

# Managing the Differently Abled Child



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# 2

## Learning Process in Your Child

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### LEARNING PROCESS

Teachers are always happy with a child who sit quietly and learn things, do homework daily, say numbers from 1 to 100, read words and write alphabets—in short rote learning. But what about learning skills to express oneself and communicate to others?

### Types of Learning

Generally, there are three types of learning or understanding:

1. Visual learners (learn better by reading line by line/word by word)
2. Auditory learners (learn better by reading aloud)
3. Experiential learners (learn better by experiencing/experimenting).

We also need to understand that learning in the preschool child is different from a regular child and there are four important facets of learning:

### Facets of Learning

- *Knowledge*: Preschoolers do not acquire knowledge by reading unlike older ones.
- *Skills*: It is learned from direct instruction and improved with practice and drill.
- *Feelings*: The feelings of competence, belonging and security are acquired.
- *Dispositions*: Curiosity, friendliness, creativity, bossism, etc. are sets of dispositions learned in the preschool.

### Reasons for Learning

Early childhood is the ideal age to learn skills and there are three reasons detailed below:

1. Young children enjoy repetition and are therefore, willing to repeat an activity until they have acquired the ability to do it well.
2. Young children are adventurous and as a result, are not held back by fear of hurting themselves or of being ridiculed by peers, as older children often are.
3. Young children learn easily and quickly because their bodies are still very pliable.

Early childhood may be regarded as the “teachable moment” for acquiring skills. If children are not given opportunities to learn skills, when they are ready to develop mentally; to do so and when they want to do so, because of their growing desire for independence, they will not only lack the necessary foundations for the skills, their peer have learned and they will lack the motivation to learn skills when they are eventually given an opportunity to do so.

### CONCEPT OF PRESKILLS FOR READING AND WRITING

If I show you a simple figure; can you decipher the meaning of it? A little difficult is not it? A tree, some leaves, grass, you may come out with ample number of answers even to the extent of saying that it is a symbol. To decipher its meaning, what is it that you have done—you recollected all the things that you know and compared it with the one given above and came out with options, you thought, were in some way similar to the one you knew? The only thing that can be definitely said about it is that it is a symbol. I am sure, even at this age, you would find it difficult to memorize 20 such figures, although as adults you would have come across some what similar things in your life. So, think about the difficulty of your preschooler, trying to make sense of these man-made symbols called alphabets, which on its own are meaningless and stands for some objects, which does not look similar to the word that represents it. This forms the most abstract form of communication-using words. More than that, the

alphabets has to be arranged or used in the correct sequence to make the correct word. Hence, reading is not an easy task for the preschooler, who lacks abstract thinking.

## Language Development

Language, the means by which ideas, thoughts, feelings are communicated is a vital part of every activity in which, each of us engages. It includes such widely differing forms of communication as writing, speaking, sign language, facial expressions, gestures and art. The felt need to give expression to one's wants and interests is innate and the ability to communicate with others through the utilization of the spoken or written word is learned. These abilities are generally clubbed as the language skills. The language development follows the listening, speaking, reading and writing patterns. Hence, make sure that effort to teach preschoolers language should follow this sequence.

### *Listening*

Listening is particularly related to speaking. It is a forerunner of speaking and throughout a person's life bears a reciprocal role. When one listens, one is not only hearing the stimulus/sound, but also attending to it, thinking about it and reciprocating by talking, i.e. the listener is actively and consciously involved in the activity.

*Attention span:* If you have to sit and listen to others, you will have to pay attention and for that you should have a wider attention span; but what about the preschool children? Their attention span is limited, i.e. 7–15 minutes and that too only for activities that are meaningful and interesting to them. Hence, activities for improving the listening skills should be given to preschoolers, to improve their attention span, which would later help them to concentrate at length on particular topics in higher classes. This is all the more needed for children who have problem in attention. Listening does not stop at the level of hearing, but it evolves itself into higher levels of:

- Passive listening.
- Appreciative listening.
- Attentive listening.
- Analytical listening.



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At the level of analytical listening the person weighs what is heard against personal experience and is alert to the attempts of the speaker to take away his/her opinion by devices of propaganda, i.e. he/she has to understand the cause and effect relationship.

*Listening skills:* Activities such as the following can be designed to develop listening skills through games, stories, songs, etc.

- Ask the child to close the eyes and listen to all the sounds that hear is in the surroundings. After 2 minutes, ask her to talk about all the sounds that she has heard. Help her differentiate between speech, noise and sound.
- Take two empty cans of same size and shape; fill one with little sand and another with pebbles; shake both the cans, one at a time and find out the difference in sounds made by both.
- Differentiate the sounds of different bells, animals, horns, etc.
- Give picture cards of objects such as cat, mat, rat, etc. to the child. You should say the name of each and ask the child to point out the correct picture. This helps in associating the word with the picture.
- Give 'odd one out' games such as man, pan, pat, ran, can.
- Give opportunity for the child to listen to rhymes, stories, songs, etc.
- Ask simple riddles such as:
  - "I shine in the sky
  - I give light
  - I rise in the morning and sets at night
  - Can you tell me who I am?"

