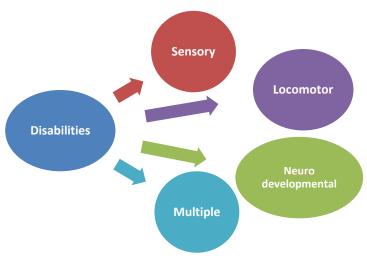
# **CREATING AN INCLUSIVE SCHOOL**

# **Unit 2: Nurturing Inclusion**

- a) Concept of Children with Special needs and their types
- b) Characteristics of disabilities Sensory, Neuro-developmental, Loco-motor and multiple disabilities.
- c) Catering to special needs Sensory, Neuro-developmental, Loco-motor and multiple disabilities.

# a) Children with special needs

- Children with special need are those who have a **disability** or a **combination of disabilities** that makes learning or other activities difficult.
- The designation "children with special needs" is for children who may have challenges which are more severe than the typical child, and could possibly last a lifetime.
- We need to learn about these children because with proper care and education, every child can reach his or her full potential.
- Children with special needs require extra attention and support, additional services, teaching, care and love!
- They will have distinct goals, and will need added guidance and help meeting academic, social, emotional, and sometimes medical milestones.
- Persons with special needs may need lifetime guidance and support while dealing with everyday issues such as housing, employment, social involvement, and finances.



# **Classification of disabilities**

Sensory Disabilities	Classification of Sensory	
• Senses are the receptors that perceive information about the	disabilities	
world around us.	• Hearing impairment	
• As 95% of the information about the world around us comes	including deafness	
from our sight and hearing, a sensory disability can affect	• Visual impairment	
how a person gathers information from the world around	including blindness	
them.	Deaf-blindness	
<ul> <li>"Sensory disabilities" can involve disability of any of the</li> <li>Sensory processing dis</li> </ul>		
five senses, but for educational purposes, it generally refers		
to a disability related to hearing, vision, or both hearing and		
vision.		

# Hearing impairment including deafness

- Hearing Impairment" means impairment in hearing, whether permanent or fluctuating, that adversely affects a child's educational performance.
- "Deafness" means a hearing impairment that is so severe that the child is impaired in processing linguistic information through hearing, with or without amplification that adversely affects the child's educational performance.

# Characteristics of hearing impairment

- **Speech Delays:** Delays in the development of speech and language are classic symptoms of hearing loss and deafness in children.
- **Communication Difficulties:** Children with mild to moderate hearing impairment may develop speech and language at roughly the same time as their peers. However, they might still struggle to communicate and speak normally.
- Selective Hearing: children with hearing loss might be able to hear certain sounds and pitches. Hearing-impaired children are often unable to hear their names when called, and their behavior can be mistakenly labeled as inattention or behavioral misconduct.
- Behavioral Characteristics: Deaf and hearing-impaired children can develop a variety of behavioral symptoms. Many children will turn up TVs or radios to an inappropriate volume in an attempt to compensate for their sensory challenges. Children struggling with deafness may also closely watch their peers to emulate behavior and body language -- a symptom known as echopraxia. Academic problems and irritability are also common symptoms of hearing loss in children.

- Turns head to position the ear to the speaker
- Asks for information to be repeated frequently
- Uses a loud voice
- Does not respond when someone is speaking to them
- · Has frequent colds, earaches, or infections
- · Misarticulates certain speech sounds or omits certain consonant sounds
- · Has a restricted vocabulary and/or problems with spelling
- Withdraws from classroom activities that involve listening
- Less socially mature
- Difficulty making friends
- · Academic achievement levels are lower than those of hearing peers
- Fidgets and moves about in seat

#### Catering to the need of children with Hearing impairment including deafness

- Encourage students to ask questions for clarification
- Repeat comments of students who speak in discussions
- When using an interpreter., Position the student so that they can see the teacher and interpreter clearly
- Be sure to include the interpreter as an IEP member
- Discuss lessons with the interpreter prior to teaching and allow adequate lag time for the interpreter
- Remember that sign language does not follow the grammatical convention of English
- Help develop a realistic sense of their abilities
- Help them become more responsible and independent
- Help them interact appropriately with their peers
- Help enhance their sense of belonging
- Use of technologies like amplification assistance
- Seat students in a semi-circular arrangement to increase sight lines
- Make sure they are subject to the same requirements as other students
- Have a classroom buddy who can help the student
- Reduce distracting noises
- Use visual aids, gestures and facial expressions
- Speak clearly and normally
- · Avoid frequent movement around the classroom and turning your back from student

# Visual impairment, including blindness

- "Visual impairment including blindness" means an impairment in vision that, even with correction, adversely affects a child's educational performance. The term includes both partial sight or low vision and blindness.
- Blindness, which means total loss of vision
- Low Vision- Indicates some functional vision exists. Students may need minor adaptation and may use optical, or electronic devices to assist them in their learning.

