# Unit-3: Adaptations Accommodations and Modifications

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# 3.1 introduction

Adaptations, accommodations, and modifications may seem like interchangeable terms, but when it comes to inclusion they carry significantly different meanings. Accommodations and modifications serve as two separate kinds of curricular adaptations.

Before defining into the differences between accommodations and modifications, let's take a step back and focus on the concept of curricular adaptations. Accommodations accomplish this objective without modifying the curriculum. Adaptations, accommodations, and modifications need to be individualized for students, based upon their needs and their personal learning styles and interests. It is not always obvious what adaptations, accommodations, or modifications would be beneficial for a particular student, or how changes to the curriculum, its presentation, the classroom setting, or student evaluation might be made.

# 3.2 Objectives

- To Learn Adaptations in inclusion
- To Learn Accommodations in Inclusive Education.
- To Learn Modification in inclusion.
- To learn specifies for children with sensory Disabilities.
- To learn specifies for Children with Motor and Multiple Disabilities.
- To learn about gifted Children.

# 3.3 Meaning, Difference, Need & Steps

Adaptations, accommodations, and modifications need to be individualized for students, based upon their needs and their personal learning styles and interests. It is not always obvious what adaptations, accommodations, or modifications would be beneficial for a particular student, or how changes to the curriculum, its presentation, the classroom setting, or student evaluation might be made. This page is intended to help teachers and others find information that can guide them in making appropriate changes in the classroom based on what their students need.

Some of the major issues that general education teachers may have with creating instructional accommodations and adaptations in the classroom may include the need for a starting point with examples of how to modify lesson plans for students with special needs in addition to looking at what different types of adaptations there are. Even though most pre-service teachers are taught to create lesson plans for the general education setting, it is also necessary for these teachers to be aware of how to modify

lesson plans for students with individual needs. All children do not learn the same way, therefore general education teachers need to be aware of methods they can use to alter lesson plans to benefit students with special needs. Being aware of different types of accommodations and adaptations is another important part of being a general education teacher, as these specific areas of adaptations will help teachers focus on what exactly they can change in their lesson plans to meet the specific needs of learners.

According to the **Council for Exceptional Children**, there are several **methods** that teachers can consider when creating instructional accommodations and adaptations to meet the needs of diverse learners (*Council for Exceptional Children*, 2011):

- Altering existing materials: Teachers can re-write, reorganize, add to, or recast the information so that the student can access the regular curriculum material independently. For example, teachers could prepare a study guide and audiotape for students.
- Mediating existing materials: Teachers can provide additional instructional support, guidance, and direction to the student in the use of the materials. Teachers can instruction to mediate the barriers presented by the materials so that one may directly lead the student to interact with the materials in different ways. For example, one might have students survey the reading material, collaboratively preview the text, and create an outline of the material to use as a study guide.
- Selecting alternate materials: Teachers might select new materials that are more sensitive to the needs of students with disabilities or are inherently designed to compensate for learning problems. For example, use an interactive computer program that cues critical ideas, reads text, inserts graphic organizers, defines and illustrates words, presents and reinforces learning in smaller increments, and provides more opportunities for practice and cumulative review.

The New Jersey Council on Developmental Disabilities lists nine different types of adaptations that teachers might use when addressing the needs of different learners (Curriculum modifications, n.d.):

- **1. Input:** Adapting the way the instruction is delivered to the learner (such as using different visual aids).
- **2. Output:** Adapting how the learner might respond to instruction (such as allowing a verbal instead of written response).

- **3. Time:** Adapting the time allotted for learning, task completion, or testing (such as increasing or decreasing time given for tasks).
- **4. Difficulty:** Adapting the skill level, problem type, or rules on how the learner might do the work (such as simplifying directions).
- **5.** Level of Support: Increase the amount of personal assistance for a specific learner (such as assigning peer tutors).
- **6. Size:** Adapting the number of items that the student will complete (such as reducing the number of answers on a multiple choice test).
- **7. Degree of Participation:** Adapting how much the student will be involved in an activity (such as having the student write answers on the board).
- **8. Alternate Goals:** Adapting the goals or outcomes expectations while using the same materials (such as asking the student to be able to recall book titles instead of recalling both book and author names).
- **9. Substitute Curriculum:** Providing different instruction and materials to meet a learner's individual goals (such as asking a student to read the graphic novel version of a text instead of the entire novel).

