

CHAPTER FIVE

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S U M M A R Y

Equality in education has traditionally been equated with equality of opportunity, not equal outcomes for all, regardless of nature, characteristics or aptitudes. The reality of individual differences was expected to extend to achievements of the students i.e. good learners would learn the complex and abstract ideas in a school subject and poor learners would learn only the simplest and most concrete ideas. Thus, learning ability has been regarded as a highly stable and permanent trait of the child. The present system of education makes student achievement normally distributed by providing uniform learning experiences without considering the initial characteristics of the students. This makes schooling an unfair competition, and renders the principle of equality of educational opportunity, a meaningless rule of the game.

Schools have been successful in providing rewarding learning experiences to only a section of students. As a strong reaction to this trend, Carroll in 1963, developed a model of school learning in which he proposed the alterability of achievement. According to him, if students are normally distributed with respect to aptitude for some subject and if all students are given exactly the same instruction in terms of both quantity and quality, then student learning will be normally distributed. Conversely, if the quality of instruction and

learning time allowed are made appropriate to the characteristics and needs of each learner, the majority of students will achieve mastery of the subject. His model provided basic guidelines for the essential goal of education : success for all. Since education is a purposeful activity in which we seek to have students learn what we teach, the achievement distribution should be very different from the normal curve if our instruction is effective. As Bloom (1971) pointed out, our educational efforts may be said to be unsuccessful to the extent that student achievement is normally distributed. Carroll's model and approach strongly influenced subsequent theorizations in many fields of education including special education.

The current practice of special education, with its inheritance of the medical model, and its use of categorical descriptions of students both equates the child with the impairment and fails to see that the handicap comes not from the impairment (alone) but from the societal response to it (Gartner & Lipsky, 1989). Handicap, thus, is a social construct created and built by an attitudinal environment. For example, a hearing impaired child would be handicapped if there is no provision for utilizing his/her residual hearing. This realization challenges the deficit model that exists in the field and practised in the schools for the impaired. The deficit model identifies something as wrong or missing in the child, and attempts to find a cause in terms of an impairment. What is basic to the deficit model is the theory of educational darwinism. Such a position implies, as Jangira puts it,

"come if you can, cope up if you can, learn if you can repeat classes if you can't, stagnate as long as you can afford...."

The new conceptualization frames the problem in a different context. If sees the problem as the result of a mismatch between learner needs and instructional or management systems and therefore will see the child not as a disabled person, but as a learner whose potential is being thwarted. Such an orientation requires preparing the student both to overcome or cope with the impairment and to become an advocate for the needed services against the handicapping response of the society. The central thesis is, every child is special, demanding special attention. In order to help him/her develop to the maximum extent possible, the provisions with respect to teaching learning, all have to be carefully and painstakingly chosen and effectively used.

The present study is based on this central thesis that the educational provision should be looked into, in order to match with the special needs of each child rather than point to the deficiencies in a child. In a deficit model, the capacities of children are highly underestimated. Actualization of the potentials of a child can be possible only by overcoming the inherent limitations of the deficit model.

With respect to the education of the hearing impaired, the deficit model operates in such a way that the students are fated to cultivate lowly developed sign language as a tool of communication, thwarting their potential to develop speech and language thus cutting them away from the hearing world.

The goal of education of the hearing impaired in the new perspective cited above would be, provision of matching environment to facilitate optimum development of the child, and to make him capable of meaningful participation in the hearing world. Hence, whole development and integration become the central themes of the perspective.

Silhouetted against the background of the challenges faced by a developing country like India in meeting the educational demands of the hearing impaired, is the present research work formulated. Any attempt to bring about revolutionary changes in the system would definitely call for fundamental conceptual clarity regarding the goals and methodology. Stemming from this perspective, questions regarding the dumbness of the deaf bifurcated into two lines of thought : the need and possibilities of overcoming dumbness and of providing an ideal but realistic system of education to the deaf; and to study the system in practice to see the degree of departure from the ideal system. So, the first major concern of the study has been, development of a model of schooling for the hearing impaired, built up on the past events that catalysed the historic developments of deaf education. Secondly, bringing out a comprehensive picture of the existing patterns of the education and vocational rehabilitation of the hearing impaired with a critique on it, has been the objective of the study.

The specific objectives formulated for the study were :-

1. To evolve a model of schooling for the hearing impaired.
2. To evolve interpretative discussions on the structural and functional aspects of schools for hearing impaired in Gujarat.
3. To critically assess the adequacy of supportive institutions viz : teacher education centres and the vocational rehabilitation centres.

The various sources of information that fed into the model were research reviews, theoretical formulations and related literature, knowledge gathered from visits to some of the effective schools for hearing impaired in the country, and from discussions with academicians and practitioners in the field.

For bringing out a comprehensive picture of the education system of Gujarat, all 25 schools (sanctioned by the government, by March, 1991), both the teacher education centres, and both the vocational rehabilitation centres were studied during 1991-92. A representative sample of all the 25 principals of the schools, 130 teachers, 750 students, all the 24 hostel wardens, 250 parents, 10 training personnel of advanced vocational training centres of all the 5 schools, 10 teacher educators, 20 teacher trainees, 7 training personnel and 8 trainees from the vocational rehabilitation centres were selected for the study. Tools used for collecting the data were information schedules, interview schedules, questionnaires, observation frameworks, and tests for assessing language and

communication skills. The tools were finalised after conducting a pilot study in 2 schools. Analysis of the data was done keeping the developed model as the reference point.

