



“Special Needs Education” is the education of children who differ physically, mentally, intellectually, emotionally and socially from children who are non disabled to such an extent that they require special services, accommodation and modification of usual school practices in education and in the environment. For example, a person with physical disabilities should be provided with the ramp along the staircase. Similarly, an individual with learning disabilities needs special techniques such as mind maps and study skill methods.

The term special needs in the education setting would normally be provided to students through an Individual Education Plan (IEP) which is also referred to as an Individual Program Plan.

According to the Individuals with Disabilities Education Act (IDEA), students with disabilities must be prepared for further education, employment and independent living. According to the United Nations, there are 1 billion persons with disabilities in the world today. The numbers are increasing every year due to various factors.

Let us now try to understand the meaning and difference between some of the terminologies described by the World Health Organisation (WHO).

Impairment

It is defined as any loss or abnormality of psychological or anatomical structure or function.

Example : Loss of vision, hearing.

Disability

Develops as a consequence of impairment. It is also the inability to carry out certain activities, which are considered as normal for a particular age or sex.

Example : Loss of a limb results in an inability to walk.

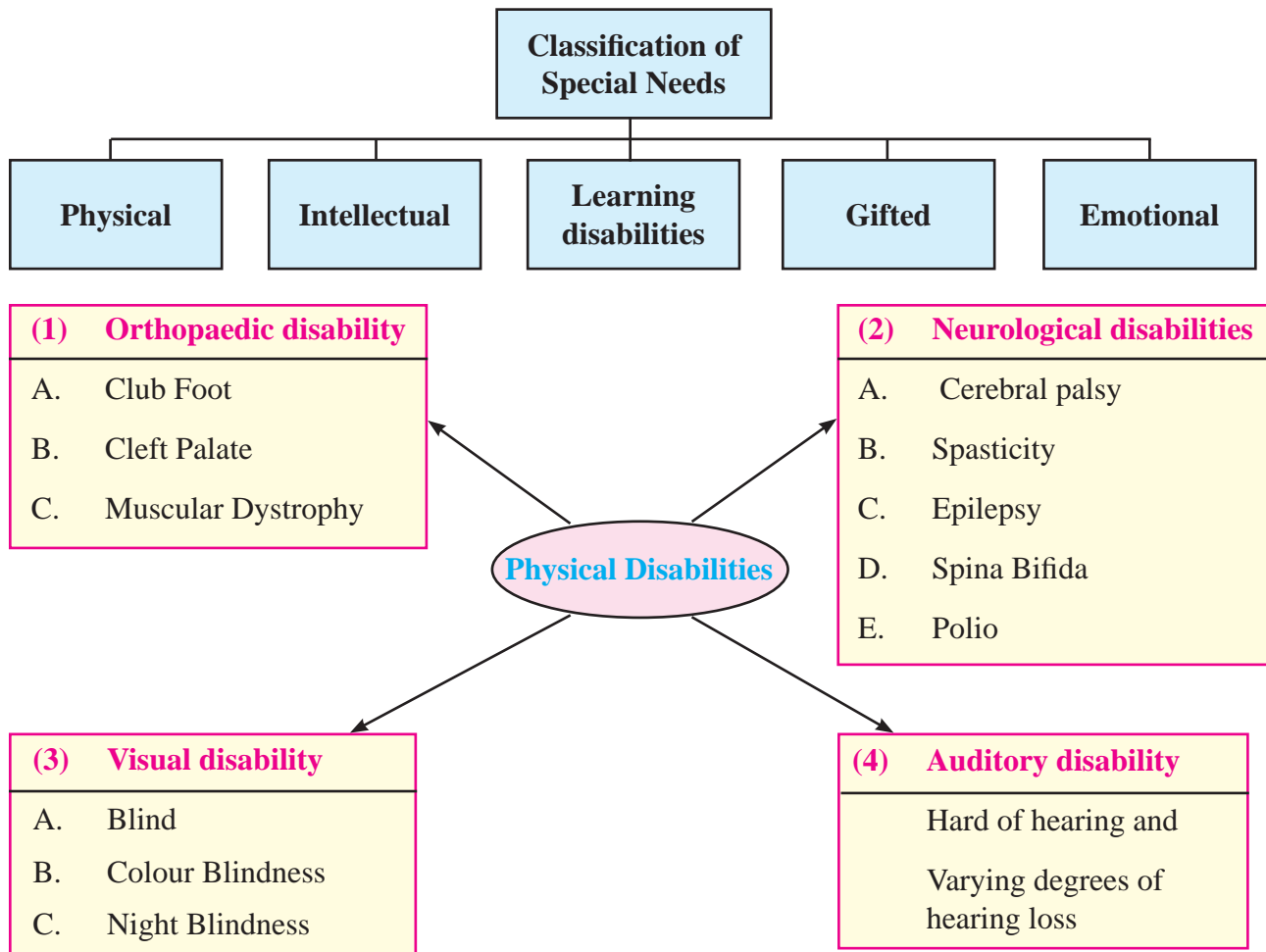
Handicap

It develops as a consequence of the disability. It is defined as a disadvantage for a given individual resulting from an impairment or a disability that limits and prevents the fulfilment of a role, which is normal for that individual, depending on age, sex, social and cultural factors.