Try to make simple riddles, on your own on food items, toys, animals, himself/herself, the family, etc.

### *Speaking*

When will you say that a person is skillful in using language? In order to express the thoughts clearly, i.e. to make others understand what we are thinking, we need a vocabulary of words and meanings. We have to organize our thought process in such a way that we can speak fluently with exact words in the exact context. The art of speaking can be developed right from the preschool years itself. We often come across parents saying 'What more to do? Even otherwise he/she is talkative.'

*Good speaking ability:* Well a lot! Here are a few things to help out preschoolers develop good speaking ability:

- First and foremost listen carefully when they say something.
- Encourage them to speak, sing songs.
- Read picture books with them, talk to them about it later.
- When they come out with a wrong usage, try not to correct them by saying something such as 'Hey that is a wrong usage.' Instead give the correct usage by stressing where the child had gone wrong.
- If your preschooler does not want to show off his/her singing talent in front of them guests, do not force the or do not make them feel ashamed by repeatedly talking about it or giving negative comments.
- Give opportunity to make choices on the dresses, games, etc. and ask him why he preferred one thing to the other, thus providing opportunity to speak out. However, be careful that the child does not learn to be fussy.
- Picture conversation, creative drama, riddles, etc. can be given.

### *Reading*

Reading is interpreting. Reading words involves seeing, recognizing the alphabets, knowing the letter-sound association and understanding the meaning of the words. Since words are arbitrary symbols, which do not have any similarity to the object it represents, reading is much more difficult than recognizing objects. Hence, while reading we are putting meanings into the symbols or inferring meaning from these symbols, e.g. concept of a 'ball'.

*Experience:* He sees, feels, tastes, holds, rolls and drops the ball. Understands objects based on what he can do with it.

*Language:* He associates the sound of the word 'ball' with his toy, he will soon associate the word ball with other objects that has the same property.

*Picture:* Recognizes the picture. It is very different from original ball. The picture does not roll or feel similar to a ball, but the child sees that it has enough in common with the object to be called ball.

*Symbol:* Much later he learns the symbol that we write to represent the round ball. This symbol has no properties at all, in common with the real ball.

### **Prereading Skills**

To facilitate the progression from experience to symbols easily, prereading skills have to be imbibed into the preschool child. Some suggested techniques—graded from simple to complex are as below:

- Talk about the pictures in the book, while introducing picture books (picture reading).
- Bring an element of surprise, to exaggerate and introduce the topic, to develop interest for example 'do you know what I am going to show you now?'
- Expand the child's talk on the pictures, rather than getting restricted to the names. This can be done by asking him or talking about its color, size, shape, where it is found, how it is used, comparing it with other things which he already knows, etc.
- Extend the conversation to a higher level of scientific truth through simple explanations. For example ice-cream melts or becomes a fluid when kept outside the fridge for some time.
- Auditory discrimination activities refer listening section.
- Visual discrimination activities such as finding the odd man out from pictures, finding out the same and different pairs from a group, finding a similar pattern or design from almost similar ones, matching, sorting alphabets, objects and symbols can be given.
- Auditory-visual association may be encouraged by giving activities, e.g. picking up the right card for the word you say.
- Directionality can be encouraged by giving opportunities to understand left-right, top-bottom, beginning-end, etc.

### *Writing*

Writing is the last stage in the language development hierarchy and the most difficult to acquire. For most of adults, writing starts with writing alphabets. But let us see if it really starts with writing alphabets and understand what writing is all about and whether

it really starts with writing alphabets. Writing requires the continuous, controlled movement of the hand, especially being able to hold the pencil with just the three fingers, the ability to recognize the characteristics of each alphabet and be able to recall it and be able to make the desired hand movements to produce the writing. It is a skill, which requires the integration of all these subskills and hence is difficult to master for a preschool child. Writing is the most important form of communication and is the last to be acquired in the hierarchy of language skills. Written expression demonstrates that the child has mastered concepts and acts as measures of academic learning in test. Unfortunately what is overlooked is the fact that writing is a complex skill that needs coordination of several abilities such as:

- Finer muscle control.
- Eye-hand coordination.
- Easy use of three fingers to grasp the pencil tip.
- Knowledge of letter shapes.

### Prewriting Skills

In order to develop all the above, prewriting skill activities should be given for the arm, wrist, palm and fingers in preschool.

*Arm:* Free arm drawing, kneading play dough, making long string of dough, catching and throwing balls, printing using blocks, etc.

*Wrist:* Opening and closing boxes and lids, tightening and loosening screws, and using pencil sharpeners, etc.

*Palm:* Printing using palm, vegetable printing, making dough balls using clay or dough, squeezing water from a wet cloth, a bottle, etc.

*Fingers:* Finger painting, picking up small things, sorting rice and green gram, rolling clay balls with fingers, paper-tearing, pasting, threading beads, clay modeling, etc.

### Progressive Steps in Writing

- Scribbling, which starts at around 2-2½ years of age
- *Free hand drawing:* Children will try to make a recognizable human form and identity it usually as themselves

- *Tracing*: Over lines pictures, using cut outs
- *Imitation*: Step-by-step drawing/writing
- *Copying*: Here the prewritten form is given without, anyone to tell where to start from, where to end.