# Characteristics of visual impairments

- Frequent experiences of watery eyes, red or inflamed eyes
- Eye movements are jumpy or not synchronized
- Difficulty moving around the classroom
- Difficulty reading small print, identifying details in pictures or illustrations
- Complains of dizziness after reading a passage or completing an assignment.
- Tilts head or squints eyes for better focus
- Uses one eye more than the other for reading
- Frequently complains of headache or eye infections.
- Reaching in front of or beyond an object
- Holding objects very close or very far to see them
- Turning or tilting his head when he uses his eyes
- Continuously pushing or poking his eyes
- Looking above, below or off to one side of an object, rather than directly at it
- Bumping into objects and having a lot or trouble seeing at night
- Feeling for objects on the ground instead of looking with her eyes

# Catering to the need of children with Visually impairment

- Encourage students to become independent learners.
- Create opportunities for students to manipulate their own environment.
- Reinforce their efforts.
- Help develop a healthy self-concept.
- Teach students how to communicate non-verbally.
- Identify what special equipment will be needed in the classroom.
- Learn how to use special equipment.

- Guarantee classroom is free of hazards.
- Place students' desk where the student can learn to their highest potential.
- Use same disciplinary practices for all the students.
- Encourage visually impaired to seek leadership and high-profile roles.
- Expect the same level of work from all students.
- Get help from others. Teach them how to assist the visually impaired students.
- Learn how to adapt and modify instruction ahead of time.

# **Sensory Processing Disorder**

- Sensory processing disorder is a condition that causes difficulties receiving and responding to information from the senses including vision, hearing, touch, smell, and taste.
- Sensory information is sensed by the person, however, the brain perceives and analyses the information in an unusual way. It may affect one sense alone or it may affect multiple senses.
- Someone with sensory processing disorder may have heightened or lowered sensitivity to stimuli such as tolerating light, being touched, sound, eye contact, and pain.
- Sensory processing disorder can be a disorder on its own, however it can also be a common characteristic of other disabilities including Autism Spectrum Disorders, dyslexia and Tourette syndrome.

#### Characteristics of students with sensory processing disorder

- Children with SPD not only struggle in the classroom (but it is likely they will struggle in other aspects of their daily lives at school).
- They may struggle on the playground in terms of becoming fearful of equipment or sounds that may occur or in the cafeteria, where the sounds and visual stimulations may cause emotional distress.
- SPD may impact an art or craft or physical education class, where a student may exhibit clumsy behaviour, or may appear uncoordinated and bang into peers as well as objects.
- In some cases, students may even exhibit difficulty walking down the corridor.

#### Catering to the needs of children with sensory processing disorder

- Have a consistent schedule and routine each day.
- Use a picture schedule that is a visual map of what comes next.
- Go over the schedule with the children by pointing to each picture.
- Use a large red dot or arrow on the schedule to highlight the current activity.

- Explain a change of classroom routine or staff as soon as possible.
- Warn children about loud noises if possible like a fire drill or vacuum
- Encourage children to cover ears or offer head sets in order to muffle loud sounds.
- Offer appropriate seating in chairs that allow children to sit with feet touching the floor, keeping knees and hips at a 90-degree angle for eating and fine motor activities. Table height should be at elbow level.
- Provide movement activities through climbing toys, mats, marching or pretend. Encourage the children to try to push the wall and see if they can move it, move furniture around the room, shovel sand or snow, sit in rocking chairs, swing, Sit 'n Spin or swivel chairs or mats.
- Provide touch experiences by providing a variety of textures in books, toys, sensory boxes, tables or bins.

