1. WHAT IS INCLUSIVE EDUCATION?

- We accept ordinary learners as well as disabled learners, learners with behavioural problems and learners with learning difficulties.
- **All children**, regardless of their differences should have the opportunity to learn with and from each other and that all need some form of support in learning
- We attempt to change attitudes, behaviour, teaching methods curricula and environments to meet the needs of all children
- **Incl education is broader** as it includes the home, the community and other opportunities for education outside of schools
- It is **a dynamic process** which is constantly evolving according to local cultures and contexts and is part of the wider strategy to promote an inclusive society

2. WHAT TYPES OF ADAPTIONS ARE NECESSARY TO REMOVE BARRIERS TO LEARNING AND TO MAKE IT POSSIBLE FOR ALL LEARNERS TO PARTICIPATE?

- **The classroom and school environment** making changes in the classroom and in the school building and environment that could make it easier for the learners to come to school and to learn and also by using assistive aids that may be needed
- **The learner** find out how the barriers to learning of the learners in your class affect their learning find out from specialists and experts what you can do
- **School subjects** make changes to subjects you teach in terms of level and expected outcomes including the level at which you teach the subject to the learners as well as the range of subjects
- **Teaching strategies** –make changes to ur teaching methods to suit the learners needs
- **Participation in other school activities** make changes in order to ensure the learner's active participation
- Tests, exams and assessments make changes in order to assess the learner's learning more accurately

3. WHAT ARE BARRIERS TO LEARNING?

- It refers to anything which stands in the way of a learner being able to learn effectively.
- A learner may experience one or more barriers to learning
- It requires support to accommodate him in order to reach his full academic potential
- Barriers can be present in:
 - o The learner when a physical/physiological impairment becomes a disability
 - The learning centre the school
 - The system of education
 - o The broader social, economic and political context (incl the environment)
- **Physical and physiological impairments** in learners can be id'ed at an early stage and can be treated by implementing effective methods and processes.
- **Barriers on the other hand**, can occur at anytime during the learning process if these learners do not get the necessary support

5. DISCUSS INTRINSIC AND EXTRINSIC FACTORS THAT CAN CAUSE LEARNERS TO HAVE LEARNING NEEDS

- Intrinsic factors

- o Are usually **born with** the problem or acquired them later
- o These are the learners with **physical/physiological impairments**
- o Are sometimes obvious blindness and sometimes not so obvious hard of hearing
- These physical or physiological impairments can occur in different measures total loss of hearing or partial loss of hearing
- o These impairments **may become disabilities** if society and the system of education do not make provision for these learners
 - **Sensory impairments** = one of the person's senses is affected visual or aural
 - **Physical impairments** = a person whose external physical appearance or functioning is affected has a physical impairment.
 - **Mental or intellectual impairments** = refers to persons who are mentally less capable than the average they find it more difficult to comprehend and to learn.
 - **Multiple impairments** Some people have more than 1 impairment they may for eg have physical & intellectual impairments, or visual & hearing impairments
 - **Physiological impairments** refer to an impairment in the functions of the body chronic diseases such as cancer, diabetes, Aids etc
 - **Developmental problems** refer to learners whose development does not correspond more or less to that of other learners his age.
 - **Genetic factors** these are hereditary factors
 - **Prenatal, Perinatal and Postnatal brain damage** Some physical and/or physiological impairments arise in children as a result of brain damage incurred before, during or after birth.
 - Personality problems some learners have specific personality characteristics
 that have a negative impact on their achievement at school and give rise to barriers
 to their learning.
 - **Learning problems** when they find it difficult to master learning tasks which most other learners in the class can manage eg. In maths or languages etc
 - **Underachievement** the learner does not do as well as one would expect of someone with his intellectual ability.

- Extrinsic factors

O Are **not born with** the barriers – because of **other factors** that affect their ability to learn such as their environment in which they are growing up or the school that does not encourage a learning culture

• Some examples are:

- **Environment** unfavourable socioeconomic circumstances, urban areas (apartments, little supervision), rural environments (poor school attendance), prosperous areas (bored, drugs, pressure)
- **Education** poor teaching (lack of qualifications, unmotivated or lazy), incomplete participation on the part of learners, inappropriate study material, inefficient school organisation, crowded classrooms
- Language many learners taught in Eng (not home language), often the teachers can't speak proper English either. They perform poorly due to a lack of understanding
- Culture need to accommodate diff cultures, we learn, think and do things differently – keep that in mind (religion, language, food, sense of humour)
- **Job prospects** many learners leave schools but there are no jobs available so they get depressed and discouraged = underachieve at school
- **Emotional problems** this is reflected in the following ways: nervousness, tension, anxiety, depression, suicidal tendencies, etc.
- **Behavioural problems** refers to those learners who show unacceptable conduct. Other behavioural problems include:

12. WHAT IS DOWN SYNDROME AND WHAT ARE THE EFFECTS THEREOF

- It is the result of an oddity of genes in the twenty first chromosome
- Usually have a **slow rate of learning and other physical symptoms**. Children with Down Syndrome are often very lovable hence the name "children from heaven"
- In order for the learner with Down's syndrome to be included in school activities, the following **characteristics will need to be given consideration**:

MEDICAL ISSUE/ PHYSICAL CHARACTERISTICS	IMPLICATIONS	STRATEGIES
Motor Skills Poor manipulation skills due to: • Hypotonia (low muscle tone) • Low shorter limbs • Reduced stamina	 Handwriting may be oversized or undersized and light/sketchy Manual skills like cutting, using concrete material & equipment may be less accurate and completed more slowly Slow at drawing up tables, charts etc 	 Use alternate tasks for recording eg: cut and paste for multiple choice questions Use large/adapted equipment – ruler with a bridge for gripping Reduce the amount of activities/work expected Provide proformas in a larger size with some info already recorded
 Visual Perception Difficulty - ordering & patterning Reversal of images Difficulty reading info presented in a random way 	 Difficult to perceive and predict a pattern or sequence Unable to reliably read a number eg: 43 becomes 34 Will miss info when presented in a cluttered or random manner 	 Model patterning by using concrete objects Rote learn numbers When counting physically touch or move or cross out objects
 Cognitive - Intellectual Comprehension/ interpretation of verbal written instructions appear to be more advanced than actual ability level Literal understanding of 	 May be more skilled in reading than maths. Comparisons are difficult as they vary in their abilities and skills Working pace is slow Appear/confirm to 	 Reduce the workload so he can complete activities Teach components of a skill in sequence. When mastered - model the whole process Abstract concepts need to be supported by using concrete materials and learn

 Abstract thinking is limited Unable to transfer knowledge to a new situation Unable to separate pieces of information to form links 	 understand but fail to comprehend the task Misinterpret words with more than one meaning eg light Unable to interpret and complete a task 	• Teach each piece of info separately while continually showing the links visually eg: 4+1=? It won't mean the same to them as 1 + 4 =?
 Memory Short-term memory is poor Long-term recall is poor Difficulty recalling and following the sequence of a process – eg. Using a calculator 	 Unable to store info long enough to process and respond to it Incorrect responses to previously known skills Difficulty getting started as they are unsure of sequence 	 Use visual instructions Use over learning and ongoing revision of skills Use rehearsals (self talk) to go through a process Eg: turn on the calculator, verbalise each number and symbol
 Specific learning dificulties Are easily distracted by visual distractions, noise & movement Experience difficulty attending when the task is perceived as difficult or boring Experience more difficulty attending to verbal info when they are part of a large group Experience difficulty focusing on and responding to key element of verbal info and tasks 	 Work is incomplete Adult intervention is often required to keep the student on the task The student will exhibit a range of problem behaviours – may not follow whole class verbal instructions – only follows the last instruction Learner may pick up an element of the instruction and go off on a tangent in their thinking 	 Remove the student to a less distracting environment Give simplified instructions Use visual displays of tasks to be completed followed by a reward/free time activity. A number of shorter tasks produce better results than one longer task Redirect the learner Provide visual prompts
Errorless learners	Difficult to correct wrong responses	Don't allow a learner to practice/internalise an incorrect procedure/task as it is difficult to unlearn and re-teach something

Failure Avoidance	• Refuse to attempt a task if	• Present only a small task/
	it is perceived as too	part of a task at a time
	difficult - like too much	• Present activities in a
	info, written or verbal, even	routine format, intro
	if the task is appropriate	changes to format or task
		gradually
		gradually

WHAT IS AUTISM (ASD) AND WHAT ARE THE EFFECTS THEREOF?

- Autism is a **lifelong, complex, developmental impairment**, it causes disturbances in brain development and functioning.
- It occurs in 4 times as many boys as girls & the incidence of ASD is on the increase.
- **The onset** of autism is from birth or before the age of 3 years.
- They **often have more learning difficulties** & the range is vast Epilepsy, sensory impairments & intellectual impairments can co-exist with it
- There are **many levels of severity** & they also display a wide range of individual characteristics they are all affected by what is known as the "**Triad of Impairments**"

- The Triad is associated with:

Repeating patterns of activities and resisting change in things which directly affect the person. It can be seen with an impairment, in the quality of dev in the following areas:

Social interaction

- Little awareness of the existence of others or their feelings
- A poor or absent ability to make appropriate social contact
- Usually show an attachment on a simple level to parents/caregivers
- Dislike being held, cuddled or touched
- Have difficulty in forming appropriate relationships with others
- In less severe cases they may accept social contact but will not make spontaneous approaches
- Prefers to play alone

o Language and communication

- Dev of speech and language may be abnormal, delayed and absent
- Show minimal reaction to verbal input and sometimes acts deaf
- Facial expressions or gestures may be unusual or absent
- The repetition of words, questions, phrases & sentences over & over
- They can have endless monologues about their special interests without adapting to the needs of the listener
- Words and phrases may be used incorrectly
- The **production of speech** may be unusual a flat monotonous tone or inappropriate variation in tone are often noted
- If verbal, may be fascinated with words and word games, but do not use their vocab as a tool for social integration and comm.
- They have difficulties in initiating or taking part in conversations

