# Educational Needs of Children with Hearing Impairment

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Abstract: Education is important for a person's goals and future well-being. It helps people develop the skills, habits and attitudes necessary to live a full and meaningful life. Educational needs are the gap between a learner's current knowledge, skills and attitudes and the desired level. They can also be defined as the need to adapt to new situations through education. Educational needs may vary depending on the learner. Special children have special educational needs. Special educational needs refer to 'children with learning problems or disabilities that make it more difficult for them to learn than most children of the same age.' If a child has a hearing impairment that makes it more difficult for him to learn than most children of his age, then he has special educational needs. Children with hearing impairment have different curricular needs than other children. These children need a variety of resources, specialists, teachers, strategies, techniques, etc. to teach the curriculum. This article presents an exploration of various aspects related to the educational needs of children with hearing impairment.

Index Terms: Hearing, Deaf, Audiologist, Psychologist, Impairment, Therapy, Educator, Special, Inclusive, Interpreter, Curriculum, Speech, Language, Communication, Evaluation, Adaptation, Teaching, Learning etc.

### INTRODUCTION

Education is the transmission of knowledge, skills and character traits and it is expressed in various forms. Education can also be classified on the basis of teaching methods or subjects. Every student learns the prescribed curriculum in a different way. Students have their own needs regarding the curriculum. The objectives of education are determined in the context of these needs. These objectives are achieved through the knowledge and activities of the subjects. Those subjects and activities are given a place in the curriculum. But not all students are able to learn that prescribed curriculum easily and equally. There can be many reasons why students are not able to learn the prescribed curriculum easily and equally. Those

reasons can also be their physical or mental disabilities. Due to disabilities, their educational needs become special. Special educational needs mean - 'children with learning problems or disabilities that make it more difficult for them to learn than most children of the same age.' If a child has a hearing disability, then it is more difficult for him to learn than most children of his age, then his educational needs are special.

Educational Needs of Children with Hearing Impairment

The curriculum needs of hearing impaired students are different from other students. Many types of resources, experts, teachers, tips, techniques etc. are required to teach the curriculum to these students. The details of which are as follows-

### 1. Treatment and Therapeutic needs -

The biggest obstacle in the educational development of hearing impaired children is their hearing loss. The primary effect of hearing loss is on their speech, language and communication. Due to the impact on speech, language and communication, their other areas also get affected. In which one major area is also the educational area. In order to ensure that the educational area of these children is not affected, their disability needs to be identified and intervened early, which includes many activities like first aid and treatment. Many experts and doctors are required to perform these activities. Such as Ear, Nose and Throat Specialist for ear operation and treatment, Audiologist for hearing test, providing hearing aids and hearing training, Ear Mould Technician for preparing ear mould, Speech Therapist for speech therapy, Special Educator for teaching, training, language and communication development, Clinical Psychologist for resolving psychological problems etc. All of them together empower the hearing impaired children through their services, so that these children can become capable of achieving better educational achievements.

### 2. Requirements for Aids and Equipments –

Different types of hearing measuring devices are required for hearing testing of hearing impaired children. According to the Audiogram obtained after testing, these children need to be fitted with hearing amplifier devices to use their residual hearing ability. These devices are of both individual and group types. For fitting individual hearing aids, it is necessary that the hearing aids should be fitted according to the residual hearing ability of the child. Because sometimes it is seen that such hearing aids are fitted to children, which are not capable of using their residual hearing ability. Similarly, there is a need to fit suitable group hearing aids to the students of a class, so that all the students of the class can benefit from hearing equally. Induction Loop System or frequency Modulated System are more beneficial than Hard Wire System. In these systems, students get more freedom in mobility. A Speech Trainer is required for their speech therapy, using which the Speech Therapist gives them Speech Therapy.

# 3. Needs for Special or Inclusive Schools –

The job of schools is to involve students in the study process and to adapt the learning environment in such a way that every student can learn according to his ability and can develop his abilities to the maximum. Some schools are associated with special education. Special education targets children with disabilities and special educational needs. This type of education is provided in various schools, colleges and universities at the level of primary, secondary and higher education. Hearing impaired students are taught in different types of schools according to the severity of their disability. If the child is suffering from severe hearing loss and he is not getting any benefit from hearing aids, then he should be given special education and if the severity of his hearing loss is not much and he is getting benefit from hearing aids, then it is appropriate to give him inclusive education. In special and inclusive education, basic and necessary facilities are available according to the disabled children. These facilities are helpful in fulfilling their educational needs.