# **Deaf-Blindness**

- Deaf-Blindness means hearing and visual impairments occurring at the same time, the combination of
  which causes such severe communication and other developmental and educational needs that they
  cannot be accommodated in special education programs solely for children with deafness or children
  with blindness.
- It is an unique and extremely complex disability that often requires specialist communication methods and systems being introduced to the person and those around them to enable communication to take place.
- Deaf-blindness has adverse effects on all areas of development, in particular the language acquisition process, conceptual development, motor development, behaviour and personality of a person.
- Isolation is a serious consequence of deaf blindness.
- The use of hearing and visual attention is brief. Sometimes they function, sometimes they do not. In a way one might say that they are turned off and on during the flow of interaction and communication.
- Very rarely vision and hearing are used at the same time. If vision and hearing are used at the same time, you may observe frequent disruptions in the interaction. These disruptions are caused, whenever the deaf blind person needs to regain energy.
- One residual sense cannot compensate for each other, which is the natural way of compensation of lack of vision and lack of hearing. This means that other senses like touch and movement are needed.

# Characteristics

• Characteristics of Students who are deaf and blind are a combination of those described for students

who are deaf and students who are blind.

• Students exhibit more severe academic, social and communication problems

#### Catering to the Needs of children with deaf-blindness.

- **Opportunities for Peer Interaction:** With the move to more inclusive environments and access to general education curriculum, children and youth with deaf-blindness should have many opportunities for peer interactions.
- Collaborative Team Planning: Collaboration has become a key concept used in fostering effective schools for all children and success for including students with deaf-blindness into their schools and classrooms.
- **Cooperative Learning:** For the child who is deaf-blind, this approach can provide the stimulation needed to maintain interest and attention to a task.
  - It also will allow the hands-on involvement of students in the learning process which is valuable to the student with dual sensory losses.
  - These students learn more when given the opportunity to interact, explore, touch, and perform skills.
- Access to meaningful Communication: Communication for the student who is deaf-blind is one of the most critical skills for this population.
  - For the student who is deaf-blind, it is so important that each child is given access to communication and allowed to be heard for what they have to say with language, with gestures, with movements, with voice, with hands, with eyes, with silence.

# **Locomotor Disabilities**

- Locomotor disability is defined as a person's inability to do any activities associated with moving both himself and objects, from place to place.
- This inability is due to the problem in the musculoskeletal (muscles, bones and joints) system and or nervous system
- Disability of the bones, joint or muscles leading to substantial restriction of the movement of the limbs or a usual form of cerebral palsy.
- Some common conditions giving raise to locomotor disability could be poliomyelitis, cerebral palsy, amputation, injuries of spine, head, soft tissues, fractures, muscular dystrophies (a group of muscle diseases that results in increasing weakening and breakdown of skeletal muscles over time) etc.

#### Catering to the needs of children with locomotor disabilities

Access and a Barrier-Free Environment

- To ensure barrier free environment for children with disability we must consider the following factors: For children who are on a wheelchair Who use a rollator or walker Crutches or walking sticks of various types should be provided
- Access for getting in and out of the school
- Getting on and off transportation (ramp, seat belts)
- Moving within the school and in different class rooms
- Going to toilet and play ground
- Eating and drinking
- Furniture
- Creating a supportive environment in the school by changing attitude of other students, teachers and other staff who are in contact with children with disability

# **Neuro-developmental Disabilities**

- Neuro-developmental disorders are impairments of the growth and development of the brain or central nervous system.
- A narrower use of the term refers to a disorder of brain function that affects emotion, learning ability, self-control and memory and that unfolds as the individual grows.
- They are characterized by developmental deficits that usually show up early in a child's development, many times before the child enters elementary school, and can run throughout the individual's lifetime.

# **Characteristics of Neuro developmental Disabilities**

- These brain function deficits can affect a person's emotions, memory, ability to learn, socialize and maintain self-control.
- They can be limited in nature, for instance to learning, or the deficits can be global and affect intelligence or social skills overall.

# Classification of Neuro developmental disabilities

- Autism
- Specific learning disability
- ADHD (Attention Deficit Hyperactive Disorder)
- Intellectual disability
- Communication disorder/speech impairment

Autism spectrum disorder (ASD): Is the name for a group of developmental disorders. It includes a wide range, "a spectrum," of symptoms, skills, and levels of disability.

# Asperger's syndrome (AS)

- The mildest form of autism which affects boys three times more often than girls.
- Children with AS become obsessively interested in a single object or topic.
- They often learn all about their preferred subject and discuss it nonstop.
- Their social skills, however, are markedly impaired, and they are often awkward and uncoordinated.
- Asperger's syndrome is mild compared to other ASDs.
- Also, children with AS frequently have normal to above average intelligence. As a result, some doctors call it "high-functioning autism"
- As children with AS enter adulthood, though, they are at high risk for anxiety and depression.
- People with ASD often have these characteristics

# Persuasive developmental disorder

- This category of diagnosis applies to most children with autistic spectrum disorder.
- Children whose autism is more severe than Asperger's syndrome, but not as severe as autistic disorder.
- A later age of onset

# Autism

- Children who meet more rigid criteria for a diagnosis of autism have autistic disorder.
- They have more severe impairments involving social and language functioning, as well as repetitive behaviours.
- Often, they also have mental retardation and seizures.

