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Confluence



**PEDAGOGICAL PRACTICES FOR
CHILDREN WITH SPECIAL NEEDS**



Sarva Shiksha Abhiyan

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Effective Classroom Practices for Children With Special Needs

*Ruma Banerjee**



Preamble

Inclusive Education has grown from the belief that education is a basic human right and that it provides the foundation for a more just society (UNESCO). With the 86th amendment of the Indian Constitution in 2002, elementary education is no more a privilege, but a legally recognized fundamental right of all children in India. The idea of inclusion is based on respect for the fundamental human rights and dignity of each individual and it envisions an entire education system becoming more responsive to the needs of all. Inclusive education is concerned with providing

flexible education keeping in view the diverse needs of children. It builds on recognizing diversity and valuing differences and not just tolerating children with special needs (CWSN).

Challenges in Developing Effective Practices

The challenges in developing inclusive practices primarily could start when the child is enrolled in the classroom and faces barriers to learning which may be due to impairment which affects his way to learning. Some children also

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- Never asked to contribute
- Never offered to contribute
- Can't see the blackboard or a textbook or can't hear the teacher; or
- May not have the same pace of learning as others in the same class.

These children are likely to be sitting at the back of the classroom and may soon leave altogether (drop out). It becomes the responsibility of the teachers for creating a learning environment where ALL children can learn, ALL children want to learn, and ALL children feel included in our classrooms and schools. In order to develop effective practices it means seeking all available support—from school authorities, the community, families, children, educational institutions, health services, community leaders, and so on—for finding and teaching ALL children.

Classroom Practice and Teacher Factors

Inclusion largely depends on teachers' attitudes towards pupils with special needs and on the resources available to them. In a study conducted in DPEP on developing inclusive practices, attitude of teachers towards educating children with special needs has been an important factor towards

making schools more inclusive. It was observed that training programs conducted by the state and NGOs for the teachers enabled in them attitude which facilitated inclusion in Karnataka. It is a fact that if mainstream teachers do not accept the education of these pupils as an integral part of their job, they will try to ensure that someone else (often the special teacher) takes responsibility for these pupils and will organize covert segregation in the school

The skills and capacity of the teacher to meet the diverse needs of children is extremely important as the classrooms may not have the same ability children and they could be from different backgrounds. The study showed that one of the problems that regular teachers face is their skills and competencies in making classroom transactions inclusive which can cater to all children including children with special needs.

A final important issue at the teacher and classroom level is teacher's sensitivity and skills in order to enhance significant social relations between pupils. Particularly for children with special educational needs (and their parents), meaningful interactions with non-disabled peers are of utmost importance. The teacher should have the right attitude, and also a good understanding of how to develop these

interactions and relationships. In summary, teachers' attitudes, available instruction time, the knowledge and skills of teachers and teaching methods and materials seem to be important prerequisites for developing effective classroom practices for special needs education within mainstream settings.

Steps in Making Effective Classroom Practices

Understanding the Needs

Identification of diverse needs and planning accordingly is an essential component for inclusive practices. An understanding of the needs of CWSN with the help of parents can provide a considerable amount of helpful information about the child needs. The needs of CWSN can be categorised under two categories learning / academic (curricular and extracurricular) needs and supportive needs (medical or supportive aids and appliances). The child who has sensory loss may not be able to hear or communicate in a normal pattern. S/he may not be able to learn or participate in the class as other children without impairment. A child with intellectual disability or learning disability may have difficulty in learning at the same pace or may not be able to learn some competencies as expected of other children in same class. Firstly the teacher has to identify learning needs in relation to curriculum, so that s/he can develop effective lesson plans and classroom practices. Secondly, in terms of supportive measures and medical rehabilitation/therapy, the child may require specialised equipment and training. The child with hearing impairment may require a hearing aid depending on the degree of hearing loss which will help in hearing and facilitate learning. The supportive need can be organised with the help of parents or resource support teachers in the community.

Educational Planning

Simple way to initiate planning is by assessing the strengths and weaknesses of the child so that the plans can be developed on the strengths rather than the weaknesses. A child with hearing loss may be intelligent. Similarly, a visually impaired or an intellectually disabled may have interest in learning or potential for other activities as sports, cultural activities, etc. It is important to identify the learning gaps due to impairment or other problem and initiate education plans to overcome the problem from the educational perspective specially

keeping in view the curriculum objective rather than medical diagnosis. Planning needs to be done in terms of curriculum and learning needs and not just disability, the basis should be understanding the gaps in terms of learning in the context of curriculum and not just the text book. The teacher should be able to understand the objectives /competencies in relation to the subject for the particular class the child is studying rather than just concentrating on text books as the objective /competency of the particular subject can provide her with an open mind to develop a baseline and identify the gaps. The teacher can use his/her creativity to develop plans and methods which finally meets the learning outcome.

Framework for Adapting the Curriculum

The following are important for the above:

- The pupil
- The classroom and school environment
- School subjects
- Teaching strategies
- Participation in other school activities (sports, cultural, extracurricular activities)
- Testing and evaluation

Curriculum is not limited to learning objective, methodology and the learning outcome. But curriculum adaptations may be necessary to remove barriers to learning and participation, For example:



- The level of the content in the school syllabus
- The outcomes expected from learners
- Equipment and teaching aids used
- Methods used to assess learning outcomes
- The goal of education is broader than acquisition of knowledge and specific competencies in school subjects. It includes:
 - Being able to identify and solve problems using creative thinking
 - Collecting, organising and evaluating information

Curriculum adaptations can be divided into accommodations which basically assist the child to adjust to learning adaptation mainly by changing the methodology of teaching, concessions in providing omissions for 2nd language or discouraging visual impaired to take science or maths.

Peer Support

Support from peer groups enables the child to develop confidence and social inclusion. It is observed that most of the time CWN depend on peer support to overcome their learning problems. Therefore developing peer support measures makes inclusive practice effective.

Identify Existing Resources in School and Community

It is important to list all supports and services available for children with special needs. These services may be available with government services, NGOs, philanthropic agencies, health centres, different schemes, etc.

Developing Inclusive Learning Environment in terms of facilities, furniture, and materials currently available and in use is also an important factor. What changes you might make to the classroom or the school environment (buildings etc.) to make it easier for the child to come to school and to learn.

Finally the stakeholders of education and parents need to answer

- What changes have been made, especially in improving learning for children with special needs?
- Should there be flexible curriculum to make for CWSN effective classroom practices?

Approaches followed in Karnataka for developing Inclusive Practices -Curriculum Reforms and Teacher Training

Curricular Reforms like Nalli Kalli – (play and learn) addresses multilevel learning stages and diverse learners of the same age that exist within a class, thus, replacing the conventional pedagogic to participatory approach and enable children to move independently. From 2009, all the schools (class 1 & 2) are following this approach with the objective of making learning effective and joyful. Some of the features are:

- A belief in reduced learning loads and total mastery of minimum level of learning.
- Replacing the textbooks by self instructional cards
- Preparation of teacher-made cards in the training itself which makes the teacher innovative and mastery over the curriculum.
- An evaluation system which is non-threatening, continuous and comprehensive was built into the learning ladder.
- A more democratic classroom management system, which is not based on the child's gender, caste, age or ability, but on the nature of activity taken up by the child, was evolved. The format of lesson planning is based on the competencies to be achieved, methodology, evaluation techniques and teaching learning materials.

Developing Effective Classroom Practices through Teacher Training

Karnataka-SSA has developed a 5 days training module for regular classroom teachers. The objective is to train classroom teachers in developing inclusive practice keeping in mind the needs of CWSN. The training package is mainly based on curriculum adaptations for class 1-7 for all subjects to meet the needs of visually impaired, hearing impaired and intellectual disabilities in a class room situation. The training is being implemented through a cascade model of training, with the help of Inclusive Education Resource Teachers (IERTS), DIET personnel, NGOs and other resource persons. Besides the state has also started training IERTS for learning disabilities, especially to be sensitive to the needs of learning disabilities and provide necessary support in the learning process.

A Bijapur is one of the largest districts of Karnataka. 80% of the population lives in rural area against state average of 69%. The district has taken keen interest in developing curriculum adaptations for children with special needs keeping in view the retention of these children, especially at higher classes as there is a tendency of CWSN dropping out. The expertise of IERTs has been utilized in developing a hand book for Class V language called *TUDITA*. IERT volunteers and few professionals in Bijapur came together to find solutions of developing inclusive practices and methods of how inclusive education could really be adopted in the classroom by using the existing curriculum. The curriculum is adapted for language keeping in view the special educational needs. The hand book is in Kannada. Every learning objective of class V language text is provided in the adapted curriculum format for three disabilities to assist the teachers to develop inclusive practices as given below:

Conclusion

The approach in inclusive practice needs to be a twin track approach while making necessary changes in the education system. There is a need to look into the specific needs also and the support required to nurture the potential of CWSN. Firstly at the classroom level, available instruction time, the attitude, knowledge and skills of teachers and teaching methods and materials can be distinguished as important prerequisites for special needs teaching in mainstream settings. Secondly issues involved in organizing inclusive education at the school level are structure for providing special support within schools, the role of special education services, other support systems finally decide as to how the child with special needs is able to learn and participate in the learning and achieve the desired goal of education.

Objective Understanding Unfamiliar Situations through Conversations

| Learning Competency | Adaptation for Disability | Teacher Activity | Child Activity | Teaching Aids | Evaluation | |
|--|---------------------------------|---|--|---|--------------------|----------------------------|
| To understand the significance of historical places of Malnad region | VI/HI// Intellectual Disability | Information about Shrengeri temples/ gol gumbaz through discussion and conversation | Explaining through charts and teaching materials | Books /charts/ stamps/flash cards | Simple questions | |
| | | | | | Through writing | |
| | | | Role play | Making small groups and facilitating discussion | | Through teaching materials |
| | | | | Using stamps, flash cards | | Identification of places |
| | | | Writing about the places | | Pairing activities | |





Effective Reading Techniques

*Subha Vaidyanathan**

Reading is a fundamental skill which is very important for academic attainment of knowledge. Up to KG and Class 1 some kind of reading or/phonetic instruction goes on in many of our schools. After that it is assumed that children can pick up reading on their own and so there is no explicit instruction. Many children struggle to read because of this and as many text books are not graded and beyond their reading level. Many children hear the text being read in class and just manage with their auditory memory and don't really read, but give the impression of reading. While this is the case for even the children from the normal population, those with special needs experience even greater difficulty in this area. Many children with a learning disability have a reading disability that is quite severe and need to be given help.

Reading is translating the written word into speech sounds. It's acquisition is not as simple and automatic for many and

must be taught and given enough practice especially in the early years. When children are exposed to reading other than the text they learn to enjoy it. Reading for pleasure is an activity that builds a child's vocabulary, enriches language and helps in writing skills. Children who start to enjoy the printed word early will go on the road to reading and reap benefits from it. They can read wrappers, signs, posters, etc. and other scenes around us that are not in books.

The question today is "what do teachers need to understand about reading? What can mainstream teachers do to foster reading so that all children can benefit and more so children with special needs?" What can be specifically used for children with difficulties? What needs to be understood is that all the remedial techniques mentioned here are useful for instruction of the whole class. Further, these techniques can be tried for the reading of other Indian languages as well.

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Reading consists of the following areas and all these need to be dealt with by the teacher:

- Phonemic awareness (knowing that words are made up of sounds)
- Phonics (the links between sounds and letters)
- Vocabulary (what words mean and how to say them)
- Fluency (the ability to read accurately and at an adequate pace)
- Reading comprehension (the ability to understand what you read)

Phonemic Awareness

Even before children start to read they must have an awareness that words are made up of speech sounds or phonemes and that these sounds work together to make words. Children must be taught to manipulate these speech sounds in different ways. Some children with difficulties are unable to find out the sounds that make up the word even though their hearing is good. Phonemic awareness instruction can help all types of students learn to read: preschoolers, children in Kindergarten, those in class 1 who are just starting to read, and older, less able readers. It acts as a foundation for reading and creates a readiness. Children who have been exposed to word games, phonological awareness are ready for word recognition activities. Even 5 minutes of these exercises done daily will have a good effect on reading skills.

Some Exercises for Phonemic Awareness are

- **Phoneme segmenting:** What are the phonemes in the word cat? (/c/ a/ /t/)
- **Position:** What is the first sound of the word cat, the third sound etc.
- **Blending:** When phonemes are given, put them together to make the new word e.g /s/ /a/ /m/
- **Deletion:** What would be left out if the /k/ sound were taken away from cat?
- **Substitution:** Take away the /m/ sound from man and put a /f/ sound, what do you get?
- **Categorizing:** The words rain, rug, rot, rim, etc all begin with which sound?
Odd one out: sun, sip, sit, cut. Find the one that doesn't fit, the odd one out is
- **Rhyme:** Listen to the pair of words and put up your

hands if they rhyme pat-pet, sit-fit. Find the one that doesn't rhyme- sun, sin, bun, gun

- **Discrimination:** Put up your hands if the pair begins with the same first sound: fog-fun, sap-cap
- **Syllable clapping, counting:** Clap your hand for a syllable, so one clap for good, two for sister, rabbit etc.
- **Compound words:** In cow boy take away cow, what is left?

The teacher works with sounds only and not with letters. It is a pure listening activity and only later is the connection between the letter and sound made. This can be tried in the other Indian languages as well. A rope can be tied across the class, clips and big letters can be used in the next step. Example- Say the sounds /f//a//t/ and the child clips a f, a and t. Even in senior classes these can be tried. For example, raise your hand if the sound you have after deleting what I tell you to is a meaningful word: in the word brain remove the /b/ sound, in the word seed remove the /s/ sound.

Phonics

The beginning reader must be taught not only to detect and separate the sounds that make up a word but also learn which sounds (phonemes) go with which letters. Phonics is the understanding that there is a predictable relationship between phonemes (speech sounds) and graphemes (letters). In the lower classes letter sound instruction is important for a child to decode a word. Unlike our Indian languages which are more phonetic, English can get a little difficult with 26 letters making the 44 different sounds. Some letters like c and g that have 2 sounds, the hard c with the /k/ sound as in cut and cot and the soft c with the /s/ sound as in city and centre and the hard g with the /g/ sound in gun and gate and the soft g with its /j/ sound as in gem, gentle. Then the vowels each have 2 sounds - the short sound and the long sounds. Also letters ch make a /ch/ sound as in the first sound of chair, a /k/ sound as in school and /sh/ sound as in moustache

The short sounds are more difficult to get for many children. Adequate instruction and practice need to be given. In the short sounds a is like the first sound of apple, e is like the first sound of egg, I like the first sound of ink, o like the first sound of orange and e like the first sound of umbrella. The visual (shown below) if kept on the desk or put up in the room helps a child to read with the appropriate vowel sounds. Children see the shape of their mouths in small mirrors as they say the vowel sound.





Practice can be given with a mixture of words and nonsense sounds. Children can read the word and also say if it is a word or not. For e.g

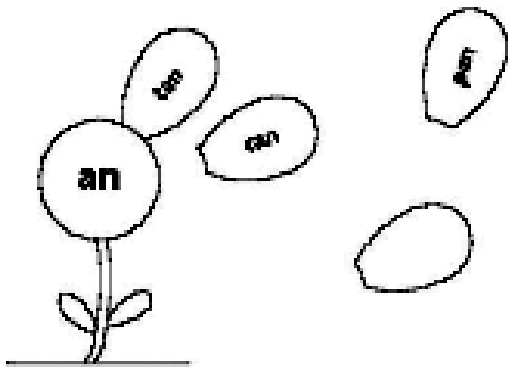
Sulp pax dug jend limb slat spen ch smib
scell runsh

Then the long sounds need to be taught to say that the long sounds of vowels are their own sounds like a , e, I, o and u. Blend sounds like bl, cl, dr, str sm, consonant diagraphs like sh, wh, ch, th have also to be shown for the child with a reading difficulty. These children can sometimes have difficulties with the auditory discrimination of /sh/ and /ch/ and read wish as wich

After basic sounds are taught, word families can be taught and activities planned too. (Pasting petals in a picture)

Step 1:

| | | | | |
|-----|-----|-----|-----|-----|
| -at | -et | -it | -ot | -ut |
| bat | bet | bit | lot | but |
| cat | let | lit | cot | cut |
| sat | set | sit | rot | rut |



Step 2:

| | | | | |
|---------|---------|---------|---------|---------|
| bats | bets | bits | lots | cuts |
| batted | betted | slotted | rotted | guttled |
| batting | betting | sitting | rotting | cutting |

Step 3:

| | | | | |
|--------|--------|--------|--------|--------|
| batter | better | bitter | rotten | butter |
|--------|--------|--------|--------|--------|

Other rules like silent letters like k in knock, w in wrap, l in talk can be done. The magic e rule is when there is a 3 letter word with a short vowel and you add an e to the end the vowel sound becomes long. (mat-mate, pin-pine, cub-cube).

For reading multi- syllabic words visual, auditory, kinesthetic methods can be taught. The common method is to underline the vowels in a word and then split the word into as many syllables as vowels. Put syllables in different colours(**con fi dent**), tap the syllables, clap the syllables or put your hand under the jaw and see how many times your hand touches the jaw to count the syllables.