o Behaviour and imagination

- Imaginative play may be limited/poor they cannot play with a wooden block as if it is a
 toy car
- Tend to **focus on minor aspects** of things in their environment, instead of an imaginative understanding of the meaning of the whole scene
- They may display a limited range of imaginative activities, which a teacher may find have been copied off the television or elsewhere
- They pursue activities repetitively & can't be influenced by suggestions of change
- Their play may appear complex, but close observation show its rigidity
- Unusual habits like rocking, spinning, finger-flicking, continual fiddling with objects, spinning objects, tapping and scratching on objects, or arranging objects in lines or patterns
- Inappropriate use of toys in play
- Holding onto objects, for instance carrying a piece of wool all day
- Noticeable physical over-activity or extreme under-activity
- Tantrums may occur for no reason
- Changes in routine of environment, eg, a change in the route to school or altering the placement of equipment in the class, may cause distress
- Interest of activities may be limited, for eg only interested in puzzles
- A small percentage may have abilities that are outstanding in relation to their overall functioning, - exceptional memory in a specific field of interest or an exceptional art ability

The following **additional features** may also be observed:

- Little or no eye contact
- No real fear of danger
- o Abnormalities of posture and motor behaviour such as poor balance
- o **Poor gross and fine motor skills** in some learners
- Odd responses to sensory input such as covering the ears
- o Sense of touch, taste, sight, hearing and/or smell may be heightened or diminished
- Bizarre eating patterns
- High pain threshold
- o Crying or laughing for no apparent reason
- o Self-injurious behaviour such as head banging, scratching, biting
- Abnormal sleep patterns

WHAT IMPACT DOES HIV/AIDS HAVE ON THE SOUTH AFRICAN ED SYSTEM?

- It's **estimated that** at least 12% of eds are to be HIV positive school effectiveness will decline cause many eds will be ill, absent & dying or pre-occupied with family crisis.
- The effect of Hiv/Aids will eventually also have to be taken into consideration when schools and the Dep of Ed are **doing budgets**.
- Kids from homes with infected family members are forced to assume adult responsibilities.
- **Families** are plunged into economic crisis and insecurity of children by their parent/s death and struggling thereafter.

NAME 4 PROGRAMMES/INITIATIVES THAT SHOULD BE PLANNED FOR HIV/AIDS INFECTED AND AFFECTED CHILDREN

- Community-based Care the care system should ensure effectiveness & appropriateness family & community strengths must be identified and care for their vulnerable children
- o **Voluntary Counselling & Testing** Provision of counselling & testing services has been shown to decrease risk behaviours & may therefore result in decreased transmission of HIV
- Primary schools —A phased approach is advised due to the enormity of this task, the scarcity of
 human and financial resources and the impact that large scale full time training could have on the
 effective function of schools
- Support and sustaining of secondary school programmes have been limited —
 Peer-group education is a way of reaching learners regarding issues such as sexuality and
 HIV/Aids. Various models are being implemented & even wider implementation is recommended.

18. WHY ARE SOME PLANS TO COMBAT HIV/AIDS IN SCHOOLS HINDERED?

- A **lack of teachers who are trained to offer life skills** as a school subject vague Aids information and cultural and religious influences which offer resistance to sex.
- Even some of the teachers who have been trained to discuss this issue with learners **find it difficult to discuss the issue openly in a class** because they feel they do not have the necessary skills to give emotional support where needed
- Other challenges arise like the costs of relieve staff for sick teachers, the need for home and hospital teaching for sick learners and counselling for teachers who have not declared their Aids status.

WHAT SUPPORT CAN U GIVE TO A CHILD WITH A HEARING IMPAIRMENT?

- **Face them when speaking** may be able to lip read or gain meaning from hand signs or gestures & facial expressions.
- Use an overhead projector instead of a blackboard so you don't turn your back on them
- Ask questions/rephrase content for adequate understanding
- Use lots of visual aids during oral lessons
- Give test directions and assignments in writing as well.
- Provide outlines, assignments and vocabulary lists before introducing new work.
- Present spelling & vocab words in sentences it could enhance meaning for them.
- Encourage learners to **look up difficult-to-pronounce words** in the dictionary.
- Make use of visual signals to get the learners' attention
- Speak clearly in a normal tone of voice and at a moderate pace
- **Agree on visual cues** to use for certain things, for eg, when a message is being announced on the intercom or to alert them of any dangerous situations
- **Involve some of the other learners in the class** by asking someone to take notes using carbon paper and to point to speakers during a group discussion.
- Others can ensure that impaired learners are in the **correct place at the correct time**.
- Work together as a class to **limit unnecessary gestures** & movement in the class
- Have enough knowledge about hearing impairments to provide for their needs
- Communicate with the parents regularly & have an open channel of comm with them.
- **Make contact with the nearest school** for the deaf in the area and ask for advice on suitable teaching methods and strategies.