5.1.

The Salient Features of the Model

The model has been based on the basic goal of education of the hearing impaired, namely integration into the hearing society. With this as the objective, the underlying philosophy adopted is that every child should be able to carry on fluent communication with the hearing people. Thus, a purely oral mode is proposed as basic to teaching aimed at developing oral skills in the children as against the other prevalent approaches of manual mode and total communication.

With a view to bring the hearing impaired children at par with the hearing children before starting the regular school curriculum of standard I, 5 years of pre-school training starting at the age of 3-4 years has been proposed. This pre-school programme is to have specialised curriculum aimed at laying foundation of language and communication skills on which 10 years of regular school curriculum can be built up.

The model lays stress on providing varied learning experience to meet the difference of the students in degrees of hearing sensitivity, age, and prior knowledge and development. What logically flows out from this principle is that each school should have a sufficient number of teachers to maintain a teacher-pupil ratio of 1 : 10-12. It is proposed that,

individual attention, coupled with child-centred approach has to be provided, which necessitates a specially designed classroom with special equipments like group hearing aid, semi-circular seating arrangement, wall-to-wall blackboard at right angles to the source of light, and soft boards for display of teaching aids on all the three walls. The principle of providing visual experiences has been greatly emphasised in this context.

The model lays emphasis on development of language and oral skills, viz. speech intelligibility and speech perception as central, based on the underlying principle that once these are developed teaching of other subjects can be similar to other schools, but with adequate stress on auditory training and speech training in all subjects coupled with use of visual aids and providing real experiences to facilitate effective conceptualization.

Language development forms the major concern in the model. 2-5 years being the critical period for language development, early detection, assessment, and intervention have been proposed in the model. In tune with this, the upper age limit for admission into first year of pre-school programme is proposed to be 3-4 years. Thorough hearing assessment is to be done as early as possible followed by training to use and monitor suitable personal hearing aids. Along with this, interesting auditory stimuli geared to cultivate interest in listening is stressed as a part of the curriculum.

In the context of curriculum, basic orientation should

be development of listening skill and speech intelligibility along with reading, writing and arithmetic. Development of listening skill and speech intelligibility are emphasised as integral part of the curriculum that runs across all classes and subjects.

Method of teaching language suggested is '**Maternal Reflective Method**', put forward by A van Uden (1977). This in essence is, adopting the role followed by a mother during the initial years of language development. Further, language development has to be through helping the child discover the rules for self, rather than following a structural approach, thus **facilitating language and not teaching language**. This envisages the child at a high status of an active and creative learner, and not as a passive recipient.

Sentence, and not word, is considered as the unit of language and hence, functional speech (conversation) is the focus in language teaching. Words are to be taught as integral parts of a sentence, thus taking care not to de-contextualize language in any way. Along with this, rhythm of speech, a movement of the articulatory organs (tongue, lips and jaws) and hence in principle teachable to the hearing impaired, is to be an integral part of speech training.

Development of reading skill has been strongly proposed, by way of maintaining a diary as the initial reading material containing the daily events of the class with which the child can relate easily.

In the context of teaching of grammar, the principle that, a hearing child learns the basic system of language (his/her mother-tongue) reflecting on the language by which he/she is surrounded with, is followed in the model. This implies that the child has to be exposed to optimum language inputs in meaningful situations to facilitate their reflection on language.

It follows from the above discussions that the child should be provided a 'talking' environment at home/hostel and in school. Thus the hostel system is seen as a supportive system furthering and reinforcing the efforts of the school, thus growing beyond functioning as a mere place of providing food and shelter.

As there are possibilities of certain secondary effects of hearing impairment like adjustment problems, and personality disturbances, there should be provision for effective counselling. It also follows that the environment should be characterized by love, care, support and understanding.

The functioning of school is to be adequately integrated with enriching co-curricular activities, effective guidance and counselling at all stages of development, remedial coaching, pre-vocational training from classes Vth to Xth standards and advanced vocational training of two years duration after completion of SSC. Vocational training has been proposed as an alternative option for those children who fail to be mainstreamed even after coaxing, and not as a substitute for higher education. It is also proposed that vocational training

should be made a complete habilitative programme by appropriate follow-up activities to help the students to be employed and become worthy citizens.

The perspective of the model is that after being equipped with the mastery of necessary linguistic competence and knowledge from a school, a hearing impaired should be able to successfully pursue higher education in general educational institutions. The model lays more stress on bringing the hearing impaired at par with the hearing children even at the cost of spending more number of years for it. So the model staunchly proposes mainstreaming of the children as and when they are assessed ready. All students should be made ready for mainstreaming after passing the Xth standard. The other two stages at which mainstreaming could be made possible are,

- i) once the pre-school education is over and
- ii) at the end of completing any of the standards right from Ist to IXth.

It is also important that sufficient follow-up be carried out as a post-mainstreaming activity.

That the education of a hearing impaired is an expensive affair is a fact to reckon with. To achieve the objectives set forth and for the quality of education proposed, any sort of compromise does not find a place in the model.

