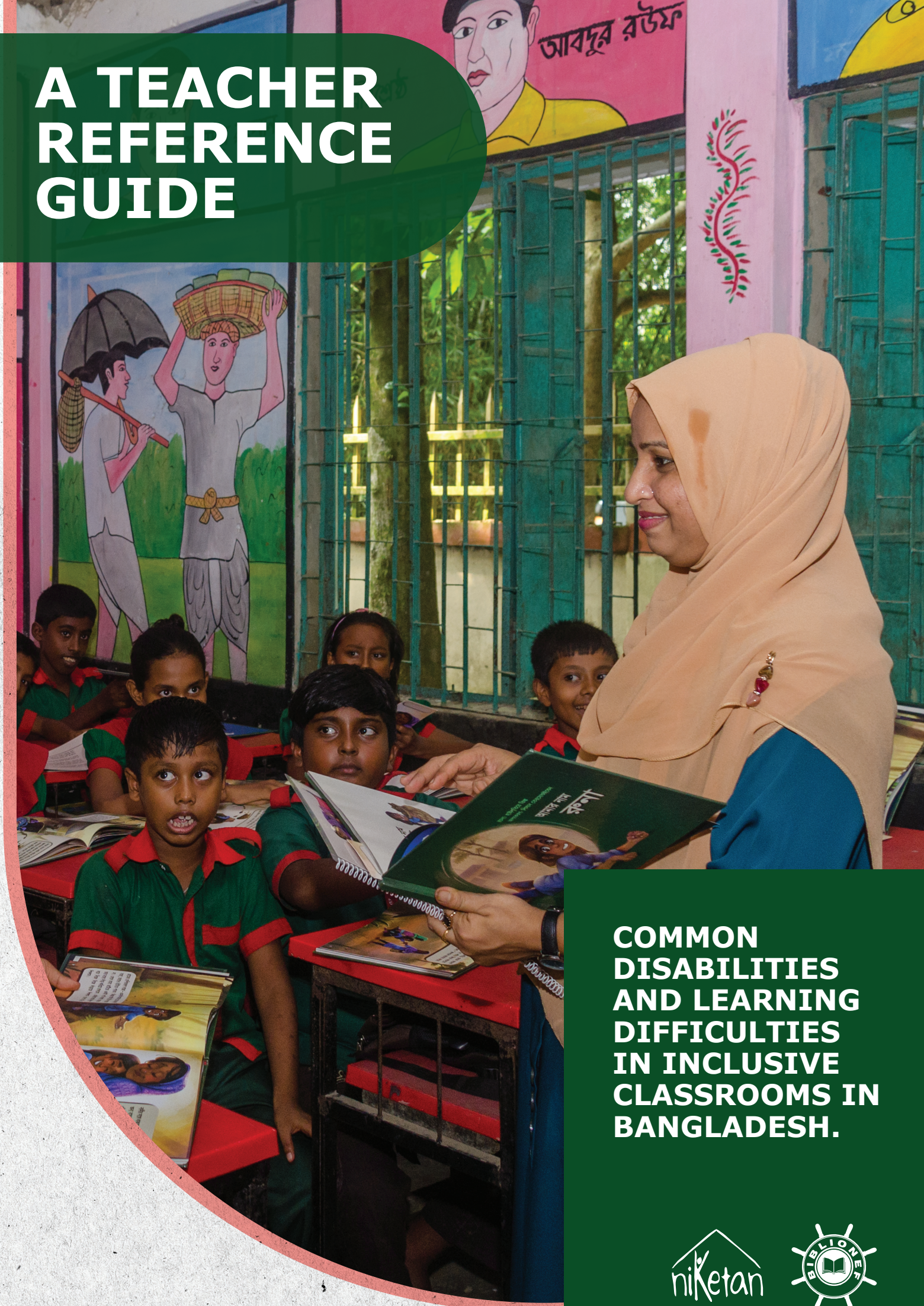
A TEACHER REFERENCE GUIDE



COMMON DISABILITIES AND LEARNING DIFFICULTIES IN INCLUSIVE CLASSROOMS IN BANGLADESH.

niketan

BIBLIONEER

TABLE OF CONTENTS

This Teacher Reference Guide is part of the **'Stories for Inclusion'** program and the Disability Inclusive Education training.

1. INTRODUCTION

Teachers are not trained to diagnose a disability. Even professionals may mis-diagnose, such as a hearing impairment for autism spectrum disorder or a learning difficulty for an intellectual disability. However, most teachers CAN identify when and with what a student experiences difficulties and needs additional support. Children with learning difficulties often struggle with one or more of the following:

- Reading and/or writing
- Mathematics
- Understanding
- Coordination
- Memory
- Short attention span
- Ability to follow directions.
- Staying organized
- Telling time

This reference guide is meant to help (mainstream and other) teachers identify classroom strategies that help different struggling learners. These learners may or may not have a specific disability or learning problem. For teachers it is less important to know disability definitions, causes or be aware of all the different types of disability. By observing and interacting with the learner, a teacher can often identify the learning difficulty (without labelling the child) and look for a strategy to support that child.

How disabilities and learning difficulties are categorized differs by country and even within countries. Many disabilities can be grouped under neurodevelopmental disorders (NDD), but it is doubtful whether this is useful for teachers. For them it is more important to look beyond the disability or difficulty and identify strengths. Learning diversity is not a weakness. For example, children who learn and behave differently due to ADHD, ASD or Learning Disabilities are intelligent like other children.

However, their brains are "wired" in a different way and this is simply a variation of the human brain.

The guide focuses on mild and moderate disabilities or learning difficulties, because there are generally no children with severe disabilities present in an inclusive regular classroom. Furthermore, disability terminology in the guide may at times differ from what is used in the Disability Act (2013), simply because this reference guide focuses on education, while the Disability Act is a more medical or health-oriented document. In addition, the Disability Act is not child-development specific. Thus, in the Disability Act you will not find a category such as 'Learning Disabilities', while this is a category especially important for (inclusive) education. Most of the 12 types of disabilities mentioned in the Disability Act, however, have been used in the Teacher Reference Guide, based on the highest relevance for education.