WHAT BEHAVIOUR COULD BE AN INDICATION OF A HEARING IMPAIRMENT

- often **misinterprets** instructions - **turns head** to listen

- watches the **teachers lips** - speaks **too soft or too loud**

- speaks too quickly or too slowly - speaks monotonously

- relies heavily on **gestures** - **avoids oral activities**

- is often **inattentive** - find it difficult to **retell a story**

- difficulty in hearing the **bell ring** - **difficult to associate** with friends

- can't follow what is said in **noisy crowds**

- experiences problems with auditory memory
- turns up the volume when listening to audiovisual aids

Causes of Aural disability

- Conductive hearing loss
- Sensorineural hearing loss

DESCRIBE THE MANIFESTATION OF CONDUCTIVE HEARING LOSS IN THE CLASSROOM

Conductive Hearing loss

- Hears badly through air conduction & better through bone conduction
- Has tendency to lower voice & speak softly
- Have **no difficulty in following speech** provided that it is loud enough
- If sound is amplified it is amplified in all frequencies & does not worry them
- They often complain of continued buzzing sounds in the head & ears (tinnitus).
- In **noisy surroundings these people will hear better** than normal people In noisy surroundings, e.g. a factory, people are inclined to speak sufficiently louder to hear their own voices. Consequently, their speech is audible to the partially deaf ear. The background noise is softer & less disturbing to the partially deaf.)

Sensorineural Hearing loss

- With sensorineural deafness, not all cells & nerves are affected at the same time.

 The deterioration begins at the parts that perceive the highest frequencies, & then gradually spreads to those that perceive the lowest frequencies.
- They can easily *hear* speech because they clearly hear the low frequencies but have difficulty in *understanding* speech because of loss of hearing for high frequencies many words will sound similar to them.
- They sometimes depend on very small differences to distinguish between sounds
- They are totally unable to hear in noisy surroundings
- Not loud, but *clear, slow speech* is the most easily comprehensible
- **Tinnitus** (head noises) may cause discomfort. The buzzing is caused by the degenerative process in the hair cells or nerves

SUPPORT FOR A LEARNER WITH A VISUAL IMPAIRMENT?

- The type of eye condition will determine the assistance given to a learner in class:
 - Myopia & cataracts
 - **Keep them seated** in front of the classroom in order to optimise their vision.
 - **Repeat** what's written on the board to help them check their own written work.
 - Have a magnifying glass handy in the classroom for books with small print
 - Ensure that the **lines in their work books are clear** ¬ dull difficult to see.
 - Ensure that **printed materials are clear at all times**, using white paper and black writing as the contrast in print and background makes it clearer to see.
 - Ensure that **printed mats are printed in larger letters** &good spacing is used.
 - o Hyperopia
 - Sit at the back of the class
 - Albinism
 - Sit in a darker place in the class away from window or a glare
 - They should wear long sleeves and trousers and hats with wide rims
 - In General
 - **Record textbooks** for those that find it difficult to read their textbooks.
 - Questions could be recorded onto tape to ensure comprehension.
 - Keep doors either opened or closed as these could be a safety hazard.
 - Pathways between the desks should be clear to prevent any of the learners from stumbling over objects and hurting themselves or others.

WHY IS IT IMPORTANT FOR ED TO KNOW WHAT VISUAL PERCEPTION IS?

Visual perception problems affect academic performance in the following ways:

- sorting & classifying objects especially with colours, shapes, sizes and types.
- **Perceiving an object against a background** or in identifying fine details in a picture or identifying two objects which overlap
- **Recalling** what they have just seen
- **Puzzles** bringing separate pieces together in relation to form a whole

WHAT BEHAVIOUR COULD GIVE TEACHERS AN INDICATION THAT A LEARNER IN THEIR CLASS MIGHT HAVE A VISUAL BARRIER?

Behaviour

- rubs eyes excessively
- shuts or covers 1 eye; tilts head or thrusts it forward
- difficulty with reading or other work that requires close use of eyes
- blinks more than usual or is irritated when doing close work
- is unable to see distant things clearly
- squints eyelids together or frowns
- refuses to participate in ball games
- has poor spacing when writing
- holds reading material unusually close/far from eyes

Appearance

- Crossed eyes
- Red-rimmed, encrusted or swollen eyelids
- Inflamed or watery eyes
- Recurring sties
- White pupils
- Learners of uneven size
- Drooping eyelids
- Eyes that move excessively

Complaints

- Itching, burning or scratch feeling in the eyes
- Inability to see well
- Dizziness, headaches or nausea, following close work
- Blurred or double vision
- Inability to see in bright light

Eye conditions

• Refraction Errors

- Nearsightedness / myopia
- Farsightedness / hyperopia
- Astigmatism
- Cataracts the clouding of the eye (more common in older people)
- Strabismus (Squint) the eye muscles do not function correctly & eye is pulled to side
- **Nystagmus** involuntary movement of eye. Cannot be corrected.
- Albinism lack of pigment in the eye leads to severe photophobia (light sensitive)
- Trachoma disease carried by flies that cause blindness
- Conjunctivitis infection of the membrane covering the surface of eye, becomes red
- Glaucoma painless pressure builds up in eye & damages optic nerve loss of vision
- Macular degeneration retina gradually destroyed person has only peripheral vision
- **Retinitis pigmentosa** too much pigment in eye distorts light gradual deterioration

SUPPORT TO A LEARNER WITH CEREBRAL PALSY?