It is certainly the case that, education as proposed in the model cannot of itself 'cure' deafness. A deaf

child may not be able to attain the spoken language competence and conversational skills achieved by normally hearing people, no matter how good the quality of educational programmes is. Deafness remains as a fundamental educational handicap and a permanent disability. The model is proposed with a conviction that hopefully the effects of the deafness would be minimized enabling the child to participate meaningfully in the society at large. The ability of using the language of the wider society is a right, which should be denied none.

5.2.

Major Findings

What is the status quo of the schools for the hearing impaired of Gujarat with reference to human and material resources ? What are the preactices going on in these schools in order to achieve their goals ? To what extent are these effective to meet the special needs of the hearing impaired ? Are the beliefs, attitudes and knowledge of the staff members of the schools conducive to the holistic development of the children ? Are the teacher training programmes and vocational rehabilitation programmes adequately supportive to the system of schooling ? In short, what is the degree of divergence of the system of education and vocational rehabilitation from the principles proposed in the model ? The study is basically addressed to these questions, major findings of which are presented below.

5.2.1.

Structural Aspects of Schools

Out of 25 schools, all the three government schools and 5 aided schools were assessed as poor in terms of availability of resources. These schools, did not have adequate facilities for even general education, then what to talk of special education? The prominent inadequacies were, lack of proper building and rooms, furniture, equipments, and sufficient staff. Teacher-pupil ratio ranging from 1:15 to 1:20 across these schools.

Fifteen aided schools were assessed as average with respect to resources. They had no dearth of teachers or equipments, had suitable school and hostel building, offered atleast three vocations, and had a regular service of ENT surgeon. But they did not have adequate number of personal hearing aids, had no audiologist of their own for assessment of hearing sensitivity and had one or two sets of group hearing sets not fitted due to lack of suitable furniture.

The remaining two aided schools varied to a large extent from the general picture. They were almost fully equipped, with facilities like audiologist for assessment of hearing sensitivity and speech training, group hearing sets, personal hearing aid used by almost all children, an adequate collection of audiovisual aids, library, facilities for vocational training etc.

5.2.2.

Functional Aspects of Schools

It is relevant to state the background of students on whom the school intervention started. Most of the students came from a rural background with uneducated and poor parents. Though parents suspected some kind of problem in these children at the age of 2-3 years, there was a delay of 3-4 years before any step was taken. Again, most of them turned to religious measures instead of medical help. 76% of the parents consulted a doctor only after 6 years and admitted the children in schools at the age of 7 years. To top all these, all the parents stopped talking with their child as soon as he/she was detected to have some problem, which in effect caused the development of the child in a silent world, finally reaching the schools with no communication skill at all.

Degree of hearing sensitivity, a basic factor which decides the teaching strategies, was assessed as a ritual in the schools, except in two. It is important that 88 % of principals and 73% of teachers did not know how to interpret an audiogram, nor did they consider it important to assess hearing or to refer to audiograms. In effect, all students were uniformly labelled as profoundly hearing impaired.

As a logical continuation of the above situation, in 76% of the schools (19/25) not a single student had personal hearing aids including the three government schools, and only 8% of the sample of students were found to be using it regularly.

Right at this initial phase, started the failure of the schooling, where by the students were faled to be dumb.

A few schools did not have group hearing sets (GHS) at all, and a few others which had GHS, did not use them, and still others did not repair their GHS that were non-functional, and even where GHS was generally used, it was not optimum. To summarize, except in two schools, the use of GHS was assessed as far from satisfactory.

A purely oral mode of communication as advocated in the model was not followed in any school. Though the underlying philosophy that percolated down from teacher education system was of oral mode, the practice in the schools was non-congruent. Although a system of signs and gestures was not included in the curriculum of teacher education programmes, an arbitrarily evolved system of signs and systems was practised in all the schools.

This mode of communication had many inherent limitations, of which the major was that their spectrum of communication got limited to a small population of hearing impaired. The others being,

- 1) they missed the rhythm and accent, helpful in comprehending the meanings fully.
- 2) they missed subtleties of meanings.
- 3) they received incomplete messages constantly.
- 4) they missed the fundamental rules of grammar.
- 5) they received misrepresented, partial and ambiguous messages.

In 23 schools (out of 25) where principals and teachers did not believe in residual hearing of the children and the usefulness of hearing aids, students were not trained to listen to sounds or speech, but were trained to speak by giving inputs through visual and tactile sense modalities, totally de-emphasising sense of hearing, which obviously led to neglect of functional speech. In fact there was no auditory training in these schools! It was only in 2 schools that interesting auditory stimuli to listen and discriminate different sounds were provided and listening skill was first trained as unitary sense modality.

The school system had a truncated approach to speech and speech reading skills whereby these were reduced to isolated subjects limited to the curriculum of standards upto only IIIrd, and were narrowly practised as uttering and speech reading of vowels and consonants leading to sentences, all prescribed in the syllabus. There was no emphasis on the wealth of experiences of the students or their expression through casual conversation. In fact, functional speech did not find a place in the curriculum, conveniently justifying this drawback by labelling majority of students as profoundly hearing impaired who could not hear and could not be trained to converse. The structured approach to speech training, resulting in learning to utter consonants and vowels in isolation, led to poor articulation in running speech, making it difficult for the students to string together the isolated vowel and consonant speech production in functional speech. With a result, no student could answer even simple

questions like "Where is your village"? as clearly as could be understood by an outsider.