If you – as a teacher - are concerned about a student, speak with the child's parents, and if need be, suggest, if possible, a medical and/or psychological assessment. In the meantime, try to create a learning environment that is welcoming and respectful, irrespective of children's individual learning support needs, where no teasing or bullying takes place. And the information below will help you as a teacher to learn more about learning difficulties and disabilities, its causes, signs and symptoms and a range of teaching-learning strategies to support such students in your inclusive regular classroom. You will realize that there are many strategies that help not only children with learning difficulties or disabilities but all children. These are quality teaching-learning strategies for all!

2. LEARNING DISABILITIES (LD)

Learning disability is a general term that refers to a heterogenous group of problems manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning, or mathematical abilities. These disabilities are intrinsic to the individual. Simply stated, a learning disability is a processing difficulty and any of the five senses may be affected. There are many different learning disabilities or difficulties, they last a lifetime, and cannot be cured. Learning disabilities may be caused by a central nervous system dysfunction. Examples are dyslexia, dysgraphia, dyscalculia, and Attention Deficit (Hyperactivity) Disorder (ADD/ADHD).

A learning disability is NOT an intellectual disability, nor are these difficulties the result of lack of motivation!

2.1 Signs and symptoms of (possible) learning disabilities (3)

What follows are some warning signs of learning disabilities to look for in preschool and primary school children. Many young children may exhibit one or two of these behaviours; however, consistent problems with a group of behaviours are a good indication the child may have a learning disability. Becoming aware of the warning signs of learning disabilities and getting children the necessary help early on can be key to a child's future. Therefore, parents and teachers need to be familiar with the early indicators of a learning disability to get the right help as soon as possible. The earlier a learning disability is detected, the better chance a child will have of succeeding in school and in life.

The most common learning disability is difficulty with language and reading, also in Bangladesh[4], but children are generally able to achieve average or above average reading ability when they receive help early.

Many children with learning disabilities remain undiagnosed or are misdiagnosed and go through life with this "hidden handicap". The resulting problems can lead to poor self-esteem, failure to thrive in school, and difficulty in the workplace. With early detection and intervention, children can learn the necessary skills to cope with and compensate for their learning disability.

All children learn in highly individual ways. Children with learning disabilities simply process information differently, but they are generally of average or above-average intelligence.

[3] Keep in mind that warning signs linked to language – in this case English – may not be the same in other languages and scripts, such as Bangla.

[4]http://library.crp-bangladesh.org:8080/xmlui/bitstream/handle/123456789/670/Jigme%20Wangchuk.pdf?sequence=1&isAllowed=y

Early warning signs: Kindergarten through 4th grade

- Slow to learn the connection between letters and sounds.
- Confuses basic words.
- Makes consistent reading and spelling errors including letter reversals, inversions, transpositions, and substitutions.
- Transposes number sequences and confuses arithmetic signs (+, -, x, /, =)
- Slow recall of facts.
- Slow to learn new skills, relies heavily on memorization.
- Impulsiveness, lack of planning.
- Unstable pencil grip.
- Trouble learning about time.
- Poor coordination, unaware of physical surroundings, prone to accidents.

`yN©Ubvq cwZZ nIqvi m¤¢vebv|

2.2 The best support for children with learning disabilities.

Most teaching strategies listed below to support students with learning disabilities/difficulties, are teaching strategies that support the learning of ALL students!

- Academics and organisation
- Break learning tasks into small steps.
- Probe regularly to check understanding.
- Provide regular quality feedback.
- Present information visually and verbally.
- Use diagrams, graphics, and pictures to support instruction.
- Provide independent practice.
- Model yourself what you want children to do.
- Clearly define (together with students) and post classroom expectations/behaviour rules for everyone to see.
- Use direct instruction.
- Provide simple instructions (preferably one at a time).
- Sequence slowly, using examples.
- Speak clearly and turn to students when you speak so they can see your face.
- Encourage children to ask questions.
- Use graphic organisers to support understanding of relationships between ideas.
- Ask questions that require students to explain (and show understanding)
- Reduce course load.
- Provide clearly printed handouts of notes.
- Repeat or re-word complicated directions.
- Frequently verbalize what is being written on the board.
- At the end of class, summarize the important messages/lessons learned.
- Eliminate classroom distractions (e.g., excessive noise, flickering lights, etc.)
- Give assignments both in written and oral form.

- Have practice exercises available for lessons in case a student has problems.
- Have students underline key words or directions on activity sheets (then review the sheets together with them).
- Write legibly on the board, use large type letters, and do not clutter the board.
- Assist the student in borrowing notes from a peer if necessary.
- Clearly label equipment, tools, and materials, and use colour coding.
- Consider alternate activities/exercises that can be utilized with less difficulty for the student, while maintaining the same or similar learning objectives.
- Provide a peer tutor or assign the student to a small study group.

2.3 Dyslexia

Dyslexia is a reading disability/difficulty typified by problems in expressive or receptive, oral, or written language. Between 5 and 10% of school-age children have dyslexia. Problems may emerge in reading, spelling, writing, speaking, or listening. People with dyslexia often show talent in areas that require visual, spatial, and motor integration.

2.3.1 Teaching strategies for students with Dyslexia.

- Provide a quiet area for reading activities.
- Develop/use audiobooks, and books with large print and big spaces between lines.
- Find or develop story texts in a Dyslexia-friendly font.
- Provide a copy of class notes to the student.
- Allow alternative forms of book reports.
- Have students use both visual and auditory senses when reading text.
- Present material in small units.
- Use graphic organisers to connect ideas.
- Read and share stories with students.
- Provide students with chapter outlines that highlight key points in their reading.
- Announce reading assignments well in advance.
- Offer to read written material aloud, if necessary.
- Point out ways in which reading is important in everyday life (e.g., on labels, instructions, and signs).
- Teach students how books are organised.
- Use stories with predictable words and words that occur frequently in the text.
- Label objects in the classroom.
- Help students notice the letters in the environmental print that surrounds them.
- Engage students in activities that help them learn to recognize letters visually.
- Teach students to attend to the sounds in language.
- Model and demonstrate how to break short sentences into individual words.
- Have students clap out syllables and listen for and generate rhymes.
- Focus on activities that involve sounds of words, not on letters or spellings.
- Model specific sounds and ask students to produce each sound in isolation.
- Teach students to blend, identify sounds, and break up words into sounds.
- When teaching decoding, begin with small, familiar words.

