaching learning process. The teaching learning process is a part of the instructional process that aims to ensure better educational benefit for the hearing impaired. The main features of teaching learning process are explained by Gathoo (2006) in the following flow chart, figure 1.2

Figure. 2. Features of Teaching Learning Process (Gathoo, 2006).



According to Gathoo (2006), inadequate language base makes it difficult for the children with hearing impairment to hold knowledge. Therefore, the flow chart in figure 1.2 indicates the step by step sequence of imparting education to the deaf. It can be made out from the flow chart that each of the steps confirms the foundation of the previous step. Gathoo (2006) tries to explain it in one line as, turning new knowledge into previous

knowledge or making the new knowledge as the foundation of the knowledge to come. In this flowchart, the 4Rs<sup>6</sup> (referring, reminding, reinforcing and rebuilding) indicate one of the most significant aspects of the teaching techniques, especially in the case of teaching language to the hearing impaired. Thus, it can be assumed that if such a planned teaching learning process is followed objectively and systematically, then learning process can become more convenient for the children with hearing impairment. This teaching learning process not only aims to acquire knowledge but also to make the students learn its application. However, teaching methods and techniques are completely different from each other. Methods are adopted on the basis of its long-term implication, while techniques can be adopted spontaneously depending upon the context and need of the children. Structural, natural and combined are the three types of methods of teaching language to the Hearing Impaired children (Huddar, 2006). She further, explains that there are certain theoretical bases pertaining to the issue of language teaching to the children with hearing impairment, and in order to understand it, three areas need to be focused, mainly:

- Principles of teaching language to the deaf.
- Methods of teaching language to the deaf.
- Techniques of teaching language to the deaf.

---

<sup>6</sup> This has been discussed in detail in “Curricular Strategies and Adaptations for Children with Hearing Impairment” (Gathoo, 2006)

A thorough concept of each of these areas would provide an in-depth knowledge about the available teaching curriculum for the hearing impaired. Schmitt (as cited in Huddar, 2006) has listed a number of Principles for Teaching Language<sup>7</sup>. They are:

- Use of multi-sensory channel.
- Useful language should be taught to the children.
- Meaningful situation and context should be used.
- Language should be considered as a means to an end rather than an end in itself.
- Language learning must begin very early.
- Language acquisition is a continuous process and not simply a product of the classroom.
- Child's need and interest should be kept in mind.
- The goal of language programme should be 'automatic' development.
- Language is considered truly acquired when the child uses it spontaneously.

The Methods of Teaching Language has also been classified into three types:

- Structural method
- Natural method
- Combined method.

TH-15429

<sup>7</sup> These principles hold good cross culturally across the globe and for early language training. These principles are not to be mugged up only theoretically but are for teachers to practice in classrooms (Huddar, 2006).



Each of these methods has its own feature that individually contributes in the development of language skills among the children with hearing impairment. Each of these methods are further classified and designed accordingly.

(Paul & Quigley, as cited in Huddar, 2006) describes two types of Structural Method, such as:

- The Fitzgerald Key: developed by Edith Fitzgerald (1929) to help the deaf children learn some of the English structures and to construct and evaluate their own written composition.
- The APPLE TREE programme: it stands for A Patterened Programme of Linguistic Expansion Through Reinforced Experience and Evaluation. It was designed to introduce the sentence patterns in a sequenced, spiraling manner proceeding from the easiest to the hardest structure. It consists of: Pre and post test, workbooks, a teacher manual designed to teach ten-sentence pattern and a series of short story books.

The Natural Method aims at the development of language through oral conversational method as experienced by the child in the ordinary environment. There are certain underlying principles of Natural Method widely discussed by Groht 1958 & McAnally; Rose & Quigley 1987, (as cited in Huddar, 2006), that:

- Information about normal language development is the basis for determining language goals and intervention strategies.
- Language is learned through communication.



- Communicative competence is the ultimate goal of language development.
- The content of the language lessons should be directed by the needs of the child.

The Combined Method includes few aspects from both Structural and Natural methods and its relative varies according to the programme. Four programmes that are being discussed by Paul and Quigley 1994 and Geers and Moog 1983, (as cited in Huddar, 2006) are:

- The Rhode Island Curriculum
- Test of Syntactic Abilities Syntax Program (TSA)
- Maternal Reflective Method
- Teachers Assessment of Grammatical Structures.

The Techniques of developing Language are distinctly different from that of method of developing language. Unlike methods, techniques are short term strategies adopted for attaining particular goals of language development for the children with hearing impairment. These techniques include, News, Conversation, Directed Activities, Stories, Visits, Role Plays, Picture Description, and Poems etc.

However, in India, there exist three modes of communication in the education of the deaf, namely, Oralism, Total Communication (TC) and educational bilingualism<sup>8</sup>. Apart from these, there are few other methods, which are commonly employed in

---

<sup>8</sup> The philosophy which desires to develop manual language in the deaf children through manual code is said to be educational bilingualism (Huddar, 2006)

teaching children with hearing impairment. However, no method can be claimed to be better than the other.

- **Auditory/ Oral Method**

It is a program that uses spoken language alone for communication and teaching the children with hearing impaired. Its main aim is to incorporate the deaf individuals into the hearing society through good speechreading and lipreading. This method, developed in America at the Clarke School for the Deaf during the late 19<sup>th</sup> century, discourages any use of sign language. The child is exposed to sounds and spoken language only at every instance. The method starts with visual attention to lip-reading and includes isolated sound elements, sound combinations, words, and finally speech (Northern & Downs, 1991).

- **Visual/ Oral Method**

In this method, sign language and finger spelling is used. The sign language used are in dependent sign language and not just the translation of the oral language. This system includes two other methods, namely, combined method and simultaneous method. The combined method uses speech, speech reading, hearing aids and finger spelling. Whereas, simultaneous method uses both speeches, speech reading and all those included in combined method along with Sign language (Northern & Downs, 1991).

- **Rochester Method**

This method is also known as 'visible speech'. It uses speech and finger spelling simultaneously. It emphasizes the traditional oral approach, supplemented by simultaneous and visible finger spelling (Northern & Downs, 1991).

- **Total Communication**

Total communication was first developed by David Denton in 1967 at the Maryland School for the Deaf (Katie Lee). It is the use of different methods of communication together to ensure deaf or hard of hearing children are free to determine their best and preferred methods of communication with others. Total Communication (TC) is a philosophy of acceptance which uses all possible methods of communication to assist a Hearing Impaired child acquire language and understand speech. Therefore TC does not refer to any particular teaching method but instead refers to the adoption of an open attitude in teaching Hearing Impaired children<sup>9</sup>. In this, the main idea is to use any means that can be used to convey the language and idea concepts between the deaf child and everyone to whom he is exposed. In other words, it incorporates all other methods i.e., aural, oral, manual modes in order to convey the ideas across.

- **Finger spelling**

Finger spelling can be described as writing in the air. Each letter of the alphabet has a corresponding hand shape or sign. In education, finger spelling is sometimes used as the main means of communication, together with spoken English (n.d.).

---

<sup>9</sup> <http://www.helium.com/tm/521826/total-communication-short-philosophy>

- **Simultaneous communication**

When sign language users use a combination of speech, signs and finger spelling to communicate, it is known as Simultaneous Communication. The advantage of Simultaneous Communication is that it offers the benefit of seeing two forms of a message at the same time: the Hearing Impaired person lip reads what is being said and simultaneously reads the signs and finger spelling of the speaker. Users of Simultaneous Communication claim that this makes for easier communication.

- **Verbotonal Method**

According to (Craig & Craig, as cited in Northern & Downs, 1991), the verbotonal approach is characterized by: emphasize on low frequencies (below 500 Hz) and on vibratory clues in perception of spoken language patterns; matching special amplification devices known as SUVAG to the deaf person's optimum "field of hearing"; use of body movements to assist both in production and perception of speech; emphasis on acoustic memory for language patterns aided by body movements and by articulatory movements from the production of speech; providing speech and language work in active "play" type situations, so that much longer periods of concentrated work on spoken language are possible; and emphasis on language in meaningful context of "situations". The main aim of this method is to develop good oral communication skills that would enable the children with Hearing Impaired to interact freely with normal hearing people.

The prime concern in the teaching process for the deaf / Hearing Impaired children is on language. However, along with the development of language, speech is

also one vital area to be focused in the education for the children with hearing handicap. Training of speech also forms a crucial part of the educational goal for the children with hearing impairment. As explained by Kostic (1980), language can be developed separately from speech but speech cannot be developed without language. Speech may be substituted by written language, whereas, if language is substituted by any other means of communication it is no longer language but gesture, picture, symbol and so on. Language is a wider concept than speech. Speech is an inseparable part of language.<sup>10</sup> Mukundan (2006), talks about three approaches used for the teaching of speech to the hearing impaired. They are:

- Auditory Global Approach
- Multisensory Syllable Unit Approach
- Associated Phoneme Unit Approach.

Each of these approaches are although distinct, yet share few common features too. In the auditory global approach the speech sounds are taught in any order, while in the multisensory syllable unit approach, few speech sounds are introduced at a time and in a specific order. The sounds, which are easiest to learn, are taught first whereas the sounds, which are difficult to learn, are taught later (Mukundan, 2006). In associated phoneme unit approach the phoneme is considered to be the basic unit and the phonemes that can be taught in isolation are taught first followed by practices of phonemes in words, phrases and sentences. In this type of approach, Cued speech technique is used which consists of

---

<sup>10</sup> Language includes the basic meaning of words, the meaning of their grammatical forms, as well as their functional or syntactical meaning (Kostic, 1980)

eight hand shapes that are used in four positions very close to the lips. It has been found from various studies (Mukundan, 2006) that:

- Linguistic information can be received with exceptionally high levels of accuracy through Cued Speech.
- Use of Cued Speech along with auditory feedback and speech reading, facilitates speech reception.
- Cued Speech can be introduced as early as two years of age.
- Cued Speech helps as an aid for acquiring reading skills.

Apart from that, there are other methods to teach speech, such as the Ling's model. It was developed by Ling (1976) with the purpose to enable the teacher to develop speech in the Hearing Impaired children in a systematic and effective way. Correct model is another method of teaching speech that suggests a range of strategies that may be used in the remedial treatment of deviant patterns. As opposed to speech training programmes, Fischer (1982), claims that signing has relatively more simultaneity, while speech has relatively more linearity, and that these phenomena are related respectively to the functioning of the visual and auditory systems, as well as to the functioning of the hands and body versus the vocal apparatus. Proponents of sign language believe that language is a more important factor than good speech. In India, Indian Sign Language Cell of AYJNIHH and its regional centers, Ramakrishna Vidyalay, Coimbatore and other NGOs are striving hard to practice ISL in the education of children with hearing impairment (Mathew, 2006).

Further, the teaching procedures employed in the United States also include many of these methods and theories. To name a few of the teaching procedures used in the United States for the children with hearing impairment are:

- The Wing Symbols: developed by George Wing in 1833. This system uses letters and numbers to represent the functions of different parts of speech in a sentence.
- The Barry Five States: developed by Katahrine Barry (1899). In this system, five slates are placed on the walls of the schoolroom to provide structure for language explanation.
- The Natural Approach: according to this approach, language is seen as a means to an end rather than an end of instruction itself. It was supported by Mildre Groht (1958) as opposed to the Fitzgerald Key.
- The Patterning Approach: Sr. Jeanne d'Arc (1958) presented the view. She emphasized on the systematic exposure to the linguistic variety for better understanding of the language instructional programme.
- The Programme Language Instructional Approach: initiated in 1960, this programme was developed for Hearing Impaired children to teach specific linguistic knowledge such as Noun, articles, or following written direction.
- Behaviour Modification: based on the learning theory, this system is for the children who fall under the rubric of severely retarded, autistic-like or multi-handicapped.
- Linguistically Based Approaches: this programme is primarily based on the linguistic theory as well as on developmental findings.

As Kretschmer and Kretschmer(1978), explains that most of these language teaching programmes are based on the linguistic theory with their basic premises laid on the following ; firstly, language is not taught to children using vocabulary as its base of operation. Instead the immediate goal of the educational process must be the development of underlying linguistic knowledge for sentence generation. Secondly, language cannot be taught in isolation. It must be an integral part of the school curriculum, which in turn is geared toward the child's needs and intellectual/ emotional interests.

However, the effectiveness of the language teaching methods and the child's linguistic and communicative development can be assured if there are corresponding language evaluation systems. Hence, assessment of language is also important in order to ensure concrete linguistic base in the HI and Deaf children. There exists variety of analysis procedure, which differs in their aspects of language on which they choose to focus and in their techniques of description. R. Kretschmer and L. Kretschmer (1984) described few of the techniques for spontaneous production analysis for the HI children.

- **Mean Length of Utterance (MLU)**

According to Shriner (1969) (as cited in Kretschmer & Kretschmer, 1984), MLU is highly correlated with psychological judgements of language development. Sharf (1972) (as cited in Kretschmer and Kretschmer, 1984), felt that of all the evaluation techniques, MLU was the most easily derived and could serve as a screening device to detect children with potential language problems. Brown also suggested that many specific aspects of syntactic development are correlated with MLU.