# Catering to the needs of children with ASD

- Although knowing the general characteristics of ASD is helpful, teaching strategies for students with ASD still need to be individualized, and it is important for teachers to realize their expectations of their students.
- Children with ASD often have visual-spatial strengths. Knowing this, teachers can modify their instructional strategies in a number of ways.
  - teachers should demonstrate and model expected skills e.g. if the teacher wants a student with

ASD to place his book bag in his cubby when he gets to class in the morning, the teacher should demonstrate exactly how to do this.

- Teachers should provide visual schedules of the day's events in a location easily seen by the student.
  - A visual schedule can be written out and paired with picture symbols to increase understanding.
  - Teacher can also provide individual student schedules attached to the student's desk for accessibility.
  - Both types of schedules can be created using Boardmaker, a program that pairs text with picture symbols, which can often be acquired from the school's speech pathologist.
- Teachers should work to make eye contact with the student and expect to acquire the student's attention. This can be challenging because students with ASD may have difficulty maintaining eye contact due to difficulties with modulating visual input. Close proximity with a verbal reminder a gentle, "Josh, look at me" can work well.
  - However, even if the student is not looking directly at the teacher, the teacher should know that he
    or she may still be listening. Checking frequently for understanding can give the teacher assurance
    that the student is, in fact, paying attention.
- Teachers can adopt other strategies to increase motivation in students with ASD, such as allowing short breaks between teaching sessions and providing time for the student to be alone if needed.
- Reinforcement is another crucial strategy in developing and maintaining motivation in a student with ASD. A reinforcer is an object or activity that the student likes, which can be presented after a behaviour to increase the frequency of that behaviour in the future.

# Academic modifications for the inclusive classroom

- Students with ASD will more than likely need to have some form of academic modification while in their general education class, regardless of intellectual ability. Issues with fine-motor deficits (e.g., grasping a pencil to write) and motivation (e.g., attending to heavy workloads in some subjects) are among some of the areas that may require modifications.
- Teachers should modify activities and materials to meet the needs of students with ASD.
- Provide extra time for completing assignments or to accommodate fine-motor deficits.
- Increase the level of support that the student with ASD receives during a lesson, such as peer or paraprofessional support during math instruction
- Teaching social skills to students with ASD is extremely important, and is beneficial not only for the student but for classmates as well. Classmates have been known to "benefit from their experiences with students with ASD, developing a compassion for and an understanding of children with special needs."

- Teachers should always supervise social interactions, and can offer valuable support by providing specific social rules and reinforcing positive social interactions.
- Teachers should recognize that a student with ASD may want to interact but may not know how. Helping the student change topics of the conversation when necessary, rehearsing strategies for social interactions, and using classmates as peer models (e.g., video modeling of a desired social skill) are notable strategies, as well as providing "scripts" of what the student should do in particular social situations.

# **Specific Learning Disabilities**

- A disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations.
- A child with a learning disability cannot try harder, pay closer attention, or improve motivation on their own; they need help to learn how to do those things.

# **Learning Disabilities**

- A learning disability, or learning disorder, is not a problem with intelligence.
- Are caused by a difference in the brain that affects how information is received, processed, or communicated.
- Children and adults with learning disabilities have trouble processing sensory information because they see, hear, and understand things differently.
- A learning disability, or learning disorder, is not a problem with intelligence.
- Learning disorders are caused by a difference in the brain that affects how information is received, processed, or communicated.
- Children and adults with learning disabilities have trouble processing sensory information because they see, hear, and understand things differently.

# **Common Types of Learning Disabilities**

Dyslexia	Difficulty processing language	Problems reading, writing, spelling, speaking
Dyscalculia	Difficulty with math	Problems doing math problems, understanding time, using money
Dysgraphia	Difficulty with writing	Problems with handwriting, spelling, organizing ideas
Dyspraxia (Sensory	Difficulty with fine motor	Problems with hand-eye coordination, balance,
Integration	skills	manual dexterity (agility)
Disorder)		

Catering to the needs of children with Specific Learning Disabilities

- **Co-Teaching:** Though inclusion can occur with or without involvement from a special education teacher, a co-teaching arrangement is typical.
- **Differentiated Instruction:** using instructional methods and materials that are matched to their individual needs. The use of differentiated instruction requires general and special educators to possess flexible teaching approaches as well as to be flexible in adjusting the curriculum based upon student need.
- Peer-Mediated Instruction and Interventions: a set of alternative teaching strategies that employ the use of students as instructors for students in their class. Peer provided instruction can be direct (e.g., tutoring) or indirect (e.g., modelling) and can focus on either academic or social-emotional development.

