

INDIA

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Education of Hearing Impaired Children in Regular Schools

AIM is to have an ideal outcome i.e. to have a Hearing Handicapped child with Good speech and who progresses normally through the education system and integrates fully into the society which communicates mainly by the oro-aural channel.

There are two schools of thoughts. One says that this concept is very much possible by integrating the Hearing Handicapped children into the normal schools whereas the other school says that this is only an exception rather than a rule.

The advent of Cochlear Implants has totally changed this concept into a rule.

LEGISLATION

According to the Ministry of Social Welfare, Government of India the Disability Act 1955 gives equal opportunity, protection of rights and allows full participation in the normal society to people with disability. By definition Hearing Impairment means loss of sixty decibels or more in the better ear in the conversational range of frequencies. On the other hand Deaf Patients are those in whom the sense of hearing is non functional for ordinary purpose of life. The cases included in this category will be those having hearing loss of more than 90 d.b in the better hearing ear to total loss of hearing in both ears.

The U.S. Education Act 1976 amended the 1944 Act and asked the Local Education Authorities to make provision for the education of the hearing handicapped children in ordinary, voluntary or in special schools. This act also encouraged the trend towards integration of the hearing handicapped child into the ordinary school. Before this, while children with mild to moderate Hearing loss often studied in general classrooms, the Controversy was for the severe to profoundly deaf children. The trend with them was to place them in non-integrating setting using Total communication methods. After the law the inclusion of the hearing-impaired student into the integrated classroom meant that the deaf student would be educated in a classroom of students with normal hearing but would receive support devices such as interpreters, note-takers, teacher -aides, deaf educators etc.

Two general positions have emerged in the interpretation of inclusion. Full inclusion means placement of all special education students, regardless of the severity of child's disability in regular education classrooms. Others believe in only partial inclusion, however the continuum of services must be available for all children equally. It is however widely held that full inclusion is the best interpretation of the 'least restrictive environment' i.e. the setting in which the individual

child's learning and development potential is optimized and not restricted. Those who question inclusion "across the board" ask, how will inclusive placement for language and reading be determined - by age or by reading levels. Will the deaf-language-delayed-student be included with younger hearing students who read at the same level or stay in age-appropriate classrooms even though the reading level of normal students may surpass that of the deaf student.

Inclusion accessibility means that any programme offered to normal students must be made available for students with disability also. But parents, teachers and administrators must be aware when full inclusion is not appropriate and when a child might benefit from a smaller classroom or an individualized programme.

There are distinct advantages and disadvantages of children with hearing loss to be integrated into Ordinary Schools.

- (i) Some children with Hearing Impairment may struggle to keep up with normal children and may develop some complex. However on the other hand they may form friends with normal children which would help them greatly in their normal development.
- (ii) These Children may not use the hearing aids to their fullest advantage. This is due to the fact that ordinary classrooms are much noisier. The teacher may also not find enough time for the child and to inform him about the inherent problems which are associated with the use of hearing aids. For this reason, classroom acoustics modifications and appropriate amplification considerations are important. Also Children with Hearing loss should use personal FM amplification systems. These systems provide individualized amplification that improves the signal-to-noise ratio and also reduces the impact of Echo.

Hearing Impaired Children may be placed in one of the several types of schools.

- (i) Ordinary classrooms using the Hearing Aids.
- (ii) Ordinary Classrooms with Hearing Aids and regular help from peripatetic teachers of the deaf.
- (iii) Ordinary classrooms for part of the day; the remainder of the time being spent in an attached Partial hearing unit.
- (iv) A Partial hearing unit only, staffed by specialist teachers of the deaf.
- (v) A school for the profoundly deaf.
- (vi) Other schools such as speech and language units and schools for children with additional handicaps.

Guidelines for the Regular Classroom Teacher

Children with Impaired Hearing listen with their Eyes as well as with their ears - 'SPEECH READING'.

- (i) They should not be seated more than 5 to 10 feet away from the teacher.
- (ii) Sitting arrangement in the classroom should be such that the students face each other and their teacher for better interaction. The child can observe everyone and thus can participate better in the activities going on.