Hence, copying from black board is the last step in learning to write. Unfortunately, the preschoolers are directly introduced to copying; something such as asking them to run, before they are taught to walk. Hence, it is the responsibility of parents and preschool teachers to see that their preschooler is carefully guided through each of the steps in writing, rather than bombarded with the last and most complex stage.

### **MATHEMATICS**

Mathematics is about numbers; at least most of us believe, so and hence starts teaching mathematics with numbers. But did you know that math is the discovery of relationships. If we have discovered a relationship and want to communicate it to another person, we may resort to description in words, or may use more effective ways of expressing the relationship. For example:

- In numbers (as in arithmetic)
- In letters (as in algebra)
- By a diagram (as in geometry)
- By a graph.

All these effective ways are 'symbolic/abstract representations' of a relationship, which has been observed and understood. Number by itself has no meaning. It is just a symbol developed by human to represent an idea, to discover, discern and record the structure, patterns and relationship within the universe. Or in a simple way, number tags are symbolic representations, which are purely abstract. Preschool child, who is in the preoperational thought stage, is capable of understanding only what is seen and what is done with something presented to person. Hence, a preschool child has to go a long way, before child comes to the above said symbolic level. So any attempt, to introduce mathematics at the preschool level should take the form of meaningful activities whereby children are encouraged to think for themselves, enabling them to appreciate mathematics as a 'vital presence' in their lives. Unfortunately, this is not practiced

in preschools, whereby learning mathematics becomes a burden to the preschooler even before child has started understanding it.

## Steps in Teaching Mathematics

Schools usually do not follow, these step-by-step methods in teaching mathematics, whereby, there is a possibility for many children to go up the education ladder without a sound base of mathematics. It has been observed that English and Mathematics are the two difficult subjects among school children evaluated at the adolescent clinic of child development centre (CDC), Kerala and this may be attributed to the problems in understanding the basics of the subject. Hence, parents and teachers can help their preschooler to understand the basics in a more concrete manner, making sure to guide child's learning, through the following steps:

*Step 1:* Sets or sorting—Grouping of objects or ideas that have some common attributes, e.g. all squares in a set and circles in another.

*Step 2:* Matching—Determining whether each member of one set has a partner, i.e. one-to-one matching.

*Step 3:* Number (cardinal)—The word used to describe the concept of how many.

*Step 4:* Number names or numerals—Recognition and later reproduction of symbols that represents a specific number.

*Step 5:* Ordering—Recognizing the relationship of one or more, more than or less than and the idea of a few more or few less.

*Step 6:* Counting—Mental recognition that while counting, we are matching the total elements with the number label we have given to the set, i.e. when we count three we are actually matching the number symbol 3 to the threeness or three units.

*Step 7:* Place value—Numerical value is associated with each position in a written numeral. Each digit represents a product of the place value and the specific numeral that occupies the position, e.g. 23 is two tens and three.

Only after the foundation is established, the basic operations of addition, subtraction and division may be introduced first on a concrete level.



# Managing the Differently Abled Child

## *Salient Features*

- Disability casts a significant impact in the development of a disabled child and a constant struggle for the families as well
- Focuses on early identification of developmental issues and its management in children
- Gives scientific information for parents on various issues of differently abled children in a very simple and comprehensive manner
- Presents practically feasible parenting tips and information about special benefits available for differently abled children in the book
- Helps to understand different developmental disorders in children, its symptoms, causes, diagnosis, management, prevention and rehabilitation with special emphasis on neurodevelopmental disabilities such as autism, attention deficit hyperactive disorder, learning disability, intellectual disability, cerebral palsy, epilepsy, visual impairment, hearing impairment, speech and language disorder, etc.

**MKC Nair** PhD MD (Med Sc) MBA MA FIAP FNNF is Founder Director, Child Development Centre, Thiruvananthapuram, Kerala, India, and Vice Chancellor, Kerala University of Health Sciences, Thrissur. He is recognized all over India for his research, clinical and community activities in the last 25 years leading to development of the specialties of Developmental Pediatrics and Adolescent Pediatrics in India. His major contribution is in reduction of childhood disability by creating a “conceptual framework” of a valid link between childhood disability, low birth weight, adolescent girls’ nutrition and feasible strategies for a policy change towards ‘pro-active’ anticipation of disability rather than a ‘passive’ attempt at provision of rehabilitation services alone. The Child Development Centre (CDC) model early stimulation, CDC grading for motor milestones, Trivandrum Development Screening Chart (TDSC: 0-6 years), Language Evaluation Scale, Trivandrum (LEST: 0-6 years), etc. are his original contributions for prevention of disability. His success has been in developing an intervention model, now made available for wider community use across the country and the same has been incorporated in the ‘District Early Intervention Clinic’ concept under Rashtriya Bal Swasthya Karyakram (RBSK) program of Government of India. No wonder he has been given the honor of editing Illingworth’s book *The Development of the Infant and the Young Child—Normal and Abnormal* (10th Edition) and *IAP Textbook of Pediatrics*.



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