- **Developmental Sentence Type**

Lee developed it in 1966. The DST was intended as a system for studying and evaluating grammatical development in children at the pre-sentence level. Lee constructed a four-level chart that detailed probable targets of acquisition in six areas of linguistic functioning: two-word noun phrases; two-word designative sentences containing demonstrative pronouns such as 'this, it, here or that'; two-word predicative sentence, declarative sentences that contain attribute or locative modifications such as 'car broken' or 'truck here'; verbal or verb phrase constructions; two-word fragments, usually prepositional phrases, negation, or question forms; and two-word stereotypical phrases. The four developmental levels into which these six categories are cast consist of two-word combinations, noun phrases, constructions, and kernel or simple active declarative sentences (Kretschmer & Kretschmer, 1984). The revised DST categories included: noun elaboration, designative elaboration, predicative elaboration, verbal elaboration, and fragments.<sup>11</sup>

- **Linguistic Analysis of Speech Samples (LASS)**

Engler, Hannah, and Longhurst, (1973) detailed a procedure for analyzing patterns of language, identifying constructions that are inappropriate, and ascertaining which constructions are conspicuous by their absence. They postulated five sentence types by which any sentence may be described: copulative verb constructions, intransitive verb constructions, transitive or object taking verb constructions, sense and infinitive-

---

<sup>11</sup> As part of her 1974 publication, Lee presented revision of her Developmental Sentence Types. She acknowledged that sociolinguistic constraints and contextual cues should be considered in classifying children's utterances. (Kretschmer & Kretschmer, 1984)

taking verbal constructions and passive verb constructions (Kretschmer & Kretschmer, 1984).

- **Developmental sentence Scoring (DSS)**

This was developed by Lee (1974). It is a procedure to describe both non-sentence and sentence constructions. For each construction, data on normal language development were used to establish a weighing scale (1 to 8 points). (Kretschmer & Kretschmer, 1984)

- **Tyack and Gottsleben's Language analysis system**

In this, each child's utterance is compared to an adult model or gloss, first with regard to the communication intent, as determined by the environmental and conversational contexts in which the utterance was produced. This system is unique from previously described systems in that it is developmentally organized (Kretschmer & Kretschmer, 1984).

- **Grammatical analysis of language disability**

This was proposed by Crystal, Fletcher, and Garman (1976), who suggested a multilevel scanning procedure. Each language sample is examined for eight levels of information explicitly noted as syntactic, not semantic or pragmatic, analysis. The focus of this technique is on simultaneously determining correct syntactic performance and instances of deviation from normal patterns (Kretschmer & Kretschmer, 1984).

- **Bloom and Lahey's language Sample Analysis**

This system distinguishes between several stages of language development: 1) single-word usage, 2) early emerging semantic-syntactic relationships (two-word combinations), 3) further emerging semantic-syntactic relationships (three-word combinations), 4) embedded relations and grammatical morphemes, 5) successive related utterances (the origin of conversation competence), 6) complex sentences, 7) syntactic connectives and modal verbs, and 8) relative clauses. The focus of the system is clearly on semantic identification and then on syntactic description, not vice-versa (Kretschmer & Kretschmer, 1984).

It is evident hereby, that there exist different methods, philosophies and techniques to deal with the language curtailment of the Hearing Impaired children. Yet the condition of the deaf and hearing-impaired children in India has not improved much. Mathew (2006), points out that majority of the special schools in India particularly believe and follow Oral-Aural philosophy as a panacea for educating the children with hearing impairment. He also points out that the current approaches in the education of the Hearing Impaired are more of 'Programme Centric' rather than 'Student Centric'.

#### **1.4 Literature Review**

Over the years, many researches have been conducted on Deaf, their education and language related areas. However, studies in related areas of Deaf in Indian context are very limited; more particularly in the area of assessing communicative teaching practices for the Hearing impaired. A review of related literatures on Deaf education and

the concept of language development give an insight of the issues pertaining to the Deaf community.

Most of the language difficulties to deaf born people are caused due lack of exposure to accessible linguistic input at the right time in the human development process, i.e., infancy and early childhood. Their incomplete language development also delays their ability to understand the motivations and actions of other people. According to Piaget's theory, the child's early reasoning develops in stages through interactions with the physical world so that language is not initially essential to conceptual development. In a study conducted by Morrison, Marcia Mary (1982) it was found that there exists a significant relationship between reading achievements and method of teaching reading, the type of school attended the hearing abilities of parents and uniformity of communication systems for home, classroom and personal use.

A study by Jesus Alegrias (1981) on the development of communicative competence in the deaf children and its interaction with the use of gestures and /or words to communicate has revealed that individual differences in communicative competence are correlated with the use of gestures but not with the use of speech, and that children increased the number of gestures, but not the number of words, when communication difficulty increased.

Hoemann (1972) conducted an experiment on quality and accuracy of peer-to-peer communicating between deaf children using manual method and hearing children using spoken language. The study revealed, the deaf children could not perform well due

to experiential deficit that affected the acquisition of the conventional language and the development of communication skills

Swisher (1989), in her study of the language learning situations of the deaf in an ASL environment, reported that, attitude towards ASL are complicated by its identity as a minority language in a majority culture, whose standard language influences it to some extent. The study revealed that attitude towards English are complicated by the fact that the learning of English is imposed by an educational establishment run by hearing people and that ASL is not used as a language of instruction.

Carolyn Ewoldt (1981) conducted a study on four Deaf readers reading in Sign of 25 stories. The significance of the study is that, the deaf readers were allowed to read whole stories in any communication system they prefer without interruption and these were analyzed by Cloze, miscue analysis and retelling. The study found that the deaf readers have more options than hearing readers, such as the finger-spelling, pantomime, and a variety of sign systems. It revealed that unlike hearing readers, deaf readers are not bound to English syntax.

Kathy Hirsh-Pasek's (1987) study on congenitally deaf readers tried to explore the metalinguistics of finger-spelling. The research explored that native users of American Sign Language (ASL) can nonetheless decode or recode print, through translation of print into English phonemes via the manual alphabet called finger-spelling.

These studies justifiably raise the issues pertaining to the various language problems of the Deaf. Skills like reading, writing, or decoding communicative messages

demands linguistic comprehension. These studies signify one essential factor that manual form of communication, which is also considered to be the native or first language of the Deaf, helps in concept development and communicative exuberance among the Deaf and Hearing Impaired individuals. This leads to a vital question, which needs to be attempted with propinquity, as in, if language attainment is considered to be the sole concern for the individual, educational, communicative and social development of the Deaf/ hearing impaired, then in why there is a lapse in realizing the concern in evaluating the instruction/ teaching methods of these deaf individuals. This holds serious implications, particularly in Indian situation where Deaf related issues have not yet been undertaken as an exhaustive research.

Greenberg, Markt. Calderon, Rosemary; and Kuschl, Carole (1984) studied the effects of early intervention on Deaf infants using Simultaneous Communication. The evaluation included comparison with a matched sample of deaf children without intervention. Their report presented findings on an independent evaluation of an early intervention program for severely and profoundly deaf children. Results indicated more developmentally mature communication and higher-quality interaction in families who had received intervention.

Susan Goldin-Meadow and Heidi Feldman (1977) found that Deaf children who are unable to acquire oral language naturally and who are not exposed to a standard manual language can spontaneously develop a structured sign system that has many of the properties of natural spoken language. This communication system appears to be largely the invention of the child himself rather than of the caretakers.

Paul (1984) found that vocabulary growth of the deaf population was quantitatively reduced and slower than that of the hearing peers. Vocabulary is one such component of language, which is acquired by reading and listening to others' speech. Thus for Hearing Impaired children, their reading skill is also impaired due to their language curtailment. However, Mayberry and Rachel (1987) found that the deaf children could recognize more vocabulary in print than in finger spelling.

A study by Jerry Herbert Houck (1982) investigated the effect of idioms on Hearing Impaired students' reading comprehension. The findings of the study revealed that the difficulties were encountered by the Hearing Impaired when idioms were presented out of the context while it was not as detrimental when included in the reading comprehension material.

Schirmer and McGough (2005), conducted a synthetic review of the research literature on the reading development and reading instruction of deaf students and compared the findings to the review of research literature conducted by the National Reading Panel (NRP) on four topic areas: a) alphabets (phonemic awareness instruction and phonic instruction); b) fluency; c) comprehension (vocabulary instruction and text comprehension instruction); and d) computer technology and reading instruction. In their discussion they noted lack of research with the deaf readers on instructional interventions that have been found effective with hearing readers and on the implications for isolation from mainstream reading research.

It is hereby evident that the looming consequences of hearing handicap still continues to rupture the possibility of overall development of the Deaf or Hearing

Impaired individuals. The researches support the fact that though hearing-impaired children are linguistically challenged, they possess the same intellectual potentials as the hearing children and therefore, can aspire to attain the same level of concept development as their hearing peers. A methodological approach in the area of instructional interventions and rigorous understanding of its implications can ensure positive results in the development of the Deaf and the hearing impaired.

Apart from language specific researches on Deaf, there are few other researches, which focus on the education of the Deaf as a whole. In a comparative study by Ju Jing-ming (2006) on the education of deaf in Australia and Norway revealed that there exists significant difference in the national context and the manner in which inclusion is understood and applied. From the study it was realized that in these two countries the transition from policy to practice seemed questionable. Another study conducted by Teller and Harney (2006) in China, reveals that in China as well, the condition of Deaf education and teacher training programmes are inadequate to meet the needs of the deaf students.

A study conducted by James M. Bebko and Elaine E. McKinnon (1990) on 41 deaf (age 5 to 15 years) and 45 hearing (age 5 to 8 years), investigated whether the language history of deaf children is related to delayed emergence of spontaneous memory strategy use. The hierarchical discriminant function analysis showed language history to be nearly perfect mediator of the relation between age and rehearsal use, effectively eliminating the lag in the emergence of rehearsal use. Increased language experience was hypothesized to be associated with automatization of language skills, and thus with decreased processing demands when language-based strategies are used.



Most of the studies conducted in this area of Deaf and Deaf education has conspicuously confirmed the effectiveness of Sign language (manual communication process) in the constructive development of the deaf individuals. In support of this the following international documents highlight the importance of Sign language as the language of learning and teaching in the education of Deaf children (“N.A.D.,” n.d.).

#### **UN Standard Rules on the Equalization of Opportunities for Persons with Disabilities**

In this, rules No. 7 and 9 clearly indicate that a national Sign Language as the language of learning and teaching, as well as culturally sensitive instruction are vital for the successful education of Deaf learners

#### **UNESCO Conference on the Education of Deaf Children (1984)**

At this Conference an agreement was reached as such that as language is important for the development of the Deaf child, the child should have access to Sign Language as well as spoken language. It was further concluded that Sign Language should be recognized as a legitimate linguistic system and have the same status as other linguistic systems

#### **Salamanca Statement (1994)**

The Salamanca Statement emphasises that educational policies should ensure that Deaf people have access to education in their national Sign Language, and furthermore, that persons with disabilities have the right to be educated in the way that they choose

(and that organizations of people with disabilities should be involved in the design and implementation of programmes).

Equally important is the guideline that children with special needs should follow the same curriculum as all other learners. It also recognizes the importance of educators with disabilities to serve as role models for children with disabilities, as well as the preparation of teacher trainers.

### **World Federation of the Deaf (WFD) (1995)**

The WFD unequivocally states that Deaf children have the right to be educated in the Sign Language of their country, and that they also have the right to Sign Language interpreters if they are educated among hearing children.

From these reviews and researches, the major issue, which triggers to formulate the core of the study, is that, with well documented and designed methods of evaluation and instruction, the condition of the Deaf people has not changed much. Every research has contributed greatly in highlighting and understanding the problems related to the Deaf. Yet the overall outcome has not been endearing enough. More specifically, the dearth of research can be felt in terms of limited undertakings on Deaf related issues of India. In the Indian context, it is observed that prevailing situation of Deaf education is not satisfactory. Government of India has introduced many schemes and programmes for the education of the disabled children. In 1974, the Ministry of Welfare introduced Integrated Education for Disabled Children (IEDC) programme, which was later handed over to the Ministry of Human Resource Development, Department of Education. This

programme was implemented in more than 20000 schools in India. Even the National Policy of Education (1986) states that all mild and moderately disabled should be integrated. With these objectives to integrate the disabled children in the regular school, most of the special schools became reluctant in providing higher educational opportunities. As a result of this, most of the special schools in India have only pre-school and primary education. Although, the Rehabilitation Council of India in collaboration with Madhya Pradesh Bhoj Open university in 2001 introduced teacher training programmes through distance mode, i.e. B.Ed (SE-DE) (Mathew, 2006). Yet there are many special schools, which find it difficult to get trained teachers to handle the classes. In reality, despite of initiating so many policies and programmes to enhance the status and condition of the disabled (Hearing Impaired children), the current education system and curriculum fails to cater to the specific needs of these children. Factors associated for such failures are many, including failure at the level of policy making and its proper implementation. Apart from the factors of failure, there are major problems faced by the Hearing Impaired children in the present system of education. They are, as stated by Mathew (2006):

- 1) Lack of awareness on early identification and intervention.
- 2) Non-involvement of the parents in educational services.
- 3) Non-availability of educational facilities and supportive services.
- 4) Lack of disability specific infrastructural facilities
- 5) Non-availability of trained and committed teachers.
- 6) Difficulty in communication
- 7) Difficulty in imparting existing curriculum.