- Model sounding out words, blending the sounds together, and saying the word.
- Have students read new stories and reread old stories every day to build fluency.
- Engage students in discussion of reading topics that are of interest.
- Model comprehension strategies and provide students with guided assistance.
- Point out how titles, headings, and graphics reveal main ideas about a book.
- Point out unfamiliar words, revisit them, and explore their meaning.
- Teach students to use contextual clues to figure out meanings of unfamiliar words.

2.4 Dysgraphia

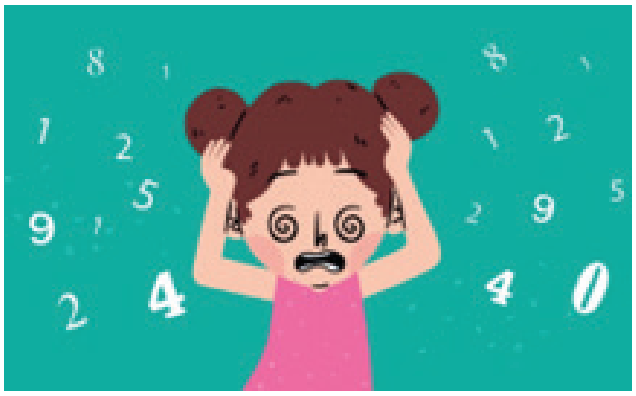
A writing disability/difficulty in which a person finds it hard to form letters correctly or write within a defined space.

2.4.1 Teaching strategies for students with dysgraphia

- Use oral tests/exams in place of written tests/exams when possible.
- Allow use of mobile phone in class as alternative to written assignments (audio recording/videorecording).
- Assign a note taker for the student.
- Provide notes or outlines to reduce the amount of writing.
- Provide a partially completed outline to allow students to fill in details under major headings.
- Allow use of a laptop or other computer for writing assignments.
- Provide computer with spell check, grammar, and cut and paste features.
- Reduce copying (from the board) that the student is required to do (and offer pre-printed math problems).
- Have wide rule paper, graph paper, and pencil grips available.
- Allow the student to use print or cursive.
- Teach pre-organisation strategies, such as use of graphic organisers.
- Do not grade based on poor spelling on first drafts, in-class assignments, or on tests.
- Have students proofread papers using a checklist.
- Shorten writing assignments and allow extra time if necessary.
- Have students complete writing tasks in small steps.

2.5 Dyscalculia

A mathematical disability/difficulty in which a person has a very difficult time solving arithmetic problems and grasping math concepts.



2.5.1 Teaching strategies for students with Dyscalculia

- Allow use of fingers and scratch paper.
- Use diagrams and draw math concepts.
- Present activities that involve all sensory modalities – auditory, visual, tactile, and kinaesthetic.
- Arrange peer assistance and tutoring opportunities.
- Have graph paper available so students can align numbers in math problems.
- Use coloured pencils to differentiate problems.
- Teach students to draw pictures of word problems.
- Use rhythm and music to teach math facts and to set steps to a beat.
- Schedule computer time to drill and practice with math facts.
- Practice new strategies until students are comfortable with them.
- Teach students to understand the problem, develop a plan to solve the problem, carry out the plan, and look back to be sure the answer solves the problem.
- Use materials such as games for practice, which are interactive and motivational.
- Use distributed practice, which means practice in small increments (e.g., two 15 minutes sessions per day, rather than an hour session three times a week)
- Use small numbers of math facts per group for mastery, and frequently practice with mixed groups.

2.6. Attention Deficit (Hyperactivity) Disorder (ADD/ADHD).

This learning disability is characterized by inappropriate degrees of attention, impulsiveness, or hyperactivity. Although these areas are core symptoms, all three characteristics are not necessarily present in those affected. Symptoms are generally first manifested early in childhood and may persist in varying degrees throughout adult life. The difference between ADD and ADHD is the absence or presence of hyperactivity.

ADD/ADHD is not caused by laziness or lack of discipline!

ADD/ADHD is one of the most common childhood neurodevelopmental disorders. Children with ADD/ADHD may have trouble paying attention, controlling impulsive behaviours (without thinking what the results will be), or be overly active.

2.6.1 Causes

It is still not fully understood what causes ADD/ADHD, but genetic factors may play an important role. ADD/ADHD is caused by differences in the brain. Just "trying harder" does not make it easier to focus.

2.6.2 Signs and symptoms

- Daydream a lot.
- Forget or lose things a lot.
- Squirm or fidget.
- Talk too much.
- Easily distracted.
- Restless (wants to move around)
- Make careless mistakes or take unnecessary risks.
- Have trouble taking turns.
- Have difficulty getting along with others.

Focus on short-term goals. Long-term goals are often overwhelming for these children. Waiting for an end of term report card is a daunting prospect for a child who needs frequent affirmations. Some can only focus on completing assigned tasks one day at a time. Children with ADD/ADHD need frequent positive reinforcements (a kind word, a small reward).

Furthermore, as these children may display impulsive behaviours within the classroom (which is a neurological rather than a behavioural issues), consequences may not work well with children with ADD/ADHD. When such a child becomes emotionally dysregulated, their brain is flooded with emotions and cannot process the conversation they are expected to have about the incident. Beginning a dialogue with them in this moment would be counterproductive, more than likely making the situation worse. Not only would it further frustrate the child, but it would add to their feelings of inadequacy, as they once again are unable to meet an expectation. It is much better to redirect the behaviour quickly and calmly in the moment but save the conversations for a later moment.

Give the child at least 15 minutes to utilize some calming strategies, to focus on something else as a mental break from whatever caused overstimulation.

Can be a strength: children with ADD/ADHD are often out-of-the-box thinkers. Many become entrepreneurs later in life. With the right structure and support, these children can get things done and thrive in school and in life.