From responses of principals and teachers, it was clear that the students of no school could speak intelligibly to an outsider. This was confirmed by observations carried out by the investigator and from the results of tests carried out in the schools.

The two modalities by which the students comprehended what was conveyed to them were speech reading and seeing the signs and gestures of the speaker. But observations, discussions and tests conducted, revealed that these two modalities with inherent limitations were not conducive to the language development of these children.

The speechreading efficiency of the students was very poor. They could not speechread any teacher's speech other than of those who had been teaching them. As such speechreading by no means can be a substitute for normal hearing, because lip movements are often ambiguous and not more than 40% of them can be precisely identified even by a proficient speech reader.

The method of teaching language followed in the schools (except in two schools) was structured viz: learning started with grammatically limited forms, to be extended later on to more and more increasingly complex forms which, relying on the ability of the children to construct and to follow learned analogies, gave these children direction to build language forms according to learned models. In this method, sentences were

understood to be formed of categories of parts of speech, (noun, verb, etc.) vocabulary was broken up for the children in lists of words, sentences were broken up in associate way using words as bricks. The words were detached from the sentences in long paradigmatic lists -- verb charts, adjective charts, adverb charts etc. resulting in decontextualization of language. The damage caused was that the global intuitive grasping of relations in language did not get a place in the curricular transactions ever.

Reading practice was virtually absent except in two schools, where the textual matter and conversations in the class were based on reading material.

Written expression was limited to reproducing what the teachers wrote and original writing by the students was a far cry in most of the schools.

The general tendency that prevailed in the field was to equate deafness to dumbness. Majority of the teachers did not believe in residual hearing nor did they believe in the usefulness of hearing aids. Associated with this orientation, was the disregard of assessment of hearing sensitivity. The fatalistic attitude of the teachers that the students could not develop speech however hard the efforts were, got reflected in their teaching as well. Thus teaching started on a set of students whose potentials were underestimated, and labelling them all as profoundly hearing impaired, strategies used for teaching rendered them more and more handicapped, thus rendering

the self-fulfilling prophecy of the teachers a reality.

The method of teaching followed in the schools except Nos. 4 and 18 was structured viz. learning started with grammatically limited forms, to be extended later, on more and more increasingly complex forms which relying on the ability of the children to construct and to follow learned analogies, gave these children direction to build language forms according to learned models.

In two schools (4,18) language development was based on functional speech in a natural way where sentence was regarded as the unit of conversation..

Conversation as a method of communication skill and language development was observed in only two schools (No. 4 and 18). In all the other 23 schools speech meant parroting the text matter. This de-emphasis of functional speech training, suppressed the self-expression, both oral and written of the students, to a great extent.

Thus the principle of sufficient frequency of language use and hence sufficient exposure to spoken and written language (conversation and reading) were absolutely de-emphasised in the curriculum. These can be traced back to the problems discussed earlier - children being late starters, being uniformly labelled without adequate assessment, not wearing hearing aid, and lack of auditory training and speech training.

Thus the students were victimized to the extent that

they were neither exposed to spoken language nor trained to acquire language skills to read and understand written matter. They were trained to parrot the content of language text in writing, but lacked linguistic competence to express themselves fairly in writing.

The vital issue observed was, that teachers tended to 'prove' that being deaf meant dumb too'. Labelling the students as profoundly hearing impaired, and setting low objectives for these students reinforced the communication problems of the students and subsequently their overall development. Due to the teaching strategies adhered to, in majority of the schools, the students progressively acquired dumbness.

The policy of maintaining a teacher-pupil ratio of 1:10-12 is based on the principle that the hearing impaired need individual attention which arise from their deficient hearing sensitivity. Compared to the strength of classes in regular schools, this ratio was observed to be favourable for giving individual attention to the students. But, this was not the practice in most of the schools observed. The variation even in hearing ability and speech ability was not considered while teaching.

Another major shortcoming observed was the conspicuous absence of teaching aids . Teachers (90%) seemed to forget the basic principle that, as the sense of hearing was defective, the unimpaired sense of vision should be best utilized by using teaching aids. For majority of the teachers, using the sense of

vision, only meant adhering to sign language depriving the students of auditory input thus causing the atrophy of their oral skills.

Majority of the teachers followed the same sequence of steps in teaching, and students were not trained to interact in the classroom. Thus the vital principle of eliciting students' participation essential for effective learning was neglected.

What emerged was that underestimating the students' potentials, and labelling them all as difficult cases to be trained to listen and speak, the school system rendered them more and more handicapped. In fact, there was no difference in teaching as compared to that in regular schools, except that teachers used manual mode also and that students did not speak. The special needs of hearing impaired students were not taken care while teaching, and individual attention absolutely inevitable in the case of these children, was not observed in majority of the classes.

Evaluation procedures showed a pattern of low difficulty level of questions, befitting the teaching strategies that were based on teachers' underestimation of the students and their prejudice that these hearing impaired could not be expected to do as the hearing children.