- 8) Large number of students in the class.
- 9) Financial constraints of the parents.
- 10) Geographical and social conditions.

Mathew (2006), points out that in India, children in special schools are taught based on the curriculum of regular school children. Due to the inherent language and other constraints in the children, teachers face a major challenge in imparting the curriculum. . On one hand it is said that education helps in achieving the needs, which are lacking in an individual, while on the other, the educational programmes are not justifiably able to cater to their individual needs.

### **1.5 Rationale and Objectives of the Study**

Deafness poses a looming consequence in the overall development of the individual. With the evolving philosophies of education, it has been realized that education of the persons with disabilities is very crucial for their development and independent living. Education of the Deaf or Hearing Impaired is thus primarily concerned to develop language and literacy skills. However, their deficit language poses serious problems in their education and overall development. The educational programmes and the teaching learning processes have paved the way in realizing the educational needs of the Hearing Impaired children. The current scenario in the country's Deaf education reveals a dearth in the realization and implementation of the curricular strategies at the ground level. Recent endeavors by R.C.I. and AYJNIHH have initiated significant perspectives in realizing the objectives of rehabilitation and manpower development. However, in a country like India, illiteracy and financial constraints of the

families of these hearing-impaired children acts as a barrier in availing the existing programmes for the Deaf. Further, the NSSO report 1991 reveals that 97 percent of the villages in India do not have the special education facility within a distance of 10km, which indicates the severity of the problem (Mathew, 2006). These act as the bonus factors in increasing the plight of the Deaf children.

A significant issue pertaining to the problem of Deaf education in India is issue of mastering the language skills by the Hearing Impaired children. The literature account on various issues of Deaf signifies the seriousness of the problem to the core. With an urge to capture a facet of this wide area of research, the purpose of the study has been directed towards understanding and analyzing the characteristics of instructional interventions in the education of the Deaf. It has been realized that in India, current trends in the teaching practices of the Deaf and Hearing Impaired are not rendering the required output. The varied techniques and methods of instruction practiced are limited in terms of its effectiveness and reliability in different contexts. This raises a concern for immediate research undertakings to understand the typicality of instructional interventions and communicative advancement of the Hearing Impaired children in the formal set up. Hence the objectives of the study are:

- To review the available literatures pertaining to the curricular strategies related to the teaching methods of the Hearing Impaired children.
- To find out if there exists any difference or correlation between the theory and its practices.
- To find out the prevailing nature of teaching and communicative practices in a formal set up.

- To find out the effectiveness of the teaching methods in attaining the language advancements among the Deaf or Hearing Impaired students.

With these objectives in mind, the study has focused on the language and communicative development of the Hearing Impaired in the present setting of special school for the Deaf and the hearing impaired. The major interest of the study is on the effect of the teaching methods and curriculum in attaining the communicative competence by the hearing impaired. The study has been conducted through open-ended interview techniques to survey the prevailing situation in Deaf education in India with major concern in understanding the instructional interventions and communicative practices in the school set up.

## **CHAPTER 2: METHODOLOGY**

### **2.1 SAMPLES**

### **2.2 TOOLS USED**

### **2.3 PROCEDURE**

## METHODOLOGY

The study was conducted in Government Nursery/ Secondary School (South), Department of Social Welfare, Government of N.C.T. of Delhi. This school is one of the special schools for the education of deaf and children with hearing impairment run by the Government of India. Before conducting the fieldwork, permission was taken from the Department of Social Welfare, Government of National Capital Territory of Delhi. The researcher first familiarized the objective of the study to the Principal and the teachers. Details of the school curriculum were taken following which observations were planned. During the study, regular visits were made to the school and classroom observations were taken starting from the pre-school (called the 'Years') to fifth standard. The observations included:

- 1) Observing the communicative process of the teachers during class.
- 2) Observing the teacher-student communicative process in the class as well as outside the class.
- 3) Observing the communicative process of the student in peer-group communication.

At the end of the observation, an open-ended interview was conducted with the individual teachers of the school. During the course of the fieldwork, the school organized a Parent-teacher meeting in the school premises along with the officials of the Rotary Club, a non-governmental organization, who assist the children by providing hearing aids. The observation of that meeting was recorded and few parents were also being interviewed. At the end of the fieldwork, a self-designed basic language test was conducted with the students of the 5<sup>th</sup> standard in order to analyze their written communicative skill in the



absence of oral communicative skill. In this test, three simple questions, as per the standard of the children, were asked. Prior to the test, a teacher was asked to explain the test requirement to the students. The teacher was requested to explain only the procedure of the test and not to prompt any answers for the questions, until the student has any query regarding the meaning of the words in the test.

Prior to this, a pilot study was conducted to view the general situation of the special schools. Brief research was done on the number of schools available for the Deaf/Hearing Impaired in Delhi. It was initiated after meeting a parent of a deaf child who was studying in third standard (now promoted to fourth standard) in the school where this study has been conducted. A brief conversation with the parent revealed that his son who has been attending the school for the past four years has developed very little academically. The hearing aid provided by the Rotary Club is also of no use for his communicative and academic purpose. The parent further revealed that despite being a government organization and that too a special school, it does not provide any facility to the students free of cost. He also revealed his inability to understand and communicate with his child due to the language barrier. A visit to the school before designing the study, revealed few other factors, such as:

- Poor infrastructure of the school
- Student-teacher ratio was high.
- Lack of auditory instruments for speech and language training.
- Syllabus structure was same as that of the regular children.
- Till fifth standard one teacher was allotted for each class to teach all the subjects.

All these observations helped in directing the course of the study and thereby attaining the objectives of the study.

## **2.1 Samples**

Eight teachers were interviewed using an open-ended interview schedule. All of them have done B.Ed, which is the minimum qualification for teaching, and had training in special education, but not trained in any Sign language. There were no significant criteria for the selection of teachers for this study. The classrooms for observations were selected and thereby the respective teachers of each class were selected for interview. Almost all these teachers have more than five years of experience in teaching Deaf and HI children. And they are all permanent residents of Delhi and NCR.

The students who were selected for the test was based on the criteria that they already had undergone preschool and primary education, hence they were considered to have developed significant communicative skills. Since, the total strength of the class was of maximum eight students, therefore test was conducted with the number of children present in the class.

The parents for the interview were selected randomly, just to acquire some general opinions on educational and communicative developments of their children. An open-ended interview schedule was also designed for the parents in order to seek their responses related to the concern of the study. Since the study is mainly concerned with the teaching practices of the hearing impaired, therefore not too many parents have been selected or interviewed.

## **2.2 Tools Used**

An open-ended interview schedule was employed. The interviews were in both Hindi and English depending upon the convenience of the respondent. Apart from the questions designed, few other questions were also asked to gain a better understanding of their statements.

The test employed to the Fifth Standard students were a self-designed communicative test, wherein three basic questions (Wh-questions) were asked keeping in view the standard and ability of the students. The questions were designed depending on the curriculum used to develop their basic communicative skills.

## **2.3 Procedure**

The interviews were conducted after classroom observations so that observations and interview answers could be matched. Questions, which were not clear to the teachers, were modified accordingly to help them to answer.

In case of conducting the test on the HI students, few limitations were posed, such as, the teachers' help is taken only to make the children understand the requirement and purpose of the test and to explain the questions only if the child fails to understand it. The teacher was not allowed to prompt or hint any answers to make them understand what they were supposed to write. During the test, only the researcher and the students were present in the room. Teachers were restricted from being in the classroom. This was done in order to understand and analyze the ability of these HI children to communicate in social circumstances, when they are not provided with any interpreter or Sign language.

## **CHAPTER 3: RESULT**

### **3.1 TEACHING METHODS**

### **3.2 COMMUNICATION**

### **3.3 AGE**

### **3.4 PARENTS' AND TEACHERS' ATTITUDE**

### **3.5 ENVIRONMENTAL FACTORS**

### **3.6 SOCIAL FACTORS**

## RESULTS

The study indicates that the prevailing teaching practices in the special school for the Deaf and the Hearing Impaired are guided by the philosophy of Total Communication, which is exhaustively accepted as a method of teaching for all levels of education programmes and purpose of the hearing impaired. The study tried to understand the existing phenomenon in the special school for the children with hearing impairment. The study was initiated by making classroom observations from pre-school to fifth standard of primary level. The school follows the same curriculum as the regular govt. schools, as prescribed by NCERT. Apart from Sign Language, the medium of instruction is Hindi. English has been introduced for the last two years from 1<sup>st</sup> standard (primary level) onwards. In order to make the students familiar with the concept of 'language and communication', these schools provide four years of Nursery training (pre-school programme) which is called the "Years". Children starting from the age of 3 – 8 years are admitted in the 1<sup>st</sup> year of this 'Years'. In these four years of the nursery training, the students are made familiar with the gestures and mode of communication. Speech therapy is also given to these children and it is given only for these four years of pre-school training. Once the children reach 1<sup>st</sup> standard, they are taught in the regular manner (with sign and speech or the Total communication), but no speech training. However, at times the teacher may take special classes of speech of other children apart from the Years' students if needed. There are no fixed timing or time-table for teaching a particular subject. The teachers may teach any subject for any duration of time as per their convenience and the student's interest. However, they do try to follow the syllabus pattern as prescribed by NCERT and complete the course within the time period. In case

they are not able to finish the course, those portions are exempted from the exam, since these exams are conducted internally. Till 4<sup>th</sup> standard, one teacher is assigned to teach all subjects in each class. And from 5<sup>th</sup> standard onwards there are different teachers for different subjects (started from this year). The objective of the school is said to make the students self-dependent, and to enable them to communicate in any form (either oral or Sign language) with the society. The ongoing curriculum in the teaching of the Deaf and Hearing Impaired can be represented in Table 1.

**Table 1**

Prevailing Teaching Curriculum in the School for Hearing Impaired children

CLASSES	SUBJECTS TAUGHT	METHODS OF TEACHING EMPLOYED	EVALUATION PROCESS OF THE HI STUDENTS
Pre-school (4 years)	Hindi, Math, G.K., Drawing. (no formally designed syllabus)	Total Communication and Speech training.	Regular class tests and Home tasks.
Primary (I to V)	English, Math, Hindi, Science, Social Science, G.K., Drawing and Stitching.	Total Communication.	Regular internal tests and yearly exams as per the CBSE curriculum.

The contents in the table explain that the prevailing nature of education for the Hearing Impaired is almost same as that of the regular schools. And the ongoing teaching practices are restricted to the use of Total communication only, which is being used exhaustively for all levels of programme.

The classroom observations and the interviews show various aspects that influence the present setting of education and thereby the communicative development and its teaching practices of the Hearing Impaired children in a school set-up. The observations of the study reveal the following factors:

### **3.1 Teaching methods**

The study indicates that the prevailing method of teaching in the school is that of Total Communication method (where an amalgamation of all the methods is used). In the first four years of pre-school education, the children are familiarized with the basic phonic and graphic structure of words and sounds. During these four years of pre-school education, these children with hearing impairment are familiarized with the Hindi alphabet (varnamala) system, names and signs of fruits (mainly banana, apple, sugarcane, pomegranate, mango), names and signs of six basic colours (namely white, black, red, blue, green and yellow) and numerical counting till 20. All these skills are developed using the Total communication method. While for developing writing skills, copy method is used wherein the child copies the patterns written on the blackboard by the teacher and through workbook practice like tracing over patterns and cursive writing. Reading skills are developed through graphophonic system (where sounds and phonemes are related to the graphemes of the print) along with signs and lip-reading method. The school has only one speech therapist, who focuses on the aural/oral development of the child and familiarizes the child with the phonemes of the sounds by drawing or flashing pictures and the words or sounds associated to it. Speech training is given only during these four years of pre-school education with the help of auditory machines. It has been noticed that

through these speech lessons, the Hearing Impaired children are able to articulate the vowel sounds much faster and conveniently than the consonant sounds.

The study reveals that the signs or the Sign language used while teaching these children with hearing impairment are not standardized Sign language. Although, there is a well-formulated Indian Sign language, yet the teachers are not trained in any such sign language to teach these Hearing Impaired children. After the introduction of English as a subject (for the last two years), finger-spelling method is being used to familiarize the children with English letters. However, in the classroom observations, it has been noticed that teachers tend to use the finger-spelling of English letters to refer to Hindi words or sounds. For example, while teaching a lesson from Hindi textbook, a story of 'Akbar and Birbal', the teacher used finger spellings such as 'B' to refer to Birbal, 'A' to refer Akbar, 'P' for "Prashna" (question) and 'U' for "Uttar" (answer). It has also been found that signs are used only for main words in a sentence, such as the proper nouns, pronouns, verbs and adjectives. The remaining categories of words in a sentence are mostly taught in spoken form. Therefore, the existing method of Total communication is practiced as teaching through signs for main category of words and spoken language for those categories of words, which forms the syntactic base of the sentences. Besides this, no other method of teaching has been used or employed by any teacher at any point of time to teach these children with hearing impairment. As a result of this, the HI children also learn to sign only for the main words and subsequently fail to construct and convey syntactically correct sentences while communicating with others. Thus total communication method neither enhances their vocabulary for Sign or spoken languages nor their communicative skills.