Syllable division needs to be taught and there are 6 common patterns –CLOVER

- C:** closed syllable (first part is closed by a consonant : ban dit)
- L l** controlled (a consonant and –le come in the last syllable :ta/ ble, cy/cle)
- O** open syllable-(the first syllable ends in a vowel and has the long sound: a/pron)
- V** vowel team(the cutting is between 2 vowels: du/et, cha/os)
- E** magic e (the second syllable is a magic e word :de/ lete in/vite)
- R** r controlled (the first syllable is after an ar, er, ir or or ur sound: par/ty sur/prise, per/haps, for/tune etc.)

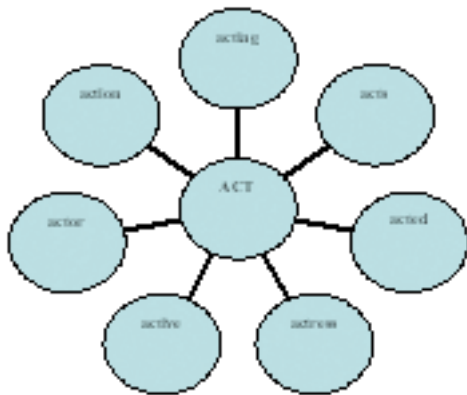
Over a period of time, in a multi-syllabic word they learn to close the other syllables with their fingers, keeping only the syllable that they are reading open.

Vocabulary

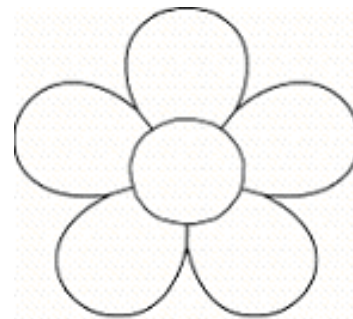
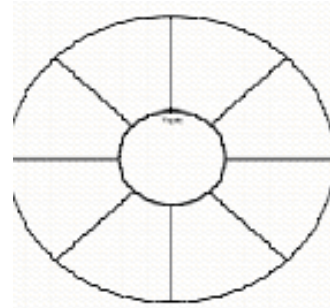
Vocabulary is an integral part of mechanical reading as well as comprehension. Vocabulary building is very important especially in India as English is a foreign language and many of the words are alien and need to be built in. Vocabulary involves knowing synonyms (word meanings) antonyms (opposites) homonyms (similar sounding words spelt differently and having different meanings). Homonyms are exclusive to the English language and children with a learning problem often have a difficulty in this area (for e.g. hare and hair, pail and pale, stair and stare). Being aware of morphology and working of root words, suffixes and prefixes is a good method.

Teaching the meaning of prefixes and suffixes helps in reading and comprehension. e.g. Pre means before and so meaning of prehistory, preschool post is after so postmortem, postwar, semi is half and so semicircle. Suffixes also have meanings. -ous means full of /so meaning of humorous dangerous, poisonous etc.-ly shows the manner so slowly, rapidly, quickly, happily tell you how. A morphological analysis looks at the root word, the prefix and the suffix. e.g. unhappily = un + happy + ly, busy+ness = business.

Vocabulary webs can be developed by brainstorming on a topic and fitting into a template (below) and help to expand vocabulary. If the word *beach* is taken, put it in the middle, words like sand, waves, boats, fish, crabs, sand castles, vendors, rides, lighthouse can be put in the sides. Or actions



on the beach like wade, play, dig, build, watch, enjoy, etc. could be written.



Dictionary skills are very important and children with difficulty need to be taught how to look it up.

Fluency

Children must also acquire fluency and **automaticity** in decoding. If reading is a struggle, then they cannot remember what they read, can't relate the ideas to their background knowledge and comprehension gets affected. A certain amount of sight vocabulary (whole words that a child has learned to recognize without decoding) should be introduced. Apart from the sight words there are some irregular or exception words that are different like said, enough, soldier as they don't fit into a phonetic pattern. Standard lists are available like the Dolch list of 220 words, Dolch nouns (90), Frye list of instant words etc. These can be put on the wall as a chart or on flash cards and presented to the children in quick succession. Subject specific lists can be made from the lesson that is being taught in class whatever the subject maybe so that the child is able to instantly recognize the words that come in the text.

After reading words in isolation, they need to read phrases and sentences with these words. e.g. away, go away. The children go away to play.

Children’s own sentences can be used for reading as it is with their own vocabulary and experiences. They can have a book of demon words that they find difficult to read and sentences they have themselves made.

In the classes KG to 1, simple instruction can be used on placards like “sit down” “stand up”. These can be shown and the children read and follow. This can be tried in the reading of the second language too.

Comprehension

Building of reading and comprehension go hand in hand. Especially in a country like India where English is a second language, it is important to build in the understanding of what is read even if the child can read only simple sentences like “ A fat cat sat on the mat. “ or “The big pig digs.”

- Introduce question words: What where who when and how. Ask them to make questions.
- Contextual guessing: Every word in the sentence need not be understood but from the context it can be guessed.
- Talking about the topic before reading. Asking questions during also help.

Subject reading and comprehension are important and it is not just the English teachers’ role to build up reading. Each one has to deal with the reading of their subject specific terminology and their text book reading. So sight words in a Class 4 History text book could be invasion, conquered, territory, and in a grade 5 Science book nutrients, pollution, carbohydrates etc. If mechanical aspects are not used, children learn the meaning, and its use it in the appropriate context.

Classroom Practices

- A word wall is a systematic collection of words displayed in large letters on a wall or other place in the classroom. They are designed to promote group learning and help in reading and writing of the whole class. The teacher

can decide on the 5-10 words to be introduced and used in the week and how s/he is going to use them. The class can chant them, whisper them, cheer in unison and teacher can play games too.

- Instead of asking a child with a reading problem to stand up and read, the teacher can stand beside the child and read along or do paired reading with a child who is a good reader. It would help with word attack, intonation and speed.
- Whole brain exercises such as Brain gym as well as eye exercises which help with ocular movement are important for reading.
- When white chalk is used to write on the black board some children find that the glare makes the letters that dance or look blurry and are unable to read. The use of a white board or writing with colour chalk on a blackboard could help. Using a non white paper and alternatively coloured overlay preferred by the child can be used.
- Phrasing and writing on the board by the teacher helps in the comprehension, especially in the lower classes. This helps them to copy well, read with intonation as well as understand what they are reading. For example:
- Some children tend to lose their place while reading. They can use wooden windows or those which can be cut in a paper, to allow just a phrase to be read or a whole sentence to be read depending on the difficulty. Alternately, a plain sheet of un ruled paper can be used covering the rest of the printed matter so that he/she can concentrate on only what he is reading.
- Playing word games, vocabulary games and phonemic awareness exercises. Make teams. With the names of the children in the class, syllable counting and syllable stripping can be done. (E.g. Nartaki- 3 syllables, Nar/ta, then Nar, Thiruvananthapuram). Think of a word and give clues: it rhymes with town and is the opposite of up.

| | | | | |
|-----------------|-----------|-------------|----------------|----------------|
| Reema and Seema | walked | to the park | in the evening | to meet Deepa. |
| ----- | ----- | ----- | ----- | ----- |
| Who? | Did what? | where? | When? | Why? |



- A class library as well as some interesting reading worksheets to be kept in each class. A child finishing his/her work quickly can be encouraged to go to the corner as a reward.
- Some children have difficulties with b and d and reverse their bs and ds. So some simple strategies can be given like drawing a bed with the head on the b side and the legs are on the d side. This gives a clue to the child for which is b and d.
- Many children enjoy computer reading and don't realize the tedium of reading when it is on the computer. The computer screen (background colour) can be adjusted according to the child's comfort. Today reading CDs are available with the voice over providing the visual and auditory pairing which helps children with a difficulty to develop reading.
- Different ways of motivating the child to read to make it interesting should be given (a reading card with the

number of books toted up every month and a top reader prize.) Extra reading during weekends and holidays needs to be insisted upon.

To summarise, a teacher should be aware of the importance of developing reading and the techniques to be used in an inclusive classroom for all children and more so with special needs children. Reading periods should be built into the timetable with different kinds of reading: loud, alternate paired, choral, pleasure, reading silently for comprehension should be used and the mechanics of reading: decoding, and reading with proper intonation along with understanding stressed upon. The class library, word walls, flash cards and a variety of reading material should be effectively used by the teacher. With teachers and parents as partners, reading can become an enjoyable activity and children can become effective readers.



Teaching Strategies To Enhance Learning

Dr. Usha Grover*

Teachers who work with the children with special needs should undergo specific training in special education. As part of the curriculum they should be made familiar with effective strategies for teaching special children. Such techniques include chaining, shaping, modelling, prompting, errorless discrimination learning, and so on. Thus, the focus of this paper is to discuss strategies which will enhance the teaching skills of a classroom teacher and make them more effective. These skills become very important because of the present day scenario of the classrooms where children with special needs study with peers with normal abilities, may be with additional support. This is in line with the recommendations of United Nation Convention for the Rights of Persons with Disabilities (UNCRPD 2002). The strategies list will help all the teachers and parents alike in supporting their children.

■ Be an effective listener

A teacher should be an effective listener to help solve the problems of children rather than suggesting solution or offering sympathy or making derogatory remarks. For example – If a child is trying to tell you his worries concerning work load and you as teacher respond ‘Stop complaining and finish the work assigned to you’ may prevent a child airing of a problem and working out the realistic solution. Listen carefully and help the child to solve his problem.

■ Do not label or criticize

Sometime children in the class do not respond



satisfactorily. Your comment ‘your behaviour is as if you are in the first class and not like in the fourth class or you are an idiot’ will not help a child to respond better. Labelling a child or criticizing a child will only close up the possibility of improvement in child. A teacher rather needs to make grounds for useful discussion for improving child’s performance.

■ Handle truancy tactfully

The problem of frequent absence is very common in schools but a serious concern to the teacher as it will affect learning. A teacher needs to use power of tact and strategic thinking to help children overcome the particular problem. If the child is absent, but has returned, show pleasure at his return, rather than be punitive. Be sensitive to the difficulty of the situation and do not create extra stress on the children.

■ Identifying children who are at risk

Identifying children who are working at lower level than their peers and helping them to improve is the responsibility of a teacher. A teacher should watch out for poor attention span, negative self image, difficulty

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in number work, lack of expression in the class. Working out where the problem lies followed by a plan of action will help the child to become better integrated and work towards selected goals.

■ **Tackle poor esteem problem**

There are some children in the class who have poor self esteem. A teacher should identify children and think of the ways to help themselves as we know poor self esteem



hinders learning. Praising the desired response, use of eye contact, listening to child's verbal and non-verbal messages, using techniques of teaching to prevent failure, can help these children to boost their self esteem.

■ **Build link between parents and teachers**

A teacher should think of the strategies to build a regular link with the parents and other caretakers of children with special needs. A teacher should hold informal meetings and share the information about the child on regular basis.

■ **Set homework appropriately**

Children shirk doing homework. In an inclusive classroom, it is very important for the teachers to realize that the homework set for the whole class may be totally unsuitable for an individual child having special needs.

Setting tasks that are relevant and at the right level is a complex task. However, a teacher needs to achieve this. Planning ahead for written home work, explaining the purpose of homework and value their homework are few strategies a teacher can use to help children do their homework.

■ **Use V.A.K.T approach**

Use multi-sensory teaching strategies. Grace Fernald introduced the techniques called VAKT (Visual Auditory Kinaesthetic and Tactile). However, recently the vestibular and proprioceptive sense is also used. This

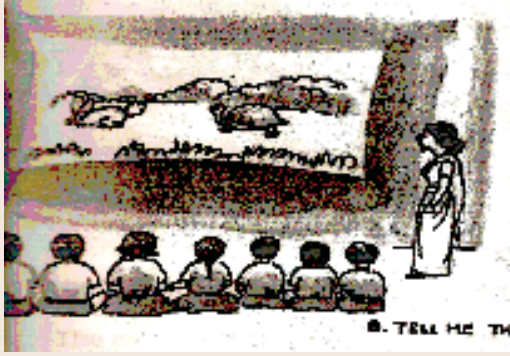


technique helps children with a range of learning difficulties to learn concepts in the way best suited to meet their needs. It means that this method takes care of the child's strength & weaknesses. If a child has weakness in one sensory area, then using strength in another area can help to compensate and encourage the use of strategies to overcome the weakness. Teaching to a weakness through strength encourages a sense of success, confidence and thereby enhance learning.

Lessons in the class should be planned using multi-sensory approach. Present the work visually, through an experiment or demonstration, then reinforce orally that is plan a quiz or tape record their responses and finally give them the written work. All these will help the learners to store the information more effectively in the memory.

■ **Use all senses simultaneously**

Once areas of strengths and weaknesses have been identified a teachers should device a series of teaching strategies that may help them in reading, writing & arithmetic. Multi-sensory methods means, simultaneous use of ears, eyes, speech, fingers & muscles. Generally



this comes naturally but with children having learning difficulty, should be taught how to use these skills together.

- **Use the 'look, say and write' approach**

Use the 'look, say and write' approach. Make use of pack of cards with letter patterns printed on one side &



words containing them on the reverse. Use pack of cards to strengthen visual and auditory memory.

- **Use kinaesthetic sense more often**

Make use of kinaesthetic sense in learning where a child remembers through movement and actions of body what



has been taught. Involve children in activity that is kinaesthetic. This will help them all the more as it is 'hands on' learning.

- **Incorporate thinking skills**

Incorporate 'thinking skills lessons' in the class and encourage development of observation skills. Play games that teach these skills for example children sitting in a



group in a circle let them close their eyes and change the appearance of one child either by making him wear earrings or goggles and ask the rest of the group what is different in the group.

- **Use "task analysis" correctly**

We all are aware of teaching methodology called 'task analysis' in which the task is taught in sequential steps. It is very easy to understand task analysis in theory but often found difficult in practice. Sometimes, the task is not presented in proper sequence with the result that the child is unable to master the task. For example while teaching alphabets teach one alphabet at a time and that alphabet should be taught in sequential steps that is matching, identification, and naming. Even while teaching matching identification the teacher has to follow the sequence of steps. For example once the child has mastered matching the identification has to be taught in one choice, two choices, and then finally in multiple choices followed by generalization. However, contrary to this teachers often tend to teach in incorrect manner. Matching is used with naming and then identification. The correct sequence of teaching is very essential for effective learning.

- **Make teaching math fun**

Children fear math period because they find it difficult and boring. It is more so in mixed ability classes. Make teaching mathematics fun using games, activities and reinforce concepts. Teacher should relate mathematics



to everyday experience. Do not assume that mental arithmetic is too difficult for slow learners. Just be sure to start from an appropriate level. It is noticed that children with learning problems are competent to work out what their pocket money will buy as it is of interest to them and being used in daily routine. People with learning problems have short memory so encourage them to work their own way. For example if a child is taught addition through a musical game it will be easy for him to understand and the learning will last long.

- **Improve unacceptable behaviour**

Two often children with special needs are assumed to have problematic behaviour simply because their needs are different; however that is not the case always. A teacher should have the knowledge of how problem behaviour are learnt and what are the techniques of management. All special education courses include a chapter on “Identification and management of problem behaviour” which enables the teachers to develop skills and competencies to deal with problem behaviours.

- **Use peer tutoring**

This technique is a way of encouraging and improving the performance of the child by getting a better performer to pair with this child to help him complete the task. The selection of peer who will help the child should be carefully done. He should not ridicule or make a mockery of a child rather should understand



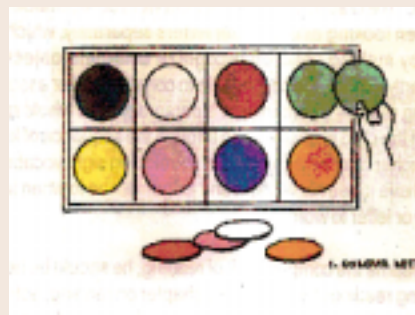
the needs of the child. Train the tutor and supervise until the tutor – tutee interaction is satisfactory. Reward both of them for successful completion of the task.

- **Be an effective support teacher**

A teacher will be required to work in a variety of classrooms in inclusive schools. They should work in harmony with the mainstream teachers. Support the mainstream colleague in practical ways. Make sure you are there when they need you.

- **Use cooperative learning**

Another effective technique to involve all children in the class is cooperative learning. In this the group is divided into small groups and each group will have combination of children with different abilities such as high, average, low achievers. Together they are required to finish the task given. A teacher should teach English, math and other subjects in a group and this will not only help of the child with special needs to improve academically but also improve in social skills.



- **Present teaching learning material (TLM) correctly**

Mostly teachers prepare excellent TLM but very often they do not use them correctly. Presenting the TLM according to the strategy of teaching used is very important for effective learning. For example if a teacher is using errorless discrimination method and in the first step only she presents all the coloured cards to identify red colour card, then the child with learning problem will get totally confused. Initially, only two coloured cards should be presented and slowly increase the number of coloured cards.