# ADHD

# What is ADHD (Attention deficit hyperactive disorder)?

*ADHD* is a condition of the brain that affects a person's ability to pay attention - most common in school-age children - ADHD children have impairment in working memory and processing speed.

# What are some signs or symptoms of ADHD?

ADHD is a chronic disorder, meaning that it affects an individual throughout life. The symptoms are also pervasive, meaning they occur in multiple settings, rather than just one.

**Characteristics:** Current research supports the idea of two distinct characteristics of ADHD, inattention and/or hyperactivity-impulsivity.

# Inattention

- Has difficulty concentrating, Has unrelated thoughts
- Has problems focusing and sustaining attention,
- Appears to not be listening, Performance depends on task
- May have better attention to enjoyed activities
- Has difficulty planning, organizing, and completing tasks on time
- Has problems learning new things,
- Demonstrates poor self-regulation of behaviour has difficulty monitoring and modifying behaviour to fit different situations and settings

# Hyperactivity

- Seems unable to sit still (e.g., squirming in his/her seat, roaming around the room, tapping pencil, wiggling feet, and touching everything)
- Appears restless and fidgety
- May bounce from one activity to the next
- Often tries to do more than one thing at once

# Impulsivity

- Difficulty thinking before acting (e.g., hitting a classmate when he/she is upset or frustrated)
- Problems waiting his/her turn, such as when playing a game

# Catering to the needs of children with ADHD

• **Class Environment:** change the classroom environment as needed (e.g., sitting the student in the front of the classroom, having the student repeat directions before following them, using checklists and other visual organizers to help with planning and follow-through).

Speech-language treatment  $\rightarrow$  individualized language goals, such as teaching better communication in specific social situations, and study skills (planning / organizing / attention to detail). Language goals differ depending on the needs of the individual student.

Task duration: To accommodate to the student's short attention span, academic assignments
 → brief and immediate feedback.

Longer projects should be broken up into manageable parts.

Short time limits for task completion should be specified and can be enforced with timers.

 Direct instruction: Attention to task is improved when the student with ADHD is engaged in teacher-directed as opposed to independent seat-work activities. Teaching of note-taking strategies

Both comprehension and on-task behaviour improve with the development of these skills.

• Token economy systems: helpful in improving both the academic and behavioural functioning of students with ADHD.

These systems typically involved giving students tokens (e.g., poker chips) when they display appropriate behaviour.

These tokens are in turn ex-changed for tangible rewards or privileges at specified times.

• **Peer tutoring:** Class-wide peer tutoring provides many of the instructional variables known to be important in setting up students with ADHD for success.

Provides frequent and immediate feedback

Combined with a token economy -found to yield dramatic academic gains.

• Scheduling: Based on evidence that the on-task behaviour of students with ADHD progressively worsens over the course of the day, it is suggested that academic instruction be provided in the morning.

During the afternoon, when problem solving skills are especially poor, more active, non-academic activities should be scheduled.

- Novelty: Presentation of novel, interesting, highly motivating material will improve attention. For example, increasing the novelty and interest level of tasks through use of increased stimulation (e.g., colour, shape, texture) reduces activity level, enhances attention and improves overall performance.
- Structure and organization: Lessons should be carefully structured and important points clearly identified.

For example, providing a lecture outline is a helpful note-taking aid that increases memory of main ideas.

Students with ADHD perform better on memory tasks when material is meaningfully structured for them.

• **Rule reminders and visual cues:** The rules must be well defined, specific and frequently reinforced through visible modes of presentation.

Well-defined rules with clear consequences are essential.

Relying on the student's memory of rules is not sufficient.

Visual rule reminders or cues should be placed throughout the classroom.

Rules should be reviewed before activity transitions and following school breaks.

For example, token economy systems are especially effective when the rules for these programs are reviewed daily.

• Auditory cues: Providing students with ADHD auditory cues that prompt appropriate classroom behaviour is helpful.