- Arrange the furniture in a way that they are able to move around freely
- The washbasin and toilet must be easily accessible.
- **Store classroom apparatus** away & position activities in places where the learners will be able to reach for it themselves.
- **Encourage learners to become independent** organise the floor & table games which are easy to manage and which will encourage participation.
- Encourage them to use disabled limbs
- Give them chores & responsibilities will feel just as important as the others
- Encourage him 2 **join in group activities** to feel as a participant in group situations
- Help him to feel physically & emotionally secure-may explore with confidence
- Explain to the rest of the class to obtain & maintain understanding and cooperation
- Comfortable with orthopaedic aids & try to make the class & other areas easily accessible so they can move around freely in the class while using their aids
- With medication make sure that they take their medication regularly.
- **Keep close contact with parents** to keep up to date of any changes or developments.
- **Try to find a typewriter**, tablet or a notebook for learners who have difficulty with their handwriting and allow them to do tests or exams orally if and when necessary.
- **Restrict incidents** that might distract attention to focus on the work to complete.
- Make provision for periods of absences & assist with catching up of missed work.
- **Be creative in your teaching** improvise when necessary and provide whatever assistance you can in order to assist learners.

WHAT IS EPILEPSY?

- Epilepsy is a **discharge of abnormal electrical activity in the brain** – it results in bodily seizures or it may be invisible (hidden epilepsy)

WHAT WILL U DO IF A LEARNER HAS AN EPILEPTIC SEIZURE IN YOUR CLASS?

- With slight seizures:

- o Be alert at all times
- o Look out for signs of a seizure and then keep an accurate record of the incidences
- o Make sure that no one opposes the child or tries to force him/her to act differently
- o Simply guide the learner to a place of safety
- o **Provide comfort** & allow the child to rest as some learners may feel nauseous, have a headache or be confused or upset afterwards

- With tonic-clonic seizures:

- Prevent the learner from falling
- o Move any objects away so that he/she does not sustain an injury.
- o **Do not allow anyone else to try hold on to the learner** or prevent the body movements of the learner as this may also lead to an injury.
- o **Turn the learner on one side** so that excess saliva may run out and not cause the learner to choke.
- o **Do not insert any objects** into the learner's mouth.
- o Make sure learner's clothes are loose, especially around the neck & the waist
- o Wait for the seizure to pass & ensure that other learners remain calm.
- o Call for medical assistance if the learner:
 - has seizures at frequent intervals,
 - is at a loss for oxygen,
 - if the learner chokes or
 - if the learner sustains injuries which require medical attention.
- o If a learner is has a **seizure for the first time** inform the parents as soon as possible, or call for a doctor or both.
- Report all seizures to the parents & if necessary send the learner home.

The effect of epilepsy on the child's learning

- Learners with epilepsy who are not treated correctly can easily **become disturbed** other learners tease them or reject them they do not know themselves what is wrong with them.
- They could become **aggressive fighters** or otherwise become negative, withdrawn & stubborn.
- They are sometimes **restless**, **hyperactive** & have poor concentration.
- They may be clumsy & have perceptual problems & find it difficult to control emotions.
- They **must be treated & guided sympathetically** but firmly, so they can grow up just as normally as nondisabled learners
- Seizures can be brought under control with meds- can become useful members of society.

Circumstances in the class which may affect seizure

- Seizures may increase if there's an **upset in the class**, exceptional excitement.
- Unnecessary stress & frustrations should be kept to a minimum
- They must **eat at regular intervals** too great interval between meals leads to low blood sugar & make them more susceptible to seizures they need a good breakfast before school.

Participation in everyday group activities

- Can participate in all games, but must be supervised at climbing apparatus & when swimming
- They have less seizures if they are active & if their attention is fully occupied by activities in which they are interested extremes should be avoided
- Overexertion or too much rest during the day could also lead to seizures
- They **need normal consistent discipline** as normal learners

 Do not overprotect or overlook misbehavior this could hamper their social relationships.