# 3.4 Specifies for Children with Sensory Disabilities

The concept of sensorial disability embraces persons with sensory, visually, and hearing impaired; and they are so important for humans, because those are the receptors that perceive information about the world around us.

The concept of visual impairment refers to both, the blindness and other conditions of vision that do not reach it. According to the timing of deficiency, we can find blindness and visual impairment from birth and acquired, early or late; having great importance, when all this happens; because it would depend all the visual experiences, that may have been acquired before the injury. Within this category, we found visual impairment and hearing impairment.

# 3.4.1 Visual Impairment

Visual impairment is the lack, deficiency, or decreased vision. For many people the word blind means total lack of vision, visual impairment but is divided into total blindness or amaurosis, blindness.

#### Classification

Partial blindness, when the vision of the person is low or there is insufficient capacity and need to wear glasses to improve it. Macular degeneration: loss of peripheral vision and central vision is weak or a black hole.

Cataracts occur when the eye's lens becomes cloudy; it is the most common cause of low vision in old age.

**Tubular or tunnel vision:** it is caused by glaucoma. Damage to the optic nerve at the back of the eye leads to a gradual loss of nerve function and can cause loss of peripheral vision.

Diabetic retinopathy is a common source of low vision in middle age. Diabetes can damage blood vessels in the eye.

**Blindness:** means there is difficulty distinguishing between colors, especially reds and greens. Cortical blindness is caused by brain damage in the primary visual area of the occipital lobe although the visual organs are in good condition. The vision of the person is vague to light or movement.

Blindness may be caused due to same diseases like Trachoma, Glaucoma, Xeropthalmia etc. or it may cause due to some accidents or some genetic defects/chromosomal abberations. Some systemic disease like diarrhoea, blood sugar and hypertension also may cause blindness.

#### Lenses

**Staff:** used to acquire information about the road in front of the user is not detected unbalanced on hanging objects, Guide dogs, blind people can be transported with the help of a dog which has to be trained for several weeks, is very useful if you need to walk long distances. These dogs are not pets but companions; they should not pet him or take him by the collar without the permission of the owner.

#### **Audio books**

**Braille:** A system of touch reading and writing in which letters, words, numbers, etc. Are points that stick out of the paper. The system has 18 abbreviations, contractions calls to save space and speed up the reading or writing.

#### 3.4.2 Children with visual in Inclusive Education

Students with visual impairments have unique educational needs which are most

effectively met using a team approach of professionals, parents and students. In order to meet their unique needs, students must have specialized services, books and materials in appropriate media (including braille), as well as specialized equipment and technology to assure equal access to the core and specialized curricula, and to enable them to most effectively compete with their peers in school and ultimately in society.

There must be a full range of program options and support services so that the Individualized Education Program (IEP) team can select the most appropriate placement in the least restrictive environment for each individual student with a visual impairment.

There must be adequate personnel preparation programs to train staff to provide specialized services which address the unique academic and non-academic curriculum needs of students with visual impairments. There must also be ongoing specialized personnel development opportunities for all staff working with these students as well as specialized parent education.

Providing equal access to all individuals with disabilities is the key element of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1992. Access involves much more than providing ramps. Access is also the key element of inclusion, which involves much more than placement in a particular setting. The relationship of access and inclusion may not be obvious to individuals who are not familiar with the educational and social impact of a vision loss. Placing a student with a visual impairment in a regular classroom does not, necessarily, provide access and the student is not, necessarily, included. A student with a visual impairment who does not have access to social and physical information because of the visual impairment, is not included, regardless of the physical setting. Students with visual impairments will not be included unless their unique educational needs for access are addressed by specially trained personnel in appropriate environments and unless these students are provided with equal access to core and specialized curricula through appropriate specialized books, materials and equipment.

#### 3.4.3 Hearing impairment or deafness.

It refers to the individual's inability to detect or receive at least some sound frequencies which can usually be heard by members of their species, hearing loss can be classified as mild, moderate to profound.

A deaf person uses vision as the primary mode for learning and communication.

# Causes of hearing loss and deafness

If one or both parents have greater risk of hearing loss the child is born deaf.

Hearing impairment is often caused by problems during pregnancy and childbirth.