For example, use of a tape with tones placed at irregular intervals to remind students to monitor their on-task behaviour has been found to improve arithmetic productivity.

• **Pacing of work:** When possible, it is helpful to allow students with ADHD to set their own pace for task completion.

The intensity of problematic ADHD behaviours is less when work is self paced, as compared to situations where work is paced by others.

• Instructions: Difficulty following multi-step directions, it is important for instruction to be short, specific and direct.

Further, to ensure understanding, it is helpful if these students are asked to rephrase directions in their own words.

Additionally, teachers must be prepared to repeat directions frequently, and recognize that students often may not have paid attention to what was said.

• **Productive physical movement:** Difficulty sitting still thus, productive physical movement should be planned.

It is appropriate to allow the student with ADHD opportunities for controlled movement and to develop a repertoire of physical activities for the entire class such as stretch breaks, a trip to the office, a chance to sharpen a pencil, taking a note to another teacher, watering the plants, feeding classroom pets, or simply standing at a desk while completing class work.

Alternating seat work activities with other activities that allow for movement is essential.

It is also important to keep in mind that on some days it will be more difficult for the student to sit still than on others.

Thus, teachers need to be flexible and modify instructional demands accordingly.

• Active vs. passive involvement: In line with the idea of providing for productive physical movement, tasks that require active (as opposed to passive) responses may help hyperactive students channel their disruptive behaviours into constructive responses.

While it may be problematic for these children to sit and listen to a long lecture, teachers might find that students with ADHD can be successful participants in the same lecture when asked to help (e.g., help with audio-visual aids, write important points on the chalk board, etc.).

• **Distractions:** Generally, research has not supported the effectiveness of complete elimination of all irrelevant stimuli from the student's environment.

However, as these students have difficulty paying attention to begin with, it is important that attractive alternatives to the task at hand be minimized.

For example, activity centres, mobiles, aquariums and terrariums should not be placed within the student's visual field.

• **Powerful external reinforcement:** contingencies or consequences must be delivered more immediately and frequently

Consequences used to be more powerful and of a higher magnitude.

Need external criteria for success and need a pay-off for increased performance.

Relying on intangible rewards is not enough.

Use of both, negative and positive consequence is essential, however, before negative consequences can be implemented, appropriate and rich incentives should first be developed to reinforce desired behaviour.

Give much encouragement, praise and affection as these students are easily discouraged.

When negative consequences are administered, they should be given in a fashion that does not embarrass or put down students.

Rewards used with these students lose their reinforcing power quickly and must be changed or rotated frequently.

• **Response-cost programs:** While verbal reprimands are sufficient for some students, more powerful negative consequences, such as response-cost programs, are needed for others.

These programs provide mild punishment when problem behaviour is displayed.

For example, a student may lose earned points or privileges when previously specified rules are broken.

There is evidence that such programming decreases ADHD symptoms such as impulsivity.

A specific response-cost program found to be effective with ADHD students involves giving a specific number of points at the start of each day.

When a rule is broken (problem behaviour is displayed), points are taken away.

Thus, to maintain their point students must avoid breaking the rule.

• **Time-out:** Removing the student from positive reinforcement, or time-out, typically involves removing the student from classroom activities.

Time-out can be effective in reducing aggressive and disruptive actions in the classroom, especially when these behaviours are strengthened by peer attention.

They are not helpful however, when problem behaviour is a result of the students desire to avoid

school work.

The time-out area should be a pleasant environment and a student should be placed in it for only a short time.

Time-out is ended based upon the student's attitude.

At its conclusion a discussion of what went wrong and how to prevent the problem in the future takes place.

To be used only with the most disruptive classroom behaviours and only when there is a trained staff member.

# **Communication Disorder**

- A communication disorder such as stuttering, impaired articulation, a language impairment, or a voice impairment that adversely affects a child's educational performance.
- There are two types of communication disorder- speech and language disorder.
  - Speech disorder problems with producing speech sounds (articulation), controlling sounds (voice), controlling the rate and rhythm of speech (fluency)
  - Language disorder problems with using proper forms of language (phonology, morphology, syntax), using content of language (semantics), using functions of language (pragmatics)

# Characteristics of children with Communication disorder/ Speech impairments

- Speech impairments include difficulties with articulation, voice strength, or the complete inability to produce speech
- Stuttering, stammering, disfluency, hoarseness, breathiness, or breaks in volume or pitch are considered impairments as well.
- Speech impairments can be caused by cleft lip or palate, or by cerebral palsy, autism, learning disabilities, intellectual disabilities or have no known cause.
- Students with speech impairments may be difficult to understand and experience problems expressing ideas.
- These students may be reluctant to answer questions in class, and in particular, give presentations individually or in a group.