### 3.2 Communication

Sign language is considered to be the native language of the deaf and the hearing impaired. Irrespective of their socio-cultural and geographical background, the deaf and the hearing-impaired individual can easily communicate with one another through signs. In this study too, it has been found that the students are more comfortable in communicating with signs. Although the signs used by these children are not standard form of sign language, yet they were found to communicate freely within themselves. The classroom observations revealed that the students understand better through signs than through lip-reading or speech. They try to understand the teacher's instruction mainly through the signs used by the teachers. Therefore, it shows that they have very weak knowledge of lip-reading and speech. While communicating with the teacher, the children attempt to use signs only. However, when provoked by the teacher, they try to make lip-movements and utter sounds, but it has been observed that they are not able to utter meaningful words and sounds because of two main reasons.

1. Firstly, their ability to understand sign is better than their ability to lip-read or to make speech sounds. And since, the teacher uses spoken form of the syntactical categories of the sentences and signs for the main words, hence they are unable to arrange both signs and verbal language to construct complete grammatical sentence.
2. Secondly, their speech-training programme also focuses mainly on the aural/oral development of phoneme sounds and not complete syntactic sentences. Hence, the teacher-student communication is mostly through non-standard and ungrammatical sign language.

Outside the classroom, it has been observed that the students communicate only through Sign language. None of their sign languages are standard, yet they can freely communicate and indulge into group discussions by using only signs. Most of their signs are self developed which the teachers also fail to understand at times (as confirmed by the teachers). Therefore, the study shows that although equal emphasis is given to develop their spoken and sign language skills through methods like total communication method, lip-reading and speech, yet the students are found to indulge into sign language communicative practices, both inside the classroom as well as outside the classroom.

Moreover, the written test conducted during the study, brought about significant facts regarding the communicative proficiency among these children with hearing impairment. From the test results, it can be deduced that the curriculum and methods of teaching are not effective enough to enable these Hearing Impaired children to communicate in social circumstances. The major problem faced by these children in communication is their inability to relate to the words and its context. Observations illustrates that these children lack vocabulary. Along with that, their grammatical concept of the language is very weak, which is overlooked by the teachers. The test was intended to analyze the situation that in the absence of, and inability to express themselves in, a spoken language; written language would substitute as a back up mechanism. But the test results showed contradictory facts refuting all the assertion made by the teachers on their teaching methods and curriculum. The test observations (see Appendix-IV) showed that-

- The HI children have serious problem in understanding the words, which have not been taught to them, or they are not familiar with.

- They find it difficult to distinguish the meaning of the Wh-question words, like what, when, where, how, who, etc. and thereby fail to answer accordingly.
- They do not understand the concepts like common noun or synonyms.
- They are unable to construct syntactically correct sentences.
- They are unable to understand the rule of pronoun replacement, as in-  
If they are asked, “who are you?” They might attempt to answer saying, “you are XYZ...”
- In order to attain a proper answer from them, they need to be offered with choices of answers (which might not be possible in every social circumstance).
- They are able to communicate only through those conversational statements, which have been taught to them in school. Any new form of language construction is completely alien to them. However, they can easily communicate in sign with another deaf person who is completely stranger to them.<sup>12</sup>
- Their inability to understand and answer to the questions, often forces them to either drop the conversation or imitate their counterparts.

Therefore, even at a higher level, their communicative skill seems to be negligibly developed. In a social situation they are neither able to communicate their ideas through speech nor through signs or by any other means of communication. This creates a gap between the hearing community and the non-hearing community.

---

<sup>12</sup> The evidence to such a situation has been found in the second standard classroom observation of the school, where a boy has taken new admission and has come from an integrated school set up. Right from the day one the children felt no constraint in understanding and conversing with each other through signs.

### **3.3 Age**

The age of the child is another factor, which plays a significant role in the educational achievement of the child. Due to delay in the identification of their disability, most of the students entering the school are of more than two to three years old. As a result their critical age of learning and acquiring language gets over. Moreover, by the time the child completes the pre-school years, the child is almost eight to ten years old. Therefore, the hearing-impaired child starts his/her session of formal or primary education from an age of minimum eight years. In case of a hearing child, by the age of eight years they are promoted to third standard. Hence there is a marked delay in their academic as well as literacy skill development.

### **3.4 Parents' and Teachers' attitude**

Through the interviews with the parents and respective teachers, the study could reveal certain facts about the attitude of both the parents and the teachers of these children with hearing impairment.

The teachers' interviews reflected on certain aspects of the teaching curriculum and their methods of communicative practices. They are-

- The respective teachers interviewed are qualified in special education but not trained in any type of Sign language to teach the Hearing Impaired children.
- They refused to acknowledge the fact that there exists a standard Indian Sign Language, rather they believe that, whatever signs they are teaching or using are standard forms and are Indian by nature.

- They confirm that Total Communication is a method of teaching rather than just being a philosophy (which, to some extent, has been accepted nationwide as method of teaching only). And according to them, this method is most effective and result oriented. Hence they never employed any other methods of teaching.
- Till fourth standard, one teacher is assigned to teach all the subjects. However, they themselves confirmed that they are not comfortable enough to teach all subjects with the same proficiency.
- The teachers were found to miss out in developing their (HI children's) independent reading and writing skills, rather the children are spoon-fed with the readymade answers to the textbook exercises. Hence, the students end up memorizing specific sentences only.
- The teachers' major concern seemed to be in completing the syllabus than to enhance their communicative skills.
- There was less concern in repetitive correction of the reading, writing and syntactic errors of the student.
- Since the children are not able to understand the concepts easily, therefore the teachers' expectations are also low.

Interviews with the parents rendered mixed views. In most cases the parents of the Hearing Impaired children are hearing parents. The study found that the parents' attitude towards the development of their children's communicative skills is almost negligible. Although they do regret the constraint of communication between them and their child, but this regret is overshadowed by the fact that their child is academically on the average. Few parents showed some interest to learn the language of their child with the support of

teachers, while others showed disregard about the fact that their child is more accustomed to use signs and not speech. However, all the parents had a common view on the fact that despite being a special school run by the government, these disabled children are not provided with any special aid for their education by the government. Although, there exist various laws and acts to encourage disabled section of the society, yet there is a lapse in the adequate information and availability of sources to the families of these disabled children.

### **3.5 Environmental factors**

Being a special school, its poor infrastructure adds to the quandary of the Hearing Impaired children as well as their teachers. The small sizes of the classrooms, depleted furniture, worn-out blackboards and inadequate open space for the children to play, all amass together to make the environment more gruesome against healthy development of the children with hearing impairment.

### **3.6 Social Factors**

Although government of India as well as the non-governmental organizations has taken efforts to mobilize the common mass about the advantages of early intervention of a deaf child, yet the families of the Hearing Impaired children are either unable to identify the problem or they are inhibited by the social stigma attached to the disability; as also confirmed by the teachers that there is a lack of cooperation from the parents to encourage their child in using the hearing aids at home or outside the school premise. Further, the unavailability of trained teachers (trained Sign Language teachers) and

ineffective curriculum for the Hearing Impaired children further append to their slow development. In the study it has also been observed that the students are reluctant to make any efforts to speak even with the teachers (whether in the classroom or outside). In this regard, lack of encouragement from the teacher's part has also been observed. If the teacher can understand what the child is saying or complaining; that itself satisfies the purpose of their conversation, irrespective of the fact that the child is using only sign and no speech. Moreover, during the Parent-teacher meeting it has been observed that most of the parents are either from the low-income or uneducated group. In few families only the father (or male guardian) is educated. Therefore, the mother with whom the child interacts maximum is unable to help the child with his/her studies. But almost all the parents of the Hearing Impaired children were hearing parents. In few cases, siblings were found to be deaf or Hearing Impaired but not the parents. Interviews with the parents brought about some interesting facts such as- the parents are merely satisfied by the fact that their children are attaining education. They expressed their regret that they are unable to communicate or understand their child's language, yet they are contented by the fact that their children are not dull and on an average gets promoted to the next class easily. Apart from that there is lack of awareness among the parents regarding the use of hearing aids.

An overview of the previous literatures and the present study result indicates that there exists a difference in the theory and practice of teaching curriculum in the education of the children with hearing impairment.

## **CHAPTER 4: DISCUSSIONS AND CONCLUSION**

### **4.1 DISCUSSIONS**

### **4.2 CONCLUSION**

#### **4.2.1 FINDINGS OF THE RESEARCH**

#### **4.2.2 LIMITATIONS OF THE RESEARCH**

#### **4.2.3 SUGGESTIONS FOR FUTURE RESEARCH**



## DISCUSSIONS & CONCLUSION

The aim of the study was to observe, the communicative teaching practices in the school and to find its effectiveness through observing the communicative processes and achievement of the students. Since, the pre-school teaching programme was aimed at initializing the concept of language among the Hearing Impaired children, hence, observations were recorded from the 1<sup>st</sup> year of pre-school till 5<sup>th</sup> standard. General overview of the school revealed following facts:

- There were total nine (9) teachers in the school.
- Total number of students ranged from 200-250 approx. (as told by the principal)
- Subjects taught during the four years of Pre-school ('Years') are: Hindi, Maths, General Knowledge and Drawing.
- Subjects taught from the 1<sup>st</sup> standard onwards are same as regular school, i.e., English (which has been introduced recently for the last two years), Hindi, Maths, Science, Social Science, General Knowledge, Drawing and Stitching.
- Speech classes are given only to the children of pre-school programme.
- Rotary Club provided hearing aids to all students.
- All the teachers are said to have special education training for the Hearing Impaired (But they were never trained in any Sign Language to teach the Deaf children).

Further, a glance through the notebooks of the HI children gave some idea about the curriculum that were being taught and practiced throughout, in order to develop their