Premature birth during labor conditions in which a baby does not have enough oxygen to breathe.

Rubella, syphilis or some other infections in a woman during pregnancy. Inappropriate use of toxic drugs (a group of over 130 drugs, such as the antibiotic gentamicin) during pregnancy.

Jaundice, which can damage the auditory nerve in a newborn baby.

Other causes include infections such as meningitis, measles, mumps and chronic ear infections can lead to hearing impairment.

Wax or foreign bodies blocking the ear canal can cause hearing loss at any age. Excessive noise, including working with noisy machinery, exposure to loud music or other noises such as gunfire or explosions can damage the inner ear and weak hearing. As people age, accumulated exposure to noise and other factors can lead to deafness or hearing loss.

# Sensori neural hearing loss can be prevented by:

- Meningitis, immunize children against childhood diseases like measles, meningitis, rubella and mumps.
- Immunize women of childbearing age against rubella before pregnancy.
- Detection and treatment of syphilis and certain other infections in pregnant women;
- Improved prenatal and perinatal care.

## 3.4.4 Hearing Impaired with Inclusive Education

Inclusive Education for Hearing-impaired Children, teachers learn how to support the hearing-impaired child in a mainstream school, addressing specific needs of the hearing-impaired child including academic, social, amplification and physical needs. Teachers also gain specialised knowledge about language and listening and how they form the basis for the development of literacy and academic learning. Music forms an important part of the curriculum and the necessary information is provided to any teacher who

wishes to use music as a way to aid the language, listening and reading development in children.

- The model of inclusive education on which this programme is based, aims at
  including hearing-impaired learners in a mainstream school through the early
  identification of hearing loss and ongoing audiological management, parent
  guidance, speech- language therapy, development of listening skills and
  educational support.
- This programme is directed at mainstream educators and is also suitable for speech- language therapists, audiologists, educational psychologists, and occupational therapists with previous training in education in their undergraduate studies.
- Qualifying students are provided with applied competence in the effective inclusion of the hearing-impaired child in mainstream education. The student is equipped with knowledge of the principles and practicalities of inclusive education to optimise the education of the hearing-impaired child.
- A module is dedicated to the guidance of parents with a hearing-impaired child.

#### KNOWLEDGE AND PRACTICAL KNOW-HOW ARE

- the principles of inclusion and how it differs from specialised schooling and integration;
- how the ear and hearing works and the amplification technology available for hearing-impaired children;
- the application of these technologies, and trouble-shooting and assisting the hearing-impaired child in the classroom;
- language and communication development and how they lay the foundation for literacy development and academic achievement. The student is able to develop a language-development programme to enhance and encourage literacy and numeracy development. evaluating and addressing the individual needs of each child (including the hearing-impaired child) in order to support the child holistically to reach her/ his full academic potential;
- differentiated teaching methods in order to ensure full participation of the hearingimpaired learner in the school;

- working as part of an interdisciplinary team along with other team members (of which the parents form an integral part);
- the importance of parental and family involvement in the education of the hearing-impaired child. The students are equipped to guide and support and actively involve the parent in the education of the hearing-impaired child and in understanding him/her;
- the role of the parent as part of the interdisciplinary team. The students are able to understand the need for parental involvement and also how to accommodate specific needs of each child and each family in education, the role of music in the development of language, listening and literacy skills, and are able to incorporate music and movement as part of the curriculum

#### 1 Inclusion: Fundamentals

In this module students learn to understand the rationale for inclusion of the hearing-impaired child in a mainstream school. Relevancy in today's education as well as considerations based on ethical and financial implications are discussed. Students acquire knowledge on global developments in the area of inclusion and deliberate global trends in inclusion.

#### 2 The Ear and Hearing

Students are provided with information in order to understand the ear in terms of the anatomy, diseases of the ear and treatment of ear pathologies. Students are made aware of the importance of hearing in the classroom and levels of impairment.

#### 3 Amplification Technology

Understanding the importance and use of amplification technologies for children with hearing impairment in and out of the classroom are discussed. The module offers an in-depth knowledge of the technologies available and the working of these devices.

# 4 Listening, Language and Communication Development

Listening and language are interlinked and listening affects language development. Students learn about the effects that language development have on both literacy and numeracy development. The required interdisciplinary teamwork to address these issues with the hearing-impaired child is discussed.