1. Physically handicapped individuals are those whose non-sensory physical limitations or health problems interfere with school attendance or learning to such an extent that special services, training, equipment, materials or facilities are required.

Information hub

In 1992 the United Nations General Assembly proclaimed December 3rd as the International Day of Persons with Disabilities. The main objective was to increase public awareness, understanding and acceptance of individuals with special needs. This would also encourage individuals with special needs to express their views and promote action to improve their situation.



Physical Disability

(1) Orthopedic disability

A. Club Foot :

It refers to the disruption of ball and socket between the femoral head and acetabulum. It affects more males than females and is not genetically inherited.

B. Cleft Palate :

This is the most common congenital malformation affecting the jaw region, which is the cleft palate/ lip. The defect occurs when the palatal shelves fail to fuse typically during the 6th and 8th week of fetal development, resulting in an opening known as 'cleft'.

C. Muscular dystrophy :

It refers to degeneration of the muscle fibers. This condition is marked by weakening and wasting away of muscular tissue.

Characteristics :

- Muscular dystrophy does not affect intellectual functioning.
- An individual's social and interpersonal relationships greatly depend on how parents, siblings, teachers and peers react.
- Individuals with physical disabilities try to spend a great deal of energy in hiding from stigmatization. Research indicates that children with this condition tend to have lower than average verbal IQ.
- Parents and family members are likely to blame each other, either rejecting the child or being overprotective.
- With proper management and help the child could be taught to accept the disability and live a well adjusted life.

(2) Neurological Disability

One of the most common causes in children is damage or deterioration of the Central Nervous System (CNS), which include the brain and the spinal cord. Damage refers to the child losing sensation, inability to control movement and inability to feel or move certain parts of the body.

A. Cerebral Palsy :

It is a Motor dysfunction in an individual due to brain damage. It is not a disease, neither is it contagious or progressive. However, improper treatment may lead to many complications.

Approach :

- Children with cerebral palsy profit from classrooms that are least restrictive.
- Inclusive settings should be provided to these children.
- A team of special educators, professional aides, therapists and counsellors should be made available to them.

B. Spasticity :

It is a condition in which certain muscles remain continuously contracted. This contraction causes stiffness or tightness of the muscles and can interfere with normal movement, speech and gait.

Approach :

- Relieving the signs and symptoms of spasticity.
- Reducing the pain and frequency of muscle contractions
- Improving gait, hygiene, activities of daily living and ease of care.
- Improving voluntary motor functions involving objects such as reaching for, grasping, moving and releasing.

C. Epilepsy :

It is a disorder in which nerve cell activity in the brain is disturbed causing seizures. Epilepsy may occur as a result of a genetic disorder or an acquired brain injury such as a trauma or stroke.

Approach :

- Remain calm and try to relax the child who has an epileptic attack.
- Allow the child to sleep after the attack.
- Inform the child's parent/ guardian about the attack.

D. Spina bifida :

It is a birth defect in which a developing baby's spinal cord fails to develop properly while in the mother's womb. The defect can be anywhere from the head to the lower end of the spine. The nerves in the spinal cord that control the bladder are not formed properly hence a child has difficulty in storing or emptying the bladder.

E. Polio :

Poliomyelitis is a highly infectious disease that most commonly affects children under the age of 5 years. The Polio virus affects the nerve tissue in the spinal cord/ brain which leads to crippling. The virus is spread mostly through contaminated water. There is no cure for polio but it is preventable with the vaccine. The World Health Organization (WHO) declared India a polio free country in the year 2014.

Approach :

- Early diagnosis
- Supportive treatment such as bed rest, pain control and good nutrition.
- Physical therapy as a measure to reduce the long-term symptoms due to muscle loss.

(3) Visual disability :



Picture 10.1 Visual impairment

A. Blind : total absence of sight Low vision

Approach :

- Sighted peers can help in making notes for visually handicapped children.
- Inclusion of interpersonal interaction
- Regular counselling
- Training to read in Braille or by the use of auditory methods such as audio tapes and records.