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100. 101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200. 201. 202. 203. 204. 205. 206. 207. 208. 209. 210. 211. 212. 213. 214. 215. 216. 217. 218. 219. 220. 221. 222. 223. 224. 225. 226. 227. 228. 229. 230. 231. 232. 233. 234. 235. 236. 237. 238. 239. 240. 241. 242. 243. 244. 245. 246. 247. 248. 249. 250. 251. 252. 253. 254. 255. 256. 257. 258. 259. 260. 261. 262. 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284. 285. 286. 287. 288. 289. 290. 291. 292. 293. 294. 295. 296. 297. 298. 299. 300. 301. 302. 303. 304. 305. 306. 307. 308. 309. 310. 311. 312. 313. 314. 315. 316. 317. 318. 319. 320. 321. 322. 323. 324. 325. 326. 327. 328. 329. 330. 331. 332. 333. 334. 335. 336. 337. 338. 339. 340. 341. 342. 343. 344. 345. 346. 347. 348. 349. 350. 351. 352. 353. 354. 355. 356. 357. 358. 359. 360. 361. 362. 363. 364. 365. 366. 367. 368. 369. 370. 371. 372. 373. 374. 375. 376. 377. 378. 379. 380. 381. 382. 383. 384. 385. 386. 387. 388. 389. 390. 391. 392. 393. 394. 395. 396. 397. 398. 399. 400. 401. 402. 403. 404. 405. 406. 407. 408. 409. 410. 411. 412. 413. 414. 415. 416. 417. 418. 419. 420. 421. 422. 423. 424. 425. 426. 427. 428. 429. 430. 431. 432. 433. 434. 435. 436. 437. 438. 439. 440. 441. 442. 443. 444. 445. 446. 447. 448. 449. 450. 451. 452. 453. 454. 455. 456. 457. 458. 459. 460. 461. 462. 463. 464. 465. 466. 467. 468. 469. 470. 471. 472. 473. 474. 475. 476. 477. 478. 479. 480. 481. 482. 483. 484. 485. 486. 487. 488. 489. 490. 491. 492. 493. 494. 495. 496. 497. 498. 499. 500. 501. 502. 503. 504. 505. 506. 507. 508. 509. 510. 511. 512. 513. 514. 515. 516. 517. 518. 519. 520. 521. 522. 523. 524. 525. 526. 527. 528. 529. 530. 531. 532. 533. 534. 535. 536. 537. 538. 539. 540. 541. 542. 543. 544. 545. 546. 547. 548. 549. 550. 551. 552. 553. 554. 555. 556. 557. 558. 559. 560. 561. 562. 563. 564. 565. 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578. 579. 580. 581. 582. 583. 584. 585. 586. 587. 588. 589. 590. 591. 592. 593. 594. 595. 596. 597. 598. 599. 600. 601. 602. 603. 604. 605. 606. 607. 608. 609. 610. 611. 612. 613. 614. 615. 616. 617. 618. 619. 620. 621. 622. 623. 624. 625. 626. 627. 628. 629. 630. 631. 632. 633. 634. 635. 636. 637. 638. 639. 640. 641. 642. 643. 644. 645. 646. 647. 648. 649. 650. 651. 652. 653. 654. 655. 656. 657. 658. 659. 660. 661. 662. 663. 664. 665. 666. 667. 668. 669. 670. 671. 672. 673. 674. 675. 676. 677. 678. 679. 680. 681. 682. 683. 684. 685. 686. 687. 688. 689. 690. 691. 692. 693. 694. 695. 696. 697. 698. 699. 700. 701. 702. 703. 704. 705. 706. 707. 708. 709. 710. 711. 712. 713. 714. 715. 716. 717. 718. 719. 720. 721. 722. 723. 724. 725. 726. 727. 728. 729. 730. 731. 732. 733. 734. 735. 736. 737. 738. 739. 740. 741. 742. 743. 744. 745. 746. 747. 748. 749. 750. 751. 752. 753. 754. 755. 756. 757. 758. 759. 760. 761. 762. 763. 764. 765. 766. 767. 768. 769. 770. 771. 772. 773. 774. 775. 776. 777. 778. 779. 780. 781. 782. 783. 784. 785. 786. 787. 788. 789. 790. 791. 792. 793. 794. 795. 796. 797. 798. 799. 800. 801. 802. 803. 804. 805. 806. 807. 808. 809. 810. 811. 812. 813. 814. 815. 816. 817. 818. 819. 820. 821. 822. 823. 824. 825. 826. 827. 828. 829. 830. 831. 832. 833. 834. 835. 836. 837. 838. 839. 840. 841. 842. 843. 844. 845. 846. 847. 848. 849. 850. 851. 852. 853. 854. 855. 856. 857. 858. 859. 860. 861. 862. 863. 864. 865. 866. 867. 868. 869. 870. 871. 872. 873. 874. 875. 876. 877. 878. 879. 880. 881. 882. 883. 884. 885. 886. 887. 888. 889. 890. 891. 892. 893. 894. 895. 896. 897. 898. 899. 900. 901. 902. 903. 904. 905. 906. 907. 908. 909. 910. 911. 912. 913. 914. 915. 916. 917. 918. 919. 920. 921. 922. 923. 924. 925. 926. 927. 928. 929. 930. 931. 932. 933. 934. 935. 936. 937. 938. 939. 940. 941. 942. 943. 944. 945. 946. 947. 948. 949. 950. 951. 952. 953. 954. 955. 956. 957. 958. 959. 960. 961. 962. 963. 964. 965. 966. 967. 968. 969. 970. 971. 972. 973. 974. 975. 976. 977. 978. 979. 980. 981. 982. 983. 984. 985. 986. 987. 988. 989. 990. 991. 992. 993. 994. 995. 996. 997. 998. 999. 1000.

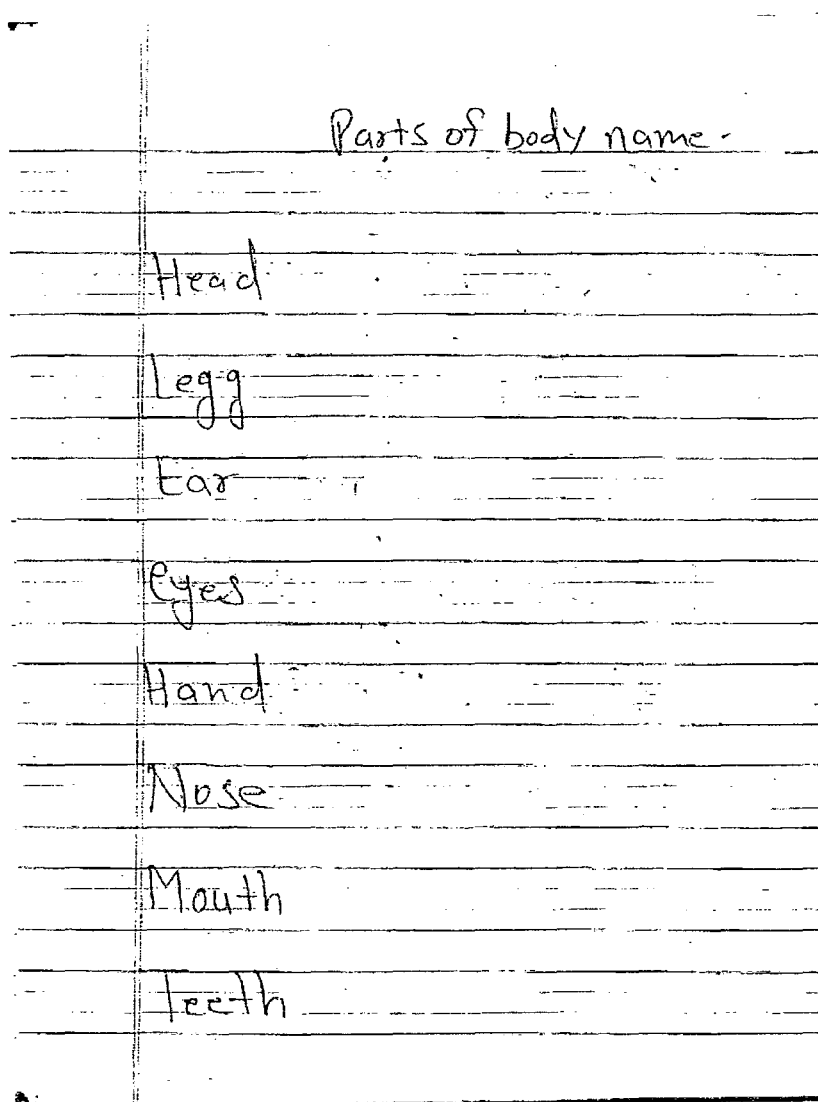
sentences which are being taught to these HI children in order to prepare them for social circumstances.

**Figure 3. Basic conversational sentences taught to HI students**

| 12/11/2007 |   | AHL   | CLASSROOM  |
|------------|---|-------|------------|
|            |   | सं. - | DATE: 2007 |
| प्रश्न 1   | तुम्हारे नाम क्या है                      |       |            |
| उत्तर      | मेरा नाम जितेंद्र कुमार गोप है            |       |            |
| प्रश्न 2   | तुम्हारे पिताजी का क्या नाम है            |       |            |
| उत्तर      | मेरे पिताजी का नाम श्री उमरनाथ गोप है     |       |            |
| प्रश्न 3   | आपने घर का पता लिखो                       |       |            |
| उत्तर      | आपने घर का पता 400 A/S हनुमति बाजार का है |       |            |
| प्रश्न 4   | तुम्हारे पिताजी क्या करते हैं             |       |            |
| उत्तर      | मेरे पिताजी दुर्गा का काम करते हैं        |       |            |
| प्रश्न 5   | तुम्हारे कितने भाई-बहन हैं                |       |            |
| उत्तर      | दो भाई उल्लोह उह                          |       |            |
| प्रश्न 6   | तुम्हारा उम्र क्या है                     |       |            |
| उत्तर      | मेरी उम्र 17 साल है                       |       |            |

These sentences (shown in Fig 3.) are taught to these HI children in order to enable them to converse either by writing or by Sign in case of urgent situations, when they are lost or have to give their identity to anybody, who cannot understand Sign language. And the HI children are expected to memorize these sentences so that they can use it as a tool to communicate about themselves to others who are not Deaf. Further, *Figure 4* shows the curriculum employed to increase their English vocabulary.

*Figure 4. Home task given by the teacher to a 3<sup>rd</sup> standard HI student*



In this figure, it is significant to notice that this is a task given and written by the teacher for the HI child to enable him to practice at home. And one may find the mistakes done by the teacher herself in the spellings as well as maintaining the uniformity of beginning the words with proper forms of capital letters. This indicates that the teachers are not vigilant enough about their task. Such negligence, no doubt, has serious effect on the

language development of the HI child. Figure 5 shows the English vocabularies, which are taught to these HI children with Hindi synonyms for the English words.

**Figure 5. English words taught using Hindi Synonyms to 3rd standard HI student**

|   |          |   |       |
|---|----------|---|-------|
| 1 | Potato   | → | आलू   |
| 2 | Tomato   | → | टमाटर |
| 3 | Pea      | → | भाजी  |
| 4 | LEmon    | → | लेमन  |
| 5 | ONIon    | → | आलू   |
| 6 | Carrot   | → | मूला  |
| 7 | Radish   | → | रुई   |
| 8 | Cucumber | → | खीरा  |
| 9 | Pumpkin  | → | कुकुर |

However, one can easily make out from the Figure 5 that attention has not been given in enhancing the writing skill of the child. All these are done by copy-method, wherein the teacher writes them on the blackboard and instructs the children to copy the same.

Similar phenomenon has been observed for all other subjects taught where the students are spoon-fed with readymade answers and vocabularies. This thereby limits the thinking and learning process of the HI children who gets all in all engaged into memorization task.

All these observations have revealed few more facts, such as,

- The teaching curriculums for these children are not well planned.
- The teachers are reluctant to check the errors made by the HI child and to employ effective techniques of teaching accordingly.
- Their (HI children's) learning process is more of rote memorization process than learning through innovative process.

The study has looked into the aspects of teaching communicative practices in the present Indian context of the Deaf Education system. It is evident enough that the educational programmes and curriculum for the Deaf, existing worldwide, are primarily based on language. However, one often misses to note that language is not only about verbal repertoire but also about non-verbal gestures and symbols. The idea is to ensure unimpeded communication. For Hearing Impaired children, the loss or inability to build contact with the language around, constrains their world of communication and thereby social involvement. Therefore, building the premise of language among these children with Hearing Impairment is more of a challenge to the educators and teachers.

The observations of the study provide an in-depth idea of the ongoing educational practices in the concerned school for the Hearing Impaired and thus can provide clear distinction between previous studies and present study, which would open up new avenues for discussions and research interventions.

#### 4.1 Discussions

Teaching the Hearing Impaired is a difficult task as their foundation of language is also impaired. As Northern and Downs (1991) explains that language and concept developments clearly proceed hand-in-hand with communication<sup>13</sup>. They further explained that the deaf child functions on the concrete level of mental operations, and thus, abstract operations are most difficult because they are performed with words- the very commodity of which the deaf child never has enough. Herein, the teaching curriculum and the methods play a vital role. As per the special needs of these Hearing Impaired children, adaptations of curriculum are done at different levels, i.e., pre-school, primary and secondary levels. As Gathoo (2006) explains that such curriculum adaptation would include adaptation in:

- Syllabus, methods and techniques of teaching,
- Co-curricular activities,
- Evaluation procedure, and
- Teaching learning materials.

Since, the need for pre-school education programme for the Hearing Impaired is to instill the concept of language and meaning of communication. Hence, the pre-school programme is designed for a duration of four years in order to facilitate the development of functional language and thereby the communication skills. In this study, it has been found that the outcome of pre-school education is not adequate enough to enable or develop communicative skills among the HI children and this has been validated by the test results as well. As pointed out by Silverman (1971) (as cited in Mathew, 2006),

---

<sup>13</sup> For hearing child, the early states of communication are primarily via speech and hearing. So the educator of the deaf faces problem with every deaf child. The child is stuck at the very first element of the communication process. (Northern and Downs, 1991).

“language is the key stone upon which successful education of the deaf ultimately rests.” Hence, it is necessary to find out the problems and errors of the HI children when they learn to read and write during their pre-school education, and accordingly adapt techniques and methods of teaching so that the child benefits more out of it. It is considered that reading skills help in the attainment of writing skills for a HI child. Therefore, the foundations of reading skills need to be mastered to the fullest in order to be able to master the skill of writing and thereby communicate their thoughts through this medium. This has also been justified by Harris (1971) (as cited in Mathew, 2006), that “reading skills are vital to the deaf people throughout the life. The ability to read well puts him in touch with his world, helps him to develop his personality, and gives him an unfailing sense of recreation.” Once, the child perceives what he is reading, simultaneously his writing also develops. Further, Morrow (1989) (as cited in Mathew, 2006) states that, “In writing, meaning is constructed in texts; while in reading text is reconstructed by constructing anticipated meanings.” This process thus triggers and stimulates the thinking and memory process within the child. But the study results have revealed that not much effort has been taken to enhance the reading and writing skills of these HI children, as a result of which their vocabulary also remains limited.

The objectives of the educational programmes and the teaching learning processes are well defined. Yet, the present educational curriculum for the deaf fails inconsistently to achieve the preliminary objectives to enable the disabled community. In the study, the inability of the HI children to respond correctly to the test questions reveals that the basic concepts of language are not sufficiently inculcated among them. A minimum language base should have developed by the time they complete their pre-school education

programme, which is the sole purpose of the programme. As significantly pointed out by Mathew (2006) that most of the states in India follow its own particular languages to run these programmes at their institutions and not every state in India does have all these programmes successfully running. Moreover, home alone cannot provide the base for language and education, especially in case of these HI children. Therefore, the process of language development is further delayed or dilapidating for these children with Hearing Impairment. And it has been highlighted in the study that the parents are not at all aware about how to assist their children in their communication. In such situation, it is the school professional's responsibility to convince and enable the parents of such children with proper counseling and assistance for their rehabilitation.