- **Stay fit**

Teaching is a stressful job and working with children with special needs is very challenging and sometimes

exhausting. A teacher should take care of his needs to be effective in his work. A teacher should engage himself in activities other than special education. He should learn to take pleasure in the smallest of their achievement. Take help of a colleague when faced with a specific problem. A teacher should take out time for stress relieving activities like swimming, dancing, yoga and meditation.

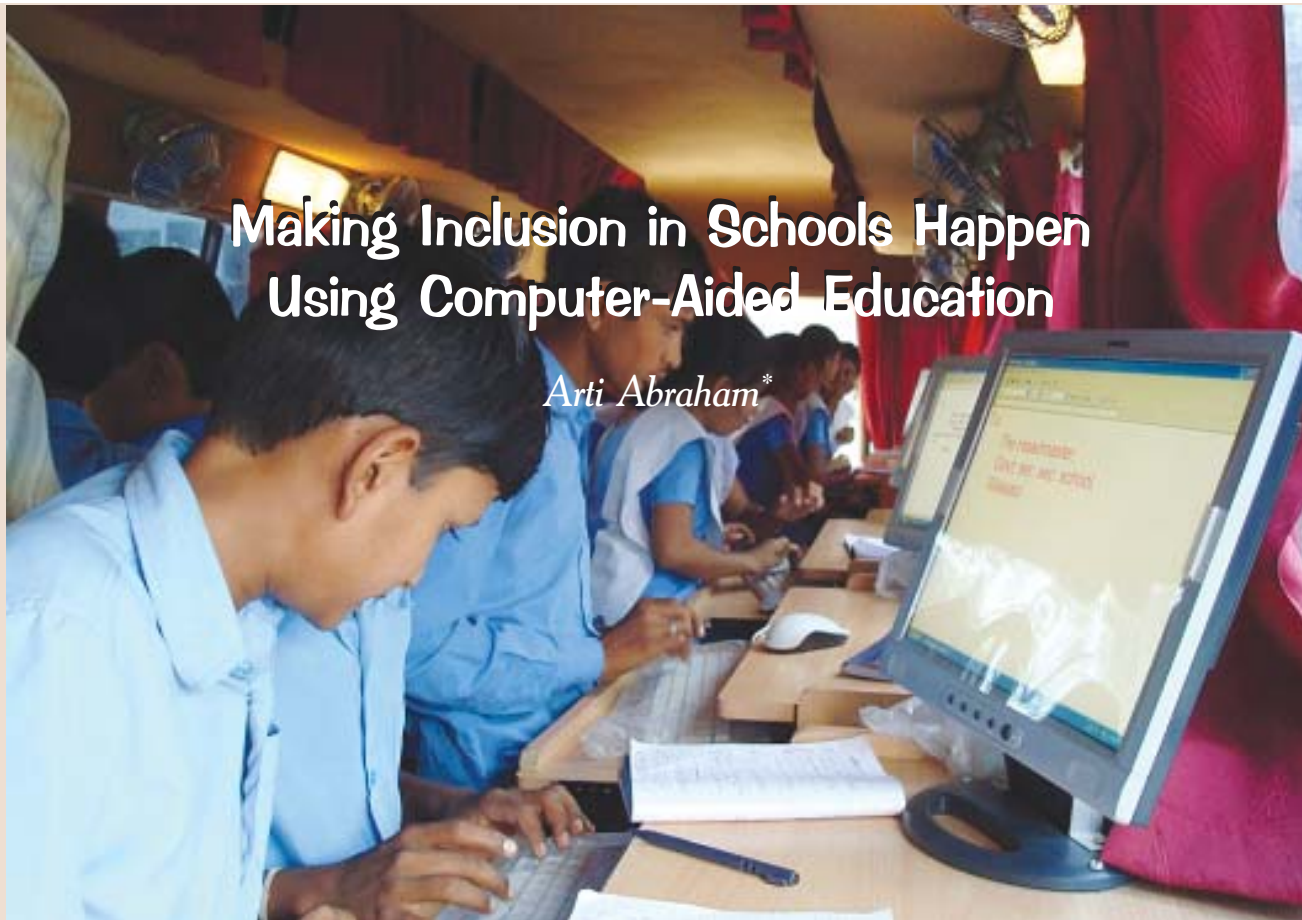
Most important a teacher should have good physical and emotional health to be of use to his children.

A good teacher will use combination of the above strategies taking the essence of each. She should match the strategy to the learning style of the child. A systematic, well planned use of strategies by a updated teacher will make a world of difference in child's learning.



Making Inclusion in Schools Happen Using Computer-Aided Education

Arti Abraham*



Inclusion is an ideal that answers the fundamental question - “How can we learn to live with one another?” It is the way of acknowledging and accepting the diversity of people who live around us in a society – regardless of colour, race, religion, economic status or points of view. It is about embracing those who have special needs, limitations and disabilities into the mainstream.

Inclusive education is the commitment of society to educate every single child to the maximum extent possible - as equal participants in a society in which all children are given the same opportunities to reach their potential. Inclusive education in the context of special needs is significant because in India disability is still viewed as something that needs to be tucked away and remain out of sight.

So then here is a truism - inclusion in schools is an important precursor to inclusion in society.

Challenges to Inclusive Education in India

Inclusion of children with disabilities as a concept has begun to make a mark in India in the last decade. While organized and large scale efforts to ‘mainstream’ or include CWSN in

*He drew a circle that shut me out —
Heretic, rebel, a thing to flout.
But love and I had the wit to win:
We drew a circle that took him in.*

Edwin Markham

mainstream classrooms are underway, there are many challenges, in terms of attitudes and infrastructure that are true of schools in India - as they are in many countries across the world. Here are some reasons why the concept of inclusion of CWSN has a long way to go.

Concerns of Parents and Teachers

- There is a great deal of concern that an inclusive class would somehow slow the development of children without disabilities. This is frequently voiced by the teachers as well as parents.
- Many of the CWSN in mainstream schools have been inadequately provided for, and as a result parents are

* Designer 99&1 Design and Expert in CAL Programmes for CWSN.



beginning to ask for more special-school provision in these schools.

- Typically, teachers are not assigned adequate time to prepare for a class. Add to this the pace at which the syllabi in the Indian educational system needs to be covered. It comes as no surprise that many teachers resent the additional challenge of having to constantly provide extra attention or help to CWSN.
- There are very few reliable tools available to teachers to assess the comprehension level of CWSN to ensure that they are keeping pace with the rest of the class. Special educators typically meet this requirement with teacher creativity and remedial work which a mainstream teacher may not have time for.
- Lack of adequate fora that address the issues faced by inclusion in India. Parents and teachers have to assiduously look for relevant information and leads, repeatedly going over covered ground - to find appropriate tools or evolve teaching strategies.

Student with Special Needs

- Often CWSN struggle to stay abreast of a lesson being taught in a class. This is because some of them start with a comprehension level that is lower than class average. They often need their lessons to be tailored

for their abilities. Both involve more time and attention from their teachers.

- Comprehending abstract concepts and differentiating between details and generalizations is a challenge for both the student and the teacher. Abstract concepts are taught best with examples and even better with visual cues. Creating appropriate material is a problem with resource hungry schools across the country.
- The average mainstream school does not have the resources with which a student can communicate effectively in a classroom. Efficient communication between the student and the teacher can be strained as a consequence.
- Communication is key to social acceptance. Most CWSN in an inclusive environment find it hard to communicate appropriately. This often results in behavior that is not in sync with what is considered appropriate by their peers. The outcome is frustration and anxiety resulting in unusual behavior and a drop in self esteem.

How Computer- aided Education can overcome these Challenges

In many schools across the world running successful inclusive programs, it has been found that normally developing children

enrolled in inclusive programs make developmental gains at least equivalent to those made by their peers in non-inclusive programs. This is because of two reasons

- The educational strategies for inclusion are the same strategies used for all children, allowing every child to reach his or her potential
- A successful integration of computers in classroom learning.

Some teachers feel that Technology has proved to be an invaluable tool for teaching children with disabilities. Customized Power Point and Flash MX presentations and quizzes have been created and used by me not only to reinforce the learning in each area but also to introduce new concepts on the academic front and as an aid in addressing social and behavioural issues. Children learn in different ways, through seeing, listening, moving, doing and touching. These presentations are effective in teaching because they incorporate multiple learning styles. The presentations are interactive and cover the entire gamut of academic as well as non-academic needs.

In India, the introduction of the computer in schools happened about a two decades ago. At the time it was viewed as a futuristic gizmo that had little relevance to the day-to-day functioning of the classroom. The focus was on learning how to use the computer. Children were being taught to write strange and complex code which appeared to spew out simplistic results like Drawing a line from point A to point B.

The big breakthrough came, when the understanding dawned, that children do not need to know how to program a computer but only to use programs created by professionals. This led to the demystification of the computer and optimization of its end use as a learning tool. And what a tool it is!

It can –

1. Simplify a teacher’s job and improve the ways in which students could be taught
2. Enhance a student’s learning process

“After my son is out of ... school, he’ll be living and working with a diverse population of people. I want

him to be accepted after he’s out of school as much as when he’s in school. For me, that’s why inclusion is important while he’s in school,” says a parent of child with disabilities.

10 ways in which Computer- aided Learning benefits an Inclusive Classroom

1. Children take to using a computer very naturally

An interesting learning from the advent of the computer age is that very young minds exposed to computerization, have developed almost an *evolutionary response* to the technology. Children are far more comfortable and conversant with it’s usage than their parents, for whom computerization was a life altering phenomenon that happened in their adulthood.

The current generation of children in schools and colleges is therefore wired to work faster and more efficiently. Learning with the help of computers prepares them for the foreseeable future when this technology becomes an invisible and integral part of their lives.

Computer- aided learning can today provide a highly organized learning environment for a child with disabilities. Tomorrow, the evolutionary adaptability of the human mind to technology will blur and then completely erase the distinction between children with disabilities and without.

2. Addresses different learning styles and paces of learning

In the traditional schooling system, teachers adopt one teaching style that they hope will meet every student’s needs.

Using a computer to teach, means that lessons can be designed to appeal to different learning styles – visual, auditory, kinesthetic etc. and address the different paces at which a class learns. A lesson taught to a class can be tailored to meet the requirements of every individual CWSN.

These digital lessons can then be used for revision and reinforcement. A lesson once created can be archived, to be used again the following year.

3. Tool for assessment

Very simply, it can address the question – how much does each individual child in a class understand at any specific point of time?





In the traditional system, assessment comes at the end of the learning cycle. By this time it is too late to bridge the gap in learning and comprehension.

This is crucial issue for CWSN because they often lose out on language by not understanding a concept adequately when it is first introduced. Thereafter every time the same concept is used, there is a certain amount of loss of related information. Teaching creatively and remedial work - tools used by special educators to counter this problem - can easily be replicated in digital, multimedia formats.

Computer-aided teaching puts no limits on the number of screens a teacher can create to teach a concept or lesson. This allows the teacher to convey information in smaller chunks, clarifying one idea at a time before moving to the next. This way gaps in a student's comprehension can be identified and closed as they arise.

4. Self paced learning

A lot of resistance to CWSN in mainstream classroom stems from the fact that they need extra attention. Teachers often feel that the other students lose out in

the equation where a CWSN utilizes more teacher time to stay level with the rest of the class.

Educational content on the computer can be designed to assess/revise/ teach concepts before the start of a lesson. They can also be used as revision material for a student that needs more attention. As mentioned earlier, computer-aided education, allows each child to learn at his or her pace, while the teacher stays involved with the entire class.

5. Independent learning

Computers have been proven very motivating to children with disabilities to access information in ways that they find interesting. From the vast repository of the worldwide web to all available digital information relevant to their requirement, provide a lively and varied environment for self-learning.

Discovering the joy of learning independently, finding ways to 'mine' information that is relevant - these are skills that pay rich dividends throughout one's life.

6. Improving language skills

Competent and appropriate use of language is often a

challenge for CWSN. Good use of language promotes better social skills and results in greater self esteem and results in a better student. When a student lacks adequate or appropriate communication skills, the remedial action taken is usually to demonstrate situations along with appropriate communication. Multimedia is an excellent tool for this requirement. Specific and research-based evidence exists, that shows the benefits of using the computer as a tool to teach language skills to children with communication difficulties.

7. Dilutes difficult behavior

Many CWSN have some behavior patterns that are not in sync with their peers. This often needs special strategies for each individual child. The pace of teaching required of a teacher often gives him no time to deal with every 'situation' that may arise. In these cases, the computer can serve as an effective motivator, provide opportunities for self learning, cooperative learning, offer social and leisure time pursuits, and provide students the tools to engage in self-monitoring activities. The computer can also facilitate self-expression, assist in determining effective learning strategies, and build self-esteem.

8. Universal access and independence

For children with sensory difficulties or limited mobility, computers can provide "physical access" to the curriculum. For children with learning difficulties, computers and all the associated information technology can provide "cognitive access" because of the opportunities to present the curriculum in a variety of ways. This way, children who have problems in grasping the concepts, skills, and knowledge that are required are encouraged to keep abreast of the demands of the day to day classroom tasks.

9. Promotes creativity and encourages concept exploration

The computer provides all individuals a "level playing field" which is content-rich as well as a private, personal space. Therefore not only CWSN but also children with shy or diffident personalities, can create and fearlessly query concepts, that they would be intimidated to do in a classroom environment, dominated by their more confident or aggressive peers.



10. Neat, clear work

Computers can greatly improve the accuracy and appearance of a piece of work, and this is reinforcing and encouraging in itself. CWSN who are not able to or inclined to writing could find ways to overcome individual setbacks by ability for good presentation using the computer. The benefit is greater among those children who have a history of learning difficulties and failure. This is usually reflected in increased self esteem and confidence in response to the positive outcome and effectiveness of their work.

One danger in all this is that working for much of the time in "solitary" computer-aided tasks might actually increase the isolation of some pupils with special educational needs. The advice, therefore, is to seek opportunities for pupils to work together on collaborative and social activities, in order to increase cooperation and group cohesion.

"Once the disabled child is in a mainstream setting, there should be an expectation that the school will change as a response to the contribution and participation of the child."

Joe Whittaker "Inclusive Education versus Integrated Education"

**SLATE is a comprehensive authoring tool created especially for teachers to create lessons in a multimedia format. Students can view these lessons in a digital presentation format – called TALKBOOK.*

In keeping with the tenets of UNIVERSAL DESIGN, content created on SLATE is accessible to all – from students in mainstream primary and secondary schools, to students in special schools, with disabilities ranging from cerebral palsy, autism, hearing impairments, mild vision impairments, learning difficulties as well as gifted children. SLATE is also effective with multi-cultural, multilingual audiences.

SLATE is easy to use and takes teachers under 1 hour to learn. Most features can be created by following simple step by step instructions with the help of a “wizard”. Built in e-tests and reports allow teachers to track the progress of students.

This software has been designed by a highly trained team of visual communicators, designers and educationists to ensure that the resulting multimedia is attractive and engaging for the students.

Why is Computer-aided Education not Prevalent in Indian Schools?

The following factors are often cited as being the reasons for the non-feasibility of computer-aided education in India:

1. Computer-aided education represents a huge paradigm shift in thinking. This change has been extremely rapid giving many in the teaching fraternity neither the time nor the facility to familiarize themselves with how it works. The result is that they view technology as something that belongs in the “computer lab” with specialist teachers and not part of mainstream classroom. This, alongside the pressures of completing the ‘portions’ within the provided time frames, gives the teacher little inclination to explore technology solutions.
2. The teachers have insufficient training and experience with computers. They are awed by a technology that was never part of their education. This has resulted in a traditionalist viewpoint that the computer cannot be of any great help in a classroom situation.
3. Related to this, computers are not yet an integrated part of the school curriculum, and every school and teacher re-invents the wheel, trying to find good software, trying to work out how to fit it into the classroom curriculum, work out schedules to make sure that every student gets a chance to work on the computer, struggling with the lack of technical support and access to successful case studies.
4. Lack of infrastructure and poor (unreliable) electricity connection in schools. This is much more so in non-urban areas.
5. Lack of financial resources (to buy enough, up-to-date computers, printers and other peripherals, licenses for good software, technical support etc.)
6. And of course, in many cases, the computers are old, with the associated problems of being more likely to have technical problems, being slow, limited in memory, virus ridden, incompatible with current software, and so on.

“It is every child’s right to study with his peers. To experience the highs and lows of school, tease and be teased and finally learn to cope with life. In doing so, the child may bring about a change in his class. That’s why inclusion in schools is so important”.

*Rajul Padmanabhan,
Director, Vidya Sagar, Chennai*



Therefore ...

We have reached a point in education, where conventional wisdom is undergoing a paradigm shift. The debate over whether computer based education in the context of CWSN is viable or necessary, has been answered in the affirmative. The computer is today as fundamental to the process of learning as are books and blackboards. The remaining barriers of inadequate infrastructure and teacher resistance are being dismantled as Governmental focus on infrastructure improvement sharpens and as a new breed of young and technology embracing teachers replaces the previous generation.