# 4. Needs for Special Educators –

Special teachers are required for the education of hearing impaired children. These special teachers are trained in the field of hearing impairment. In the field of hearing impairment, teacher training programs recognized by the Rehabilitation Council of India, New Delhi at Diploma, Bachelor and Master level, D.Ed., B.Ed. and M.Ed. Special education courses are run by many institutes, colleges and universities. At present, all these courses are two-year courses. Only after completing these courses, teachers are appointed to teach hearing impaired children. So that they can educate, train and rehabilitate such children in a better way.

### 5. Sign Language Interpreter Required –

There are some schools where special teachers are not appointed or even if they are appointed, a sign language interpreter is appointed in the class for the purpose of teaching the curriculum to the admitted deaf children in a better way, who translates the subject being taught by the teacher into sign language and presents it, so that these children can understand the subject better by seeing it, due to which their educational achievement is better. Sign language interpreter is appointed in special and inclusive schools. At present, DTISL and DISLI courses are being conducted in sign language, recognized by the Indian Rehabilitation Council, New Delhi, Both these courses are of diploma level. DTISL course is for deaf people while DISLI course is prescribed for normal people.

### 6. Curriculum Adaptation Need –

The curriculum of various boards is prepared keeping in mind the normal students. Deaf students find themselves unable to learn these courses in the same form, because they lack speech, language and communication ability. Therefore, adaptation is required in these courses. It is the responsibility of the subject teachers to adapt the syllabus as per the special educational needs of deaf students while teaching and conducting practical work. But it must be kept in mind

that the adaptation should not change the basic concept of the used syllabus, because the purpose of adaptation is to provide some learning experience to all students. For teaching the syllabus to deaf students, it can be explained by making it analytical, illustrative and simple. To adapt the syllabus, the subject teacher should explain it with examples and illustrations based on the life of deaf students. To make the subject or topic simple and understandable, it is appropriate to teach it by dividing it into small units, so that they can understand it. The subject should be taught experimentally by giving it a practical form. For example, through experiments in science laboratory, subjects of civics and social sciences can be given a practical form. Geography and economics can be taught in a better way through pictures and graphs. In language teaching, the lesson can be explained by dramatization.

# 7. Needs for Adaptation in Teaching Methods and Techniques –

Hearing impaired students have to resort to many teaching methods, tips, teaching formulas in class teaching according to their problems. Lecture cum demonstration method is more beneficial for teaching. In this method, pictures, movies etc. are shown along with the lecture, which makes it easier for students to learn the lesson. Hearing impaired students are less able to hear, so the teacher should speak loudly and encourage them to wear hearing aids. If they are able to hear very little or not at all, then the teacher should make arrangements for the students sitting near that student to write a carbon copy of the things spoken and give it to the hearing impaired students. The teacher's teaching can also be recorded on a tape recorder, which these students can later listen and understand by playing it loudly. During teaching, the subject teacher himself should use sign language along with oral language and if he does not have knowledge of sign language, then an interpreter proficient in sign language should also be present in the class, so that the students can understand whatever the teacher is teaching. It is appropriate to explain through audio-visual material for such students. Audio-visual teaching aids are interesting and comprehensible for all the children in the class.

### 8. Needs Related to Teaching Learning Materials –

The present time is the time to use technology in the class. Subject teachers should try to explain the subject matter through modern digital means such as smart class, television, overhead projector and screen, video film etc. to make the subjects or topics of the curriculum interesting and comprehensible. This will make it easier for hearing impaired students to understand the subject or topic. Since these students are more gross learners rather than subtle learners, that is, they learn better by seeing and doing the subject matter rather than learning by listening and reading, therefore, the use of some traditional teaching materials such as picture cards, charts, models, real objects and real experiences etc. in their teaching plays an important role in making their teachinglearning process more effective.