2.6.3 Teaching strategies for students with ADD/ADHD.

I. Hyperactivity or impulsivity

- Minimize distractions (visual stimuli like clutter, etc.). Highly decorated classrooms may not be the best learning environment for children with ADD/ADHD.
- Allow the child to calm down (e.g. close eyes and take 20 slow, deep breaths; stand up and stretch; take a few minutes-walk outside)

- Create a consistent routine, making the school day more organised and predictable (so children know what to expect).
- Give opportunities for movement, e.g., allow your student to stand up while they work, ask them to bring a message, have them go get a drink of water, let them do 10 jumps in place, have a 3-minute dance party.
- Allow the child to stand once his or her work is complete.
- Ignore transgressions like blurting out and agree on a gesture (e.g., finger on lips) to remind the student.

II. Written expression: difficulty writing a text and organizing ideas.

- Let the child dictate ideas to a scribe.
- Provide a graphic organiser with key components of an essay to write.

III. Reading comprehension: difficulty remembering and feeling overwhelmed by long reading assignments.

- "Read to the clip": put a coloured paperclip at the end of the required reading section to divide long reading assignments into shorter segments.
- Teach a student to identify key points in each paragraph by noting the primary noun and verb in the first sentence.
- List key points for each paragraph on sticky notes and place them beside the text.

IV. Math computation

- Provide a multiplication grid.
- Develop/use engaging/fun worksheets.

V. Organisation

- Teach organisational strategies and carve out time for students to organise their bags and desks.
- Have students work in pairs to organise assignments, tests, worksheets, and notebooks weekly.
- Use colour-coded folders: red for unfinished work and green for completed assignments.

VI. Getting started.

- Give a predetermined visual cue to remind a student to start. E.g., make eye contact and pull on your ear.
- Have a nearby student (of the child's choice) tap him/her on the arm to remind him/her to refocus.
- Schedule a brief "brain break"[5] before starting work; explain that activity increases blood flow to the brain so students can think better after a short game.

VII. Completing and returning assignments.

- Train your students to note down their assignments.

VIII. Working memory.

- Reduce demands on working memory through use of prompts, using a graphic organiser that lists key parts of a text, circulate copies of lecture notes.

[5] See also: https://www.weareteachers.com/brain-breaks-for-kids/

2.7 Testing and accommodations for students with LD

- Avoid overly complicated language in test questions and clearly separate items when spacing them on the test or exam sheet.
- Consider other forms of testing (oral, hands-on demonstration, open-book, etc.)
- Eliminate distractions while students are taking tests or exams.
- For students who may have difficulty transferring answers, avoid answer sheets.
- Allow students to write answers on the test sheet.
- For students who have reading difficulties, have a proctor read the test to the student.
- For students with writing difficulties, have someone scribe the answers for them or use an audio-recording device.
- Provide study questions for tests or exams that demonstrate the format along with the content of the test or exam.
- Teach students how to proofread assignments and tests.
- Allow students to use a dictionary, thesaurus, or a calculator during tests.
- Develop a scoring guide, share it with students, and provide models of examples of each level of performance.

3. CEREBRAL PALSY (CP)

Cerebral Palsy (CP) literally means paralysis of the brain. Often the parts of the brain which are most affected control movements of the arms, legs and/or facial muscles, resulting in limbs being either very floppy or, more usually, very tight and tense. Often children with CP find it difficult, or are not able, to talk properly due to difficulties in controlling their head movements or facial muscles.

CP is often a combination of different disabilities. Sometimes when there is more general damage to the brain intellectual abilities may also be impaired, but more often children with CP tend to be physically rather than intellectually impaired. Some children may also have difficulties with hearing and/or seeing.

Children may have a mild form of CP with minimal loss of function in their limbs or speech defect; to very severe forms when the child has multiple disabilities.

3.1 Causes

There is rarely a single cause for CP. It may result from congenital malformations, infections during pregnancy, birth difficulties (e.g. oxygen shortage) and childhood infections such as meningitis, excessive jaundice, rubella, and head injury. It is caused by damage that occurs to the developing brain, most often before birth. There is no cure, but treatments can help improve function.

3.2 Signs and symptoms

Symptoms of CP can vary greatly. In some children CP affects the whole body. In other children, symptoms might only affect one or two limbs or one side of the body. General symptoms include trouble with movement and coordination, speech and eating, development and other issues.

I. Movement and coordination – symptoms may include:

- Stiff muscles and exaggerated reflexes, known as spasticity. This is the most common movement condition related to CP.
- Variations in muscle tone, such as being either too stiff or too floppy.
- Stiff muscles with regular reflexes, known as rigidity.
- Lack of balance and muscle coordination, known as ataxia.
- Jerky movements that cannot be controlled, known as tremors.
- Slow, writhing movements.
- Favouring one side of the body, such as only reaching with one hand or dragging a leg while crawling.

- Trouble walking. Children with CP may be walking on their toes or crouch down when they walk. They also may have a scissors-like walk with their knees crossing. Or they may have a wide gait or a walk that is not steady.
- Trouble with fine motor skills, such as buttoning clothes or picking up utensils.

II. Speech and eating - the following symptoms may occur:

- Delays in speech development.
- Trouble speaking.
- Trouble with sucking, chewing, or eating.
- Drooling or trouble with swallowing.

III. Development: some children with CP have the following symptoms:

- Delays in reaching motor skills milestones, such as sitting up or crawling.
- Learning disabilities.
- Intellectual disabilities.
- Delayed growth, resulting in smaller size than would be expected.

IV. Other symptoms – damage to the brain can contribute to other neurological symptoms, such as:

- Seizures, which are symptoms of epilepsy. Children with CP may be diagnosed with epilepsy.
- Trouble hearing.
- Trouble with vision and changes in eye movements.
- Pain or trouble feeling sensations as touch.
- Bladder and bowel issues, including constipation and urinary incontinence.
- Mental health conditions, such as emotional conditions and behaviour issues.