PERCEPTUAL MANIFESTATIONS

- Visual perception problems differences and similarities
- **Auditory perception problems** distinguishing sounds

DISCUSS LATERALITY, LATERAL DOMINANCE AND DIRECTIONALITY AND WHAT INFLUENCE THESE HAVE ON A LEARNERS PERFORMANCE

Laterality:

- Awareness of **left and right** side of body
- Some children **struggle to cross midline** touch right foot with left hand. They will draw a line with left hand to middle of page & then continue drawing with right hand.
- Experience **problems in formal schooling** only write on one side of the page and also experiences problems with reading as one's eyes need to cross the midline

Lateral dominance:

- refers to one's preference of a specific side of the body left handed/right handed
- Learners progress to this naturally
- If they reach school without establishing dominance they may experience problems:
 - with the **concepts** of left and right
 - distinguishing the diffs in direction between b and d which poses problems for reading, writing and spelling

Directionality:

- Learners must learn to **know their body** and be aware of it only then can they know where objects in space are.
- Problems:
 - o difficulty with the order in which things are arranged
 - o write numbers upside down like a 6 and 9, letters like p/d, pot/top
 - o can't identify **one duck in a row** facing an opposite direction

Manifestations of perceptual-motor problems at preschool level

Motor manifestations

Gross motor problems

- **Causes clumsiness, poor balance & uneven rhythm** in the use of the larger muscles of the body
- Problems can be observed when child crawls, walks, runs, jumps, kicks, etc.
- > Problems can be observed during outside play, movement games & music

• Fine motor problems

- ► Has a lack of fine motor coordination
- Experiences probs in using smaller muscles during creative activities(e.g. cutting, drawing & collage)
- Will battle do up buttons, thread beads, build with small blocks & page books
- Probs can be observed when handling small educational apparatus & during inside play

• Visual-motor coordination problems

- Experience probs with the **cooperation between eye-hand/eye-foot** in order to successfully execute movements with hands or feet
- ➤ Problems manifest in poor finger & hand movements
- > Struggle with finer hand skills & also has poorly coordinated movements of the legs / feet when kicking a ball.

Perceptual-motor manifestations

Spatial perception

- Must learn to perceive objects in relation to themselves b4 perceiving them in relation to each other.
- Activities that **promote body awareness** are very important in preschool
- They learn that things may be far away, close, big / small in relation with them and with each other
- ➤ Problems manifest when they **cannot understand concepts** such as above / beneath, in front / behind, under / over. They cannot indicate first, middle, last; cannot estimate time / depth / distance in ball games; cannot determine direction accurately & often gets lost.

Assistance to learners with perceptual-motor problems

Perceptual-motor skills can be improved thru the correct exercises. Keep in mind:

- 1. Perceptual exercises should always be **presented in an integrated way**, as a game or part of meaningful activities they should not even know that they are busy with exercises.
- 2. **Don't emphasise** the child's weak areas, they are inclined to avoid activities they have problems with.

Activities may be presented to develop perceptual & motor skills.

Some practical hints:

- 1. Lay out **tracks of various textures** that learners can walk on / crawl on / slide across e.g. corrugated cardboard; damp sheet; rough mat; bubble wrap; grass
- 2. **Games such as "I-spy**..." can be combined with motor movements, such as "Jump like a frog and touch something red"
- 3. Play games like "touch ur knee with your hand" progress to more difficult body parts
- 4. Play memory games e.g. "I go shopping and I buy..." can be played. (Limit to 6 learners).

DISCUSS HYPERACTIVITY AND DISTRACTIBILITY. HOW CAN A TEACHER GO ABOUT HANDLING A LEARNER WITH SUCH A PROBLEM. NAME 8 STRATEGIES THAT A TEACHER CAN EMPLOY TO DEAL WITH BEHAVIOURAL PROBLEMS

Hyperactivity = refers to a surplus of motor activity:

- learners are constantly busy fiddling and running around
- are hardly ever quiet & must touch & handle everything within their reach
- may **push or kick** others without any reason
- this **may become irritating** for both the teacher and other learners

Distractibility = sometimes known as "sensory hyperactivity":

- learners on **continually on the move** as far as attention is concerned
- any sensory stimulus is so enticing they can do nothing but pay attention to it
- they can pay attention, but they cannot control their attention
- any movement in the class or sound distracts their attention
- because of this they are **seldom able to finish tasks** but shift from one unfinished task to another

Handle them as follows:

1 Recognise the symptoms

- Identify the learner's weak and strong points

- Teachers & parents each compile a list be objective see what traits are characteristic of a learner in that age group and which are not
- o Determine the frequency of the behaviour use a check list to record where the learner experiences problems and how often
- o Parents and teachers lists can differ and it's important that regular discussions are held to review the situation at home and at school

- Identify easy and difficult tasks and situations

O Be specific & write down the exact circumstances and events. Does the problem occur often? Is it the same in a group/individual situation? Specific games? The presence of adults? How tired he/she is?

- Identify skills necessary for each task and situation

o which skills are needed to successfully complete a task – determine weak and strong points.

- Investigate your own thoughts and feelings

One may harbour negative feelings toward the child because he/she is so demanding –
 frustration because the learner turns all her hard work upside down with being disruptive

- Other people's reactions

- o Mothers often are the 1st to suspect a prob-don't ignore it- begin to search for an explanation
- It is only when all involved understand the prob that an attempts to help them can be of value

2 Understand the learner's world

- Learn to understand the learners behaviour

- These learners have little experience of success to motivate them in stressful situations and their shortcomings prevent them from fulfilling the normal expectations for their age group
- o Develop a sensitivity to how these learners feel and why they act in certain ways
- o Build and maintain a positive relationship

- Keep the learner's level of development in mind

○ Let the learner set his pace and not the teacher – on some levels the learner will perform according to chronological age, while on others according to a lower age limit

- Discuss problems with the learner

o helps them to understand themselves/explain the situation in lang they can understand

- Verbalise the learner's unexpressed feelings

o it helps them to understand their feelings and put it into words.