#### 5 Educational Practices for inclusion

The impact of hearing impairment in classroom practice and aligning the learning environment to support the hearing-impaired child to achieve his/her potential, are covered. Evaluating the child's needs holistically in order to support the hearing-impaired child and adapting the curriculum, teaching methods and assessments to the hearing-impaired child's specific needs, are included.

# 6 Parent and Family Guidance and Support

The aim of this module is to guide and support the parent and family in all aspects of hearing impairment of their child as well as addressing the educational needs of the child. The importance of the parent or guardian as part of the interdisciplinary team working with the hearing-impaired child is stressed.

# 7 Music in the Development of Language and Literacy

The importance of music in speech, language and listening development and its effects on academic performance are clarified. The role of music in overall academic performance is explained. The effect of music in the holistic development of the child is discussed.

# 3.5 Specifies for Children with Neuro-Developmental Disabilities

Neurodevelopmental disorders are impairments of the growth and development of the brain or central nervous system. A narrower use of the term refers to a disorder of brain function that affects emotion, learning ability, self-control and memory and that unfolds as the individual grows. The term is sometimes erroneously used as an exclusive synonym for autism and autism spectrum disorders.

Disorders considered neurodevelopmental in origin, or that have neurodevelopmental consequences when they occur in infancy and childhood, include:

- Intellectual disability (ID) or intellectual and developmental disability (IDD)
- Autism and autism spectrum disorders such as Asperger syndrome
- Fetal alcohol spectrum disorder

- Motor disorders including developmental coordination disorder, stereotypic movement disorder and the tic disorders including Tourette syndrome.
- Traumatic brain injury (including congenital injuries such as those that cause cerebral palsy)
- Communication, speech and language disorders
- Genetic disorders, such as fragile-X syndrome
- Down syndrome
- Attention deficit hyperactivity disorder
- Mendelsohnn's syndrome
- Schizophrenia
- Schizotypal disorder
- HIV
- Malaria

Neurodevelopmental disorders are associated with widely varying degrees of difficulty which may have significant mental, emotional, physical, and economic consequences for individuals, and in turn their families and society in general.

#### Causes

The development of the brain is orchestrated, tightly regulated, and genetically encoded process with clear influence from the environment. This suggests that any deviation from this program early in life can result in neuro-developmental disorders and, depending on specific timing, might lead to distinct pathology later in life. Because of that, there are many causes of neuro-developmental disorder, which can range from deprivation, genetic and metabolic diseases, immune disorders, infectious diseases, nutritional factors, physical trauma, and toxic and environmental factors.

Some neuro-developmental disorders-such as autism and other pervasive developmental disorders-are considered multifactorial syndromes (with many causes but more specific neurodevelopmental manifestation)

# **Deprivation**

Behavioral retardation, as in the reactive attachment disorders, has been observed in emotionally deprived children living with their families. However, prominent modern thought attributes other causative mechanisms to autism and autistic spectrum disorders.

However, nurture is not the only cause of deprivation that leads to neuro-developmental sequellae. A common example of sensory deprivation due to biologic factors is blindness. Blind infants are at risk for poor developmental outcomes that if left untreated can lead to severe, autistic-like behaviors. Despite its biologic basis, caregivers can ameliorate blindness-related sensory deprivation. This can lead to positive neurodevelopmental outcome, as in the cases of author Helen Keller, who was trained in the use of tactilesign language, and musicians such as Arthel "Doc" Watson and Ray Charles who remained emotionally connected to others via their sense of hearing.

## **Genetic disorders**

A prominent example of a genetically determined neuro-developmental disorder is Trisomy 21, also known as Down syndrome. This disorder usually results from an extra chromosome 21, although in uncommon instances it is related to other chromosomal abnormalities such as translocation of the genetic material. It is characterized by short stature, epicanthal (eyelid) folds, abnormal fingerprints, and palm prints, heart defects, poor muscle tone (delay of neurological development) and mental retardation (delay of intellectual development).

Less commonly known genetically determined neurodevelopmental disorders include Fragile X syndrome, Rett syndrome, and Williams syndrome. Fragile X syndrome was first described in 1943 by J.P. Martin and J. Bell, studying persons with family history of sex-linked "mental defects". Rett syndrome, another X-linked disorder, produces severe functional limitations. Williams syndrome is caused by small deletions of genetic material from chromosome 7.