# Catering to needs of children with Communication disorder/ Speech impairments

- Educators should create an environment of acceptance and understanding in the classroom, and encourage peers to accept the student with speech impairment.
- Practice and maintain easy and effective communication skills by modelling good listening skills and

by facilitating participation of all students in classroom discussions and activities.

- Some students with severe speech impairments will have deficits with the analytical skills required to read and write.
- Teachers should constantly model the correct production of sound.
- Maintain eye contact with the student, then tell her to watch the movements of your mouth when providing direct instruction. Ask her to copy these movements when she produces the sounds.
- Allowing more time for a student to complete activities, assignments and tests.
- Having a student sit near you to easily meet her learning needs.
- Discussing possible areas of difficulty and working with the student to implement accommodations.
- Always asking before providing assistance, and using positive reinforcement when the student completes an activity independently.
- Using peer assistance when appropriate.
- Using peer assistance when appropriate.
- Modifying activities or exercises so assignments can be completed by the student, but providing the same or similar academic objectives.
- Creating tests that are appropriate for the student with speech impairment (for example, written instead of oral or vice versa.)
- Providing scribes for test taking if a student needs assistance.
- Making sure the student understands test instructions completely and providing additional assistance if needed.
- Remember, patience is extremely necessary in teaching students with speech impairments. Accepting and accommodating an individual's speech will benefit educators, classmates, and of course, the student herself by sharpening listening skills and promoting learning and understanding. After all, everyone's voice deserves to be heard.

# **Intellectual Disability**

- American Association of Mental Retardation "Mental retardation refers to <u>significantly sub average</u> <u>general intellectual functioning</u>, resulting in or associated concurrent <u>impairment in adaptive</u> <u>behavior manifested during the developmental period.</u>"
- It adversely affects a child's educational performance.
- Until October 2010, the law used the term "mental retardation." In October 2010, Rosa's Law was signed into law by President Obama. Rosa's Law changed the term to be used in the future to "intellectual disability."
- Average IQ 90 to 110

- Early 19<sup>th</sup> century Borderline (70-79); Moron (50-69); Imbecile (25-49); Idiot (24 or below)
- Mid 19<sup>th</sup> century Borderline (70-79); Moron (50-69); Imbecile (30-49); Idiot (29 or below)
- Later 19<sup>th</sup> century Mildly mentally retarded (50-70); Moderate (35-49); Severe (20-34); Profound (below 20)
- Now Slow learners; educable; trainable; custodial mentally retarded.
- Students with mild intellectual disabilities tend to have more general, delayed development in academic, social, and adaptive skills.
- Delayed development reflected in low achievement across content and skill areas; significantly lower scores on measures of intelligence and adaptive behaviour when compared with students who are not identified with intellectual disabilities.

#### Characteristics

Academic performance: lag significantly behind grade-level peers in developing academic skills.

- delay in learning to read and learning basic math skills + delay in language skills → results in delays in other academic areas
- students with mild intellectual disabilities develop basic literacy skills and functional mathematics skills
- deficit in phonological language skills + delay in general oral language skills
- difficulty comprehending what they have read due to weak verbal skills in areas such as vocabulary. **Implementing need:** teachers need to provide these students with instruction to address their phonological weaknesses as well as a broader range of language skills (e.g., vocabulary development)

<u>Cognitive Performance</u>: general delays in cognitive development that influence the acquisition of language and academic skills.

- Moreover, while these students can learn much information that is part of the general education curriculum, they learn more slowly than do typical students.
- Deficits in specific cognitive skill areas also contribute to this delay. Three of the most important cognitive skill deficits exhibited related to attention, memory, and generalization.

#### Attention

Difficulty with different types of attention

- orienting to a task look in the direction of the task (e.g., a teacher demonstrating how to solve a math problem on an overhead projector in the front of the room)
- Selective attention need to attend to relevant aspects of the task and not to unimportant task components (e.g., attending to one type of math problem on a page and completing the appropriate

operation).

• sustained attention – need to continue to attend to a task for a period of time.

#### Need

Teachers should:

- present initial stimuli that vary in only a few dimensions,
- direct the individual's attention to these critical dimensions,
- initially remove extraneous stimuli that may distract the individual from attending
- increase the difficulty of the task over time, and
- teach the student decision-making rules for discriminating relevant from irrelevant stimuli.