- Communicate with more than words

o They are often sensitive to hidden messages. Choose the right words and body language

- Anticipate problems rather than wait for them

o watch for signs that warn of an outburst. Take positive steps to prevent potential problems and help learners to avoid situation in which they experience problems

- Distinguish between the learner and the learner's behaviour

o learners must be aware that the teacher accepts and loves them as a person

3 Provide structure

Types of structure:

- **Relationship structure** Allow learners to succeed as often as possible Be a good role model
- **Task structure** tasks should be presented in such a way that learners:
 - o Understand what is expected of them
 - o Are not overwhelmed by the nature and scope of the task
 - o Have enough guidelines to reduce frustration
 - o Can complete the task with pride and feel that they've achieved something
- **Situation structure** can't handle every situation if routine is disturbed prepare them

- A few guidelines

- o Prepare the learner for any disruptions in the normal routine
- Explain what behaviour is expected of them limits and consequences
- o The duration of the situation should suit the learner's tolerance lever
- Reward positive behaviour
- o Don't convey vague, unclear consequences to learners no threats
- o Limit the learner's number of choices attention is better held
- o Follow a relatively constant daily routine at home and at school

4 Therapeutic discipline

- Therapeutic discipline is a teaching method that:
 - o Tries to change, shape or reinforce learners' behaviour patterns
 - o Is employed in agreement with the learner's level of development
 - O Shows understanding for the needs of learners
- **Consequences for behaviour** learners must become aware of the repercussions that their behaviour can lead to and the consequences of their behaviour should be discussed with them.
 - o Positive behaviour & attempts to do good should always be recognised & reinforced
 - o Chat to them often about behaviour positive and negative

WHAT'S THE DIFFERENCE BETWEEN PARAPLEGIA & QUADRIPLEGIA

Monoplegia – one limb is affected

Hemiplegia – one side of the body is affected

Paraplegia – the lower limbs are affected (legs)

Triplegia – 3 limbs are affected

Quadriplegia or tetraplegia – all 4 limbs are affected

Diplegia - is when legs are more severely affected than arms

Types of physical disability

Neurologically related physical disabilities (brain & spinal cord)

• Spina bifida

- ➤ Baby is born with an **opening in the spinal column**
- ➤ At the opening membrane may bulge to form a sac containing cerebrospinal fluid & a part of the spinal cord

Paraplegia & quadriplegia

- **Paraplegia:** inability to move & absence of sensation in the **lower limbs**
- **Quadriplegia:** inability to move all **four limbs**
- > The spinal cord cannot relate information from brain to limbs not the same as cerebral palsy

Epilepsy

- ➤ Physical disability with neural connections
- ➤ **Definition: sudden disturbance in brain function** caused by unusual electrical activity in the brain cells. Disturbance is temporary & once over the person returns to normal

Cerebral Palsy

- A section of the brain has been damaged / failed to develop before brain is fully grown
- There are observable signs that the motor system has been affected
- > Disability may vary in degree from mild to severe
- **Condition is complex** because there are usually other malfunctions

Causes of cerebral palsy

- Caused by an underdevelopment of / damage to certain parts of the brain concerned with movement
- This condition can be **caused by prenatal, perinatal or postnatal factors** anything that prevents brain from getting enough oxygen can cause brain damage

Classification of cerebral palsy

The **topographical classification** (part of the body which is affected):

- 1. **Monoplegia.** One limb is affected.
- 2. **Hemiplegia.** One side of the body is affected.
- 3. **Paraplegia.** The lower limbs are affected.
- 4. **Triplegia.** Three limbs are affected.
- 5. **Quadriplegia or tetraplegia.** All four limbs are affected. When the legs are more severely affected than the arms, the term is **diplegia.**

Postpoliomyetis (polio)

➤ Viral infection which damages the motor cells in brain & spinal chord

Physical disabilities of the skeleton & muscles

- Amputation loss of limb trough accident or surgery
- **Deformed limbs** born without limbs or have deformed limbs
- **Burn lesions** person becomes physically disabled due to severe burns

LEARNING PROBS AS A BARRIER TO LEARNING

MANIFESTATIONS OF LEARNING DIFFICULTIES

1. Problems with school subjects

- Maths:

- cannot tell the difference between mathematical signs $(+ x \div)$
- cannot understand the two main forms of mental arithmetic (+ -)
- Cannot analyse and work out word sums
- Over-dependent on concrete aids to work out answers- in gr 3 still needs fingers for simple sums
- tends to use the same operational principle to work out answers to different kinds of sums eg: 2 + 5 = 7; $2 \times 5 = 7$

Spoken language

- Sentences are short and the content insignificant
- Avoid conversations
- Find it difficult to follow conversations
- Do not always understand instructions
- Have a limited vocab
- Sentence construction is incorrect
- Use incorrect past tense and plural forms