It is felt that since the curriculum is same as that of the regular schools, thereby the focus of developing and evaluating communicative skills shifts to the academic achievement. Hence, it is required that scientific language evaluation methods should be employed at the pre-school level. As Krestchmer and Krestchmer (1984), talk about various systems and methods to analyze language. He suggests few steps for spontaneous language analysis system, such as-

- Identification of the underlying propositions of each utterance or written unit produced by a child,
- Description of the semantic content of each proposition.
- Description of the syntactic devices employed by the child to realize the semantic content of each proposition in the surface structure of the sentence.
- Description of the degree of communication competence with which the child accomplishes this task, and finally



- Description, in contemporary terms, of the deviations or restricted form as semantically, syntactically, and/ or pragmatically motivated.

However, these steps of analysis are subject to the form of the language. Yet, the techniques of analysis can be employed to understand the progress in the communicative achievement of the HI children. But, in the present study, such techniques are neither known to the teachers nor practiced at any level. The entire evaluation of the HI children depends on his/her ability to generate memorized patterns and structures taught in the class. This rather encumbers the HI or deaf children's cognitive development and thus ends up in memorizing patterns of language. It is true that like hearing children, deaf children also have an innate ability to acquire language. However, one must not overlook the fact that in case of Deaf and HI children, the faculty of language is inactivated and thereby the task of acquiring language becomes a complex task. Herein, the teachers must maintain a distinction while catering to the linguistic needs and its development in a formal set up. Thereby one can find the shift in the objective of educational programmes for the deaf and the HI children from overall development of linguistic and cognitive development to mere academic enforcement. And this situation implies to the inadequacy in the teaching curriculum of the state and insufficient manpower resources.

While, it is true that curriculum for the deaf and HI children should be designed accordingly, however, the methods of teaching should also be well suited to the individual needs of the deaf and HI children. If the methods of teaching are designed and employed properly, then learning language for these disabled children would be less tedious. From the study it has been found that the school limits its mode of instruction by Total Communication system. And it has been realized that the prevailing method of

instruction in these special schools of India has been constricted to this Total Communication policy. The same has also been realized and criticized by the National Association of Deaf (N.A.D), which is a non-governmental and non-profit making organization for the upliftment of the deaf community in India. In one of their position paper ("N.A.D.," n.d.), it has been pointed out that Total Communication is a philosophy where every possible means of communication is used with Deaf children. It further illustrates that although Total Communication improves general communication skills and facilitates the learning process to a certain extent, it does not lead to the full development of Sign Language skills or the improvement of spoken/written language skills. Children who are educated through Total Communication therefore still experience serious problems with their language skills especially when it comes to reading, writing, understanding concepts and vocabulary.

The issue of language and communicative development of the deaf and HI are of serious concern due to the prevailing supremacy of oral language over Sign Language. In the evolving era of bilingual and multilingual education, the education of Deaf communities is afflicted by the threats of oralism. As Tove Skutnabb-Kangas (n.d.) points out that

*"All education based on orality only, education that forbids the use of Sign languages, all education of the Deaf which does not use a Sign language as the main teaching language, is subtractively assimilationist. Even education where its use is allowed, and even if Sign language is taught as a subject but is not the main teaching language, is subtractively assimilationist. It tries to replace the Deaf Children's mother tongue, a*

*Sign language, with a spoken language, and make Deaf children as much like hearing children as possible.”*

India too has a well-defined Sign language. Unfortunately, the knowledge and use of Indian Sign Language (ISL) is almost negligible in our country. The recent attempts by the UNICEF and AYJNIHH have initiated some concrete steps in developing the Indian Sign System (ISS). However, the implementation of ISL at the educational level is still a far cry. Huddar (2006) draws some tentative conclusions of ISL on the basis of few studies by Vashishta, Woodward and Santis, 1980, and Zeshan, 2000, as-

- Sign language is an integral part of deaf community in India.
- ISL is used by over 10,00,000 deaf adults and approximately 500,000 deaf children (as estimated in 1980 by Vashishta et al.)
- ISL is not used formally in education of deaf in India (as claimed in 1980. the picture has not changed much after that.)
- ISL has various regional varieties sharing same grammar.
- Zeshan claims that common vocabulary among the regional varieties is from 60% to 85 %.

It is claimed that there are as many Sign languages as there are countries in the world. But, nowhere Sign languages have been able to gain an official standard. However, as cited by Tove Skutnabb-Kangas (n.d.), Aotearoa/ New Zealand is the first state in the world that gave full official status to the New Zealand Sign Language (however, as she mentions, not Sign languages in the plural form).

The theoretical base of teaching language to the deaf and HI children are found to be weak. From the study it can be interpreted that the Total Communication is more of a

medium of instruction than being a method of teaching. As previous literatures also confirm that it is a process, which enables the flow of communication between the teacher and the student. From the literature reviews it is also understood that there exists different methods and techniques to develop linguistic competence of the HI children. And each of these methods has been designed keeping in view the specific linguistic needs of the deaf and HI child. Therefore, no single method can be claimed to be better than the other, since each of them has different goals. For instance, the methods like the Fitzgerald Key method and the APPLE TREE method, which are designed to enable the HI and Deaf children to understand the construction of sentence patterns, are not at all known to or adopted by any of these teachers teaching the HI children in a special school.

Further, at the pre-school level, techniques like developmental reading, functional reading and remedial reading, which are designed to develop the reading skills and concept of language among the HI children, the teachers were found to be apathetic to these techniques. As per their (the teacher's) statements in their interviews, the fact that these HI children are not mentally disabled and that they can be later integrated in mainstream schools, justifies that their educational instruction also should not differ from that of the mainstream educational system, which otherwise would be a kind of discrimination on the basis of their disability. Same phenomenon can be observed in case of developing their writing skills in the pre-school education. The HI children are instructed in the same manner as the hearing children (in terms of curriculum). The compulsion to complete the academic syllabus often overlooks the linguistic development of the HI child. And indeed it is difficult to meet both academic and linguistic curriculum, within the set duration of time, by the teachers. It has been observed that the

HI children who are not able to attain even the minimum level of pre-literacy skills are often detained from promotion. This in turn delays the beginning of their primary education. Such failures are often associated with the poor IQ and late development of the child<sup>14</sup>. Further, methods like Cued Speech, to develop the vowel and consonant speech sounds of words and sentences, is not a regular practice in the school. It was mostly observed that the children, when they try to attempt to speak their names or something, they end up articulating the vowel expressions only. As it is obvious, that the vowel sounds are easy to lip-read for these children than the consonant sounds which have varied places of articulation. This highlights the fact that even the speech trainings are not adequate enough for them to master the oral language. It is also a significant fact to notice that the school has only one speech therapist with minimally equipped laboratory aids for speech. It has been started with the aid of Rotary Club for the last two years. In such circumstances, it can be interpreted that there exists a lapse in the policy and its implementation at the ground level.

The observations justify that there exists an enervated attitude in the educational programmes for the deaf and HI individuals. Despite propounding so many policies and Acts for the rehabilitation and upliftment of these disabled community, the situations continued to be the same. Both teachers and the families of these deaf and HI children have shown reluctance in developing their communicative skills. As a result, we find that today's special education system fails to provide satisfactory outputs. However, it is not intended to generalize that such situation prevails in all areas of special education. But the education for deaf and HI is inadequate in achieving its goal.

---

<sup>14</sup> Such cases have been observed in the classroom observations and had been questioned during the interviews with the teachers.

Huddar (2006), states that the primary handicap of deafness (if not treated) leads to a secondary problem of language, communication and speech. This if not intervened, may lead to a tertiary handicap of educational impairment, because the 'edifice' of education is built upon language. For a hearing child, language learning is merely an achievement; while for a Hearing Impaired child, learning language becomes a complex task. The complexity of the task becomes more tedious when the education imparted to them is also language bound with a curriculum, which is designed for normal hearing children. As Gathoo (2006) points out that on one hand, the ongoing language development has to be ensured so that the base becomes stronger and stronger and more and more capable to hold knowledge. On the other hand, lessons have to be followed by the follow-up activity so that the students get dual opportunity to assimilate the knowledge. The study observed that the ongoing programmes of education in India for the children with hearing impairment are not adequate to prepare them for social situations. Policies and strategies are well defined to cater to the individual needs of these Hearing Impaired children, yet there exists a mismatch in its premise and practice.

The existing educational programmes are well designed but as Gathoo (2006) states that the curriculum of hearing children is not directly suited for the children with hearing impairment. She also points out that the aims and objectives of special education are the same as general education with some additional aims such as development of language and communication skills and integration of children into regular schools. This study, as well as previous studies, has revealed that the curriculum employed for these Hearing Impaired children is same as that of the hearing children in India. Moreover the examination and the evaluation patterns are also based on the norms of the Central Board

of Secondary Education (CBSE), which operates the regular school examination system. In fact there exists no distinction in the evaluation and examination of the Hearing Impaired children to that of the hearing children. Therefore, the major objective of these educational programmes for Hearing Impaired children descends to mere acquirement of academic scores. In such a situation one can easily deduce the emerging shift between the goals of language development and of academic performance.

#### **4.2 Conclusion**

Hearing impairment is often considered to be a hidden disability. It usually remains unexplored till the child reaches the age of two to three years, when significant delay is noticed in the language development of the child. There are various types and causes pertaining to hearing loss. In recent years, Government of India has taken significant initiatives in the prevention programmes for all disabilities. Many research studies have demonstrated that children with hearing impairment receiving intervention in the first few months of their life have shown improved language development, better academic success and increased lifetime earnings (Rangasayee, 2006). Early identification and intervention enables in the early acquisition of language. This study also underscores that educational achievement has its relevance on the development of language and communicative skills of these Hearing Impaired children. Policies have been intended and educational programmes have also been designed to cater to the educational and linguistic needs of these HI children. However, the disappointing fact is that the major part of these policies and Acts remain unimplemented or unnoticed. And

this situation becomes rather grave when government schools fail to achieve the minimum target to rehabilitate these disabled children and their families.

The present state of affairs in deaf education calls for serious and immediate amendments. The study gives a brief overview of the ongoing educational programmes and its implication in the development of the Deaf and HI children. The focus of the study was to understand the effectiveness of the teaching procedures and the resultant output of it in developing the communicative skills of these disabled children. Hearing Impairment is a disability, which not only impairs their language development but also constrains their social involvement. The general theory is that children with hearing impairment are more inner-focused as a result of reduced stimulation from the outside world (Rangasayee, 2006). In a world of verbal dominance, where language regulates every action of mankind, its absence thereby is considered to be a proscribed existence. Several theories and arguments have been put forward regarding the importance of language and its use. In case of language acquisition among children, it is believed that there exists a critical age for all human beings during which the child is able to learn or acquire language easily. Once this critical age is crossed, language acquisition becomes next to impossible. And especially, in case of a child who is linguistically impaired, this critical age theory strongly holds its authority. Hence, it is felt that the educational programmes for such linguistically impaired individuals must cater to their language needs. Such ideas thereby resulted in the discovery of various language teaching methods and programmes. It is through these endeavors that Sign language attained its significance in the education of Deaf and Hearing Impaired children.



Previous literatures have revealed various facts about education and language development of the deaf and HI individuals. Studies have also revealed that while teaching language to the deaf children, various aspects of language needs to be considered in order to develop proper linguistic competence among the deaf and the HI individuals. Hence, of all educational programmes, the pre-school programme constitutes the most important phase of educational programmes. Unlike the pre-school programmes of the hearing children, which develops basic concept of the world around, the pre-school programme for the deaf and the HI children are mainly aimed at developing their language skills. This study has attempted to understand this phenomenon of language development by observing the teaching methods and techniques employed in the concerned school.

From the perspective of the teachers, as observed in the interviews, it is learnt that theories are not applicable, or should be said, that theories are not clearly conceived in the pragmatic sense of language teaching. There exists a mismatch between the objectives of education and goals of language development. On one hand language development is considered to be the most significant component to facilitate educational achievement for the deaf and HI individuals. On the other hand, educational attainment is considered to be the means to develop language. This implies that both educational and language development are complementary to each other in order to ensure overall development of these disabled children. Further, parents' views infer the fact that in order to ensure social security for these children, education is the answer to all. According to the parents, if the children are able to achieve their academic goals, then social

adjustments can be made accordingly. This attitude of the teachers and parents reflect two main factors-

- In order to achieve the educational goals, teachers and parents ignore the importance of communicative development.
- The goals of education are considered to be the pedestal for their language and communicative development.

The above-mentioned two factors are the product of many other factors, which play collectively in this matter. From the study it has been observed that there are various social, economical and environmental factors, which together makes the situation more gruesome for the healthy development of the Deaf and HI children.

