Annexure 1

EARLY INTERVENTION

DEVELOPMENT STAGES OF DISABLED CHILDREN

The purpose of this session.

The aim is to develop an understanding among family members of disabled children of the different developmental stages that their children may go through.

INTRODUCING PARTICIPANTS TO "DEVELOPMENT" AND "EARLY INTERVENTION"

Every child grows and learns. We sometimes use the work "develop" to mean "grow".
Children with Down syndrome and other intellectual disabilities many not be able to do all the things that other children can do. They therefore may need help and support from their families and other people. That "help" is sometimes referred to as "early intervention".

WHAT DEVELOPMENTAL STAGES MAY DISABLED CHILDREN GO THROUGH?

- Gross motor development
- Fine motor development
- Language development
- Cognitive development
- Social and self help skills development.

These stages may be simplified as follows, in order for the families to easily identify with them and to understand them.

- **Physical development:**

This is at the stage at which the **body** of the child **grows**. This we can see. The child learns to do certain things with his body parts. Some disabled children may need to be helped to move some body parts.

- **Hands and eyes working together.**

Here the child may be taught to **touch** the **things** that she sees.

- **Communication and language development.**

Here the child learns to interact with people around him. She talks or makes signs to convey what she wants to say.

- **Mental development.**

Here the child thinks and learns to do certain things.

- **Emotional and social development.**

The child learns about herself and other people.

- **Life skills**

The child learns to care for herself and become independent.
The development of a disabled child is a process which requires understanding by every person for it to be effective. Consequently a separate and a more detailed manual has been prepared for families to:

- Fully understand the developmental areas and stages of children with Down syndrome and other intellectual disabilities
- Different interventions, services and resources needed to promote the development of children with Down syndrome and other intellectual disabilities
- Examples of effective interventions which may be employed in order for children with Down syndrome and other intellectual disabilities to develop appropriately.

NOTE: Children with Down syndrome and other intellectual disabilities usually follow the same pattern of skill development (growth) as other children. Their average rate of progress may be slower than that of the other children. This however is not the rule.

Annexure 2

INCLUSIVE EDUCATION

PROFILE OF A LEARNER WITH DOWN SYNDROME

When a child with Down syndrome reaches school going age parents are faced with many choices. The decisions taken are often made due to a lack of information or based on myths and mistruths regarding the education of children with Down syndrome.
Children with Down syndrome **can and do learn and can be taught!!!**
They also learn throughout their lifetime just like all of us providing that they are **given the opportunity!**

Aiming High

If parents aim to include their child in the mainstreams of life they need to start working on certain issues long before school going age:

- Discipline your child at all times with the same expectations as for any child;
- Teach your child how to behave and interact with others in a socially acceptable way;
- Teach your child to take turns, share and give and take;
- Teach your child to work independently and co-operatively
- Teach your child self help skills and practical skills;
- Raise awareness regarding Down syndrome in your community (church, school, shopping area) talk to people about your child;
- Enroll your child in an inclusive pre school setting;
- Do not be too sensitive about rejection and negative attitudes; educate those that are about your child and his/her disability.

Time to go to school

When your child is old enough to go to school;

- Visit the new school well in advance;
- Arrange for your child to meet the teacher;
- Develop a familiarity with the school's layout (map of the school);
- Get acquainted with the routine and the rules of the school;
- Get a home school communications book in place;
- Set up a regular meeting (quarterly) between role players to discuss planning and progress;
- Be involved in the activities of the school;
- Be prepared to assist the teacher in additional exercises at home.

The Curriculum

Remember the child is not necessarily developmentally delayed in his whole development;
Therefore there is no need for a diluted curriculum in all learning style.

Factors influencing learning:

Certain factors influencing learning are typical of many children with Down syndrome.

Strengths that facilitate learning:

Strong visual awareness and visual learning skills are;

Learn by using the written word
Modeling behaviour and attitudes
Learning by way of practical material and hands-on-activities

Weaknesses that inhibit learning are mentioned in the table below.

The above mentioned factors (strengths and weaknesses) influence the planning and implementation of meaningful and relevant activities and programmes of work.

Why inclusion
Research has shown that:

- Children do better academically when in inclusive settings;
- Developing peers gain in understanding about disability, tolerance and support;
- Inclusion provides models for normal and age appropriate behaviour;
- Inclusion provides opportunities to develop relationships;
- Inclusion education is the key step towards inclusion in life.

Experience shows:

- One of the most important ingredients for successful inclusion is the will to make it succeed / a positive attitude;
- Most teachers have the skills to understand the individual needs of a child with Down syndrome;
- Most teachers have the skills to teach children with Down syndrome effectively and sensitively.