89% of the teachers covering 92% of the teachers omitted difficult portions of each lesson taught, and even in each lesson difficult exercises were omitted. Despite this screening, very low difficulty level questions were asked in the

examinations. The reasons given were that as most of the students depended heavily upon visual memory and memory of writing, most of the answers done in the class were "by-hearted" by writing down many times, and that these problems restricted their grasping and recall power, demanding very low difficulty level in examinations.

The evaluation procedure which ought to be at par with that followed in the corresponding classes of regular schools including all difficulty levels was found to be very limiting, instruction and evaluation thus mutually reciprocating to perpetuate the 'culture of dumbness' in the schools.

Mainstreaming was out of the scheme of planning and organization of the school system except in the case of 2 schools. Majority of principals and teachers tended to brush it aside as an absolutely impossible endeavour and were not ready to attempt it at all.

As the system worked with a prejudice and underestimation of students, mainstreaming did not find a place in the agenda of the schools. But, apart from all these, the pathetic situation was that the quality of majority of the students who emerged from the schools after completion of 10 years was that they could neither understand speech, nor speak. Also, they did not have the linguistic competence to read well enough to comprehend or to freely express themselves by writing.

The hostel system failed to provide an environment of auditory stimuli essential for hearing impaired and there was no encouragement to use hearing aids or to communicate by speaking. Thus the hostlers grew-up in a world of signs and gestures. Thus the hostel system, far from being supportive to the school system was found to be akin to any other hostel not growing beyond the functioning of providing food and shelter, ignoring the special need of the hearing impaired, and thereby perpetuating the culture of signs and gestures.

The fundamental principle proposed in the model is that hearing impaired depend heavily on inputs from the environment for language development, and that the optimum condition for successful language development is a continuous and affectionate relationship between the people of immediate environment and the child. This implies that hostel and school should work as coordinated and mutually supporting systems to facilitate the development of hearing impaired children.

Majority of the wardens were not trained or formally oriented about the nature of hearing impaired.

5.2.3.

Profile of School No.4

The school, started in 1960 by a trust with 16 students, obtained government's recognition and grant-in-aid in 1970. Strength of the school in 1991-92 was 286, with 190 hostlers. There were 21 qualified teachers for different subjects, 5 teachers looking after pre-vocational training and a

librarian in charge of the library. An audiologist took care of assessment of hearing and speech therapy. The hostlers were looked after by 3 hostel wardens. Advanced vocational training centre was managed by 12 personnel.

The school building was constructed with absorbing rough surfaces to avoid the effect of echo. There were adequate number of classrooms with sufficient furniture and softboards for display of visuals, an audiology room, a library and an ear-mould clinic. Hostel building was spacious and built alongwith the school building.

Procurement of personal hearing aids was a regular activity and Group Hearing Aids were present in all classes upto standard IVth.

Annual expenditure was well covered by funds from voluntary organizations and individual donors, apart from government and trust funds.

The number of students given admission was controlled, so as to maintain the maximum number of students in a class at 13-14. Upper age limit for admission to KG-I was restricted to 4 years. A medical certificate showing that the child was hearing impaired and he/she did not have any other handicap was demanded for admitting the child. Hearing sensitivity of each newly admitted child was assessed after one or two sittings with the audiologist within one month of admission.

The principal and teachers believed that most of their

students had some residual hearing which could be exploited by amplifying the auditory stimuli and hence every child was fitted with personal hearing aid after assessment of his/her hearing was finalized. At this juncture, parents of dayboarders were given orientation with regard to use and monitoring of these aids. Teachers started a day's class after checking the hearing aids of each child and ensuring that each one was functioning. Batteries were changed too, if needed. Group Hearing Sets were regularly used by the teachers in classes wherever they were present.

The basic philosophy regarding mode of communication followed in the school was that students be trained to listen and understand, and communicate to others by speaking. There was more stress on developing listening skill for comprehension than on developing speaking ability. Auditory training was scheduled as a part of the curriculum in KG classes and standards Ist, IInd and IIIRD. Later on, the emphasis on auditory training reduced although this school put in more efforts to train the students to listen than what happened in other schools.

In the first year, the children were provided with different kinds of sounds - made interesting by use of visuals alongwith dramatization. The objective was to instil interest in the children to listen, and to make them realize that this exercise was worth the effort.

Individualized instruction for developing speech and speech reading skills was carried out. The difference from the

other schools was that the method followed was synthetic as against analytic method followed in other schools. In the second year and thereafter, functional speech was stressed i.e. students and teachers indulged in conversations and built up language from these. These conversations were both natural and artificially created. Unfortunately, the emphasis on speech and speechreading got reduced in higher classes (IVth to Xth)

A van Uden's method of 'Maternal Reflective Method' was followed in the lower classes (KG to IIIrd) in language teaching and communication skill development (This method has been presented in the model).

A prominent feature of language teaching in the lower classes was that stories with attractive visuals worked on charts were commonly used as teaching aids. Many times, the textual matter itself was written on chart paper with visuals to make them more easily comprehensible. In higher classes, language teaching became more and more text-book based.

A diary was maintained for students from KG I to Std. III in which conversations that went on in the class were recorded and were later used as reading material. Thus, children were given reading practice regularly.

Use of audiovisual aids to teach any subject was a salient feature of the school.