The study found that the teaching curriculum and methods are not as effective as they are intended to be. The student's interest has been overlooked in the process of achieving the academic goals. In this school (Government Nursery/ Secondary School (South)), the method of Total Communication is claimed to be the most effective method in teaching. However, literature reveals that Total Communication is not a method but a philosophy, which enables comprehensible communication between the Deaf and the Hearing individual. Moreover, in order to make such claims one has to test the validity of other methods as well. But in this case, the study shows that no other methods have ever been employed by the teachers to check its validity. Apart from this, the concept of standard Sign language also seems to be misconstrued by the teachers. According to them, whatever signs are being used in the class is Indian because they are signed for Indian languages. Hence, their teaching curriculum cannot provide sufficient enhancement for the Sign language of the deaf and HI children. Sign is the first language

of the Deaf/ HI people. And instruction imparted in one's first language makes learning easier than developing the concept of another language, wherein the forms of language are completely different (one being verbal and the other being sign language). Therefore, the study notices a significant fact that, the teaching methods do not completely cater to the child's linguistic needs and expediency. To argue in favour of this, one can bring in the example of the blind or the visually impaired students. For them, as well, learning to use language was made possible only after Brail writing system was introduced. Thereafter, throughout the world, use of Brail was mobilized to facilitate education for blinds. Similar attempts can be made to promote the use of Sign language in educating the Deaf, which is their native language. For that, one standard Sign language has to be assigned and the teachers should be trained in that. We already have such system of education in the form of British Sign language (BSL), American Sign Language (ASL) and others, where it has been found that enrollment of deaf and HI students for higher education is also high. However, in India, few deaf and HI students are able to continue till higher education.

#### **4.2.1 Findings of the Research**

The study has looked into few aspects of the Deaf education system and its teaching practices in the present context of India. Previous literatures have examined various other aspects of education for the deaf and HI. However, on Indian context, limited work has been done on the education for deaf and HI. Moreover, this area of analyzing the effectiveness of teaching curriculum and communicative development of the Deaf students has not been studied extensively so far. Hence, a brief observation in

this study intends to provide an insight into the issues related to the communicative teaching practices and its outcome.

- Classroom teaching practices are not adequate to develop language and communication skills among the Deaf and HI children.
- Pre-school educational programmes are not properly designed to develop their basic literary skills.
- Teachers are not trained in any form of standard Sign language.
- Speech laboratory is not adequately equipped. And speech instruction methods are also not adequate to develop speech among these children.
- Apart from Total communication, no other methods of teaching are employed.
- Teacher student ratio is not properly maintained. In the school, there are 9 teachers for a strength of almost 250 students.
- Syllabus of these deaf and HI students are same as that of hearing children. Their evaluation pattern is also same.
- Lack of coordination among the teachers and the parents.
- Both teachers and parents are engaged in developing the academic skills than the communicative skills among these children.
- Students use only Sign language both inside and outside the classroom. However, their signs are not standard sign language.

From these findings, it becomes obvious that the current trends in the education of the Hearing Impaired are not student-centric in its real sense. The education of the Hearing Impaired in India has to be revised and restructured in order to attain the real objectives of education. Whether it is Sign language or oral form of language, proper language base

has to be ensured among these disabled children, which when developed accurately would ensure social inclusion and overall development.

#### **4.2.2 Limitations of the Research**

Though the study highlights some significant aspects in the education of the Deaf and HI, yet it cannot be considered to be the ultimate in itself. There are various other areas, which need to be explored in order to understand the crux of the situation discussed in this study. The study is limited by the paucity of literature. Several aspects of education of the deaf and HI have been extensively evaluated in previous literatures. Measuring the effectiveness of teaching methods has also been undertaken. But analyzing the practice and prospects of the teaching methods, that too in an Indian context, has not been dealt earlier. Its brevity in the observations further limits the study. In order to attain an exhaustive knowledge in this area, a longitudinal research has to be undertaken. Its results then can be compared with the results of the regular education programmes. Moreover, the test employed in the study was not a scientifically proven test, which further limits the findings of the study.

On an average, the study briefly tried to verify the situations prevailing in the special schools for deaf and HI children. More specifically, it intended to provide a gist of the existing teaching practices and the outcome of it in the communicative practices of the deaf and HI children.

### 4.2.3 Suggestions for Future Research

The limitations of the study can be considered to be the key concerns to initiate a new venture in this area of study. Education for the Deaf or the special education needs to be explored in much wider peripheries of the Indian context. For future research it can be suggested to focus in the following concerns-

- Extensive research can be done on the ongoing teacher's training programmes and the existing teaching curriculum in special education.
- Comparative analysis can be done on the Indian and Western methods of language teaching curriculum.
- Exhaustive study of the teaching methods and its implications in the overall development of the special children should be done.
- Exclusive curriculum for developing the communicative skills of the special children should be designed and observed in an experimental set up (in India).
- Study can be undertaken to understand the linguistic and psycholinguistic perspectives of the schools and the families of these special children.

These are few suggestions to pursue further research in this area in order to understand the phenomenon of language and communicative development of the special children (deaf and HI children in this case) particularly in the Indian context.

Education of the deaf and the Hearing Impaired is a raising issue in the current status of research. Educational programmes and curriculums for the special children need to be restructured with a child-centric approach. Similarly, teacher's training curriculum also needs to be theoretically established and practically feasible. Serious concerns and attempt should be made in the implementation of policies. To conclude, one would refer

that a systematic approach to any kind of problem or issue can render effective results. Therefore, before attending to a problem if the stratagem of approach is designed, then it can render better perspective as well as solutions to the problem.

## BIBLIOGRAPHY

### Books

- Baker, Colin (2006). *Foundations of Bilingual Education and Bilingualism*.  
Clevedon: Multilingual Matters Ltd.
- Barbe, Walter B. (1963). *The Exceptional Child*. Washington D.C.: The Center for Applied Research in Education, Inc.
- Kiernan, Chris, Reid, Barbara, & Goldbart Juliet (1987). *Foundations of Communication and Language (FOCAL): Course Manual*. Manchester: Manchester University Press.
- Kostic, Djordje (1980). *Speech and the Hearing Impaired Child*. Calcutta: Indian Statistical Institute.
- Kretschmer, Richard R., & Kretschmer, Laura W. (1984). *Language Development and Intervention with the Hearing Impaired*. Baltimore: University Park Press.
- Moores, Donald F. (1978). *Educating the Deaf Psychology, Principles and Practices*. Boston: Houghton Mifflin Company.
- Northern, Jerry L. & Downs, Marion P. (1991). *Hearing in Children* (4<sup>th</sup> ed.). Philadelphia: Lippincott Williams & Wilkins.
- Rao, L. Govind (Ed.). (2007). *Perspectives on Special Education* (Vol. 1). Hyderabad: Neelkamal Publications Pvt. Ltd.
- Sims, D. G., Walter, G. G., & Whitehead, R. L. (Eds.). (1982). *Deafness and Communication*. Baltimore: Williams & Wilkins.
- Singh, Vijay Pratap (2004). *Educating Deaf Child*. New Delhi: Sarup & Sons.



### Manuals

ayee, R. (Ed.). (2006). *Introduction to Hearing Impairment*. New Delhi: Kanishka Publishers, Distributors.

ayee, R. (Ed.). (2006). *Fundamentals of Hearing, Hearing Impairment and Biological Management*. New Delhi: Kanishka Publishers, Distributors.

, Varsha (Ed.). (2006). *Curricular Strategies and Adaptations for Children with Hearing Impairment*. New Delhi: Kanishka Publishers, Distributors.

, Asmita (Ed.). (2006). *Language and Communication*. New Delhi: Kanishka Publishers, Distributors.

, Suni (Ed.). (2006). *Education of Children with Hearing Impairment*. New Delhi: Kanishka Publishers, Distributors.

an, Geetha (Ed.). (2006). *Fundamentals of Speech and Speech Teaching*. New Delhi: Kanishka Publishers, Distributors.

aswamy, Saraswathi (Ed.). (2006). *Family, Community and the Hearing Impaired Child*. New Delhi: Kanishka Publishers, Distributors.

### and Articles

, T., Want, S. C., Siegal, M. (2003). Siblings and Theory of Mind in Deaf Native Signing Children. *Journal of Deaf Studies and Deaf Education* (Volume 8). Oxford University Press.

ne, P. K. (1991). A Nineteenth-Century Experiment in Education of the Handicapped: The American Asylum for the Deaf and Dumb. *The New England Quarterly* (Volume 64, pp. 355-375). The New England Quarterly Inc.

G. (1995). The Teaching of Minority Languages as Academic

- Subjects: Pedagogical and Theoretical Challenges. *The Modern Language Journal* (Volume 79). Blackwell Publishing.
- Bebko, J. M., & McKinnon, E. E. (1990). The Language Experience of Deaf Children: its Relation to Spontaneous Rehearsal in a Memory Task. *Child Development* (Volume 22). Blackwell Publishing.
- Swisher, M. V. (1989). The Language-Learning Situation of Deaf Students. *TESOL quarterly* (Volume 23, pp. 239-257). Teachers of English to Speakers of Other Languages, Inc. (TESOL).
- Smith, M. E.G., & Campbell, P. (1997). Discourses on Deafness: Social Policy and the Communicative Habilitation of the Deaf. *Canadian Journal of Sociology* (Volume 22). Canadian Journal of Sociology.
- Senghas, J., & Monaghan, L. (2002). Signs of their Times: Deaf Communities and the Culture of Language. *Annual Review of Anthropology*. (Volume 31). Annual Reviews.
- Quigley, S. P. (1969). The Deaf and the Hard of Hearing. *Review of Educational Research* (Volume 39, pp. 103-123). American Educational Research Association.
- Mindel, E. D. (1974). Deaf Education: a Child Psychiatrist's View. *Peabody Journal of Education* (Volume 51, pp. 153-161). Lawrence Erlbaum Associates (Taylor & Francis Group).
- Meadow, S. G., & Feldman, H. (1977). The Development of Language-Like Communication without a Language Model. *Science, New Series* (Volume 197, pp. 401-403). American Association for the Advancements of Sciences.

- Mayberry, R. I. (2002). Cognitive Development in Deaf Children: The Interface of Language and Perception in Neuropsychology. In S. J. Segalowitz and I. Rapin (Eds.), *Handbook of Neuropsychology* (Volume 8). Elsevier Science B. V.
- M. S., M. Pandian (2007). A Reading Program for 13 year-old Boy. *Language in India* (Volume 7).
- Lundy, Jean E. B. (2002). Age and Language Skills of Deaf Children in Relation to Theory of Mind Development. *Journal of Deaf Studies and Deaf Education* (Volume 7). Oxford University Press.
- LaSasso, Carol, & Lollis, Jane (2003). Survey of Residential and Day Schools for Deaf Students in the United States That Identify Themselves as Bilingual-Bicultural Programs. . *Journal of Deaf Studies and Deaf Education* (Volume 8). Oxford University Press.
- Lang, H. G. (2002). Higher Education for Deaf Students: Research Priorities in the New Millenium. *Journal of Deaf Studies and Deaf Education* (Volume 7). Oxford University Press.
- Lane, H. S. (1963). The Deaf and the Hard of Hearing. *Review of Educational Research* (Volume 33, pp. 48-61). American Educational Research Association.
- Klatter- Folmer, J., Kolen, E., vanHout R., & Verhoever, L. (2006). Language Development in Deaf Children's Interactions with Deaf and Hearing Adults: A Dutch Longitudinal Study. . *Journal of Deaf Studies and Deaf Education* (Volume 11). Oxford University Press.
- Hoemann, H. W. (1972). The Development of Communication Skills in Deaf and

- Hearing Children. *Child Development* (Volume 43, pp. 990-1003). Blackwell Publishing.
- Hirsh-Pasek, K. (1987). The Metalinguistics of Finger-spelling: An Alternate Way to Increase Reading Vocabulary in Congenitally Deaf Readers. *Reading Research Quarterly* (Volume 22). International Reading Association.
- Guralnick, M. J., & Paul-Brown, D. (1984). Communicative Adjustments during Behaviour Request Episodes among Children at Different Developmental Levels. *Child Development* (Volume 55, pp. 911-919). Blackwell Publishing.
- Greenberg, M. T., Calderon, Rosemary, & Kusche, Carol (1984). Early Intervention Using Simultaneous Communication with Deaf Infants: The Effect on Communication Development. *Child Development* (Volume 55, pp. 607-616). Blackwell Publishing.
- Figueras-Costa, B., & Harris, P. (2001). Theory of Mind Development in Deaf Children: A Nonverbal Test of False-Belief Understanding. *Journal of Deaf Studies and Deaf Education* (Volume 6). Oxford University Press.
- Ewoldt, C. (1981). Psycholinguistic Description of Selected Deaf Children Reading in Sign Language. *Reading Research Quarterly* (Volume 17, pp. 58-59). International Reading Association.
- Emmorey, K. (2005). Sign Languages are Problematic for a Gestural Origins Theory of Language Evolution. *Behavioral and Brain Sciences* (Volume 26).
- Ellis, Nick C. (2007). Dynamic Systems and SLA: The Wood and the Trees. *Bilingualism: Language and Cognition* (Volume 10, pp. 23-25). Cambridge University Press.