# Memory

- difficulty remembering information (i.e., short-term memory).
- For example, difficulty remembering math facts or spelling words; or if they remember this information one day, they may forget it the next.
- To some degree, memory problems are influenced by attentional difficulties.
- have difficulty generating and using strategies that help facilitate short-term memory.

# Need

• Teaching approaches to addressing short-term memory deficits include focusing on meaningful content during instruction and instructing students about strategies that they might use to facilitate remembering information (e.g., rehearsal, clustering information, using mnemonic devices)

# Generalization

- Difficulty to generalize information to other material or settings
- For example, a student may learn operations for addition and subtraction but may then have difficulty generalizing this information to a division problem.
- Similarly may learn a new word when reading material in one subject area but may have difficulty reading the same word in other reading material.
- Difficulty generalizing material learned in one setting to another (e.g., from school to the community).

#### Need

 Teaching strategies that may be used to address difficulties with generalization include teaching material in relevant contexts, reinforcing students for generalizing information across material or settings, reminding students to apply information they have learned in one setting to another, and teaching information in multiple settings.

Social Skills Performance: Difficulty interacting socially.

- Due to delays in cognitive and language development → difficulty understanding the content of verbal interactions and understanding expectations (e.g., when to listen, when and how to respond) during verbal interactions.
- · difficulty with attention and memory impedes social interactions
- social difficulties inability to read social cues and interact successfully in conversations, lack of affiliation in school activities, low social status, and negative self-concept.

#### **Implementing needs**

- Hands-On Learning: we need to set goals that are most important for the child. E.g. learning the names of the planets may not be as important as learning about how plants grow.
- We need to make materials and set up the environment so that it supports the child's learning.
- Use teaching strategies to teach and motivate the child to learn like using activities and other hands-on tasks to teach skills. <u>All children learn best through this process.</u> E.g. science experiments to learn science concepts or play dough and make letter shapes to learn letters. Hands-on learning is also a great way to learn math.

Play-Based Learning: to teach cognitive skills.

- E.g. if a child is playing with cars, we sit with the child and start playing too. While playing we use statements like "can I play with the red car? Can you give it to me?"
- **Baby Steps:** Every task, skill or activity needs to be broken down into small baby steps  $\rightarrow$  taught one small step at a time  $\rightarrow$  learns to combine these baby steps to learn a bigger concept.
- E.g. concept of red colour in one day → first teach sorting red, then matching red, then identifying red, then naming red and finally generalizing red.
- **Chaining:** process of breaking a task into its small steps and teaching them in a sequential manner  $\rightarrow$  used to teach daily living skills and life skills.
- E.g. first teach a child to hold a pant with two hands, then we teach him to hold it and bring it down to his legs. Next we teach him to hold it, bring it down to his legs, and put one leg inside. This process is called forward chaining. Backward chaining is when you teach the child the last step first. Assist the child and gradually child can do the whole activity on his own.

Group Learning: bring children together in a group to teach various skills. Children often do better

when they are in a group. Behaviour difficulties are less, and children motivate each other. The only difficulty  $\rightarrow$  need enough hands to help children learn together.

- **Positive Reinforcement:** reinforce the child positively every time he learns a new skill, or performs or practices a known skill.
- Use reinforcements that are appropriate for the child.

The best way to teach, however, is to understand the child, understand his abilities and his needs. From there comes the natural selection of strategies and methods that fit him or her.

# **Multiple Disabilities**

- Combination of various disabilities
- E.g. Leslie Parsons was born with a visual impairment (she is legally blind), moderate hearing loss, cleft palate, muscular imperfection in her extremities and ptosis (drooping) of the eyelids. She has difficulty with tasks requiring muscle coordination and fine motor skills, as well as visual acuity (sharpness).

# Catering to the needs of children with Multiple disabilities

- Focusing closely on a different students' IEP document and goals each day or half day.
- Use volunteers and aides with care, so that they can safely carry out particular tasks that you set for a student which are labour intensive and require one to one support,
- Use technology such as iPods, taped stories, electronic versions of books available online or music to cater for some students in your group when your hands and mind are busy elsewhere in the room.
- Consider physical movement tasks that can be done without direct teacher support, such as hitting a soft ball suspended from a string from the ceiling, or sorting through shapes in a feely box or manipulating a textured toy or object.
- Change your environment regularly so that you and your students get out in the fresh air to complete learning tasks.