B. Colour blindness :

It is a condition, which is often inherited. It is a reduced ability to distinguish between certain colours Colour blindness is also known

as colour vision deficiency. More men than women are affected by colour blindness.

C. Night blindness :

Night blindness also known as 'Nyctalopia' is a condition characterized by the inability to see in dim light or at night.

Approach :

- Fortifying the diet with vitamin 'A'

(4) Auditory disability

The sense of hearing is integral to communication and the use of language. It is through this mode that an individual is able to receive and give information.



Picture 10.2. Auditory Impairment

Children who cannot hear sounds at or above a certain intensity (loudness) level are referred to as individuals with hearing impairment. Hearing sensitivity is measured in decibels(dB).

There are 5 degrees of hearing loss namely, slight, mild, moderate, severe and profound.

Approach :

- Using a hearing aid
- Making the child sit in the front in the classroom
- Lip reading
- Regular counselling

Intellectual disability :

Intellectual disability (ID) is significantly sub average intellectual functioning present from birth or at infancy, causing limitations in the ability to conduct normal activities of daily living.

According to Weschler (1958) Intelligence is the aggregate or global capacity of the individual to act purposefully, think rationally and deal effectively with his environment.

$$IQ = \frac{MA}{CA} \times 100$$

Key

IQ – Intelligence Quotient

MA – Mental Age

CA – Chronological Age

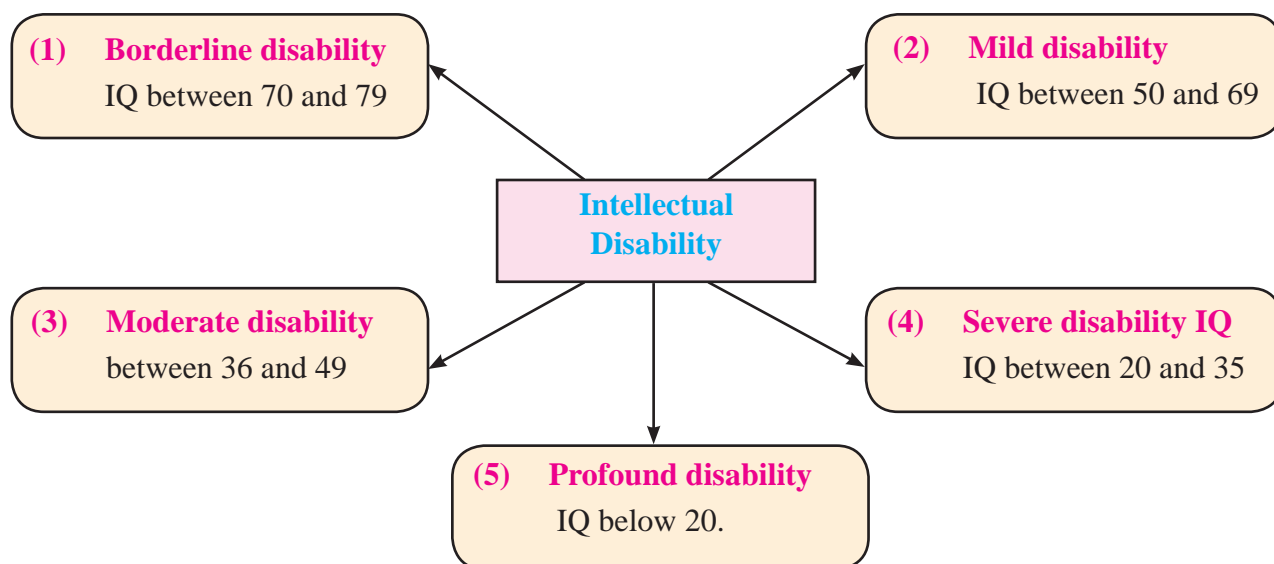
Learning disabilities :

According to the Individuals with Disabilities Education Act(IDEA) of 1990 it is a disorder in which one or many of the basic psychological processes involved in understanding or in using language spoken or written, manifests in an inability to listen, think, speak, read, write, spell or do mathematical calculations.

There are four types of learning disabilities. Let us look at each one of them.

(1) Dyslexia :

It is a disorder manifested by difficulty in learning to read despite instruction, adequate intelligence and social cultural opportunity



Characteristics :

- Difficulty in comprehending a passage
- Spatial disorientation i.e. left right confusion
- Unable to recall the sequence of letters in a word
- Poor figure ground discrimination
- Hyperactive, impulsive, distracted and short attention span.

Approach :

- Intensive remedial intervention.
- Buddy system, Peer tutoring
- Using special teaching aids- spell check, scribe
- Counselling students and parents

(2) Dysgraphia :

Writing is one of the most important forms of communication and it is usually the last to be learnt. Disorder of written expression is known as dysgraphia.