- Eisenstadt, S. N. (1953). Conditions of Communicative Receptivity. *The Public Opinion Quarterly* (Volume 17, pp. 363-374). Oxford University Press.
- Cummins, J., & Hornberger, N. H. (2008). Encyclopedia of Language and Education. *Bilingual Education* (Volume 5). Springer Science + Business Media LLC.
- Courtin, Cyril (2000). The Impact of Sign Language on the Cognitive Development of Deaf Children: The Case of Theories of Mind. *Journal of Deaf Studies and Deaf Education* (Volume 5). Oxford University Press.
- Charrow, V. R., & Wilbur, R. B. (1975). The Deaf Child as a linguistic Minority. *Theory into Practice* (Volume 14, pp. 353-359). Lawrence Erlbaum Associates (Taylor & Francis Group).
- Bowe, F. (1998). Language Development in Deaf Children. *Journal of Deaf Studies and Deaf Education* (Volume 3). Oxford University Press.
- Skutnabb-Kangas, T., & Aikio-Puoskari, U (n.d.). Exclusion or Inclusion-Linguistic Human Rights for a Linguistic Minority, the Deaf Sign Language Users, and an Indigenous People, The Saami.
- Skutnabb-Kangas, Tove (n.d.). Bilingual Education and Sign Language as the Mother Tongue of Deaf Children.
- Gregory, Susan (2002). Language and Communication Development in Deaf and Hearing Babies from Birth to Two Years.

### **Internet Sources**

- Centre for Studies on Inclusive Education. (n.d.). Retrieved March 17, 2008, from <http://inclusion.uwe.ac.uk/csie/index.htm>

Different Methods of Communication for the Deaf. (n.d.). Retrieved March 21, 2008,

from

[http://www.ihearfoundation.org/services/therapy/different\\_methods\\_of\\_communica.php](http://www.ihearfoundation.org/services/therapy/different_methods_of_communica.php)

Easterbrooks, Susan R. & Handley, C. Michele. (n.d.). Behavior Change in a Student

With a Dual Diagnosis of Deafness and Pervasive Development Disorder: A Case

Study. Retrieved March 17, 2008, from

[http://muse.jhu.edu/journals/american\\_annals\\_of\\_the\\_deaf/v150/150.5easterbrook\\_s.pdf](http://muse.jhu.edu/journals/american_annals_of_the_deaf/v150/150.5easterbrook_s.pdf)

Gregory, Susan (1996). Bilingualism and the Education of Deaf Children. Retrived

March 15, 2008, from Leeds University,

<http://www.leeds.ac.uk/educol/documents/000000306.htm>

Hyde, Merv, Ohna, Stein Erik, & Hiulstadt, Oddvar (n.d.) Education of the Deaf in

Australia and Norway: A Comparative Study of the Interpretations and

Applications of Inclusion. Retrieved March 25, 2008, from

[http://muse.jhu.edu/journals/american\\_annals\\_of\\_the\\_deaf/v150/150.5hyde.pdf](http://muse.jhu.edu/journals/american_annals_of_the_deaf/v150/150.5hyde.pdf)

Keith & Sharon Baker (n.d.). Educating Children Who Are Deaf or Hard of Hearing:

Bilingual-Bicultural Education. Retrieved March 15, 2008, from

[http://www.thedeafway.net/html\\_files/educatbot.htm](http://www.thedeafway.net/html_files/educatbot.htm)

Lipreading & Oralism (n.d.). Retrieved March 21, 2008, from

[http://www.deafexpressions.4t.com/custom4\\_1.html](http://www.deafexpressions.4t.com/custom4_1.html)

Ministry of Human Resource Development. (n.d.). Inclusive Education, Retrieved March

17, 2008, from <http://www.education.nic.in/INCLUSIVE.asp>

Ministry of Human Resource Development. (n.d.). Inclusive Education. (n.d.). Retrieved March 17, 2008, from <http://www.ncpedp.org/eductn/ed-isu2.htm#2>

National Association of the Deaf (n.d.). National Association of the Deaf Education Position Paper. Retrieved March 25, 2008, from <http://nad.org/>

Neyrchel De Vera and Yaser Dharer (n.d.). Bilingual-Bicultural Education of Deaf/Hard-of-Hearing Children. Retrieved March 15, 2008, from <http://www.deafed.net/PublishedDocs/sub/ivd1c.htm>

Oralism (n.d.). Retrieved March 21, 2008, from <http://www.wisegeek.com/what-is-oralism.htm>

Rehabilitation Council of India (n.d.). Retrieved March 15, 2008, from [http://www.rehabcouncil.nic.in/programmes/short\\_term.htm#TEACHING%20LANGUAGE%20TO%20THE%20DEAF%20CHILDREN](http://www.rehabcouncil.nic.in/programmes/short_term.htm#TEACHING%20LANGUAGE%20TO%20THE%20DEAF%20CHILDREN)

Roy, Irene (n.d.). Retrieved March 21, 2008, from <http://www.helium.com/tm/521826/total-communication-short-philosophy>

Special Education in India. (n.d.). Retrieved March 21, 2008, from [http://www.greenteacher.org/exeprience/spc\\_edu\\_india.htm](http://www.greenteacher.org/exeprience/spc_edu_india.htm)

Teller, Henry, & Harney, Jillian (n.d.). Views From the Field: Program Directors' Perceptions of Teacher Educatin and the Education of Students Who are Deaf or Hard of Hearing. Retrieved March 29, 2008, from [http://muse.jhu.edu/journals/american\\_annals\\_of\\_the\\_deaf/v150/150.5teller.pdf](http://muse.jhu.edu/journals/american_annals_of_the_deaf/v150/150.5teller.pdf)

**APPENDIX-I****QUESTIONNAIRE FOR TEACHERS**

- 1) Do you use Sign Language? What kind of SL do you use?
- 2) Are you familiar with ISL? Do you use ISL?
- 3) What other methods of communication you use?
- 4) How do the students communicate? Do they use only sign or mixture of sign and oral communication? Do they use any standard SL?
- 5) Do you find any difference when the students communicate with you to that of their communication with the peer group?
- 6) Did you observe any significant difference in the communicative patterns of the children who have deaf parents to those who have hearing parents?
- 7) What is the objective followed while teaching these Deaf children?
- 8) What are the different methods employed while teaching these deaf or Hearing Impaired children?
- 9) Formally, what are the different methods to teach the deaf/ Hearing Impaired students? Are you aware of all the methods?
- 10) According to you which method of teaching is more effective and why?
- 11) Have you ever tried any other method before using Total Communication?
- 12) How do you analyze that the child has understood your instructions?
- 13) Do you know any theory related to the education and communicative



- 14) Do you have any special curriculum or method to develop their communicative skills?
- 15) Do you think the child's family background helps in their development of communicative skills?
- 16) Do you interact with or counsel the parents of these deaf children? Do you think such meetings help in the development of their communicative skills?
- 17) How do you help in developing their reading and writing skills? Do you have any specific method for that?
- 18) How do you complete the syllabus? Which way do you evaluate their performance? How is it different from the evaluation of method of the hearing children?
- 19) How do you deal with the students who have developed language late or have limited language proficiency?
- 20) According to you which form of communication (oral or manual) should the students master in order to survive or communicate with the mainstream?
- 21) Do you have any opinion or innovative method of teaching which you think would be more effective in developing their communicative skills?

**APPENDIX-II****QUESTIONNAIRE FOR PARENTS**

1. Since when your child has been studying in this school?
2. Did your child study in any other school before this?
3. Does your child understand whatever is taught in the school?
4. How do you help your child in their studies?
5. How do you communicate with your child? Are you able to understand everything he/she says or signs?
6. Does your child attempts to speak at home? Do you encourage him/her to use speech?
7. Do you think your child is improving in terms of academics and communication after joining this school?
8. How many times are you invited for parent-teachers meeting?
9. Is your child able to hear with the auditory aids provided by the Rotary Club?
10. Are you going to take your child for speech training classes, which the school is organizing during this vacation in the AYJNIIH?

**APPENDIX-III****TEST QUESTIONS FOR STUDENTS**

1. तुम्हे कौन सा फल खाना अच्छा लगता है ?
2. तुम्हे वह फल क्यों अच्छा लगता है ?
3. तुम उस फल को कैसे खाते हो ?

## APPENDIX-IV

## TEST ANSWERS BY THE HI STUDENTS

नाम : Pankaj

कक्षा : IV

प्रश्नों के उत्तर दो -

- 1) ~~मुझे~~ ~~मेरे~~ ~~आतू~~ ~~टमाटर~~ ~~मटर~~ ~~चिची~~ ~~मिर्ची~~ ~~आम~~ ~~केला~~ ~~खाना~~ ~~अच्छा~~ ~~लगाता~~ ~~है~~ ?
- 2) ~~मुझे~~ ~~मेरे~~ ~~वह~~ ~~फल~~ ~~कौन~~ ~~सबसे~~ ~~अच्छा~~ ~~लगाता~~ ~~है~~ ?  
मैं वह फल केला अंगूर अनार ग्रीब नारियल संतरा पिस्ता
- 3) ~~मैं~~ ~~उस~~ ~~फल~~ ~~को~~ ~~कैसे~~ ~~खाते~~ ~~हैं~~ ?  
मैं उस फल को कटे शेर बाद हाथी माथ कूता

नाम : बिट्टू कुमार

वर्ष : VI

इन प्रश्नों के उत्तर दो —

- 1) तुम्हें कौन सा फल खावा अच्छा लगता है ?  
उ० तुम्हें केला, आम, उमर, अंतरा, अनार, सेब, पीता
- 2) तुम्हें वह फल क्यों सबसे अच्छा लगता है ?  
उ० तुम्हें कन्दा, लीला, चीड़ा, साँप, रीर, बाघ, ऊँट, कीउर
- 3) तुम उस फल को कैसे खाते हो ?  
उ० मधर, आलु, टमाटर, मिर्च, फूल, ध...

भाषा : अरबियातुगोरी

कक्षा : V

प्रश्नो के उत्तर दो —

1) तुम्हें कौन सा फल खाना अच्छा लगता है ?  
~~खट्टा~~ आम, केला, पपीता, सेब, अनार

2) तुम्हें वह फल क्यों खाना अच्छा लगता है ?  
~~सबसे~~, अमरुत, मसूर, अदरक, गाजर, चुन्नी

3) तुम इस फल को कैसे खाते हो ?  
~~कैसे~~, मटर, आलू, फल गीला, बिना

नाम : शिदुशर्मा

तक़ा : पाच

प्रश्नों के उत्तर दीं —

1) तुम्हें कौन सा फल खाना अच्छा लगता है ?

उत्तर - मैंने आज सब फलों अर्थात् पपीटा - खाना अच्छा लगता है।

2) तुम्हें वह फल क्यों सबसे अच्छा लगता है ?

उत्तर - मैंने वह फल ~~सबसे~~ पपीटा अच्छा लगता है।

3) तुम उस फल को कैसे खाते हो ?

उत्तर मैं उस फल को शीश - खाते हूँ।

नाम : सूनझ

कक्षा : V

1) तुम्हें कौन सा फल खाना अच्छा लगता है ?  
 तुम मेरी सख्खिया फल खाना अच्छा लगता है।

2) तुम्हें वह फल कौन सबसे अच्छा लगता है ?  
 तुम मेरी वह फल खाना सबसे अच्छा लगता है।

3) तुम उस फल को कैसे खाते हो ?  
 तुम मेरी उस फल को इस उचार खाते हैं।



नाम : मोहन शर्मा

कक्षा : V

प्रश्नों के उत्तर दी -

1) तुम्हें कौन सा फल खाना अच्छा लगता है ?

मैंने सोन फल खाना अच्छा लगता है।

2) तुम्हें वह फल कौन सबसे अच्छा लगता है ?  
मेरे वह फल मेला सबसे अच्छा लगता है।

3) तुम उदा फल को कैसे खाते हो ?  
मैं उस फल को फ्रुजर खाते हूँ।

नाम : शाहसाय

कक्षा : V

प्रश्नों के उत्तर दो -

1) तुम्हें कौन सा फल खाना अच्छा लगता है ?  
 मैं सब फल खाना अच्छा लगता है।

2) तुम्हें वह फल क्यों सबसे अच्छा लगता है ?  
 मैं वह फल खाना सबसे अच्छा लगता है।

3) तुम उस फल को कैसे खाते हो ?  
 तुम उस फल को रोटी खाते हो।

नाम : सतीश कुमार

कक्षा : कक्षा V

प्रश्नों के उत्तर दो —

1) तुम्हें कौन सा फल खाना अच्छा लगता है ?

मेरे आठ ~~अच्छे फल~~ ~~खाने~~ फल खाना अच्छा लगता है,

2) तुम्हें वह फल क्यों सबसे अच्छा लगता है ?

मेरे फल अमरुत आमरुत सेक मारियल सतरा

3) तुम उस फल को कैसे खाते हो ?

मैं उस फल को अच्छे सेर बाघ हाथी साथ कुत्ता