Since 1983-84, mainstreaming was started as an experiment in the school. Students, after being equipped with

basic academic skills were mainstreamed into regular schools. By 1991, 35 students had been mainstreamed with an average of 4 students getting mainstreamed every year.

Sanction for SSC Programme, was obtained in 1990 and in the academic year 1990-91, a batch of 12 students started attending the course, to appear for the SSC examination of 1992.

The school had its own internal competitions in painting, dance, games and sports. Annual Day Celebrations and Annual Sports were also organised each year. Students of the school participated in inter-school meets for sports and cultural competitions whenever held in the state. Besides these, Independence Day, Republic Day, Rakshabandhan, and Makarsankranti were celebrated.

Pre-vocational and Advanced Vocational Training were imparted. The pre-vocational course for students from Std. Vth to Xth (regular IInd to VIIth) offered tailoring, knitting and embroidery, carpentry and drawing-painting. In the advanced training centre, courses offered were tailoring, embroidery, knitting, painting, photography, electroplating, carpentry, motor rewinding and commercial painting.

So far 21 trainees had been rehabilitated with self-employment and 65 had been employed in institutions. A follow-up register was maintained by the centre to keep track of the trainees.

The school was run under the able leadership of a principal who put in dedicated efforts to supervise and improve

all activities of the school.

A Teacher Education Centre was run along with the school in the same campus, where senior staff members of the school conducted classes apart from visiting faculties from outside. With an objective of facilitating the endeavour of mainstreaming more successful, mothers also were trained in the centre. The main focus of the programme was development of communication skills, as far as mothers were concerned. Till 1990-91, 120 were trained in this centre among whom 35 were mothers.

The School had a special clinic where ear moulds were prepared. Ear moulds are the snug fittings in the ears into which the hearing aids get inserted. These were made for students of the school as well as for those from outside. The school also had an Audio Speech Clinic where assessment of hearing and subsequent guidance for procuring hearing aids was carried out, not only to students of the school but also to outsiders.

It is clear from the foregoing presentation that the school had many activities going on, all geared to the development of the hearing impaired. All these were possible due to committed efforts by all the staff members under the leadership and guidance of the principal. Mobilization of financial resources was an important endeavour carried out in the institution on which depended the success of other activities. As has been stated in the model, education of the hearing

impaired is not an easy task and compromising on funds can be done only at the cost of quality of education. Apart from the funds and availability of all resources, what is essential is dedication and perseverance, which were integral part of the personality of the members of School No.4.

Although the school was close to the model in many ways there were a few areas wherein discrepancies were observed. These are presented below :-

The stress on oral mode of communication of students reduced gradually from IVth to Xth standard. The time spent on auditory training, speech and speech reading training also got reduced gradually in these standards.

The school system failed to involve parents adequately in the school activities, irrespective of whether they were local or parents of hostlers. They failed to formulate effective alternate strategies to motivate the parents to come for parent - teacher meetings. Thus guidance of parents also remained out of the agenda, as in any other school.

Awareness regarding the role of teacher as a counsellor was not ingrained into the system. Hence, neither general counselling nor vocational guidance was carried out effectively.

Hostel functioned as in any other school, with no coordination of activities with the school. There were no efforts by the hostel staff to provide a 'talking' environment to the hostlers, and no care was taken to help the students to use

and monitor the hearing aids.

To conclude, with whatever shortcomings the school had, it had many positive aspects to be emulated by the other schools. It is pertinent to add here that this school was assessed as one of the best in the country by a survey team deputed from the Centre, under the leadership of Sr.Rita Mary (Principal -- Little Flower Convent for the Deaf, Madras).

5.2.4.

Adequacy of Functioning of the Supportive Organisations.

5.2.4.1.

Teacher Education Centres (TEC-s)

- Residual hearing, as a concept was not emphasised in the theory inputs of TEC-I.
- In practical training, auditory training was imparted as one of the modalities of understanding conveyed messages, along with sense of vision and sense of touch. But sense of hearing as a unitary modality was not stressed.
- Residual hearing and auditory training were emphasised in TEC-II, both in theory and in practice inputs.
- Theory and practice inputs on technical knowhow of the hearing aids were not included in TEC-I, but was included in TEC-II.
- Theory inputs on audiometer, and practice inputs in

audiometry were far from adequate in TEC-I. In TEC-II although theory and practice inputs were given in audiometry, they were reported to be inadequate.

- Phonetics of Gujarati language formed the core of theory inputs in language teaching of TEC-I, and the technique followed was a structured analytic one starting from vowels, followed with consonants and simple to complex words and sentences made from these.

In TEC-II teaching of language was based on a synthetic method. Starting from full sentences spoken during conversations. The method followed was A van Uden's Maternal Reflective Method, in which sentences formed basic unit of language and not words. Practice inputs were insufficient as expressed by teacher trainees and trained teachers.

Psychology

XIIth standard Psychology was followed in TEC-I, which had inadequate stress on psychology and special demands of hearing impaired which was emphasised in TEC-II. Guidance and counselling did not find a place in the curriculum of both the centres either as theory inputs or as practice inputs neither were details of vocational training centres included.

Philosophy of Mode of Communication

Mode of communication trained at both the TEC-s was purely oral, based on oralist philosophy, and hence sign language was not part of the training programme.