As far as the effectiveness of computer-aided inclusive education is concerned, the last remaining and critical piece in this jigsaw, is appropriate and efficient software. Programs such as SLATE*, ITCP, Sanyog and Shikshak are aimed at filling this gap and their ultimate ability to effectively do so, will determine not only their viability but whether truly inclusive education is an idea whose time has finally come.

“When we exclude people, it ultimately costs more than the original effort to include them.”

*Dr. Melissa Heston,
Associate Professor, UNI*





A Report on the National Workshop on Inclusive Education in SSA

The national workshop on “**Bridging Gaps through Inclusive Education in SSA**” was held in West Bengal from 24th – 25th June, 2009. The first day was devoted to technical presentations by the resource persons. The second day mainly concentrated on visits to IE related intervention sites. About 55 participants from 30 States/UTs participated in the workshop. The main objectives of the workshop were:

- To review progress and hold discussions on key issues related to IE
- To apprise the participants of the resource support strategy through NGOs developed by SSA West Bengal
- To share with the participants Best Practices like Theme Based Camps in Orissa and Sayanthana Vedi Camps in Kerala
- To discuss with the States progress made on the 3 set of guidelines (Evaluation, Assessment and Barrier Free) developed at the national level
- To expose the participants through visits to the practices like training of Key Resource Persons from the Family and Home Based Education programmes being undertaken by SSA West Bengal.

The workshop started with Dr. Anupriya Chadha welcoming all the participants. Shri. Sushil Kumar from MHRD then apprised the participants about the progress and the major issues of IE in SSA.

State-Wise Progress

Progress on Inclusive Education

1. Andhra Pradesh

- 181999 CWSN identified and 158016 enrolled. 2500 CWSN covered through AIE and 12030 CWSN covered through home-based education.
- 187051 CWSN provided aids and appliances.
- 52 NGOs involved in the IE programme.
- 220871 teachers have been provided 5-day training on IE. 633 trained through 45/90 day training.
- 802 resource teachers in place.
- 31461 schools made barrier free.

2. Arunachal Pradesh

- 12169 CWSN identified and 7094 enrolled. 300 CWSN covered through home-based education.

- 5179 CWSN provided aids and appliances.
- 5 NGOs involved in the IE programme.
- 921 teachers have been provided 5-day training on IE. 67 teachers trained through 45/90 day training.
- 789 schools made barrier free.

3. Assam

- 97801 CWSN have been identified and 68374 enrolled in schools. 6570 CWSN have been enrolled in EGS and 22004 are being covered through home-based education.
- 28023 CWSN have been provided aids and appliances.
- 91624 teachers have been given five-day training on IE.
- 167267 teachers have been given training through the mass teacher training programmes and 4135 DIET/ BTC faculties trained through RCI foundation course.
- For barrier free access, 37659 schools and new school buildings are being equipped with ramps and handrails.

4. Bihar

- 313500 CWSN have been identified and 241995 enrolled in schools.
- 94269 CWSN provided aids and appliances.
- One day orientation programme has been organised for 171104 teachers.
- 3-day training given to 139557 teachers.
- 2889 teachers have undergone three-month foundation course by RCI.
- 350 resource teachers appointed.
- 33246 schools have been provided with ramps.

5. Chhattisgarh

- 46153 CWSN have been identified and 45169 enrolled in schools. 353 CWSN have been enrolled in EGS and 171 CWSN being covered through home based education.
- 33420 CWSN provided aids and appliances.
- 1-day orientation programme has been organised for 66620 teachers.
- 3-day training given to 35651 teachers.
- 528 teachers have undergone three-month foundation course by RCI.

- 30 resource teachers appointed.
- 18592 schools have been provided with ramps.

6. Chandigarh

- 4601 CWSN identified and 4260 enrolled.
- 15 resource teachers appointed.
- 7 NGOs involved.
- The State has started teacher training on IE and 896 teachers have been given 3 day training, 244 teachers given 45-90 days training on IE.
- 37 schools made barrier free.

7. Daman & Diu

- 146 CWSN identified and 91 enrolled.
- 11 CWSN provided assistive devices.
- 69 schools made barrier free.

8. Delhi

- 8661 CWSN identified and 8581 enrolled.
- 47792 general teachers have been provided the 1-day mass teacher training.
- 6371 CWSN provided aids and appliances.
- 3710 schools have been provided ramps and handrails.
- 50 resource teachers appointed.

9. Goa

- 1725 CWSN identified and enrolled.
- 4 NGOs involved.
- 95 teachers given 45/90 days training.
- 653 schools made barrier free.

10. Gujarat

- 75218 CWSN identified and 62406 enrolled.
- 1129 CWSN covered through EGS/AIE.
- 191044 general teachers have been provided orientation to IE issues in the mass teacher training.
- 123239 CWSN provided aids and appliances.
- 9823 teachers have been given 45/90 day training.
- 32128 schools have been provided ramps and handrails.
- 1193 resource teachers appointed.

11. Haryana

- 25075 CWSN identified and 20431 enrolled in schools. 161 CWSN enrolled in EGS.

- 66000 general teachers have been provided 1-day mass teacher training.
- 39625 CWSN provided aids and appliances.
- 42850 teachers have been given 5 day training.
- 9391 schools have been provided ramps and handrails.
- 70 resource teachers appointed.

12. Jharkhand

- 47312 CWSN have been identified and 40193 are enrolled in schools. 107 covered through home-based education.
- 29238 aids and appliances have been provided.
- The State has provided 3-5-day training on IE to 9148 teachers. 42260 teachers have been given a 1-day orientation to IE in the mass teacher-training programme for the duration of 10-days.
- 188 resource persons have been trained through the RCI foundation course.
- 16 resource teachers appointed.
- 14721 schools made barrier free.

13. Karnataka

- 132297 CWSN identified and 97169 enrolled and 11473 covered through home-based education.
- 55258 CWSN provided aids and appliances.
- 195894 teachers oriented to IE through the 20-day refresher training.
- 15733 teachers oriented to IE for 5-days.
- 24678 teachers provided training through RCI foundation course.
- 606 resource teachers appointed.



- 70821 schools made barrier-free.

14. Kerala

- 134570 CWSN identified and 127607 enrolled in schools. 362 CWSN enrolled in EGS and 775 provided home-based education.
- 9 NGOs involved.
- 13793 CWSN provided aids and appliances.
- 132000 teachers oriented to IE through the 20-day refresher training.
- 67182 teachers oriented to IE for 5-days.
- 460 resource teachers appointed.
- 13779 schools made barrier-free.

15. Lakshadweep

- 463 CWSN identified and 398 enrolled in schools. 65 CWSN are provided home-based education.
- 220 teachers trained on IE for 3 days.
- 32 schools made barrier-free.

16. Madhya Pradesh

- 111492 CWSN identified and 102567 enrolled. 6562 CWSN are enrolled in EGS and 1807 provided home-based education.
- 90450 CWSN provided aids and appliances.
- 75204 teachers oriented to IE through the 20-day refresher training.
- 18264 teachers oriented to IE for 5-days.
- 13005 teachers provided training through RCI foundation course.
- 163 resource teachers appointed.
- 59943 schools made barrier free.

17. Maharashtra

- 414277 CWSN identified and 380723 enrolled. 24518 CWSN covered through EGS and 9036 through home-based education.
- 39 NGOs involved.
- 141977 CWSN provided aids and appliances.
- 380000 teachers oriented to IE.
- 15446 teachers provided training through RCI foundation course.
- 1300 resource teachers appointed.



- 86929 schools made barrier free.

18. Manipur

- 7423 CWSN identified and 4357 enrolled.
- 7 NGOs involved.
- 1117 CWSN provided aids and appliances.
- 3062 teachers oriented to IE.
- 2642 teachers provided training through RCI foundation course.
- 122 schools made barrier free.

19. Meghalaya

- 9224 CWSN identified and 7496 enrolled.
- 249 CWSN covered through home-based education.
- 6216 teachers trained through mass teacher training. 6546 teachers provided 3-day orientation.
- 549 teachers provided training through 45/90 day foundation course.
- 3189 CWSN provided assistive devices.
- 571 schools made barrier free.

20. Mizoram

- 7264 CWSN identified, 5458 enrolled.
- 2716 teachers trained through mass teacher training.
- 2423 teachers provided 3-day orientation.
- 432 teachers provided training through 45/90 day foundation course.
- 1585 CWSN provided assistive devices.
- 1274 schools made barrier free.
- 9 resource teachers appointed.

21. Nagaland

- 3627 CWSN identified, 2948 enrolled.
- 1862 teachers provided 3-day orientation.
- 3 NGOs involved.
- 164 teachers provided training through 45/90 day foundation course.
- 910 CWSN provided assistive devices.

22. Orissa

- 126245 CWSN identified and 114845 enrolled. 2842 through home-based education.
- 83 NGOs involved.
- 128418 CWSN provided aids and appliances.
- 164004 teachers oriented to IE.
- 5173 teachers provided training through RCI foundation course.
- 328 resource teachers appointed.
- 43393 schools made barrier free.

23. Punjab

- 70085 CWSN identified, 48247 enrolled. 439 CWSN covered through EGS and 2906 through home-based education.
- 108 teachers provided 3-day orientation.
- 202 resource teachers appointed
- 78 NGOs involved.
- 970 teachers provided training through 45/90 day foundation course.
- 59042 CWSN provided assistive devices.

24. Puducherry

- 2926 CWSN identified. Out of these, 2816 enrolled in schools and 110 covered through home-based education.
- 4 resource teachers appointed
- A total of 1559 aids and appliances have been provided to CWSN.
- 130 general teachers have been trained through mass teacher training.
- 343 schools provided with ramps and handrails.



25. Rajasthan

- 248084 CWSN identified and 236213 enrolled. 6841 CWSN covered through EGS and 4013 through home-based education.
- 32 NGOs involved.
- 25368 CWSN provided aids and appliances.
- 61251 teachers oriented to IE.
- 9770 teachers provided training through RCI foundation course.
- 200 resource teachers appointed.
- 68445 schools made barrier free.

26. Sikkim

- 965 CWSN identified and 698 enrolled.
- 104 CWSN provided home based education.
- 102 schools made barrier free.

27. Tamil Nadu

- 116339 CWSN identified and 103133 enrolled in schools and 412 in EGS. 12794 CWSN provided home-based education.
- 96677 CWSN provided aids and appliances.
- 201604 teachers oriented to IE for 5-days.
- 34908 schools made barrier-free.
- 826 resource teachers appointed.

28. Tripura

- 3093 CWSN identified and 2964 enrolled in schools and 64 in EGS. 15 CWSN provided home-based education.
- 1460 CWSN provided aids and appliances.
- 19606 teachers oriented to IE for 1-days.
- 2282 schools made barrier-free.

29. Uttarakhand

- 16517 CWSN identified and 13764 enrolled in schools and 102 in EGS. 1149 CWSN provided home-based education.
- 8989 CWSN provided aids and appliances.
- 40569 teachers oriented to IE through the 20-day refresher training.
- 12957 teachers provided 45/90 day foundation course.
- 9494 schools made barrier-free.
- 8 resource teachers appointed.

30. West Bengal

- A total of 214869 CWSN have been screened and 132897 have been enrolled in the schools and 7673 in EGS. 21733 being provided home-based education.
- 46377 CWSN provided aids and appliances.
- 149116 teachers have been provided intensive training on IE.

- 258533 teachers have been oriented to IE through 20-day training.
- 1013 teachers provided RCI foundation course.
- 1007 resource teachers appointed.
- 49589 schools have been provided with ramps.

Technical Sessions

The first presentation of the day was on Sayanthana Vedi Programme for CWSN in Kerala SSA by Shri. Sam John. He started his presentation by explaining the concept of Sayanthana Vedi and its objectives. Basically Sayanthana Vedi Camp is an attempt to improve the achievement level of children with special needs through remedial practices. It also involves giving guidance to the parents on care and management of CWSN. Besides, the community also becomes aware about the issues related to CWSN. These camps are conducted once a month in BRC/CRC. Appropriate models are developed for the purpose of these camps. These camps have been successful in providing resource support and guidance to the parents of CWSN.

The second presentation of the Day I was on Residential Bridge Courses (RBCs) for CWSN in Bihar. This presentation started by providing a brief status of IE in SSA. Shri. P.K. Mishra then stated the objectives of these bridge courses. Basically the State conducts two kinds of bridge courses. 30-day bridge courses are conducted for mildly disabled children with the help of resource teachers. The 12-month RBCs are conducted at the district level by NGOs for totally blind and mentally retarded children. Shri. Mishra then explained the provisions provided to CWSN in these bridge courses. So far the state has covered 13185 CWSNs through the 30-day RBCs and 940 CWSNs through the long-term RBCs.



The third presentation of the day was on Activities of District Level Resource Organisation (DLRO) by Bangio Saksharata Prosar Samiti, a NGO working for West Bengal SSA in the area of IE. This presentation began by clearly defining the role of State Level Resource Organisation and DLRO. The objectives of DLRO engagement and their working pattern along with their catchment area were explained in detail. The representative from their NGO explained its strategy for working for IE in SSA. The main area of work involved identification of CWSN, convergence, providing special educators and giving resource room and plus curricular support to CWSNs.

The fourth presentation of the day was on Theme based Camps conducted specially for CWSNs in Orissa. The Theme Based Camp is an innovative activity for CWSN, in which different categories of CWSN participate along with their parents and some normal children in some specific selected activities organized in a camp. It facilitates integration, acceptance and sensitization for CWSN. Shri. Patra then explained the objectives and the procedure of these camps as given below.

Aims and Objective of Theme Based Camps

- Developing self-confidence and competence in differently abled children.
- To facilitate integration of differently abled children along with the normal for better acceptance in society.
- To develop different compensatory senses.
- To avoid discrimination between differently-abled and the non- disabled children
- To motivate the parents of CWSN for all round development of their children.



Procedure: Organization of Theme Based Camps

- The camps are being organized in Education Circle-wise in each quarter of the Financial Year.
- 30 differently able children participate in the camp along with 10 nos. normal children and their parents.
- The parents of the CWSN are also oriented on different themes for home management.
- The selected CWSN are awarded for their excellent talents.
- All participants are also awarded as consolation prizes.
- The PRI members/VEC president and other Officers are present in the camp for appraisal.
- The talents of CWSN are detected and selected for State and National level competition.

So far 2000 such camps have been conducted covering approximately 8000 children.

The last presentation of the day was on the qualitative aspects of IE by Dr. Anupriya Chadha, Chief Consultant, SSA. The focus of this presentation was on the following aspects:

- Identification of CWSN
- School related factors
- Remedial teaching
- Individualized Educational Plan (IEP)
- Manpower related issues
- Learning achievement of CWSN

The session was made very interactive by different states providing their inputs on the various qualitative aspects discussed during the presentation.

Visits to the Intervention Sites

Day-II began with visiting various intervention sites related to inclusive education. These included visits to low vision camps, physio therapy camps, resource rooms, training programmes on IE, interaction with parents trained through the Key Resource Persons Training Programme. In order to enhance and intensify the process of mainstreaming CWSN in regular schools, SSA - West Bengal is training parents, siblings and other such family members who are directly related to the child affected with a disability. This is called training of Key Resource Person from the Family (KRPf). Family members are selected by the District Project Office in consultation with the local VECs, resource teachers, circle level resource persons and special educators of the district level resource organization. Care is taken to train only those members from the family who have the necessary interest, positive attitude, motivation, leadership skills, good communication skills and willingness to work in a team. Interaction with parents revealed that a KRPf brings about attitudinal changes in the family, provides relevant information, helps in obtaining the necessary concessions and facilities as well as referral services available for CWSN, monitors school attendance, discusses the problems of CWSN and, if possible, provides possible solutions. SSA West Bengal has also prepared a module for the training of KRPf.

Another highlight of the visits was observing resource rooms for children with special needs, which generally exist in a regular school having CWSNs. Two such resource rooms were visited. The purpose of the resource room is to provide remedial teaching to CWSNs and to impart to them plus curricular skills. These resource rooms function 3 days in a week under the supervision and guidance of special





educators. One school is selected from each circle for resource room facility and CWSNs from the nearby schools visit the resource room. The state plans to open 11 more such resource rooms.

Training programme for the AIE Sevaks/Sevikas was also observed. The state has enrolled 465 CWSNs in AIE centres. It therefore imparts 1-day training to AIE instructors. In the training programme observed, 48 AIE instructors were being trained. This training is provided with the help of special educators and the following topics are covered:

- Concept of inclusive education
- Types of special education
- Identification of CWSN
- Tips for classroom management.