#### **Immune dysfunction**

Immune reactions during pregnancy, both maternal and of the developing child, may produce neuro-developmental disorders. One typical immune reaction in infants and children is PANDAS, or Pediatric Autoimmune Neuropsychiatric Disorders Associated with Streptococcal infection. Another disorder is Sydenham's chorea, which results in more abnormal movements of the body and fewer psychological sequellae. Both are immune reactions against brain tissue that follow infection by Streptococcus bacteria. Susceptibility to these immune diseases may be genetically determined, so sometimes several family members may suffer from one or both of them following an epidemic of Strep infection.

#### Infectious diseases

number of infectious diseases can be transmitted either congenitally or in early childhood, and can cause serious neurodevelopmental disorders, such as schizophrenia. Congenital toxoplasmosis may result in formation of cysts in the brain and other organs, causing a variety of neurological deficits. Congenital syphilis may progress to neurosyphilis if it remains untreated. Measles can progress to sub acute sclerosing panencephalitis. Congenital rubella syndrome can produce schizophrenia in addition to multiple other symptoms.

#### Metabolic disorders

Metabolic disorders, present in either the mother or the child, can cause neurodevelopmental disorders. Two examples are diabetes mellitus (a multifactorial disorder) and phenylketonuria (an inborn error of metabolism). Many such inherited diseases may directly affect the child's metabolism and neural development but less commonly they can indirectly affect the child during gestation. (See also teratology).

In a child, type 1 diabetes can produce neurodevelopmental damage by the effects of excess or insufficient glucose. The problems continue and may worsen throughout childhood if the diabetes is not well controlled. Type 2 diabetes may be preceded in its onset by impaired cognitive functioning.

However a non-diabetic fetus can also be subjected to glucose effects if its mother has undetected gestational diabetes. Maternal diabetes causes excessive birth size, making it harder for the infant to pass through the birth canal without injury or it can directly produce early neurodevelopmental deficits. Usually the neurodevelopmental symptoms will decrease in later childhood.

Phenylketonuria, also known as PKU, is an inborn error of metabolism that can induce neurodevelopmental disorders in children. Children with PKU require a strict diet to prevent mental retardation and other disorders. In the maternal form of PKU, excessive maternal phenylalanine can be absorbed by the fetus even if the fetus has not inherited the disease. This can produce mental retardation and other disorders.

## Nutrition

Nutritional deficits may cause neurodevelopmental disorders, such as spina bifida, which is common, and anencephaly, which is rare. Both disorders are neural tube defects with malformation and dysfunction of the nervous system and its supporting structures, leading to serious physical disability as well as its emotional sequellae. The most common

nutritional cause of neural tube defects is maternal deficiency of folic acid, a B vitamin usually found in fruits, vegetables, whole grains, and milk products. (Neural tube defects are also caused by medications and other environmental causes, many of which interfere with folate metabolism, thus they are considered to have multifactorial causes.) Another deficiency, iodine deficiency, produces a spectrum of neuro-developmental disorders ranging from mild emotional disturbance to severe mental retardation.

Excesses in both maternal and infant diets may cause disorders as well, with foods or food supplements proving toxic in large amounts. For instance in 1973 K.L. Jones and D.W. Smith of the University of Washington Medical School in Seattle found a pattern of "craniofacial, limb, and cardiovascular defects associated with prenatal onset growth deficiency and developmental delay" in children of alcoholic mothers. This disorder, now called fetal alcohol syndrome, has significant symptom overlap with several other entirely unrelated neurodevelopmental disorders. It has been discovered that iron supplementation in baby formula is linked to lowered I.Q. and other neurodevelopmental delays.

#### **Trauma**

Brain trauma in the developing human is a common cause (over 400,000 injuries per year in the US alone, without clear information as to how many produce developmental sequellae) of neurodevelopmental syndromes. It may be subdivided into two major categories, congenital injury (including injury resulting from otherwise uncomplicated premature birth) and injury occurring in infancy or childhood. Common causes of congenital injury are asphyxia (obstruction of the trachea), hypoxia (lack of oxygen to the brain) and the mechanical trauma of the birth process itself.