3.3 Teaching strategies

I. Classroom adaptations:

For children with mild forms of CP, very little adaptations may be needed to classrooms. However, children with moderate to severe CP may require:

- Special seating to keep their head and body straight when sitting.
- Special desks to work at whose height can be adjusted.
- The use of communication boards (e.g. made up of pictures or symbols) so that the teacher and peers can understand the child.
- The child may need extra assistance to use the toilet. Sturdy rails around the toilet will help.

II. Teaching strategies:

- If the child's speech is unclear, devise alternative means for communicating, for example through pictures or drawn symbols. These can be placed together on a board and the child points to the picture to convey the message. Computerised versions are also available. When the child touches the picture or symbol, a synthesised voice says the word.
- Encourage the child to join in answering questions but leave extra time for him/her to respond either through speech or via symbol boards. Encourage the peers to interact with the child as children usually find their ways of communication.
- Writing will be especially difficult for children if they have problems controlling the muscles of their hands and arms. They may need extra time to do their writing, or they can be provided with a written copy of the information, or another pupil may write for them. Computer keyboards can also be adapted to make it easier for children with CP to produce written words.

4. INTELLECTUAL DISABILITIES

Intellectual disability is a term used when a person has certain limitations in cognitive functioning (IQ below 70) and skills, including conceptual, social, and practical skills, such as language, social and self-care skills. These limitations can cause a person to develop and learn more slowly or differently than a typically developing person. ID can be caused by injury, disease, or a problem in the brain. 1-3 percent of the global population has an intellectual disability. It is more common in low-income countries than in high-income countries.

4.1 Causes

The most common causes of intellectual disabilities are:

I. Genetic conditions: sometimes an intellectual disability is caused by abnormal genes, inherited from parents, or other reasons, e.g. Down syndrome or Fragile X syndrome.

II. Complications during pregnancy: e.g. a rubella infection during pregnancy.

III. Problems during birth: if there are complications during labour and birth, such as a baby not getting enough oxygen.

IV. Diseases or toxic exposure: diseases like whooping cough, the measles, or meningitis can cause intellectual disabilities. ID can also be caused by extreme malnutrition, or by being exposed to poisons like lead or mercury.

Intellectual disabilities are not contagious: you cannot catch it from someone else. ID is also not a type of mental illness, like depression. There are no cures for intellectual disability. However, children with intellectual disability can learn many things. They may just need more time or learn differently than other children.

4.2 Signs and symptoms

There are many different signs and symptoms of intellectual disability that can exist in children and will vary depending upon specific characteristics. These signs and symptoms may first become apparent in infancy or in some cases may not be noticeable until the child reaches school age. Some of the most common symptoms can include:

- Learning and developing more slowly than other children the same age.
- Difficulty communicating or socializing with others.
- Lower average (or higher average) IQ test scores.
- Difficulties talking or talking late.
- Having problems remembering things.
- Inability to connect actions with consequences.
- Difficulty with problem solving or logical thinking.
- Trouble learning in school.
- Difficulties in doing everyday tasks like getting dressed or using the restroom without help.

4.3 Teaching strategies for children with mild/moderate intellectual disabilities

I. Develop language skills: delayed language development is common for children with a mild or moderate intellectual disability. These students often have difficulty with reading and speaking skills. Provide rich vocabulary instruction and reading comprehension strategies.

II. Make math manageable: many students can learn basic math like arithmetic, measurement, and time. However, they may have difficulty learning advanced mathematical reasoning and problem solving. These students learn math best when they are taught with tangible examples and multiple-step problem solving strategies.

III. Increase attention span: these students may have trouble attending to a task, knowing which parts of the task to focus on, and keeping attention for a given amount of time. Prompt students to an important part of the task. Remove distractions. Increase the difficulty of the task over time.

IV. Make up memory mechanisms: these children often have difficulty remembering information they recently encountered. Remembering new information can be even more difficult if they have trouble attending to it in the first place. Teach short-term memory strategies like repeating the information to oneself, remembering information in clusters, and mnemonic devices.

V. Show the child how to adjust to new scenarios: children may have difficulty applying new skills they learned in one area to a new situation. A child may learn a new English word in class but have trouble understanding the same word in a science textbook. Teach material in meaningful contexts. Remind students to apply information they learn in one situation to another.

Vi. Open up opportunities to learn social skills: some children with intellectual disabilities (e.g. Down syndrome) have good social skills, and other children may need social skills training. Students may have trouble understanding the content of interactions and expectations for friendships.

4.4 Down Syndrome

Down syndrome is the most frequent chromosomal cause of mild to moderate intellectual disability, and it occurs in all ethnic and economic groups. In Bangladesh, 6000 babies with Down syndrome are born every year.[6] Children with Down syndrome generally reach key developmental milestones later than other children. Life expectancy for people with Down syndrome has increased dramatically during the last decades, from 25 years in 1983 to more than 60 years today.

4.4.1 Causes

Down syndrome is caused by a random error in cell division that results in the presence of an extra copy of chromosome 21.

[6] https://www.dhakatribune.com/bangladesh/health/241729/children-with-down-syndrome-need-opportunities

4.2.2 Signs and symptoms related to Down syndrome.

Symptoms of Down syndrome vary from person to person.

I. Common physical symptoms are:

- Decreased or poor muscle tone.
- Short neck, with excess skin at the back of the neck.
- Flattened facial profile and nose.
- Small head, ears, and mouth.
- Upward slanting eyes, often with a skin fold that comes out from the upper eyelid and covers the inner corner of the eye.
- Single crease across the palm of the hand.
- Deep groove between the first and second toes.

Physical development in children with Down syndrome is often slower than development of children without Down syndrome. E.g., because of poor muscle tone, a child with Down syndrome may be slow to learn to turn over, sit, stand, and walk. Despite these delays, children with Down syndrome can learn to participate in physical exercise and similar activities like other children. It may take children with Down syndrome longer than other children to reach developmental milestones, but they will eventually meet all or many of them.

II. Intellectual and cognitive symptoms: Cognitive impairment – which means problems with thinking and learning – is common in children with Down syndrome and usually ranges from mild to moderately impaired. Down syndrome is only rarely associated with severe cognitive impairment.