Key Recommendations of the Workshop

The following key recommendations emerged from the deliberations and discussions held during the workshop:

- The states having less than 1% CWSNs were identified and they had to improve their identification mechanisms and strategy on a priority basis
- There was considerable discussion on providing aids and appliances. Most of the states had different experiences in obtaining the required equipment through ALIMCO. There has been a gradual increase in the number of CWSN being provided such aids and appliances. However, in some states this aspect needed strengthening and the states were asked to devise a multi-pronged strategy to provide assistive devices to CWSN.
- It was also observed that the N.E. States and UTs require intensive capacity building on IE. These States

had to conduct more planning workshops for functionaries at all levels

- Having begun with identification, assessment, provision of aids and appliances and teacher training, it was felt that the focus of the States now should be on the qualitative aspects of IE. This included remedial teaching, development of Individualized Educational Plans, learning achievement of CWSNs, etc. If children with special needs are not provided in-class attention and adequate resource support, they are likely to drop out.
- It was emphasized that there was an imperative need for more cross sharing of information between various States to stimulate faster development.

Conclusion

The progress made by the participating States was reviewed in detail. The focus was on covering more CWSNs and to provide them quality education. There was unanimity on the need to address critical issues like identification of CWSNs, remedial teaching, appointment of resource teachers, providing the required assistive devices to CWSNs and preparing schools for inclusion. Some important quality related aspects regarding inclusive education in SSA were discussed at the workshop. These were relating to manpower development, resource support to CWSNs and sustained on-site support to CWSNs. Developing a strategy that will ensure that every child with special needs receives continuing on-site support is perhaps the biggest challenge of all. Unless this is achieved, CWSNs may not fully benefit from the programme. This will indeed be the touch-stone of the success of the programme.



News from the States



Academic And Skill Enhancement Camps – Ray Of Hope For CWSN in Rajasthan

The National Policy on Education (NPE) –1986 brought the fundamental issue of equality for all children centre stage. Section 4.9 of the policy clearly focuses on the needs of the children with disabilities. It says “the objective should be to integrate physically and mentally handicapped children with the general community as equal partners, to prepare them for normal growth and to enable them to face life with courage and confidence.”

The Plan of Action (1992) postulates that “a child with disability, who can be educated in a general school, should be educated only in a general school and not in a special school.”

SSA with its focus on increasing access, enrolment, retention of all enrolled children and reduction in school dropouts is now emphasizing on providing quality education to all children, including children with special needs. Rarely, has it been considered that special educational needs of these

Education aims at “maximum development of abilities and skills, of which every individual is capable of, with complete social, physical and emotional development and all round preparation for life”

children can be met by providing them adequate resource support in regular schools and they can be given an opportunity to receive education in the most appropriate environment. Education of children with special needs is relatively a new concept and requires a great deal of technical expertise to deal with the needs of children having different kinds of impairments. Hence, education of children with

special needs is considered an important component in SSA.

The aforesaid aim of all round development of children with special needs is being achieved under 'Inclusive Education' component of SSA, Rajasthan. The model that has been worked out for the above mentioned purpose is as follows:

- Regular classroom teachers are oriented to the special techniques and are also directed to deliver prescribed programme for each child, best suited to his or her requirement.
- Regular class room teachers who take care of CWSN are supported by on-going supplementary instructions and consultations from school based specialists
- CWSN spend some time in a specially staffed and well-equipped resource room under the guidance of regular classroom teachers and special educators.

Inclusive Education is a multidisciplinary process. CWSN require additional inputs, so that they can cope up with general children competently. To enhance capabilities of CWSN, the strategy to identify CWSN, grouping according to learning levels, remedial teaching, assessment, monitoring and strengthening has been worked out. These are explained below.

Identification

On the basis of school results, children who achieved below 40 % were identified as slow learners. These mainly included children with mild mental retardation and learning disability.

Grouping

On the recommendations of special teachers, two sample papers of equal difficulty level were developed for pre-test and post test. Children, who secured below 40 % marks in regular examination, attempted these sample test papers. On the basis of pre-test achievements, children were identified and accordingly groups of slow learners were formed. Each group comprised 10 children. Non-residential camps were conducted where the desirable number of children was present in the catchment area of the school.

Remedial Teaching

Hard-spots were identified and according to the level of students appropriate TLM (Teaching Learning Material) was made available. Activities were planned to make concepts clear.

Essentials of Remedial Teaching

Each pupil is different in terms of learning ability, academic standards, classroom learning and academic performance and each has his/her own pace in learning. The aim of remedial teaching is to provide learning support to pupils who lag far behind their counterparts in school performance. By adapting school curricula and teaching strategies, teachers can provide learning activities and practical experiences to students according to their abilities and needs. They can also design individualized educational programmes with intensive remedial support to help pupils consolidate their basic knowledge in different subjects, master the learning methods, strengthen their confidence and enhance the effectiveness of learning.

Throughout the teaching process, teachers should provide systematic training to develop pupils' generic skills, including interpersonal relationship, communication, problem-solving, self-management, self-learning, independent thinking, creativity and the use of information technology. Such training can lay the foundation for pupils' life-long learning, help them develop positive attitudes and values, as well as prepare them for life.

Teaching should not be directed by textbooks which should not be taken as the school curriculum. There is no need to cover all the contents in the textbooks as well. Schools can classify the teaching content into core and non-core learning aspects according to the teaching objectives and pupils abilities. Core learning aspects require in-depth studies and application whereas materials in the non-core or advanced learning aspects may be streamlined or appropriately selected for teaching.

Teachers are encouraged to adopt recommendations on cross-curricular teaching by linking up related teaching areas flexibly so that more time can be spared for effective activities and learning.

Teachers should make good use of all teaching materials. For example, they may select and use the materials in textbooks to meet the teaching objectives, or compile their own supplementary teaching materials. They may also design materials of different standards. Materials from the internet, newspapers, magazines.



Peer Group Learning Techniques

This approach made learning meaningful and enjoyable for CWSN. Achievements on concepts clarity encouraged students to perform better.

Assessment

After completion of every unit, interesting exercises with multiple-choice answers, short answers, essay and paragraph writing from the content were given to students. The second question paper was used as post test to test the comprehension of concepts, skill development and application ability of the students.

Achievement at a Glance

Encouraged by the outcome of these camps, a request to extend time period of these camps was received from community leaders, teachers and guardians of the students. Accordingly SSA Rajasthan developed a proposal for 45 days remedial-cum-skill-development residential camps for orthopaedically impaired, visually impaired and hearing impaired children.

These 45 days remedial cum skill development residential camps have been designed to impart useful skill training to

CWSN. The target group of these camps are CWSN with more than 40% disability. Their disability has to be certified by Medical Board. Dropped out CWSN between 12 to 18 years of age are also encouraged to participate in these camps. These children can then appear for class VIII Board Examination.

These Camps

- Are organized during summer vacation utilizing the SSA infrastructure for blind, hearing impaired and severe orthopaedically impaired
- Are conducted in DIET Campus / KGBVs or schools well equipped with computers and are spacious to conduct various activities.
- Use child friendly computer programmes that have been designed to make learning enjoyable, meaningful and encouraging.
- Provide opportunities to develop skills as playing tabla / harmonium / making soft toys / canning / painting are provided, so that CWSN can master skills according to their interests and competencies.
- Employ special educators and vocation trainers to guide CWSN.

| S.No. | Year | No. of Camps Organized | No. of Participants (children) | Subject-wise Average Achievement | Achievement of Remedial Teaching | |
|-------|---------|------------------------|--------------------------------|----------------------------------|----------------------------------|-------------------------------|
| | | | | | Subject wise Pretest | Post test Percentage Increase |
| 1. | 2005-06 | 6156 | 14972 | Science | 49.34 | 52.19 |
| | | | | Eng. | 47.22 | 49.00 |
| | | | | Math. | 58.89 | 26.02 |
| 2. | 2006-07 | 3816 | 119673 | Science | 60.23 | 71.05 |
| | | | | Eng. | 54.42 | 48.04 |
| | | | | Maths | 64.20 | 62.03 |



Progress of the Camps at Glance

| S. No. | Year | No. of camps organized | No. of CWSN beneficiaries |
|--------|---------|------------------------|---------------------------|
| 1. | 2007-08 | 24 | 1065 |
| 2. | 2008-09 | 20 | 1135 |

- Are monitored by SSA officials who fully support the whole programme. Activities of the camps are also supervised and monitored by the committee, which includes block level resource persons, computer lab instructor, IE officer and DIET Principal
 - Are supervised and monitored for their daily routine programme, facilities, quality of food and items provided to children.
 - Prefer CWSN from BPL families and children enrolled in government schools.
 - Are visited by officials, parents, community leaders frequently and regularly.
 - Provide academic strengthening through remedial teaching by providing practice work on hard spots identified by teachers.
- These activity based programmes are proving extremely beneficial and contributing immensely to the rehabilitation and overall development of CWSN.



Using Activity Based Learning for CWSN in Tamil Nadu

Introduction

Education has taken a giant leap from rote memory to self-learning. This has been facilitated through Activity Based Learning (ABL), which is a new methodology to address gaps in primary education. This methodology targets student of standard I to IV by transforming the classroom environment and learning dynamics, by making the child the centre of his/her academic world.

ABL methodology is a ground breaking effort in making learning fun, quality oriented and child centered. It can also be replicated easily. Text books were broken down into activities, learning materials were colour coded and arranged in ladders, exam patterns were eliminated and achievement chart maintained for the whole class. This resulted in a remarkable improvement in the academic performance of students and also improved their attendance.

The essential features of ABL in comparison to the conventional teaching method are listed below:

| Conventional Method | ABL Method |
|-------------------------------------|--|
| Children learn from teacher | Children learn from each other |
| No activities used | Activities main medium of instruction |
| Teacher centered | Child centered |
| No peer group learning | Peer group learning is the backbone of ABL |
| Black board mainly used by teachers | Children also use black board |
| Exams were conducted regularly | No exams in ABL |
| No TLM | Lots of TLM is used |

The introduction of ABL method in Tamil Nadu is a great leap towards fulfilling the ideas of our Constitution in bringing quality education to the underprivileged class of our society. Equality of educational opportunity is no more a dream.

The bold steps taken towards changing the outdated system of education has begun to show great acceptance among the masses. Education which was rather a stress has now really become joyful in the ABL classrooms. Children's inborn nature of curiosity is tapped and their individuality is recognized. Their hidden talents are brought out through their creative work. Focus is shifted towards the development of intellectual capabilities rather than on rote memory. Rote memory testing has no place in this method of education. The child's innate passion for learning is encouraged by giving opportunities to engage in spontaneous, purposeful activities.

ABL system of learning not only simplifies the process of teaching and learning, but also makes it more logical and natural. Separate logos are assigned for each activity. These logos are distributed in the milestones. Each milestone has various steps. The initial milestone in each standard is termed as zero milestones. These zero milestones are basically to develop learning readiness in the children. A minimum of 10 days is spent to finish each milestone.

ABL offers solutions to two major problems: multi grade classes and inadequate staffing. It provides learning material for several children to work upon, while the teacher is busy with one group. ABL appears to be a system where the teacher can facilitate learning, without dominating the classroom or intimidating the children. Since the child learns in a self-directed way with the help of the systematic materials provided, teacher's absence or occasional unavailability of teacher is also tackled partially.

Advantages of ABL

ABL is a child (student) centered methodology that gives quality education and also enables him/her to develop his/her social understanding and self confidence.

Class Environment

Classroom atmosphere is made very stimulating with cards and ladders. Permanent shelves with trays for proper



arrangement of cards, kambi pandal for displaying the creations of young buds, low level blackboards, achievement charts, weather chart, health chart, self-attendance chart, child tracking register, rolling mats for comfortable seating, maths kit for strengthening numerical ability and workbooks all form an essential part of the ABL exercises.

Space for Creativity

ABL plays a vital role in bringing out the creativity of the children. Children develop their own stories. Their artistic skill has paved a way for this creativity in drawing. Drama enables them to cultivate imagination and enhances their ability to speak clearly.

Salient Features of ABL

Orderliness

Keeping bags in order gives the children organization capacity. Cards are arranged in proper order in the appropriate trays which improves self responsibility. Placing the group cards on mats before assembly motivates the children for the preparation of their daily routine. Keeping the card in its place after completion of the activity inculcates discipline.

Wire pandal is the display of the students' performance in the classroom. The display of their performances induces and promotes interests in studies. It stimulates latent talents and also becomes self-inspirational. This process show cases the creativity and originality of the children.

Self Cleanliness and Weather Report

The health chart keeps the children neat and tidy which in

turn makes the children aware of health and hygiene. It regulates bathing, combing, washing, nail cutting and hair cutting, etc. It also improves sanitation. Knowledge about weather and climatic condition is improved through the weather chart. It improves aesthetic sense and gives them knowledge about the beauty of nature.

Grouping

In ABL, child to child learning is promoted through co-operative learning and collaborative activities. Team spirit, sympathy, empathy, mutual understanding, endurance, social adaptability, tolerance, adjustment, service, etc. are inculcated in the children.

Ladder Approach

This approach kindles enthusiasm among the children. Step by step, sequential order and decorum are learnt indirectly. It makes the children understand where they are in the journey of learning.

Individual achievement of the children is portrayed in this chart. It's an indirect plan for effective classroom transaction of knowledge. It shows the efficiency of the class. It is the way of tracking each child's achievement and attainment of skills.

Individual File

Student's cumulative ability is recorded and filed. It's a mirror of children's attitude and achievement of activities. It is a treasure of performances and knowledge accorded.

No Exam

Continuous comprehensive evaluation is adhered. Self evaluation logos like catamaran, ship, eagle, dog, dotted beetles are used in various subjects for this purpose. Thus, there is no examination fear in the child.

Crowning

Every child is rewarded after completing few milestones in front of the peers. This in turn boosts self esteem and confidence. It indirectly acts as a stimulus for positive learning response.

Montessori Self Learning Maths Kits

This is a well designed kit consisting of 25 sets of addition, subtraction, multiplication and division device. Beads and small wood work patterns are assembled in the form of

numbers for developing interest in children regarding mathematical skills. Abacus is also one of its contents. Children find a special interest in learning maths through the kit box. It acts as a key to open the minds to maths.

Low level Board

By bringing the blackboard down from the level of the teacher to that of the child's and by increasing the blackboard space, two more learning aids have been created: a specific space for each child to write and a large space to read each others' exercises. Every child proudly owns a part of that blackboard.

ABL for CWSN

Inclusion is not just being physically in schools; it means that all children study, work, play and grow up together. The Sarva Shiksha Abhiyan program and plan for inclusive education is path-breaking. It has been a boon for all children who earlier had faced a barrier to schooling, particularly for children with disabilities. The number of children with disabilities in mainstream schools has been on the rise every year.

ABL is an innovative effort in developing knowledge, skills and positive attitude within the children with special needs. ABL classroom provides a child friendly environment for learning with necessary need based support services.

Under this ABL method, language cards and maths kits have immense utility in enhancing the teaching learning levels and in attracting the differently abled children towards the school. By doing so, ABL has attracted a large number of CWSN to schools. It is a process towards access,



participation and achievement for all in education and that's what SSA-Tamil Nadu has successfully achieved in the past few years.

Towards the successful implementation of ABL concept for CWSNs and also to motivate the school teachers and special teachers towards to adapt the ABL methodology for CWSNs, a well equipped training was conducted.

In the District/Block levels training programmes, the logos were segregated in accordance with the capacity of different disabilities. Following it, TLM was prepared for the respective logos. The TLMs were prepared keeping in mind the capacity of CWSN. These learning materials have their sound logical base to make the children to have deep involvement in enriching their abilities relating to the aspects of reading, writing and calculations.

The children with special needs are to be specially taken care of, as each child coming under the broad category of CWSN has a disability in some area. Each child has to be understood and guided and included in the activities of the classroom, based on his /her disability level.

The experience of the last two years in ABL with the disabled children covered under inclusive education is that the CWSN enjoy being in an ABL classroom. They feel free and active and show keen participation in the ABL activities. They like to sit in groups with other children and read; they write on the low- level blackboard by using chalk piece and even interact with the teacher and peers.

The pictures in the ABL cards are very effective with the disabled children. They learn a lot from looking at the pictures than by explanation. The same ABL cards can be modified and made specific for different categories of disability, along with the required TLM.

Activity Based Learning provides lots of opportunity for the different kinds of CWSNs.

Visually Impaired

Colorful ABL cards are very helpful for the low vision children. These cards increase the rapid recognition. Various TLM related to the ABL cards are prepared for these children. Bold letters are used in the ABL cards. The letters used are written in attractive colors. Tactile flash cards are used for these children. Beads are used for these children for introducing basic arithmetic skills.

Yogeswaran is a low vision child studying in V STD, but is class-II ladder. When he joined the school, he studied using the conventional method. He found it very difficult to learn. But after the introduction of ABL cards, the result of the child is very satisfactory. ABL cards are colorful and in bold letters. So, he found it very effective and helpful to learn through cards. Apart from this, Yogeswaran uses Maths kit for doing simple sums. Hence, ABL has been very fruitful for him.

The initiative by SSA Tamil Nadu and Vidya Sagar, a reputed NGO in Chennai aims at making learning materials accessible to all. This means that either existing materials could be augmented or new materials could be created to suit the needs of all children. For instance, a child who is totally blind will benefit from tactile and textured pictures to understand concepts, while Braille script will ensure reading. A child with low vision will need color contrasts to enhance the pictures and materials. These materials will be multi-sensory and it is a well established fact that early learning is best, if done through multisensory inputs.