#### 9. Positive Classroom Environment –

In the classroom, hearing impaired students should be seated in a semi-rectangular, semi-circular, L-shaped or straight line so that the teacher and students can easily reach each other and the students can listen to the teacher and lip-read. The distance between the teacher and the students should not be more than three to four feet. The teacher should not be too mobile while speaking, because being too mobile causes problems in lip-reading to the students. There should be adequate lighting in the room so that the students can lip-read by looking at the teacher's face. The temperature of the room should be normal so that the students can learn attentively. To eliminate the noise in the school, carpet should be laid on the floor or ground, acoustic tiles should be installed on the windows and walls so that the noise can be absorbed. If possible, trees and plants should be planted outside the classroom, so that external noise can be prevented. All the electrical equipment in the room such as tube lights, fans etc. should be noise-free, because such noise can hinder the use of the child's residual hearing. The classroom should be in the inner part of the school so that the noise of office, auditorium, road traffic etc. does not reach the classroom. Students should be seated a little away from the windows and doors, so that the students are not distracted by the glare and sound of windows and doors during teaching-learning.

### 10. Needs for Text-book Adaption –

Hearing impaired students read the same text books that normal students read. The language of the text books can be complex for hearing impaired students. Therefore, there is a need to present the language of the text books in a simple form. At the beginning of the lesson, the introduction of the lesson should be given, then the objectives of the lesson, then the main points of the lesson and the meaning of the key words and then the lesson should start. Giving as many examples as possible is beneficial for the students to understand the concepts properly in the lesson. Giving appropriate pictures related to the lesson in every lesson helps in learning that subject matter. Therefore, clear pictures should be given at the appropriate place. At the end of the lesson, it is essential to give practice work based on knowledge, understanding and application, so that immediately after reading the lesson, the students can repeat the lesson through practice and learn the concepts mentioned in the lesson and their language and grammar level can also improve through this. The size of the letters of the text books should be a little bigger and in dark color, so that even the hearing impaired children with weak eyesight can read easily. Since hearing impaired children learn by reading the lesson several times, for which they have to open and close the books again and again, therefore the size of the books should be a little bigger than the common size and the pages and binding should be strong so that the book remains strong and durable.

### 11. Changes in Evaluation Methods –

Hearing impaired children have many problems including speech, language, communication. These problems affect their learning and performance, because until they are not able to learn the subject in a better way, their performance also does not improve. They have limited language development, due to which they find themselves unable to answer long answer questions in a better way. They face problem in presenting a concept in a better way by weaving it into a web of words and sentences. They are not able to present their thoughts fluently in the answers of long answer questions and hence do not perform better than children with normal hearing ability. Therefore, it becomes necessary that for the evaluation of such children, instead of long answer questions, they should be evaluated through questions like short answer, very short answer, multiple choice, right or wrong, fill in the blanks, matching etc. Also, it is better to evaluate through observation, assignments, presentation etc.

### 12. Needs of Co-curricular Activities –

Co-curricular activities are an integral part of the curriculum. Their scope is wide. These activities are based on the approach of multi-sensory development. These activities help in the all-round development of children. These include many activities like literary, social, physical, cultural etc. Hearing impaired students should be encouraged to participate in sports activities according to their physical ability. These students have many grammatical difficulties related to reading, spelling, punctuation marks, to overcome them, activities like copy writing, writing beautiful articles, writing spellings by listening or lip reading should be encouraged. Participation of hearing impaired students in activities like science exhibition, children's fair, annual function, painting for school magazine etc. should be encouraged and appreciated. Subject based quiz competitions can also be good cocurricular activities. Exposure visits should be conducted to teach some lessons of social subjects in a better manner. Excursion visits are also beneficial to arouse interest in studies.

### **CONCLUSION**

If a child with hearing impairment finds it more difficult to learn than most children of his age, then his educational needs are special. The curriculum needs of hearing impaired children are different from those of other children. Many kinds of resources, experts, teachers, tips, techniques, etc. are required to teach the curriculum to these children. The important ones among these are treatment and therapeutic needs, requirements for aids and equipments, needs for special or inclusive schools, needs for special educators, sign language interpreter required, curriculum adaptation need, needs for adaptation in teaching methods and techniques, needs related to teaching learning materials, positive classroom environment, needs for text-book adaption, changes in evaluation methods, needs of co-curricular activities.

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