Specific learning profile of a child with Down syndrome:

- Child is not just developmentally delayed in his whole development;
- No need for a diluted curriculum in all learning areas;
- Learning profile goes hand in hand with a learning style;
- Certain factors influencing learning are typical of many children with Down syndrome;
- Strengths that facilitate learning;

Strong visual awareness and visual learning skills are:

- Learnt by using signing;
- Learnt by using the written word;
- Learnt by modelling behaviour and attitudes;
- Learning by way of practical material and hands-on activities
- Weaknesses that inhibit learning;

PROFILE OF A LEARNER WITH DOWN SYNDROME

FACTORS INHIBITING LEARNING

FOR USE BY EDUCATORS AND INTERESTED PERSONS – Parents can print out this section and pass on to their child's teachers.

FACTOR	IMPLICATIONS	STRATEGIES
VISUAL IMPAIRMENT 60 – 70% Get glasses before the age of 7	Difficulty in reading and writing Difficulty in accessing the curriculum	1. Place child near the front of the class 2. Use larger print/writing 3. Use simpler and clear presentation
HEARING IMPAIRMENT Over 50% have hearing loss due to upper respiratory infections Clarity in hearing can fluctuate daily	Affects speech and language Perception that child is not interest or has a poor attitude	1. Place pupil in front of class 2. Speak directly to the pupil 3. Reinforce speech with facial expressions; signs; gestures and visual back up 4. Write new vocabulary on the board 5. Repeat the answers of other pupils 6. Repeat words or phrases
DELAYED FINE AND GROSS MOTOR SKILLS Due to low muscle tone and loose joints	Restricting experience in early years Delaying cognitive development	1. Provide additional practice, guidance and encouragement 2. Provide wrist and finger strengthening activities 3. Use a wide range of multi sensory activities and materials 4. Keep activities meaningful and enjoyable

FACTOR	IMPLICATIONS	STRATEGIES
SPEECH AND LANGUAGE DIFFICULTIES Caused by physical perceptual and cognitive problems Smaller vocabulary which leads to less general knowledge Receptive skills are greater than expressive skills	Difficulty in understanding instructions Problems in understanding language of the curriculum Difficult for the child to ask for help Weaknesses in spelling and writing Cognitive skills are often underestimated	1. Give time to process language and respond 2. Listen carefully – your understanding (ear) will adjust 3. Ensure face to face and direct eye contact 4. Use similar and familiar language 5. Use short and simple sentences 6. Check understanding – child to repeat the instruction 7. Use reading to help with speech and language 8. Emphasise key words 9. Avoid closed questions 10. Encourage pupil to speak aloud / read in class 11. Create opportunities for speech – send child with a message 12. Provide additional listening activities / games
POOR AUDITORY SHORT TERM MEMORY AND AUDITORY SKILL	Difficulty in responding to the spoken word Difficulty in learning from a situation relying only on auditory skills Find it difficult in following and remembering verbal instructions	1. Limit amount of verbal instructions 2. Allow time for child to process and respond 3. Repeat instructions to the class individually to the child 4. Try to limit lengthy instructions and discussions 5. Plan for visual translation or alternative activity

FACTOR	IMPLICATIONS	STRATEGIES
SHORTER CONCENTRATION SPAN	Child is easily distracted One-to-one support has a high intensity and the child tries more easily than an unsupported child	1. Short focused and clearly defined tasks 2. Vary level of demand from task to task 3. Vary level of support 4. Use peers to keep pupil on task 5. At carpet times place the child near the teacher (not on the teachers lap). 6. Give the child a square carpet to encourage to sit in one place 7. Working on computers can sometimes sustain child's attention 8. Create an activity box for times when the child needs a change of activity or time out
IMPAIRED THINKING AND REASONING SKILLS	Difficulty to transfer skills from one situation to another Difficulty to understand abstract concepts / subjects Difficulty in problem solving	1. Do not assume that skills will be transferred automatically 2. Teach new skills by using a variety of methods, materials and contexts 3. Reinforce abstract concepts with visual and concrete materials 4. Offer additional explanations demonstrations 5. Encourage problem solving by using meaningful and practical every day life situations

FACTOR	IMPLICATIONS	STRATEGIES
CONSOLIDATION AND RETENTION Pupil with Down syndrome takes longer to consolidate new skills (master it) Ability to learn and retain can fluctuate daily	Difficulty to transfer knowledge from situation to another Delaying cognitive development Difficulty in accessing the curriculum	1. Provide extra time and opportunities for additional repletion and reinforcement 2. Involve parents or support teacher in repletion and reinforcement 3. Present new skills in a variety or ways using concrete, practical and visual materials 4. Move forward by continually checking back to ensure that child retains the previously learned skills
SEQUENCING DIFFICULTIES Influenced by impaired short term auditory memory, speech and language and delayed fine and gross motor skills	Difficulty in sequencing words into sentence formation Difficulty in sequencing events / information into the correct order Difficulty in organising thoughts and relevant information onto paper	1. Provide visual support flash cards, key works, picture cues and sequences, sentence cues 2. Provide alternative methods of recording Scribe Underline correct answer Picture card sequences Computer with specialist software whole word programmes; 3. Restrict writing to their own experience and understanding; If copying from the board select shorter essential version for the pupil