In Tamil Nadu, SSA has pioneered graded reading books. These have been authored and illustrated by the teachers of the various schools in the state. These books are relevant to local culture and have a simple, child-friendly language. While these books are already attractive to all children, the idea is to make them appealing and accessible to children with disability as well. This concept also enhances learning through multi sensorial experiences.

These books have kits which contain objects and toys mentioned in the books. Since the books are augmented, all students can use them together (both disabled and non disabled). The materials in the kit gives them an opportunity to do the activities together.

Hearing Impaired

Teaching a hearing impaired child can be made more effective with the help of various teaching materials. ABL cards play a vital role for these children. The activities given in the

ABL cards are illustrated in the form of pictures. A model of puppet show with speech balloon is demonstrated for story telling, direct activities and for places of visit.

Mentally Retarded

The main objective of teaching mentally retarded child is to develop his/her adaptation level. This is done with the help of TLM like flash cards, pictures, concrete materials, visual aids, tactile material models, real objects and multimedia CDs. These are developed keeping in mind the ABL cards that are to be used by these children. Through health chart the children are given training to be neat and tidy. Rhymes from the ABL cards are recorded in CDs. These CDs are played for the children and by listening to the rhymes, children start reading these rhymes. Everything is taught to these children in small steps in a sequential order, which is a very essential part of the ABL method.

Meena is a MR Child who finds ABL cards quite helpful for her to read and write. Although she is studying in 3rd standard, she is in 1st standard ladder. At the initial stage she didn't mingle with other children. Now there is great change in her due to the peer grouping nature of ABL. She is interested in writing and in saying rhymes. After using ABL cards, she now writes numbers from 1 to 50 and also writes Tamil and English alphabets correctly. She also writes simple words in Tamil and English. She is able to say stories and rhymes from the ABL cards. She enjoys using ABL cards instead of books.

Orthopaedically Impaired Children

Mobility is the major problem for this group of children. With the help of the peer group, this child can actively participate in the class. The peer group helps the child to take the ABL cards and read. The teachers as well as the peer group guide the child in doing various activities in connection with the ABL cards they read.

Success stories in ABL Class Room

Sivanesh is a boy with Autism studying in 3rd standard in PUPS M.N.G Street. Initially he didn't respond well in





Palani Mareeswaran is a boy with multiple disability studying in class-II in PUPS, Vadakkū Seval, a remote village of Tutikurin district. His father is a palm tree climber and mother a jaggery maker. He was found lying down under the palm tree when his parents were at work. He used to greet the Head Mistress of the nearby school, when she went to school everyday. When she asked him if he was interested in coming to school, he readily agreed. Palani's mother carries him to school daily. His peer group helps him in his daily activities. He is given physiotherapy training in daily living skills by the IE special teacher. He is very much interested in ABL methodology. He is now able to write Padam, Pattam, Kappal etc. He is also able to paint and colour pictures and can count numbers up to 100. He comes to school regularly without fail.

the conventional class. But after the arrival of Activity Based Learning Cards, he was quite happy to read the lessons. This is due to the colorful ABL cards. After the introduction of ABL cards his knowledge and skill developed. He is able to read the news paper fluently now. He does the activities given in the card happily. He writes the words dictated correctly. He does addition, subtraction and multiplication quickly. He also recites Aathichudi and Thirukural fluently. His current level in the ladders in various subjects (given below) shows a remarkable change in his studies.

| Subject | Ladder | Milestone |
|----------------|--------|-----------|
| Tamil | 3 | 10 |
| English | 2 | 8 |
| Maths | 3 | 7 |
| Science | 3 | 8 |
| Social Science | 3 | 7 |

A tremendous development is found in Sivanesh's education.

Astonishing Achievement of SAJU through ABL

Blessing Saju, a 8 years old is studying in class-III in Govt. Primary School of Muttaikkadu village in Thuckalay Block in Kanyakumari District. By birth he is not having both the hands from the upper arm level. His father is a coolie and mother is a housewife. He lives with his parents and three elder brothers in his native village. Saju faced a lot of hurdles even for his daily basic activities. Through SSA- Inclusive Education he was enrolled in the Govt. Primary School Muttaikkadu and since then his confidence level to learn with the other normal students has increased.

The teacher moulded him to do his basic activities using his legs within the class room and the same is reinforced by his family members. Day by day he is improving in all activities. His special teachers frequently visit his school to assist and guide the general teacher to handle Saju in the class room.

Now he is able to pick ABL cards by his legs from the trays and also studies in groups. He can write and draw using his leg in his note books. Also he is able to eat from his plate by his right leg without spilling.

The ABL classroom infrastructure is very useful for Saju



as he writes in the low level black board with his leg. At present he has overcome almost all the hurdles to actively participate in the learning process of ABL classroom.

CWSNs in Conventional Class & ABL Class

- In conventional class children learn only from teachers and no activities are found in the classroom. But in ABL, activities make children to learn enthusiastically. Activities have more to do with what the children like to do.
- Conventional class is teacher-centered, but ABL classroom is child centered.
- In conventional class peer group involvement is not there, but in ABL class the normal child helps the child with special need.
- Conventional class does not involve children in group activities. But ABL classroom involves children in group activities which in turn helps them to develop team spirit and a sense of adjustment.
- In conventional class blackboard was used only by teachers. In ABL class the children have freedom to use blackboard.

- In conventional class exams were conducted, but in ABL class no exam. So, the CWSN do not have the fear of exams.
- In conventional class there is no self attendance, weather chart and health chart. But in an ABL classroom all these are present. The CWSNs mark their own attendance and tell about the weather. They also know how to keep them clean and healthy.

ABL gives not only education but also increases discipline, concentration power, helping tendency, self confidence and esteem of the CWSNs.

Conclusion

This new methodology has been the result of the co-operation of parents, teachers and community. Peer tutoring, co-operative learning, field visits, multi sensory approach and hands on experience are the various techniques adopted in ABL for CWSN. With ABL cards the CWSN are learning effectively. In ABL methodology, disability is not a barrier for CWSN. In fact the potential and the capabilities of the CWSNs are enhanced.





Class Room Practices for Low Vision Children

*Ms. Kinnari**

For any student to perform at his or her optimal level, it is essential to have a appropriate environment, the necessary skills, and supportive devices. Children with low vision are generally subjected to the same rules and regulations as sighted students. However, students with visual impairment may have problems in their academic pursuits unless the environment is favorable and tailored to meet their individual requirements. In India, primary education is now a Fundamental Right of every child. Low vision is recognized as a disability in the Person with Disability Act, 1995. As per the Act, providing free education till the age of 18, in a conducive and appropriate environment is the responsibility of the appropriate Government. Hence, we have to modify our schools and teaching techniques to provide education to all such children. It is important to provide a environment, which gives flexibility and opportunities for optimal use of their knowledge and talent. To do so, we need to modify the

present environment in schools to meet the special needs of low vision children. The main concern of educationists should be to provide a conducive environment to such students, so that despite their limitations, they can perform to the best of their abilities, improve the quality of life, and become happy, contributing members of society.

There are some basic aspects which need to be integrated in the school and class room for motivating children with low vision to participate effectively in class room activities. This will help, both the student and the teacher, for improving teaching learning procedures. The followings are the basic steps to include help low vision children in class room activities:

1. **Orientation of Class Room Teachers**

It is essential to orient the class room teachers in a basic understanding of different disabilities. The teacher

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Mahesh, a student of class three, was not performing up to the mark in school. He was being taught Braille but was not picking it up fast. He was labelled as a dull, slow learning student by the teacher and he was losing interest in study. One day, his class teacher punished him and made him stand out of the class for not paying attention in the class room. During this time, surprisingly, another teacher of the school found him playing with a bright colored ball. Teacher was surprised to see the child running behind the ball. Ultimately, the child was taken to an Ophthalmologist and was diagnosed as having low vision. Mahesh was not totally blind. He had a residual vision, which can be used for mobility, reading and writing, provided he used low vision devices. In most schools and special institutes, we treat low vision children as blind. We force them to learn Braille in a dark room and do not understand their special needs. Hence, they do not perform well in the class room.



should be aware of the implications, educational constraints and specific needs of children with disability. The teacher should be well informed and aware about the role of teacher in the education of such children. As far as the education of children with low vision is concerned, the teacher should be aware of the following:

- Understanding of low vision and its implications.
- Various types of low vision.
- Different magnifying devices - spectacle magnifiers, hand magnifiers, eliminated magnifiers, stand magnifiers, sheet magnifiers, pen magnifiers, dome magnifiers, dictionary magnifiers, and different telescope for the distance vision.
- Various electronic magnifying devices like close circuit television and various computer softwares, available for available magnification.
- Usage of the devices.
- Specific needs of the child like appropriate postures, sitting position, light arrangement, necessary font size, etc.

- Curriculum and extra support for children with low vision.

Training in these aspects will help the teacher to create a conducive and accessible environment in the class room. It will enable the teacher to address the issues of children with low vision in regular class room settings.

2. Functional Assessment of the Child

Functional assessment is highly recommended for each and every child with a visual impairment. Functional assessment is a procedure, conducted by a trained teacher/rehabilitation professional, and it includes various activities like tracking, moving, discriminating, identifying, locating, and comparing different objects. Through this assessment, one can decide the extent of vision, need for necessary magnifying and adaptive devices, requisite font size and light arrangements for the child. Based on this assessment, students with low vision should be counselled as to how to make the maximum use of their residual vision. Their visual functioning can be optimized by providing suitable low vision devices according to their day-to-day



requirements. The environment should be modified to have proper light, suitable nature of contrast and use of proper types of colors based upon the assessment of individual children.

3. Class Room Environment

Here are some suggestions for teachers to enable them to provide a better environment in class for children with low vision.

Environmental Modifications

A student with low vision generally requires modification of the environment in terms of lighting, color and contrast, posture, sitting position and working distance and time and speed.

3.1 Light Arrangement

Some students with visual impairment prefer to work under dim light conditions as they cannot tolerate bright light, while others require brighter illumination. Here are some suggestions for students who require bright illumination:

- The light should be uniform throughout the room.

- An adjustment lamp can be positioned to facilitate reading and writing activities.
- The child should be seated near the window where there is more light.

For students who prefer to work with dim illumination, the suggestions are:

- The seating position should be away from the window.
- A cap and sunglasses must be used while in the sun, like while being at the playground.
- Use of curtains on windows to avoid glare on the blackboard or on the student's face.

3.2 Color and Contrast

Some children with low vision also have color vision problems and may require a high contrast environment to perform to the best of their abilities. Some solutions recommended, for such situations, are:

- Bright contrast reading material.
- Use of thick white chalk on the black board.





- Use of a bold line note book for writing.
- Tactile clues, patterns, and prints for color blind students while doing map work.

3.3 Posture, Position and Working Distance

- Allow students to sit or stand at a distance of one meter during any demonstration using visual material.
- Arrange the material or books in a logical way so that they can be located easily.
- Allow students to move the book or their heads for more comfortable viewing. Students can choose close working distance to read, write, and copy.
- Provide suitable furniture to students to enable them to make best use of low vision devices.

Students may be allowed to watch television and computer screens from a close distance.

3.4 Time and Speed Factors

- Adequate time must be given to students for use of optical and non-optical devices.

- Make allowances for eye fatigue and scanning ability.
- Give extra time to such students complete the examination.
- Keep in mind their different reading and writing speeds.

3.5 Size of Lettering

- Use large and bold print.
- Allow the child to read and write using a large font.
- Do not change the font style in a document.
- Remember that double spaced sentences are easier to read.

3.6 Other Considerations

- Allow the students to use the study material before, during and after the lecture and demonstrations.
- Read aloud as much as possible while writing on the blackboard.
- Encourage the student to use prescribed low vision devices.

- Give students, in advance, a list of the assignments and teacher's notes.
- Use quiet periods of time (for example, while showing an educational movie) to say some extra words of explanation to these students, or assign a classmate as a commentator.

3.7 Large Print

All children with low vision may not require large print material. Standard classroom material, until class two, makes use of primary size type, which is usually large enough for low vision children. By class-III, it may be advisable to enlarge the font.

3.8 Optical and Non-optical Devices

There are a large number of low vision devices available to enable children to see and function better. These include magnifiers, like a spectacle magnifier, hand magnifier, pocket magnifier, and stand magnifier for near vision, and telescopes for distance vision. Majority of the children do not require near vision devices as they have good accommodation for reading and writing. But they usually require telescopes for distance vision. Instructions about close working distance and/or approach magnification will also help them to read more easily.

Non-optical devices do not require lenses but help improve viewing conditions through better lighting and improved contrast. Some non-optical devices are :

- Reading stand - it helps to maintain a suitable working distance for optical devices and for maintaining a comfortable posture.

- Overhead reading lamp - it improves contrast and provides focussed illumination.
- Felt tip pen, black ink pen or soft lead pencil improves the contrast effect.
- Bold line notebook / helps children to write in a straight line. Cap / helps to avoid glare for the child.

3.9 Electronic Devices

Closed circuit television may help students to read charts, graphs, picture, and text. When using a CCTV, try and reverse polarity (white letters on black back ground) for improving the contrast.

3.10 Computer Software

While using computer software, the complete screen is available for modification. children who are unable to read normal print, can scan the material and use the magnification option on the computer according to their individual needs for reading.

Conclusion

All these devices can make a substantial, positive impact on the educational process and social integration of children with low vision. The key factors for effective inclusion of children with low vision into regular schools needed a specialized eye examination, a clinical low vision examination, professional rehabilitation support and guidance to the child, parents and teachers regarding use of suitable devices and making appropriate environmental modifications.

A few simple efforts on part of the educators can make the learning process meaningful and enjoyable for low vision children.



Teaching Children with Hearing Problems

Dr. L. Govinda Rao*



Introduction

Education means more than just learning of academic skills. If children are helped to feel more confident about themselves, then they will be in a stronger position to be able to cope with the inevitable stresses of life. It is on the teacher and the parents to help children develop and build upon understandings, skills, knowledge and attitudes, which are the essential elements of the educational process and which they can use as adults. Learning for young children is a social activity where new skills and understandings are gained through interaction with both adults and peers. Responsibilities and decision-making are everyday experiences for children and they need to develop attitude and skills, which enable them to participate fully in their own social world.

In the pre-primary and the first two primary classes, teaching of skills have been broken down into 10 skills groups:

- Visual
- Listening
- Language and reading
- Manipulative
- Self-help and social and emotional developments
- Early mathematical concepts
- Time
- Position and direction
- Texture
- Colour

Education of the hearing impaired children poses unique problems because they do not possess the essential tools namely language and speech through which education takes place. However, they do have the normal intellectual and emotional potential. Hence, special efforts should be made

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to give the hearing impaired child basic functional language and speech skills to prepare him/her for the formal education in school. Unless this is done, the child will not be school-ready.

Classification of Hearing Impairment for Educational Purposes

A hearing-impaired child is educationally and socially deaf when s/he cannot understand conversation and speech in most situations and the onset of a hearing loss is pre-lingual or early in life. Deafness has a degree; some children are stone deaf, who just cannot hear anything while others can have a varying degree of ability to hear sounds. Fortunately most of the hearing-impaired children come under the second category, i.e. they have some residual hearing, which can be made use of through hearing aids and through special training to teach them language and speech.

The chronology/ age of onset of hearing impairment is of great importance for education. Hearing impairment from birth before language and speech patterns are established, create many difficulties in the acquisition of linguistic communication skills. These hearing-impaired children are referred to as prelingually deaf. They can develop language only with very special training methods and consistent use of suitable hearing aids and unless this is done, they should not be placed directly in to regular schools. Their speech is greatly disadvantaged compared to persons post-lingually deafened at one year or later. Other factors being equal, earlier the onset, greater the handicap.

Although nearly every hearing-impaired child has some residual hearing which, with amplification, can be of some use not every person wearing a hearing aid can understand what you are saying. Hearing aids amplify background noise as well as voice and unlike glasses, they do not have completely corrective power. Yet another type of classification can be relevant for educational and audio logical purposes. That is the degree of hearing loss like mild, moderate, severe and profound. Children with mild and moderate hearing loss will be able to manage in regular schools with some help like use of appropriate hearing aid and seating arrangement in front in the class.

Identification / Testing of Hearing Impairment

A checklist to identify hearing-impaired children on the basis of behavioural characteristics is given below:

Identification Checklist based on Behavioural Characteristics

| Hearing | Yes | No |
|---|-----|----|
| Does the child have problems paying attention in class? | | |
| Does the child favour one ear for listening purposes? | | |
| Does the child have problems to hear when you speak to him from behind? | | |
| Do you think that the child speaks too loudly or too softly? | | |
| Does the child exhibit voice problem & mispronunciation? | | |
| Does the child tune the TV/Radio too loud? | | |
| Does the child answer your questions irrelevantly? | | |
| Does the child keep away from his age mates? | | |
| Is the child unable to respond when you call from the other room? | | |
| Does the child understand only after few repetitions? | | |

Pre-school Training

- If a child is even moderately hearing-impaired, he/she will need special assistance in developing speech and language. Breath control is of great importance in developing the ability to speak. Therefore, the child is often taught to blow a candle.
- The child with hearing impairment watches the lip movements. Different vowels and consonants produce different patterns of lip movements.