#### 3.5.1 ASD or other neurodevelopment disorder Students in Mainstream Classrooms

For children who present at the high-functioning end of the spectrum, the classic "Asperger's kids," inclusion in a mainstream classroom is a good option. Special accommodations for children with ASD or other neurodevelopment disorder may include modifying homework and classroom assignments, providing extra time for assignments, and working with a special education specialist to devise lesson plans. Children with ASD may be taught in classrooms with a mainstream teacher who is also certified in special education.

Many students with autism or other neurodevelopment students, however, will not be able to succeed in a mainstream classroom setting. These children may have significant cognitive impairment, an extreme learning disability, or a physical disability in addition to ASD. In some cases the disorder may be so severe that the child has never learned to communicate verbally. For such children a special education classroom or institutional setting may be the only option.

Whatever early intervention therapy or teaching method is used to assist a child with ASD or others neurodevelopmental students , clear communication among parents, teachers and therapists is essential. Students on the autism spectrum lack the ability to understand how their lack of social and communication skills affects their relationship with others, and careful examination of such students' progress is necessary to make sure they are not being bullied or taken advantage of in peer interactions. Every opportunity must be made to help a child with ASD have a positive experience on which they can lay a foundation for future developmental growth.

# 3.6 Specifies for children with Loco-Motor & Multiple Disabilities

# 3.6.1 Locomotor disability:

Means a person's inability to execute distinctive activities associated with moving, both himself/herself and objects, from place to place, and such inability resulting from affliction of either bones, joints, muscles or nerves.

#### **Main Causes**

Locomotor disability may arise from the following conditions

- Cerebral Palsy
- Polio
- Amputation
- Paralysis
- Congenial Deformities

## **Categories of Locomotor Disability for Evaluation**

# **Assessment of Permanent Physical Impairment of Upper Limb**

The estimation is purely a measurement of functional impairment and is not expression

of personal opinion.

The estimation and measurement should be made when the clinical condition has reached the stage of maximum improvement from the medical treatment. Normally the time period is to be decided by the medical doctor who is evaluating the case for issuing the PPI Certificate as per standard format of the certificate.

- 1. The upper limb is divided into two component parts; the arm component and the hand component.
- 2. Measurement of the loss of function of arm component consists of measuring the loss of motion, muscle strength and co-coordinated activities.
- 3. Measurement of loss of function of hand component consists of determining the prehension, sensation and strength. For estimation of prehension opposition, lateral pinch cylindrical grasp, spherical grasp and hook grasp have to be assessed as shown in Hand Component of Form A Assessment Proforma for upper extremity.
- 4. The impairment of the entire extremity depends on the combination of the functional impairments of both components.

## **Arm Component**

Total value of arm component is 90%

## Principles of evaluation of range of motion (ROM) of joints

- 1. The value of maximum ROM in the arm component is 90%
- 2. Each of the three joints of the arm is weighed equally (30%)

## 3.6.2 Multiple Disabilities

"Multiple disabilities" means concomitant impairments (such as mental retardation blindness, mental retardation-orthopedic impairment, etc.), the combination of which causes such severe educational needs that they cannot be accommodated in special education programs solely for one of the impairments.

**Multiple disabilities** is a term for a person with several disabilities, such as a sensory disability associated with a motor disability. Depending on the definition, a severe intellectual disability may be included in the term "multiple disabilities". Individual usually has more than one significant disability, such as movement difficulties, sensory loss, and/or a behavior or emotional disorder.

#### Characteristics

People with severe or multiple disabilities may exhibit a wide range of characteristics, depending on the combination and severity of disabilities, and the person's age. There are, however, some traits they may share, including:

# **Psychological**

- May Feel ostracized
- Tendency to Withdraw from society
- Students with multiple disabilities may become fearful, angry, and upset in the face of forced or unexpected changes.
- May execute self-injurious behavior

#### **Behavioral**

- May display an immature behavior inconsistent with chronological age
- May exhibit an impulsive behavior and low frustration level
- May have difficulty forming interpersonal relationships
- May have limited self-care skills and independent community living skills

# Physical/health

- A variety of medical problems may accompany severe disabilities. Examples include seizures, sensory loss, hydrocephalus, and scoliosis.
- May be physically clumsy and awkward
- May be unsuccessful in games involving motor skills

# Challenges

#### **Families**

- A variety of medical problems may accompany severe disabilities. Examples include seizures, sensory loss, hydrocephalus, and scoliosis. Time is needed to ensure their safety at home in times of condition like seizures.
- Financially, the medical/transport fees may place burdens on the family.
- The effort needed to ensure safety of the person will require family members to take turns to look after that person.