- (iii) They should be kept in conversation so as to see if they are attentive and listening.
- (iv) The hearing impaired child should be given the text of the lecture before hand so that they get used to the words which would help them in speech reading.
- (v) The teacher should write most of the conversation on the Black-Board so that no information is missed out. Information and knowledge gained through reading help children compensate for what they are missing because of their hearing handicap.
- (vi) Hearing Impaired children can get fatigued more readily than the other children because they have to strain continuously in order to keep up with the rest of the class. Due to this, such children need individual attention from the teacher so that they can relax in between.
- (vii) There should be more emphasis on visual aids in such integrated classes.

Important Points to Improve Visual Communications between Teacher and the Hearing Impaired Child :

- (i) Don't stand in front of the window. Light should fall on the face of the teacher.
- (ii) Hand movements should not over impose the face and thus obscure the lip movements.
- (iii) Male teacher should not have a mustache. This can hide the movement of the upper lip and make speech reading difficult.
- (iv) Avoid words which look alike on the lips e.g. 'pie' and 'bye'. These are difficult to speechread.
- (v) Look directly at the child and speak naturally - neither too slow nor too expressive.

Communication methods in the education of the deaf child

Total Communication

This is the use of any and all modes of communication and involved using a combination of speech, gestures, formal signing, finger spelling, speech reading(lip reading) and writing.

Conrad(1980) postulated that in very deaf children, exclusive use of spoken language fails to provide sufficient linguistic stimulation to the child's brain, parts of which may undergo functional and perhaps even physical atrophy.

Supporters of total communications argue that providing sensory input through different channels - auditory and visual, enhances the possibility of language development.

However it has also been argued that total communication impairs speech development which is in itself a complete mode of language. Tayler(1985) in a survey of different schools showed that oral-only schools are more likely to succeed in developing the most normal speech.

People who support total communication say that normal speech patterns contain information which is highly redundant to the normal hearing person, but are essential to those with hearing loss. This includes hand gestures and some from of signing language.

Auralism

Children educated in this system use only speech and lip reading as a means of communication. Signing of any sort is strongly discouraged or even prevented. There is also an argument

that the ability of the child to develop speech is inhibited if the child is allowed to communicate by signing.

Finger spelling

Cued Speech

Some speech sounds e.g. M,P,B,K,D,C, can not be distinguished by lip reading alone. Cued speech uses eight different hand shapes in four different positions close to the speaker's mouth to enable the child to discriminate lip movements.

Signing System (Manualism)

British sign language is the most favoured.

Importance of Exposure so Speech for the developing brain and it's need for Cochlear Implantation later -

The Importance of profoundly deaf children attending normal schools and exposed to oro-aural communication is absolutely necessary in case they are to be subjected to Cochlear Implantation later.

Exposure to speech early in life, however brief, seems to be a necessary requirement for the acquisition of spoken language. Longer the exposure better is the outcome. One example of the detrimental effect on the brain has been illustrated in the visual system, in which, uncorrected amblyopia, myopia or cross-eyedness results in functional blindness in one eye.

This period of imprint is called the critical period in the life of any individual. This is also referred to as the Brain Plasticity. The Brain acts like a sponge during early life and absorbs any useful information it receives from the environment. The most important factor for proper development of brain specially the auditory system is stimulation in the form of sound. However, it is understood that stimulation received by the auditory system may not only be acoustic in nature, Sound in the form of electrical currents also has he same effect on the nerve endings. This is the basis of the Cochlear Implant. Cochlear Implants prevent a state of sensory deprivation specially in children who are totally deaf and are not benefited by the conventional hearing aids. Adequate rehabilitation is thus achieved with the help of this sensory input.

The importance of continuous auditory stimulation in children who are deaf is suggested by the fact that younger children who were using the hearing aids and were exposed to speech, were the best candidates for Cochlear Implantation. Delayed Implantation after the early onset of deafness predicts lower levels of speech reception. Children with even minimal hearing abilities who have had the auditory stimulation tend to perform better than congenitally deaf children who had no exposure to speech.

This exposure as we have already discussed would be possible if the Hearing Handicapped child is diagnosed of his hearing disability as early as possible, fitted with Hearing Aids and then subjected to oro-aural form of speech stimulation at all levels i.e. at home and in normal integrated schools.