To ensure that the child has a good look at your lips:

- Always speak to him/her in front in good lighting
- Never say anything to him/her behind his/her back
- Speak in simple and clearly spoken words
- Let your words try to build an association between what you say and the objects to which you are referring
- Encourage the child to produce different vowels and consonants



- Do not stop the child if s/he uses his/her own gestures.
- Use of sign language is another mode of communicating with a hearing-impaired child.
- Encourage the child to place his/her finger on your throat when you speak. This will give him an opportunity to understand speech through vibrations and by looking at your lips. The various methods used to teach speech and language to hearing impaired children are collectively known as total communication.
- The comprehension of lip movements can be tested when the child is asked to give an object and the parent watches whether the child is giving the right object.
- Besides the child is encouraged to pronounce the names of the objects he/she is giving. In this way, the process of speech therapy is conducted.

When a child enters a primary school, s/he cannot be effective in a group situation without some ability to communicate. Therefore, it is important that all the methods indicated above should be extensively used to prepare the child for coming to the regular school. This may mean hard work for both the

parents and the teachers, but rewards in the child's development will more than counterbalance the effort involved.

Teaching Strategies

Facilitating communication & enhancing language development for hearing impairment

The speech therapist will teach the student to use the oral-aural method and sign language method for communication. The oral-aural method involves the use of hearing aids, producing speech and speech reading (lip reading). Sign language systems can use both finger spelling (using hands and finger to represent individual letter) and language signs (using hands, fingers, and arms to form whole words or phrases). The teacher/parent may need to know some basic signs and the speech pattern of the child with hearing impairment. The teacher, parents and speech therapist can assist in this.

Most students with hearing handicaps use a more limited range of textbooks as they find it difficult to understand word forms, phrases and sentence structures. This of course, leads





to deficits in academic performance and poor grammatical speech. Therefore, it is necessary to improve their language.

Vocabulary can be built up by

- Constantly providing new words
- Using the newly learnt words in many situations
- Writing the word down
- New vocabulary should be introduced only if it serves the purpose of increasing communication abilities, solving problems or comprehending questions.

The order of words in a sentence (syntax) and its meaning can be illustrated with many examples both written and spoken. For example:

“The cat ran after the mouse”

“The mouse ran away from the cat”

“The cat chased the mouse”.

All the sentences have the same meaning, but the order of words and the words used differ. Verbal examples should precede written examples. An increase in vocabulary and better syntax generally helps a child to use language

effectively. But, very often, the student with hearing impairment becomes a receiver of language rather than initiator. So, s/he must be given direct opportunities to ask questions, give directions, carry messages to others and provide information.

There are sound psychological reasons why a child’s visual sense should be exploited to the fullest, while he/she is being taught. It is well known that of the five senses, sight is by far the most important in learning for most people. In the case of children with serious hearing deficiencies, the use of visual aids is clearly of critical importance. There should be a well-equipped science laboratory in the school / classroom.

Models of/Approaches to Communications

Acoupaedics/ Aural: This is a mode which emphasis on listening skills without stressing speech reading. The hearing-impaired child receives languages only trough listening and is encouraged to speak. For this to occur, it is important that hearing impairment is diagnosed early and the young hearing-impaired child is fitted with appropriate hearing aids.

Speech – reading/ oral: This is an art of understanding the speaker by closely observing his/her facial expressions

and lip movements. The hearing-impaired children, through this, are exposed to speech through the daily activities at home and at school by means of which they learn to watch the face of the speaker, speech-read by means of situational guidance and lastly speech reading without contextual guidance.

Aural-oral: The children are encouraged to listen and speech-read, and express themselves through speech. No gestures or signs are used along with speech. Speech reading is aided with hearing aids.

Gestures and signs: These are used only for some key words. It uses hands, face and arms to communicate words, feelings and ideas. They do not help in exposure to complete language and do not help the child to acquire language. Hence, use of gestures and signs should be discouraged.

Finger-spelling: It consists one-handed or two handed manual alphabets and conventional signs with a fixed position of fingers or hands for each letter of the alphabet.

Simultaneous approach: It is a very systematic effort to present spoken language to the child along with speech. In this approach, each word and word part is signed along with speech and the child is encouraged to do the same. It is

believed that this reduces the anxiety and stress experienced by the hearing impaired child.

Total communication: The philosophy of total communication is the use of all forms of communication available to develop language competence. This includes child devised gestures, speech, signs, finger spelling, speech reading, use of residual hearing, reading and writing. It is a philosophy incorporating the appropriate use of the aural, manual and oral modes of communication in order to ensure effective communication with and among hearing impaired persons/ children.

Cued speech: This system consists of 8 hand shapes placed in 4 positions around the face. It is a simple system of hand cues placed around the mouth to supplement lip reading, making oral language visually clear to the hearing-impaired child. According to the promoters, it is phonetically based. The different hand cues indicate the differences between many sounds, which are invisible or look identical to other sounds on the lips.

Hearing Aid

The basic equipment used by a hearing-impaired child is a hearing aid. It is a device that amplifies sound many times to



enable a hearing-impaired child to hear words or phrases fully or partially. A hearing aid picks up sound and makes it louder. However, it does not make it clearer as all sounds are amplified equally – background noise as well as conversation. The hearing impaired child has to learn which sounds are important and which are to be ignored. In order to do this efficiently, he/she has to be trained to use his/her hearing aid and to develop his “listening” skills through Auditory Training. This means interpretation of words and separation of meaningful words from ambient noises.

A hearing aid does not cure hearing impairment. But if used well, it does help the child to utilise his/her residual hearing to receive environmental sounds and the sounds of spoken language and to monitor his/her own voice.

The ear mould is a very important component as it links the hearing aid with the user. Each child’s ear has a different shape and size and the ear mould should be made individually to fit perfectly. The fitting ear moulds distort the amplified sound and produce a sharp, whistling sound. This causes discomfort to the user and reduces the efficiency of the hearing aid.

Pleasant sounds should be presented through the aid such as music, mother singing or talking naturally while she plays or works with her child. The speaker should speak in a moderate voice, close to the hearing aid.

Use and Maintenance of Hearing Aids

Initially, the aid should be worn for a short time. The time should be increased gradually until the child keeps it on for the whole day except during his/her bath or when asleep. Children often pull out the receiver of the body-worn or the entire post-worn or the entire post-aural aid. Parents should not get angry or excited, and replace the receiver gently, but firmly every time.

A piece of band-aid across the receiver of a body-worn aid will prevent it from falling out and also discourage the child from pulling it out. To prevent a post-aural aid from falling off, a strong string tied near the plastic tubing of the aid, can be pinned to the child’s shirt or dress.

The hearing aid is a sensitive, delicate and expensive device,

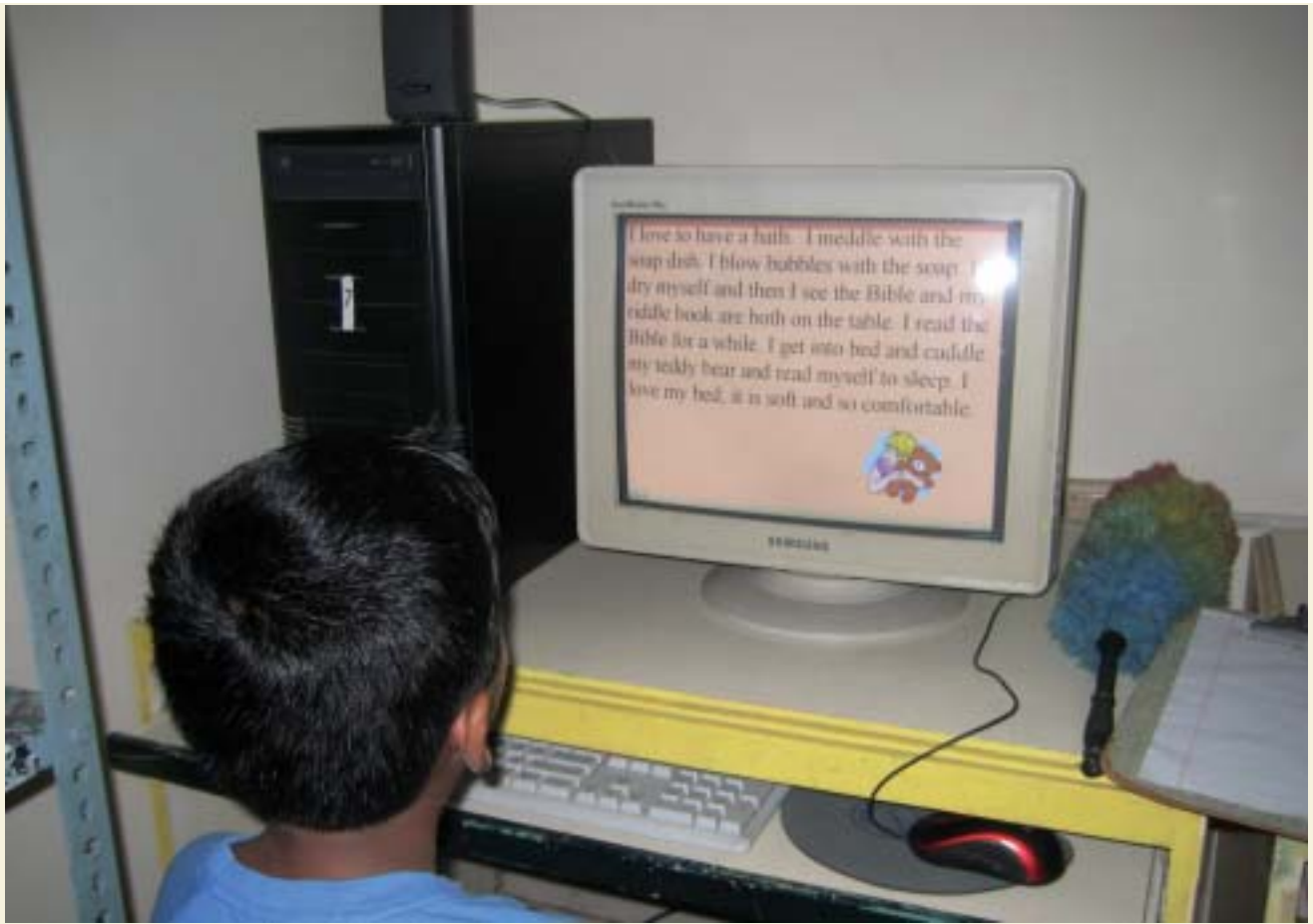
which needs careful handling. This will ensure longer hours of optimal listening conditions for the child. For this:

- Do a check every morning.
- See that the volume is OFF.
- The M-T switch should be set on ‘M’ (microphone). The setting should be on ‘T’ (telephone) only when the child is talking on the telephone.
- The tone setting (HLN) set by the audiologist should not be changed.
- Switch on the hearing aid and turn on the volume. It is useful to have your own ear mould. Remove the child’s ear mould off the receiver, and listen through your one. Whisper a few words. Be sure that the sound is clear. The daily listening check helps to know whether the hearing aid is in perfect working order sounds like and detect any changes.
- If there is no sound, check the ON-OFF switch before changing the battery.
- Change the battery if the amplification seems inadequate at the child’s volume setting.
- Check the cord connections at the hearing and receiver ends and see if the cord is frayed or split, if there is any scratchy sounds or intermittency.
- Check the ear mould receiver connections and fitting, if there is a whistling sound
- Look for cracks on the ear mould and casing of the hearing aid.
- Ensure that the microphone is not clogged and that the ear moulds are clean.

Conclusion

The education of children with severe hearing impairment, particularly, children who are pre-lingual, calls for special competencies from the teachers and parents. Both the teacher and the parent or the primary care-giver should be well trained and should have a variety of skills as well as an understanding attitude towards the hearing-impaired child. A good teacher and a parent can make all the difference in the success of hearing-impaired children.





Teaching Gifted Children

*Dr. Anupriya Chadha**

A gifted child is one who has an exceptional ability to learn. According to some widely adopted definitions, at least 15% to 20% of children may be identified as gifted or exceptionally able learners. "Gifted...children are those who by virtue of their outstanding abilities are capable of high performance. These are children who require differentiated educational programs in order to realize their contribution to self and society."

Giftedness in young children refers primarily to "precocity," a rapid rate of development in one or more realms. To some people, giftedness is purely academic and means, for example, that a child earns all A's on report cards. That child may be gifted, along with the children who, at age 3, can count to 100 or read a book.

But giftedness is more than developing skills faster or going through the developmental milestones earlier. Young gifted children are intensely curious, produce a constant stream of questions, learn quickly and remember easily, and think about

the world differently than their age-mates. They may have a super-high energy level. Young gifted children are at risk for boredom, frustration, and depression. Recognizing giftedness is important because to persist, giftedness needs nurturing.

Identifying Giftedness

The most effective way to recognize and identify giftedness is to use a variety of approaches over an extended period of time. Physical, social, and cognitive development is rapid and variable in young children. Cognitive and motor skills come suddenly: one moment the skill is not observable and then it suddenly appears. For this reason, testing may work at one time and not at another. A more complete picture of giftedness in young gifted children would involve observations of behavior and verbal ability in different classroom settings, anecdotal information from parents, and child products (art work, diagrams, stories-written or told).

One way to begin finding gifted children is to focus on a

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range of behaviors that occur in the daily conversations, activities, and responses to learning opportunities in and around the classroom. Here is a list of characteristics common in gifted young children:

- Express curiosity about many things
- Ask thoughtful questions
- Have extensive vocabularies and use complex sentence structure
- Are able to express themselves well
- Solve problems in unique ways
- Have good memories
- Exhibit unusual talent in art, music, or creative dramatics
- Exhibit especially original imaginations
- Use previously learned things in new contexts
- Are unusually able to order things in logical sequence
- Discuss and elaborate on ideas
- Are fast learners
- Desire to work independently and take initiative
- Exhibit wit and humor
- Have sustained attention spans and are willing to persist on challenging tasks
- Are very observant
- Show talent in making up stories and telling them
- Are interested in reading.

Helping the Gifted Child

The following three factors emerge regarding the gifted children:

- Gifted children are a diverse and frequently stubborn group, who sometimes use their intelligence to avoid being seen as intelligent.
- They are competitive and enjoy being best in the fields they feel confident about. However, they are reluctant to try new things for fear of failure.
- They may resent being in classrooms where gifted students have to do more work, rather than different work.

Professor Howard Gardner gives us at least seven very encompassing categories in which a child may be gifted.

Linguistic. This means a child is very verbal and excels at reading and writing.

Logical-mathematical. This area involves the ability to see patterns and relationships; these children enjoy games of strategy and experiments.

Bodily-kinesthetic. These children are athletic, have good motor coordination and enjoy being active.

Spatial. This type of giftedness appears in those good at puzzles, drawing, building and thinking in images.

Musical. These children are discriminating listeners and enjoy singing, drumming and keeping rhythm.

Interpersonal. These learners become leaders. They communicate well, understand the way others feel and are not embarrassed to take charge.

Intrapersonal. These gifted traits are revealed in shy, but motivated children.

The following techniques help a gifted child in the classroom:

Portfolios

Portfolios present an option for a talent search in the classroom. A portfolio is a collection of products (e.g., assignments, paintings, drawings, stories, observations) from school and home. It is a repository of what a child has done or can do. Categories of achievement and ability could include any of the following: use of language; level of questioning; problem-solving strategies; depth of information; breadth of information; creativity; focus on or absorption in a task;





profound interest in existential and spiritual questions; self-evaluation; preference for complexity or novelty; ability to synthesize, interpret, and imagine. Portfolios provide authentic assessment. Conducted over an extended period of time, such evidence is valuable in determining instructional plans. Both parents and teachers may use portfolios to identify talent and document its development over time.

Create a Stimulating Learning Environment

One of the first steps to consider when meeting the needs of young gifted students is the classroom environment. The classroom needs to be a place where all children can easily engage in activities and projects at their own level and pace. Here are some suggestions for designing a gifted child-friendly classroom:

- Create a room that invites inquiry (pictures, books, areas for music, art, and a variety of materials);
- Use thematic instruction to connect content areas;
- Make a wide range of materials available;
- Arrange for activity centers for self-initiated projects;
- Have flexible seating arrangements;
- Offer attractive, lesson-related activity options for students who finish work early;
- Vary the atmosphere of the room through music as well as opportunities for creative movement, mime, dance, singing.

Developing learning centers can support creative learning in the classroom environment. A linguistic center, for example, could have a variety of books, dictionaries, magazines, storybook character puppets, magnetic letters with boards, crossword puzzles, alphabet games, and computer software for word processing and story writing.