- Individuals have only limited speech or communication
- Requires a lot of patience with individuals with multiple disabilities

#### **Individuals**

- Difficulty in basic physical mobility
- May experience fine-motor deficits that can cause penmanship problems
- May have slow clerical speed.
- May tend to forget skills through disuse
- May have trouble generalizing skills from one situation to another
- May lack high level thinking and comprehension skills
- May have poor problem-solving skills
- Ability to engage in abstract thinking is limited
- May be poor test taker due to limiting factors of the disabilities
- May have difficulty locating the direction of sound
- May have speech that is characterized by substitution, omissions
- May have difficulty learning about objects and object relationships
- May lack maturity in establishing career goals
- May face problems in socializing with peers

# Accommodations/strategies

- A multi-disciplinary team consisting of the student's parents, educational specialists, and medical specialists in the areas in which the individual demonstrates problems should work together to plan and coordinate necessary services.
- Involvement of the appropriate professionals (E.g. occupational therapists, speech/language therapist etc.)
- The arrangement of places school and homes must be easily accessible.
- Have a buddy system that ensures their needs are heard and that they get aid when needed.
- Give Simple and Specific and Systematic instructions to what you exactly want the person to do.

- Use visual aids when communicating with the child.
- Engage the child regularly in oral language activity.

# 3.7 Engaging Gifted / Talented Children

The term 'gifted and talented," when used with respect to students, children, or youth, means students, children, or youth who give evidence of high achievement capability in such areas as intellectual, creative, artistic, or leadership capacity, or in specific academic fields, and who need services

There are a number of characteristics that can signal to a professional that a young child might be gifted. There are behaviours that can be observed that indicate when a child's thinking or learning is advanced. Examples include:

- early development of language
- abstract thinking
- strong memory
- a capacity to focus and concentrate on tasks of interest
- intellectual curiosity
- a strong motivation to learn.

Although development may be rapid in some areas, young gifted children have the same learning to master as all children. How they manage this learning and when these behaviours appear can be different because their cognitive development can be advanced in particular ways. For instance young gifted children may start talking earlier, or may begin at much the same age as other children but then their language development can be more rapid and they quickly become very articulate.

Young gifted children can also behave in a more sophisticated way than their peers. This can have different outcomes. For instance it could result in them taking on the role of the leader in play, or it may put them out of step with other children, making social interaction more difficult.

In many cases, where professionals and families have recognised a child's advanced development or learning and are responding in an appropriate way, it may not be useful to seek a formal identification of giftedness through assessments such as IQ tests. Formal

assessment of giftedness may be more appropriate later on, when the child is older, about to transition to school or is attending school. If the child and their family are receiving appropriate support, formal testing may not be required, particularly in the early years.

On the other hand, there are situations when formal testing is appropriate, such as when very high levels of giftedness or a learning difficulty are suspected, or if such testing is required for entry to specific programs.

# Myth:

Gifted and talented children are not found in disadvantaged areas, they are products of upper, middle class or professional families.

#### Fact:

Gifted children occur in the same numbers in all socio-economic and cultural groups. The challenge for early childhood professionals is to be aware and know how to identify children who are gifted and talented.

#### **Considerations in identification**

In identifying giftedness and/or talent in young children, professionals should consider a number of factors that can affect the process.

- Individual assessments and observations are 'snapshots' only, and provide information about what the child can do at this time. To really identify a young gifted and/or talented child requires a collection of evidence over time.
- For various reasons, young children may not perform 'on demand', and thus not demonstrate their full potential.
- The development of young gifted and talented children can be very uneven, with peaks and troughs, stops and starts. Multiple assessments and observations over time are necessary to identify advanced development or learning.
- Where gifted and talented children also have disabilities (dual exceptionality), the
  disability can hide or mask the giftedness or talent. Educators should be aware that
  gifted and talented children can show learning that may not fit within conventional
  ideas about achievement.