Practical Training

Both TEC-I and II imparted more 70% of practical inputs in teaching of language and speech, and the rest of the lessons were devoted to teaching other subjects. As voiced by all the teacher trainees and teachers in service, lessons in language teaching, especially in grammar were far from sufficient and that demonstration lessons by teacher educators and good teachers of schools were not sufficient either, which created problems when they started teaching in the schools.

Suggestions by Teachers and Teacher-Trainees

Respondents of TEC-I suggested that more theory and practical inputs be given with regard to the different aids and equipments used in teaching the hearing impaired. It was commonly suggested by respondents of both the centres that weightage for practical training in real classrooms be increased.

It was strongly suggested by all respondents that practice inputs for language teaching and mathematics teaching were far from adequate and needed an urgent revision.

From observations by the teachers, it was realized that apart from the above changes called for in the curriculum, the curriculum needed to cover the competencies required in a teacher to help a child to be mainstreamed, including the role as a counsellor, establishing the link with the regular school and doing the follow-up activity. Criteria to be fulfilled before a child could be mainstreamed needed to be scrutinized before

being incorporated in the curriculum. Similarly, role of a teacher as a community worker needed to be included in the curriculum of both the centres to help the rural people in identifying their hearing impaired child and consulting a doctor as early as possible.

5.2.4.2.

Vocational Rehabilitation Centres

The major findings were :

i) V R C - I

Out of the 9 vocations offered 6 were suited to hearing impaired, with a total of 130 seats.

38% seats were filled in by male trainees and 9% by female trainees at intake stage, during the years 1986-91.

44% of males and 63% of females dropped out at different stages of training during the 5 years.

56% of males and 37% females completed the training during the 5 years.

On an average, only 30% of the seats were utilized during the 5 years by males and females together, by completing the training.

Out of those at intake stage, 17% of males and 4% of females got settled with employment during the 5 years.

Out of the trainees admitted, only 38% were fresh school

leavers, (10% males and 26% females) during the 5 years.

Out of the male trainees admitted, 54% were uneducated and 62% of the females were uneducated, during the 5 years.

36% of the male trainees, and 12% of the female trainees were early drop-outs (before completing Std. IV), during the 5 years.

Out of 54 males who got employed during 5 years only 20 had studied upto regular VIIth (37%) and none of the females had studied upto VIIth.

ii) **V R C - II**

This centre started only in 1988 and hence data for the years 1988 to 1991 were collected. It was a centre for only women, and was in the process of gaining momentum.

Out of the 4 vocations offered 2 were meant for hearing impaired and in all, 30 seats were meant for hearing impaired.

During the years 1988 to 1991, only 39% of the seats have been filled by trainees on an average, at intake stage. (47%, 13%, 23%, and 73% in the years 1988, 1989, 1990 and 1991 respectively)

Totally in the 4 years, 12% have dropped out at evaluation stage, 11% during training, making a total of 49 % drop-out, during 4 years at different stages.

Totally 51% of those who got admitted, completed

training during 4 years, and 40% of these (17% of those who got admitted) got employed through VRC.

Thus, utilization of seats for being trained were 20%, 10%, 13%, and 37% during the years 1988, '89, '90 and '91, making a total of 51% utilization over 4 years.

29%, 0%, 29%, and 27% of those who got admitted during the years 1988, 89, 90 and 91 respectively were fresh school leavers (2 years after passing VIII, IX, X or SSC)

6/14, 4/4, 3/7, 8/22, were uneducated during 1988, 89, 90, and 91 respectively.

Totally 45% were uneducated and 30% were early drop-outs among those admitted during the 4 years.

Out of the 8 (40% of those who got trained) who got employed during 4 years only 2 were school leavers (educated upto atleast VIIth (regular)

VRC personnel did not contact the schools personally except those close by, in order to orient the staff and the students about the course and prospects at their VRC.

Majority of the principals and teachers did not do vocational guidance giving details of VRC-I and II.

In spite of guidance and counselling reportedly carried out in 3 schools, not more than 10-20% opted to join VRC-s.

From the findings it could be inferred that school

students did not utilize the facilities provided in the VRC-s adequately, partly due to the lack of vocational guidance and counselling carried out in the schools for the students, and partly because the VRC personnel did not give enough importance to coordinate with school system. Education not being a criterion, the VRC personnel were more involved with community awareness programmes and school was not their important field. Thus, the low percentage of school students both at intake and employment stages.

5.2.5.

Emerging Picture of Schooling and Habilitation

The pattern of schooling that emerges from the study is highly depressing. The system is typically characterized by the absence of many conditions that are visualised as essential in the model. The conditions mentioned include, early intervention, hearing assessment, provisions for utilizing residual hearing through hearing aids, stress on development of listening and speech, use of group hearing system, the approach of oral mode of communication and a hearing environment which are found to be either absent or highly inadequate in most of the schools. A hearing impaired child spends many long years in school and comes out with an extra disability : dumbness - a disability which could have been avoided if the system successfully made provisions for meeting the requirements of children.

A hearing impaired child is identified as having some

problem with speech at around 2-3 years, but reaches a school after as late as 6-8 years. Generally the story in between these years of detection and schooling is pathetic. The child does not get any medical help which means, neither assessment of hearing sensitivity is done nor is a hearing aid procured, and above all the child is denied a world of sound. Thus, the critical period of 2-5 years for language development is totally wasted.