Common cognitive and behavioural problems may include short attention span, poor judgment, impulsive behaviour, slower learning, and delayed language and speech development.

5. AUTISM SPECTRUM DISORDER (ASD)

ASD is a complex neurological and developmental impairment that affects how a person learns, communicates, and interacts with others. It affects the structure and function of the brain and nervous system. Children with ASD may have problems with communication, interactions with other people (social skills), restricted interests and repetitive behaviours. One out of every 68 children - or approximately 1.5% of children – have ASD (according to studies in Asia, Europe, and the USA).

5.1 Causes

There is no one cause. Research suggests that it develops from a combination of genetic and non-genetic, or environmental, influences. It occurs 4 times more in boys compared to boys, possibly because in girls the social and communication problems tend to be more subtle. It may run in families and affect early brain development. Research suggests autism genes are usually inherited from the father.

Different people with ASD can have different symptoms. For this reason, ASD is known as a spectrum disorder – a group of disorders with a range of similar features. ASD includes:

- Autistic disorder ("classic" autism) – this is what people often think of when they think of autism.
- Asperger syndrome – this is sometimes considered a milder version of classic autism, mostly affecting social behaviours. Unlike children with autistic disorder, many children with Asperger syndrome have normal or above-average intelligence and language skills.

5.2 Signs and symptoms

The symptoms of one person with ASD may be very different from the symptoms of another person with ASD. One person with ASD may have mild symptoms, while another may have severe symptoms, but they both have ASD. Or in other words, ranging from low-functioning to high-functioning ASD. Also, the child may or may not have a language delay or an intellectual disability. Many students with ASD are visual learners.

Despite the range of possible symptoms, there are certain actions and behaviours that are common. In general, the main signs and symptoms of ASD relate to: communication; social behaviours; and routines or repetitive behaviours.

Communication:

- Cannot explain what he/she wants.
- Language skills are slow to develop, or speech is delayed.
- Doesn't follow directions.
- Seems to hear sometimes, but not other times.

Social behaviour:

- Doesn't smile when smiles at.
- Has poor eye contact.
- Inappropriately approaching a social interaction by being passive, aggressive, or disruptive.
- Seems to prefer to play alone.
- Is very independent for his/her age.
- Seems to tune people out.
- Not expressing emotions or feelings and appearing unaware of others' feelings.
- Developing specific routines or rituals and becoming upset at the slightest change.

Repetitive behaviour:

- Gets "stuck" doing the same things over and over and cannot move on to other things.
- Shows deep attachment to certain toys, objects, or routines.
- Spends a lot of time lining things up or putting things in a certain order.
- Being fascinated by details of an object, such as the spinning wheels of a toy car, but not understanding the overall purpose or function of the object.
- Repeats words or phrases.

Other behaviours:

- Has unusual movement patterns.
- Doesn't know how to play with toys.
- Does things "early" when compared to other children.
- Walks on his/her toes.
- Throws intense or violent tantrums.
- Is overly active, uncooperative, or resistant.
- Seems overly sensitive to light, sound or touch, yet being indifferent to pain or temperature.
- Sensory challenges, such as being overly sensitive to light, sound, or touch, can affect a child's ability to take in information, respond to requests, participate in social situations, write, participate in sports, and maintain a calm and ready to work state.

Students with ASD may have difficulty looking at you and listening simultaneously (taking in information from auditory and visual modalities at the same time). From a social modelling aspect, it is important to gain eye contact before speaking, but expect that a student with ASD might avert his eyes, but still be listening.

5.3 Teaching strategies for students with ASD

Establish a routine: the world is often a confusing and anxiety-inducing place for children with ASD. That is why they find great comfort in a predictable and stable routine. Creating a visual timetable is an effective and widely used method for doing so. This involves placing images and simple words on a timetable. In chronological order, to describe the activities and transitions in the child's day. Having this visual aid gives he child a sense of security, while also acting as a reminder.

Develop classroom rules and post them at a visible place in the classroom and review these rules regularly. It is most helpful to allow the class to help formulate the classroom rules. Ask students to take turns reading the rules aloud as part of the daily routine. Make sure all students understand the rules and the consequences for not adhering to them. Consistent rules help children understand what is expected from them, it makes the child's world more predictable and less confusing. Children with consistent teachers experience less anxiety.

Limit sensory overload: as teachers know from experience, the classroom can be a hectic environment, especially in lower primary classrooms. This can be distracting for any student, but for students with ASD, it can be overwhelming. Around 75% of children with ASD are oversensitive to sounds/noise. But they may be oversensitive also to light, touch, textures, smells. Every child with ASD is different and you will have to learn what their individual sensitivities are. Observe how they react to hearing certain sounds or touching certain fabrics. Then, do what you can to remove or reduce any stimuli in the environment that causes them anxiety. E.g. students who are oversensitive to certain sounds could be provided earplugs or headphones during certain activities.

Make use of rewards and incentives: positive reinforcement in the classroom to help children with ASD manage or eliminate problem behaviours, such as behaviours that result in self-harm or disruptions to other children.

Peers can be great role models for students with ASD. Pair compatible children together when working on projects or participating in classroom activities. Many children welcome the opportunity to be a peer role model to a classmate with additional learning support needs. The experience is not only positive for the child with ASD, but for the peer counsellor as well.

Provide appropriate feedback: students with ASD frequently have difficulty with communication, therefore it is important for teachers to be clear and direct when providing feedback, asking questions, and giving directions. Choose simple, straightforward wording to minimize the risk of misunderstanding. It is also important to regularly check how your student is progressing and whether they are struggling with any aspect of a task or assignment.

Get them talking! In some classrooms, a handful of students dominate small-group conversations and whole-class discussions. While it is important for these verbal and outgoing students to have a voice in the classroom, it is equally important for other students – including shy and quiet students, students whose first language is different from the language of instruction, and students with disabilities – to have opportunities to share and challenge ideas, ask, and answer questions, and exchange thoughts. To ensure that all children have opportunities to communicate, teachers need to put structures and activities in place that allow for inclusive interaction.

A teacher could for instance ask children to "turn and talk" to each other at various points in a school day.