Allow for Flexible Grouping

Group work is common in preschool through the primary classes. For gifted students, cluster groups, where four or five gifted children work together, provide the most productive situation for learning. Grouping young children should always enhance the strengths students have, and the kinds of groups formed (structured, open, creative, divergent, content-based, etc.) should emerge from learning goals established for each classroom activity. Here are some guidelines for organizing small groups:

- Provide variety. Offer opportunities for children to work with a variety of students grouped differently (interests, complexity level of assignments, motivation).
- Offer choices. Whenever possible, allow children to choose group mates and topics and assist in designing projects and their format.
- Create ground rules. Discuss ground rules with children. Rules for discussion may include: if you can't agree on what to do, try more than one idea; take turns sharing ideas; listen to others in your group; make your best effort; help each other; if you don't understand or agree,



talk about it with your group; get the teacher’s help if you need it.

- Evaluate students individually. At the conclusion of group work, it is important to evaluate them individually. Evaluations (mastery tests, portfolios, checklists, oral responses, drawings, written compositions, etc.) should focus on individual learning rather than on how students contributed to the group.
- Compact the curriculum. A proven strategy for serving young gifted children in the regular classroom is to compact— process the essentials so that they can advance beyond the material they have already mastered. Most teachers create a system of testing and observation to determine the children’s level of mastery. There are a couple of options for compacting. One is to allow gifted children to choose activities (unrelated to material covered in class) that particularly interest them. The other is to design an activity related to the current lesson that challenges their talents. In order for this practice to work in the long run, the teacher will need to design some kind of learning contract (signed by both the child and teacher) that stipulates the activities or projects chosen, the conditions for their completion, and the outcomes. The teacher can then help them locate resources both in learning centers and the library.
- Incorporate creative thinking. Another way to serve young gifted children in the regular classroom is to incorporate creative thinking and activities into daily

lessons— strategy that benefits the other students as well. Gifted children particularly enjoy “what if” questions to stimulate new and alternative ways of exploring a subject or theme. A study of the rainforest, for example, might allow a child with an interest in lizards to become a lizard for a day. “What if you really were a chameleon living in the rainforest? What would you enjoy most about being one? Why?” Activities could include gathering new facts about that animal for the purpose of a mimed story, a self-portrait (which the child then explains afterwards), or written (or dictated) story. Teachers can support these activities by asking questions and suggesting different resources for their imaginative exploration.

Brainstorming with gifted children on what kinds of projects they could do may also generate ideas teachers may never have thought of on their own. The point of the brainstorming is to teach children to think of the different things they can do with the information they have learned. What would they like to do with it? What else could they find out? How would they like to express what they know?

Activities could range (depending on the age and ability of the student) from map-making to naturalist studies of animal life, dramatic enactments, creative movement, art projects, and science experiments. This is where teachers’ understanding of their students’ unique strengths becomes vital in providing appropriate learning activities. A kindergarten class just beginning to explore numbers may

be very dull to an artistically gifted child who already knows how to count to 50 and recognizes these numbers by sight. A teacher who understands the child's talent could offer encouragement to undertake an art project involving the theme of numbers (e.g., drawing objects or animals in multiples, then counting them, making designs out of numbers, exploring the relationships between numbers through art, etc.). This integration of subject areas also makes learning possible in multiple directions and allows children to develop talents in different content areas.

Assessing and Documenting Development

Like identification, assessment should be ongoing. Teachers can use tests, class assignments, observations, informal interviews, consultations with parents, and portfolios to assess how the children are doing. However, they are only

meaningful if conducted repeatedly over time and within a variety of classroom activities and projects. In this way, teachers gain a more comprehensive understanding of their students' talents and can create further learning opportunities for their development.

Conclusion

Early identification and intervention are essential for the growth and development of young gifted children. Equipped with practical teaching strategies and creative resources, classroom teachers are in a unique position to advance their talents in a stimulating environment of original thinking and discovery. Sensitivity to the special needs of young gifted children can make a significant difference to their future development and happiness.



Classroom Practices For The Blind

*Dr. Swati Sanyal**

“Education must aim at giving the blind child knowledge of the realities around him, the confidence to cope with these realities, and accepted that he is recognized and accepted as an individual in his own right.” Berthold Lowenfeld

Blindness and visual impairment may give rise to some special educational needs but it needs to be emphasized that these children are primarily children. Like any other group of children, they also have multitude of interests, aspirations and abilities. Their educational needs are more like that of other children. They also need access to a full curriculum. To effectively instruct a blind student in the classroom, the teacher must be aware of certain characteristics of vision and the implication of loss of vision on a person.

The development and integration of the use of vision takes place at such an early stage in infancy and becomes so instinctive, that sighted people are generally unaware of its complexity and its central role in daily life. Vision has been characterized as the “driving force” in the early years of life. This is the period when key skills that govern development are laid down. The use of vision during the early years governs the way, and often the rate, at which a child acquires most of these skills.

Vision makes us aware of our immediate physical and social surroundings. With little or no sight the infant may be at a disadvantageous position in acquiring the knowledge about the environment. With the right kind of intervention programme, teaching methods and assistance a blind child can participate fully in his/her environment. But in order to effectively instruct a blind or a visually-impaired child in the classroom or elsewhere, a teacher must be aware of the differences in learning style of children with blindness or visual impairment. This style stems from their unique way of perceiving the world.

To have a better idea of the learning style of blind and visually-impaired students, let’s consider the following situation:



Think about entering a classroom. Within seconds a sighted child will know who is in the room, how the desks and chairs are arranged, where is the teacher’s table, where is an empty seat, who is sitting next and so on. In gaining all this information, s/he will utilize very little verbal information and almost no tactual information. Yet s/he is able to construct a complete understanding of the room, the interrelationships of the different objects in the scene. In absence of sight, a blind child would have to rely on auditory cues, verbal communication, or information gained from moving around and touching the objects kept in the room. By any of these methods s/he will have difficulty in constructing the entire scenes at one go because s/he does not have information about areas which are not within his/her direct contact.

It is evident from the above situation that visual acquisition of information is very rapid. Conversely, tactual and auditory methods can be time consuming and limited. When learning about something tactually, the proximity of the object along with the size of the object is important to be able to explore all parts of the object. When learning audibly, a student must have an accurate description to obtain a clear understanding.

Lowenfeld, a noted author in the field of visual impairment, stated that as a direct result of loss of vision blindness imposes

* Course Director – Blind Relief Association, New Delhi.



three basic limitations on an individual. These limitations are in the:

- Range and variety of experiences
- Ability to get about
- Interaction with the environment

In order to minimize these effects, he deduced a number of principles of special methods such as:

- Need for concrete experiences
- Need for unifying experiences
- Need for learning by doing

With these basic principles in mind, a few basic teaching guidelines could be developed and followed to create a productive learning environment for a blind student. These guidelines are a benefit to the class as a whole.

Basic Teaching Guidelines

Blind and visually-impaired students need verbal description of everything. This refers to reading and emphasizing what a teacher writes on the blackboard or s/he has in print on his/her paper. The teacher should also refer to everyone and everything by name or description rather than pointing or using vague terms, such as 'here' 'there', 'this', or 'that'. Whenever a teacher explains, make sure that s/he speaks clearly and distinctly to facilitate the students understanding and make them able to take down notes or read along etc.

Using real examples provides concrete reinforcement for blind

and visually-impaired students. Two dimensional representations and verbal descriptions do not convey as much information as real, three dimensional objects. It is best to provide the real objects whenever possible.

Concreteness in teaching is another major approach which can be achieved essentially in two ways: by having the blind students observe the object or situation itself, or by providing them with a model of the object. To aid the students to understand the interactions between objects and demonstrations all should be related to the experiences of the students.

The use of embossed pictures to give blind children an equivalent of visual illustrations are quite often tried out, but from experiences it is known that such embossed pictures can even result in wrong concepts. For instance when a picture of a four legged animal is shown on paper, it could only show three legs that also on one plane. Therefore a teacher needs to use his/her judgment at the time of selecting the diagrams and maps for embossing. He also needs to use embossed diagrams quite judiciously to develop spatial concepts and basic skills to understand the relationships needed for orientation and other purposes.

Organization of the class and of material is very important for blind or visually-impaired student's understanding. To help the students in mobility through the room, the furniture should maintain its configuration. Every object in the class should have a permanent location. If any change is done, the blind students be informed. The blind students need to have a firm mental picture of where objects are in the classroom, resource room or in the laboratory so that they can locate them independently. Braille labeling on the objects can serve dual purpose of motivating the child to learn Braille and for object identification.

As a result of their blindness and because of the common societal reactions to blindness, the blind students in general have significantly less opportunities for self activity. Therefore, special attention must be given at home and in school to encourage blind children to do as many things for themselves as possible. The general approach should be to encourage blind children to do things themselves with as little assistance as possible.

As regards the creative activities of blind children, educators should not impose their 'seeing taste' on blind children. Rather they should be encouraged to create things according to their own concepts and emotions.

It is clear from the foregoing that an adapted teaching approach for blind and visually-impaired children involves an increased use of verbal description, explanation, concretization in teaching. Additionally an appropriate teaching approach may include small group teaching. This allows flexibility in the pace of lesson and gives the students with blindness an opportunity to examine the materials close to or ask questions to clarify a confusing point.

A blind or visually-impaired child in a regular class is one among many children in that class. Through careful planning a teacher can help this child acquire near-normal experiences like the other students. At the same time to learn the general curriculum he should possess certain skills which are unique to blindness and dealt with under “PLUS CURRICULUM”. The plus curriculum is not something that is extra. Rather it is compensatory and by learning these skills a blind child will be able to learn the core curriculum. A special teacher can help the blind students learn the various areas of plus curriculum which are as follows:

- Braille
- Orientation and mobility
- Activities of daily living
- Sensory training
- Social skills for inclusion
- Use of special equipments like Abacus and Taylor Frame for mathematics

Classroom Tips for Teaching Blind Children

- If possible, take the child round and get him/her oriented to the surroundings by letting him/her touching the objects
- For safety purposes, keep all doors and cabinets in the classroom fully closed or open
- Avoid checking the child constantly, but keep a watch to avoid accidents
- Please say orally whatever you are writing on the blackboard. When teaching from a textbook, you or one of the students should be asked to read the book
- Give plenty of verbal instructions while introducing a new concept in the class
- Use concrete experiences. Provide opportunities wherein students can associate words with tactile experience

- Plan activities where children can learn by doing. A visit to a post-office nearby will be more beneficial than its description
- Make learning joyful and natural for visually-impaired and ordinary children
- Always name the child when you address him or her as the child may not know that you are looking at him/her
- Persuade other children to interact socially with the visually-impaired child
- Persuade other children to accept the visually-impaired child as a friend. Encourage the visually-impaired child to participate in as many physical activities as possible
- Simple modifications may make this possible. For example put a bell or a whistle in a football and the visually-impaired child can play with the other children
- Ask the classmates to help organize work and other such material for the child
- Persuade the other sighted children not to make derogatory references to his/her visual impairment.

To conclude it may be said that to maximize the blind student’s participation in various activities, certain adaptations are needed. In general adaptations can:

- Alter the physical environment
- Change the strategy
- Reduce the complexity
- Provide cues or offer assistance.

At the same time a few guidelines are suggested for adaptation. The first rule for making adaptation for teaching a blind or visually-impaired student is ‘minimization of adaptation’. Adaptation emphasizes the disability of student. This emphasis creates a gap between the children with disability and their peers. Moreover if adaptations are too detailed they will appear cluttered to the students. If adapted materials are significantly different from the original materials, special provisions may be required when referencing the material in the class.

The second rule for adaptation is the ‘avoidance of adaptation for basic skills’. Too many modifications can easily overcompensate and overlook the blind or visually-impaired student’s ability to perform basic skills.

It is also essential that a good emotional relation between the blind student and his/her teachers and peer group



develops. And above all a teacher needs to be positive and realistic about his/her expectations from his/her blind student.

Conclusion

Blindness is basically an information disability. With modern advances in technology, it has ceased to be an educational disability. But traditionally, blindness has been associated with helplessness. As a result, psycho-social prejudice

continues to be a social barrier, both at home and at work. But the scenario is gradually changing, as more and more blind people are getting economically independent. The general attitude towards blind children is also steadily changing.

With a little support and adequate information, these children can succeed in all aspects of life and have meaningful existence.



With Braille under threat...

LAST Sunday marked the 200th anniversary of Louis Braille's birth on 4 January 1809. It was the occasion of the annual festival of type that is held in the morning and evening by blind and partially sighted people all over the world. Even Sans almost every known language has long since abandoned line drawings, most notably Sanskrit.

But Braille is under threat. The technology of the computer has made it possible to produce Braille documents. This has led to a decline in the use of Braille. The technology of the computer has made it possible to produce Braille documents. This has led to a decline in the use of Braille.

... Would it really matter if it went out of use?

Chandigarh Tribune

Summer camp for special kids ends

Tribune News Service

CHANDIGARH, June 19 A 15-day summer camp which was organised by the State Braille Abhiyan, Chandigarh, was concluded today. It was organised under inclusive education for the Children with Special Needs (CWSN) that includes

children like hearing-impaired, physically handicapped, a phobia of activities. For these 15 days, they have been chalked out for these children. The other activities included drawing and painting, beading, and to enhance their confidence and to enhance their self-esteem. Activities like dancing, singing, and drama were also included. Almost 80 students participated in the camp. Dr. J.S. Dhillon was the chief guest at the concluding ceremony. He said...

Learning difficulty is not a barrier for them

Deekha Chopra / IAS

New Delhi: Students with learning difficulties are not a barrier for them. They are the backbone of the CBSE class X board exams. And most appreciated their attitude to the help they get from the Centre. Their school and parents. CBSE allowed them a number of exemptions, including the exemption from the computer skill. Although there is no place for skill IT (computer science), when time to fix the papers and a scribble is required.

It was a personal moment for 15-year-old Khushi Mishra, a student of Springdale Public School, who scored 92 in IT and 90 in EV and was a bit disappointed that he missed out on a certificate for that one mark. "I was happy to be exempted," said Khushi, who was exempted from taking the IT paper and got computer science in class X. His attitude and confidence have always been a problem," he said.

Manoj Mishra, a student of DPS, Patiala, was happy with the exemption. He said, "I was exempted from taking the IT paper and got computer science in class X. My attitude and confidence have always been a problem," he said. Manoj Mishra, a student of DPS, Patiala, was happy with the exemption. He said, "I was exempted from taking the IT paper and got computer science in class X. My attitude and confidence have always been a problem," he said.

An IAS officer, against all odds

Rahul Moronba Bhopal, June 10



LOSING HIS eyesight at the age of 20 could have demoralised Krishna Tiwari.

Instead, he decided to proceed with his life according to plan, becoming India's first IAS officer with a 70 per cent visual disability.

Tiwari, whose retina gradually deteriorated, leaving him legally blind by 2001, is currently finishing his training programme at Madhya Pradesh's RCVP Moronba Academy of Administration in Bhopal.

In a welcome change, the government is adapting itself to working with people with disabilities, rather than the other way around.

Director General (Academy of Administration) Sandeev Khanna, who has served with the Ministry of Social Justice



RAHUL MORONBA did not let himself be demoralised by losing his eyesight. He is now an IAS officer.

Poor vision doesn't stop him from eyeing dream college

Shikha Chopra

IT WAS HIS dream to study at the Indian Institute of Management (IIM) Ahmedabad. But when he lost his eyesight, he had to rethink his dream. He decided to study at the Indian Institute of Management (IIM) Ahmedabad. But when he lost his eyesight, he had to rethink his dream. He decided to study at the Indian Institute of Management (IIM) Ahmedabad.

Summer camp with a difference

Shikha Chopra / IAS

If I can't hear, the way you teach me, you can teach me the way I can hear. Making this, an inclusive education for hearing-impaired children to do what is little hard for them at the summer camp. The 15-day summer camp being organised by the UT Education Department at Government Master Senior Secondary School, Sector-8.

It is about something out of the question to come across a child who is hearing-impaired, is dancing in the house of silence, a child who is visually impaired, is having a beautiful painting of a sunset and a child who is mentally challenged, is creating something out of nothing. But a group of teachers are committed to teach all these

special children at the summer camp. The summer break of 2008 has brought a reason to smile for teachers, a fifth standard student of GMS-8, as he doesn't have to sit at home alone and not watch his favourite activity — dancing in his summer camp. "Dance is hearing impaired but by feeling the vibrations of sound, he dances very well," says his teacher Preeti from GMS-8, who is teaching these special children in the camp.

In the camp, another student is busy in playing his beautiful doll as he loves to dress and his teachers encouraged him a lot for this. "Here we have a lot of good activities, we have also showcased their drawings in the function held at



of his kind in the city as this has been organised for these special children," said the teachers. Apart from summer activities like dancing, yoga, meditation, a plethora of activities for these 15 days has been chalked out for these children. The other activities include beading

DU charts new course to open avenues for disabled students

Shikha Chopra / IAS

NEW DELHI: The Department of University Education, Government of Delhi, has announced a new course for disabled students. The course is designed to help these students in their studies. The course is designed to help these students in their studies. The course is designed to help these students in their studies.



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MINISTRY OF HUMAN RESOURCE DEVELOPMENT
DEPARTMENT OF SCHOOL EDUCATION AND LITERACY
GOVERNMENT OF INDIA