- Cultural and other biases can interfere with a professional's ability to identify
  giftedness and talent in young children. Families' different cultural backgrounds
  can lead to a diversity of expressions of giftedness and talent, and may not fit
  narrow or pre-determined ideas. In some cultures, children may be discouraged
  from displaying their abilities.
- Stereotypes about giftedness and talent can lead to failure to identify young gifted children, particularly where the signs of giftedness are subtle. Young gifted children are not 'geniuses'. Not all gifted children are early readers or good at maths.
- Young gifted children may lack opportunity or support to demonstrate their gifted potential, or develop this potential into talent, and thus not be identified.

In the world of education, a gifted and talented child is defined as someone who has exceptional aptitude or talent in one or more areas. While some gifted children are separated from their peers and educated in special gifted and talented classrooms, others are served by getting involved in special enrichment classes and activities, either during or after school.

Recognizing a student's giftedness by pulling a student out of the general education classroom can often have negative side effects. Keeping gifted students in the classroom through a full-inclusion program, however, can negate some of those side effects. In a full-inclusion classroom, gifted students stay in the classroom with students of all abilities and the classroom instruction is differentiated, allowing gifting students to receive instruction at their level while still interacting with their peers.

# **Celebrating Areas of Giftedness**

One of the benefits of teaching gifted children in a full-inclusion classroom is the ability to focus on their specific areas of giftedness. While some students are gifted in multiple areas, many students may only be gifted in one or two key areas. Unfortunately, when students are identified as gifted, they are often treated as if they are gifted in every area and therefore receive high-level instruction in every area, even if they are not ready for it. In a full-inclusion classroom, instruction in every subject is differentiated, allowing gifted students to work at higher-levels in areas where they are gifted and work at other levels in areas where they are not.

#### **Positive Interaction with Peers**

Being gifted is not easy. Often when gifted children are pulled out of the general education

classroom they face ridicule from their peers. While teaching gifted children in full-inclusion classrooms does not guarantee they will never be called a "nerd" or made fun of for their giftedness, it does not make their giftedness as obvious to their peers. They have the opportunity to socialize with other students their age and learn to work and interact with students of all different ability levels. In the full-inclusion classroom, every child has his/her own strengths and weaknesses.

# **Enhancing the Curriculum**

When done effectively, full-inclusion programs have the potential to enhance the curriculum for all students, not just gifted students. Special classes and pull-out programs for gifted students typically follow a set curriculum and just work at a higher level than general education classrooms, but they do not always meet the needs of gifted students. Full-inclusion classrooms operate with differentiated instruction, allowing teachers to focus on adapting the curriculum to meet the needs of individual gifted children and all students in the classroom, thereby enhancing the curriculum and improving the instruction all students receive.

# **Full Inclusion Done Right**

For teachers, a full-inclusion classroom full of students with learning disabilities, gifted students and those who are just average can be overwhelming. In order for full-inclusion classes to become overwhelming for gifted students, teachers must be committed to teaching gifted children and all children at their levels through differentiated instruction.

# 3.8 Let us Sum Up

**Adaptation:** all students should have equitable access to learning, opportunities for achievement and thepursuit of excellence in all aspects of their educational programs. Adaptations are teaching and assessment strategies especially designed to accommodate a student's needs so he or she can achieve the learning outcomes of the subject or course and to demonstrate mastery of concepts. Essentially, adaptations are "best practice" in teaching. A student working on learning outcomes of any grade or course level may be supported through use of adaptations.

Accommodations can help kids learn the same material and meet the same expectations as their classmates. If a student has reading issues, for example, she might listen to an audio recording of a text. There are different types of classroom accommodations, including presentation (like listening to an audio recording of a text) and setting (like

where a student sits).

Modification: Kids who are far behind their peers may need changes, or modifications, to the curriculum. For example, a student could be assigned shorter or easier reading assignments. Kids who receive modifications are not expected to learn the same material as their classmates.

In this three parts are very much important in inclusive education.

3.9 "Check your Progress"		
Q.	Discuss about Adaptation , Accommodations and Modifications	
1.	What is Sensory Disabilities?	
2.	Discuss about Neuro - Developmental Disabilities.	
3.	Write a brief note on Multiple Disabilities.	

4.	Who are they Gifted Children?
5.	Make difference between multiple disability and multi sensori impartment?

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