During a lesson about climate change a teacher could prepare a few questions for students to "turn and talk" to each other. For a student with (high functioning) ASD who may need practice with skills such as staying on topic and turn taking, this could be very beneficial.

Give choices! Choice may give students a feeling of control in their lives. Choice can be built into almost any part of the school day. Students can choose which assessments to complete, which role to take in a cooperative group, and how to receive personal assistance and supports. Examples include:

- Solve five of the ten problems assigned.
- Work alone or with a small group.
- Read quietly or with a friend.
- Use a pencil, pen, or the computer.
- Conduct your research in the library or in the resource room.
- Take notes using words or pictures.

Support transitions: children with ASD may struggle with transitions (from classroom to playground, from library to lunch break, etc.), or even moving from activity to activity. Such changes can be very difficult causing stress. Teachers can help minimize such stress by:

- Giving reminders to the whole class before any transition/change of activity.
- Providing the students or entire class with a transitional activity such as writing in a homework notebook or singing (the same) song.
- Asking peers to help in supporting transition time, e.g. a classmate to walk with.
- Provide a transition aid (e.g. an object or picture).

Take a break! Some students works best when they can pause between tasks and take a break of some kind (read a story, play a short game, walk around, walk up and down a hallway once or twice, stretch, etc.). Try to be aware of the signs that your student may need a short break.

6. HEARING IMPAIRMENT

Often, we presume that children can hear when in fact they might have difficulties hearing. Children cannot tell us they have problems hearing because they may not know what it is like to hear properly. Mild hearing losses are much more common in school populations than profound hearing loss (deafness). Remember too, that some hearing problems come and go. If a child is prone to head colds or recurrent ear infections, their hearing can also be affected.

6.1 Causes

Some children are born with impaired hearing; others may lose their hearing later. In one out of three cases the cause of the hearing impairment is unknown.

The most common causes are:

- Hereditary (within a family).
- The mother had German measles during early pregnancy.
- Lack of iodine in the mother's diet.
- Prematurity (baby born early and small).
- Ear infections, especially long lasting, repeated infections with pus.
- Excessive earwax that blocks the ear canal.
- Meningitis (infection of the brain).
- Cerebral malaria and overdoses of medicines used in its treatment.

6.2 Signs and symptoms

- **Poor attention:** if a child does not pay attention in class, it is possible that he or she cannot hear what is being said or the sounds the child hears may be distorted. Due to these reasons the child either tunes out what the teacher says or does not try to listen or attend.
- **Poor speech development:** immature, unusual, or distorted speech may be due to hearing loss. Or the child talks in a very loud or soft voice.
- **Difficulty in following instructions:** a child who has unusual difficulty in following oral instruction may have a possible hearing impairment.

- The child may respond better to tasks assigned when the teacher is relatively close to the child, or to written tasks rather than the ones that require an oral response.
- The student may turn or cock head to one side to hear better.
- Hearing problems can cause the child to watch what other students are doing before starting his/her work or looking at classmates or the teacher for clues.
- A child may have difficulty in hearing text read by others, or the child may request his peers or teacher to speak louder.
- Sometimes the child may give an inappropriate answer to a question asked or fail to answer altogether.
- Children with hearing loss prefer to work in small groups, sit in a relatively quiet area of the classroom or in the front row.
- The student may be reluctant to participate in oral activities, may fail to laugh at jokes or understand humour.
- The child may be shy or withdrawn or appear to be stubborn and disobedient as a reaction to his hearing loss.
- The student may interpret facial expressions, body movements and contextual information rather than spoken language and thus sometimes make false conclusions.
- The student may tend to isolate herself/himself from social activities.
- The student may complain of frequent earaches, colds, sore throat or recurrent tonsilitis.

6.3 Teaching strategies for students with hearing loss.

Although it is important that a child's hearing is tested, a teacher can immediately use some of the strategies below!

I. Classroom adaptations:

- The child should be seated as close as possible to the teacher (no more than 3 metres away)
- The teacher must make sure to stand or sit facing the student. Do not cover your face with a book when reading; or talk when writing on the board.
- Make sure light does not come from behind you, as your face would be in shadow. Work in good light so that the child can see your face, hands, or lips.
- Some children benefit from seeing both their teacher and their classmates at the same time. They can learn from seeing other students responding to the teacher. So, position the child in class accordingly or arrange the desks in such a way that it is possible for children to see each other's faces.
- Try to minimize classroom noises. Use a room that is in a quieter part of the school.

II. Teaching strategies:

- If a hearing aid has been prescribed for the child, make sure it is worn; that it is switched on and that the batteries are good.
- Speak clearly but do not shout.
- Use simple words and sentences along with gestures or pictures to help the child understand what you are saying.

Children with hearing impairments learn more from seeing rather than hearing although teachers should use both. Show them what you expect them to do. Use pictorial material or symbol cards.

- Pair the pupil with a hearing student. The partner can help find the correct page; repeat your instructions and so on.
- Encourage the child with hearing loss to watch and listen to other students as they answer your questions. If they cannot see other children and hear their responses, you may repeat what they said as you face the child with a hearing disability.
- Check with the child that he or she understands what (s)he is expected to do.
- Children with hearing impairments might find group situations more difficult because of all the talking going on at the same time by different people. Teachers can use these times to give face-to-face instruction to a student with a hearing impairment.
- If the child's speech is not clear, take time to listen to what the child is trying to tell you. Help him to use the correct words and grammar but also praise the child for his/her efforts at talking.

7. VISUAL IMPAIRMENT

Various terms are used to describe different degrees and types of visual impairment such as low vision, partial sight and blindness. Many children's problems are easily corrected with glasses once the problem has been identified, but some children will have more marked impairments. Some of the warning signs are easily observed but it is possible for others to go unnoticed.

7.1 Causes

The more common causes are:

- Infectious diseases contracted by the mother during the first few months of pregnancy.
- Infectious diseases contracted by the child, e.g. measles or chicken pox.
- Maternal or childhood malnutrition. Eating yellow and green fruits and vegetables helps to protect the eyes.
- Eye infections.
- Injuries to the eye.
- Tumours affecting nerve for sight.
- Brain damage.
- Xerophthalmia, i.e. nutritional blindness as a result of insufficient Vitamin A in the diet.