In spite of all these disadvantages, with which the child enters a special school, the child can develop speech and language, IF the essential conditions viz. hearing assessment use and monitoring of personal hearing aid, specialized teaching strategies coupled with unremitting efforts by the teachers are all present in the school environment. Unfortunately, this is not so. What happens is, the student is labelled as profoundly impaired, and is given instruction which is conspicuously devoid of oral approach, based on very low expectation emerging from the underestimation of his/her potentials, leading him/her to acquire the arbitrary system of signs and gestures as the only mode of communication.

Thus, the child emerges from the school system as equipped with neither receptive nor expressive oral skills. This only helps the child to communicate with a meagre population of deaf people and alienates him/her from the larger world.

On the other hand, the school system is also unsuccessful in equipping the child with skills in a vocation

sufficient enough to earn a livelihood.

Many of the discrepancies were rooted in the teacher education system. The de-emphasis of assessment of hearing, of residual hearing and its amplification, of auditory training and speech training, are all rooted in the teacher education programmes. Philosophy regarding mode of communication poses the gravest problem, with the teacher education curriculum stressing on oral mode and the schools practising a predominantly manual mode. This wide gap between philosophy and practice has victimized the students in such a way that they have neither a common system of signs nor speech intelligibility or comprehension of spoken communication. Precisely, the teacher education centre, especially TEC-I, were ineffective to groom teachers for hearing impaired children.

In case of VRC-s, very low percentage of enrolment of school leavers and their heavy drop-out has also low percentage of school leavers among those rehabilitated, all rendered them ineffective as supportive to the school system.

It can be concluded that the emerging picture of schooling and habilitation of the hearing impaired in Gujarat is not satisfactory, as compared to the proposed model. Unstinted and committed efforts by all persons concerned over a long period of time is the only way to improve the present situation.

5.2.6.

Guidelines for Improvement

The proposed model itself gives guidelines to schools for improvement, and hence only a few major points are mentioned in the following lines.

The root cause of perpetuating the culture of 'dumbness' lies in the ignorance of the system about residual hearing and utility of hearing aids which calls for a scrutiny and revision of the curriculum of the TEC-s. Associated with this is the need for thorough audiological assessment of each child to avoid uniform labelling, which would be feasible only if repeated assessments each with 3-4 sittings with the audiologist are carried out meticulously.

In order to help the teachers gear their teaching to the needs of students arising from their different hearing sensitivities, teachers should be well trained to read and interpret an audiogram which means that this input has to be emphasised in practical training of the teacher education curriculum.

Auditory training, ie. training to use the sense of hearing as a unitary sense modality and training to speak consequential in the development of any hearing impaired, have to be given all the due weightage right from day one, throughout all the years of education. Implied in this statement is the dedicated adherence to oral mode of communication by the teachers along with continuous and regular use and monitoring of personal hearing aids which can be accomplished only with diligence and

dedication on the part of teachers.

With improved auditory training and speech training, comprehension and expression of students would improve, enabling them to internalize all the lessons prescribed in the regular schools, and to attempt answering questions of all difficulty levels as regular students of the respective standards would, thus facilitating mainstreaming.

As has been stated in the model, education of the hearing impaired is an expensive affair and any compromise with regard to funds can be done only at the cost of quality of education. Hence fund mobilization by exhausting all sources including state and central governments, voluntary organizations, and individual donors to a large extent would decide the degree of effectiveness of any school programme.

The whole perspective of the hostel functioning has to change, in tune with the proposed model. A hostel for hearing impaired should rise beyond discharging merely the function of providing food and shelter. It should support the school system by providing emotional security, assurance to the students and by providing them with an environment of speech.

Above all these lies the need for a thorough introspection on the part of all the functionaries associated with the hearing impaired, to come out of dereliction and to work with commitment and devotion for the development of these children.

5.2.7.

Areas for Further Research

Some of the areas that need to be researched into, as identified from the findings of the present study are :--

1. Methods of teaching Gujarati language to hearing impaired, with special focus on grammar.
2. Techniques of auditory training and speech training with focus on Gujarati language structure.
3. Development of special pre-education curriculum for the development of language and communication skills.

Apart from these areas of research, one of the problems that demands immediate attention was the ignorance of rural people regarding their hearing impaired children which was the primary evil behind the vital issue of late schooling leading to many of the dents in the development of the child. If these rural people are made aware of the problems and adequately counselled, so that they could identify problems of hearing if present, in their child, and could seek medical help at the earliest, then these children could start pre-education at an early stage of 3-4 years which would be a momentous beginning for their future development, provided the school system successfully matches its provisions in tune to the needs of the child.

Definitely, education of the hearing impaired is a very challenging task, that demands unremitting efforts. That we are still at the launching pad with a long journey ahead, in itself

is a worthwhile revelation, which should be the taking off point to begin working hard for improving the situation, to help our hearing impaired children from getting marginalized.

Let not our hearing impaired children
prepetuate a culture of signs and gestures,
and let not them be pushed into
darkness of a silent world.
Let them enjoy the pleasure of listening,
to sound, speech, music, murmur of nature
and everything and everything around
and enjoy the ecstacy of being with people.

- Shailaja Shivaji

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