Reading

- Don't know what sounds letters stand for
- don't recognise words on sight
- Read slowly, vocalise words
- Add or leave out words
- Misread the text
- Cannot answer direct questions on the section they have read
- Cannot recount what they have read

- Spelling

- Don't know what sounds letters stand for
- Have difficulties with vowels (switch them around)
- Cannot identify the elements of words
- They spell phonetically instead of according to spelling conventions
- Cannot remember or apply simple spelling rules

- Written language

- sentences are short and rudimentary
- same sentence structure is repeated (The cake is sweet / The boy is ugly)
- Sentence construction (word order) is deficient
- Spacing of letters and words is incorrect
- Can verbalise a proper sentence but cannot write it
- Cannot take dictation

- Handwriting

- Letters are poorly formed
- letters are formed incorrectly
- line quality is poor shaky or pressure applied (too heavy or light)
- Pencil grip is incorrect and writing posture is poor
- Spacing of letters and words is poor
- Letters do not line up between lines or letter do not line up with each other

Assistance with respect to specific difficulties – School subjects

Maths

- Keep maths exercises **related to the life experiences** of the learners so they can appreciate the practical value of maths
- Mechanical explanations of how to arrive at solutions to math problems will be necessary in the case of learners having problems with working out solutions for themselves.
- Advise parents that math operations should be related to a child's environment.

 Parents should not attempt formal instruction in maths because they tend to pass on the explanations they heard from teachers at the time when they were at school
- **Hints** which may be valuable for foundation phase:
 - O **Initially maths exercises** should be done in a concrete way instead of always using counters use things from their natural environment
 - \circ The different operations (+, -, x,÷) must be explained to learners every time so they can become familiar with the operations and understand the differences
 - O Involve them in collecting the ingredients for a recipe for a meal
 - O **Draw the family into a board game** & encourage the child to keep the score and compare the scores of the different family members

Language Problems – Spoken language

- **Read stories** to learners to extend vocab, familiarise them with written language and language structures discuss stories and use questions and answers. Learners can act out the story or create drawings and then discuss it
- Never criticise learners' language usage this inhibits spontaneous conversation among them. Simply correct the incorrect form by rephrasing without comment after the learner has used it.
- **Group discussions** should be encouraged they can tell stories to the group and afterwards it can be discussed ask questions about it
- Allow **enough time** for informal conversation
- **Encourage learners to read** on their own as it's a means of expanding general knowledge, vocab and their command of language
- Advise parents to make time every day for conversation within the family circle

Language Problems - Reading

- **Reading stories** helps learners to realise that written language is different from spoken language and will know how written language is formulated
- Ensure that learners become competent at two main aspects of reading: recognising and understanding the words
- Enough time should be spent for learners to become familiar with high frequency words in order to recognise these words on sight, as well as with the sounds associated with letters
- Learners should become familiar with the composition of words & sentences & should be able to apply this knowledge by writing words & sentences alone
- Teach the elements of reading to learners in a **playful manner** don't sound out the words for eg, c+a+t is cat this should be avoided
- Use open ended questions
- **Don't allow learners to fall behind** as they proceed through the class reader rather keep passages shorter and get the group to follow in their readers
- Read in unison and in sequence for variation
- Learners can **make up their own stories** and these can be written down for them they can illustrate the stories and then read them

Language Problems – Spelling and written language

- It is crucial that learners **know the relationships** between letters of the alphabet and the sounds they stand for.
- They must be able to analyse words & sentences & apply simple spelling rules
- The relationships between letters should be conveyed to learners by using varied, playful techniques and regular practice sessions
- Once learners have learned a new spelling structure, they should be exposed to other words containing the same spelling structure they must understand and know the spelling rule and also learn to use it in written sentences
- Parents should motivate them to write correctly and take pride in their written work

Behaviours associated with learning difficulties

- Insecurity, withdrawal, daydreaming, tearfulness, unfriendliness, stubbornness, hyperactivity, complaints about stomachache, nausea, refusal to go to school
- Excessive sweating of the hands, urinesis & encopresis (uncontrolled bladder) may occur
- Excessive dependence on and seeking of approval
- Incomplete and untidy work
- Attention problems
- Perseveration difficulty in switching attention from one activity to another

Causes of learning difficulties

- Ecological factors

- The home environment communication, lack of basic needs, neglect
- The school poor teaching, inadequate facilities & equipment, language
- Social problems poor interaction, relationships, self confidence
- Cultural environment poverty, family disintegration, few opportunities

- Emotional problems

- continuous failure at school
- conflict at home
- poverty
- a negative attitude towards school in the home, low self-esteem, depression, anxiety and withdrawal

- Physical problems

- Visual and hearing problems
- Ill health
- Neurological dysfunction auditory perceptual skills, visual perceptual
- Biochemical imbalance in the brain
- Intellectual disability low performance levels
- Gender differences boys phys & cognitive dev takes longer than girls
- Undernutrition Poverty, dev probs, tired at school