7.2 Signs and symptoms

- Physical indicators: there may be red eyes, crusts on lids among the eye lashes, recurring styes or swollen eyelids, watery eyes or discharge, crossed eye, eyes that do not appear straight, pupils of uneven size, eyes that have excessive and drooping eyelids.
- The child rubs eyes often. Also, when doing close visual work.
- The child shuts or covers one eye when he has difficulty seeing with that eye or tilts the head or thrusts the head forward.
- Unusual facial behaviours: a child shows unusual amount of squinting, blinking, frowning, or facial distortion while reading or doing other close work.
- Unable to locate and pick up a small object.
- Light sensitivity of difficulty: a child may show unusual sensitivity to bright light by shutting their eyes or squinting. The child may have a difficulty in seeing in dim light or inability to see after dark.
- Difficulty with reading: an unusual difficulty with reading or working that requires bringing the book or object close to the eyes. But the child may do very well in oral or spoken directions and tasks.
- The child may have difficulty with written work: like not being able to stay on the line or write within the spaces.
- Difficulty with distance vision or depth perception may result in the child avoiding the playground or avoiding all gross motor activity. Such a child may prefer reading or other academic activity.

7.3 Teaching strategies for students with vision loss.

Classroom adaptations:

- Find out from the child where is the best place for him/her to see the blackboard/whiteboard, for example when seated at the front of the class.
- The light should not reflect on the board, and you should ensure that the writing appears clearly on the board.
- If the child's eyes are sensitive to the light, move him/her away from the window. Have the child wear a peaked hat to shade his eyes or give him a carboard screen to use for shade when reading and writing.
- Ensure the child knows the way around the school and the classroom. Teachers and sighted pupils should lead the child by walking in front with the child having a visual impairment slightly behind and to one side: holding on to the guide's elbow. Warn them of obstacles such as steps and narrow doorways.

Teaching strategies:

- Use large writing on the chalk- or white board or visual aids. The use of coloured chalks/markers is recommended. Let the children come close to the board or teaching aids so that they can see more easily.
- Read aloud what is written on the black board/white board.
- Prepare teaching aids that children can read more easily such as large print materials. Other children in the class could help prepare these. Or they can be produced by enlarging images on photocopies or using larger font sizes on computer printouts. This can also help children who have difficulties in reading.
- Children may have difficulty seeing the lines on writing paper. They can be given paper with thicker lines drawn on it.
- Some children will benefit from using magnifying aids. Two types are available. Ones that enlarge the whole page or line magnifiers, which are a useful aid to reading.
- Encourage the children to use a pointer or their finger when reading. Cover the rest of the page with paper except for the paragraph the child is rading. Use a bookstand to avoid reflection.
- Children with poor vision need to learn through touch as well as through hearing. They should be given a chance to handle objects.
- Pair the child with a seeing classmate who can assist the child to organise their work. The partner can help find the correct page; repeat your instructions and so on.
- Use verbal praise or touch to give the child encouragement.
- Use the name of the children during class discussions so that the child with a vision impairment knows who is talking.
- Computers offer especially support to students with vision impairment and blindness. Students can print out a large print copy, read text on the screen using screen enlargement software, listen to the text on a voice synthesizer or convert it into Braille.
- Make an abacus available to the child during math lessons.
- Lessons can be recorded for later use at home or for revision. Children who experience difficulties in writing can also provide recorded information. Books on audiotapes are sometimes also available.

8. CONCLUDING REMARKS: MANAGING AN INCLUSIVE CLASSROOM

Creating an inclusive learning environment: Developing a welcoming environment for all children depends on your words and attitude. As a teacher you are responsible for making your students feel safe, respected, and acknowledged. You can do this by performing simple, friendly gestures throughout the day.

Greet your students at the door and check in regularly. Use positive reinforcement instead of punishment. Evidence suggests that positive reinforcement techniques have greater success in moulding positive classroom behaviours.

Familiarize yourself with students' unique rhythms: One important classroom management strategy is getting to know your students. Find out where their strengths lie and which areas, they find challenging. Positively reinforce their strong points and check more often for understanding when teaching difficult topics.

It is critical to understand all students, but especially those with disabilities or learning difficulties. You need to be aware of environmental triggers. These can include colours, noises, people, locations, and other stimuli. Once you know what causes a student to lose focus, you can adjust and plan accordingly.

Intentional classroom seating: Create an intentional seating chart. Disruptions happen two to three times as often when students choose their own seats.

Placing students in rows is better than groups or circles for a few reasons. It provides students with their own space, so they don't feel uncomfortable. It also keeps their attention directed forward.

Avoid seating students with attention disorders near windows, doors or other potential distractions, as this leads to disruptions down the road when students do not focus and thus don't understand the material.

Practice consistency: Adding diversity to your lesson plans keeps students interested and engaged. However, all activities should fall into a structured lesson plan or schedule. Behaviour management studies show that all students benefit from having a dependable routine.

Having constant variation or unpredictability is destabilizing, especially for students with learning disabilities and/or autism spectrum disorder (ASD).

Encourage social interactions: Peer tut oring is an effective tool in classroom management strategies. Pair students with disabilities/learning difficulties with cooperative peers to help them stay focused. You will often find both students benefiting from the interaction.

Social interactions also extend to behaviour modelling. Losing your temper as a teacher will only make a tense situation worse and lead to more disruptive behaviours. Practice patience and model accountability as a teacher.

Your students will respect you more if you are willing to admit when you were wrong or overreacted. Use this practice frequently in your classroom management strategy.

Understand the importance of visual aids: Verbal repetition in not always the best way to get an idea across. Visual learners will benefit more from having information posted around the room.

Classroom rules should be always visible. They not only help visual learners but serve as a reminder to other students as well. It also allows you to reference the rules when broken or questioned.

No two students are the exactly alike, and no two days will be the same either. Adaptability is a key component of any successful behaviour management strategy. Stay organised and plan for potential disruptions.

GOOD LUCK!

www.niketan.nl
info@niketan.nl