Characteristics :

- Inability to remember to write certain letters/ numbers
- Difficulty in distinguishing between capital and lowercase
- Habitually erasing or over printing
- Difficulty staying on the lines while writing \ Repeating the same letters while writing words

Approach :

- Intensive remediation intervention
- Evaluating the child orally
- Counselling the parents, teacher and the Dyscalculia

(3) Dyscalculia

Dyscalculia may result from lesions in widely different regions of the brain. It is a structural disorder which is genetic in origin.

Characteristics :

- Deficit in auditory reception
- Difficulty in assigning meaning to mathematical concepts
- Deficit in attention which interfere with the ability to concentrate
- Perceptual errors
- Left right confusion

Example :

26	✓	26	✗
+ 4		+ 4	
<hr/>		<hr/>	
30		210	

Approach :

- Remediation in math
- One to one, teacher- child teaching
- Exemption from math at the board level to reduce stress among students
- Counselling parents teachers and students

(4) Dyspraxia

It refers to a developmental disorder of the brain in childhood causing difficulty in activities requiring coordination and movement, marked by clumsiness in otherwise healthy children. It is a neurological disorder.

Characteristics :

- Children often have language problems
- They also have difficulty in associating their thoughts and perception
- Poor balance and posture often resulting in clumsiness
- Poor eye hand co-ordination

Approach :

- Occupational therapy to help manage everyday activities both at home and at school
- Speech and language therapy to help them to communicate more effectively
- Perceptual Motor training, improving child's language, visual movement and auditory skills
- Counselling parents and the child

Gifted :

Gifted children are those who give evidence of high performance capability in areas such as intellectual, creative, artistic, leadership capacity or specific academic fields and who require services and activities not ordinarily provided by the school in order to fully develop such capacities.

Characteristics :

- They often read widely, quickly, intensively and possess a large vocabulary.
- They can work independently at an early age and can concentrate for longer periods
- They often have boundless energy which may sometimes lead to misdiagnosis of hyperactivity
- They prefer the company of older children and adults to that of their peers
- Motivation to learn, find out and explore new avenues
- They tackle tasks and problems in a well organized goal-directed and efficient manner
- They often show interest in intellectual activity
- They readily see cause-effect relationships
- They are sensitive to beauty and aesthetics
- They are flexible, fluent and original thinkers

Emotionally disturbed :

Also known as emotionally impaired, the term covers many mental and emotional health issues. Some of the issues include Anxiety disorders and Eating disorders.

Characteristics :

- Panic
- Fear
- Uneasiness
- Shortness of breath
- Sleep problems

Approach :

- Counselling
- Cognitive Behavioural Therapy (CBT)

Pervasive Developmental Disorders (PDD) :

comprise a group of conditions originating in childhood that involve serious impairment in different areas.

One such developmental disorder amongst them is 'Autism'. It is characterised by difficulties with social interaction and communication and by restricted and repetitive behaviours.

Autism :

A child with autism has impairment in communication, reciprocal social interaction skills and exhibits presence of stereotype patterns of behavior, interest and activities.

Characteristics :

- Lack of eye contact with people around
- Doing something over and over again like repeating word, rocking back and forth and flapping fingers, waving arms in a circular motion
- Not listening to people
- Talking in a robotic voice or a sing song voice

- Experience trouble in adapting to changes in the routine.
- Highly sensitive to sounds, touch and smells

Approach :

- Early intervention can make a significant difference in the development in a child



Reflection / Darpan

After learning about the different areas of special needs, ask yourself - What is or should be the primary goal of education for every child? Document your thoughts and revisit them from time to time.



Picture 10.3 Inclusion

Many professionals stress the importance of 'mainstreaming' 'integration' and 'inclusion' for students with special needs into the regular schools.

What is Inclusion?

According to Bui, Quirk, Almazan and Valenti (2010), Inclusive education is when all students regardless of any challenges they may have, are placed in age appropriate general education classes that are in their own neighborhood to receive high quality instructions, intervention and support that enable them to be successful in the core curriculum.

To sum up

- Inclusion is a right, not a privilege
- Inclusion means facilities or provisions that are made. It is not exclusive to a group
- Inclusion means the feeling of belonging and being accepted by others
- It refers to the right to be an active member of the community
- Inclusion addresses the uniqueness of every individual i.e. both, weakness and strength of a child

- The program planned is holistic, helps in bringing about developmental changes as well as a change in social behaviour.

The national policy of education 1986, focused on the need for including education for children with disabilities. In 1995, an amendment passed, stated that every child has access to free education in an appropriate environment till the age of 18 years.

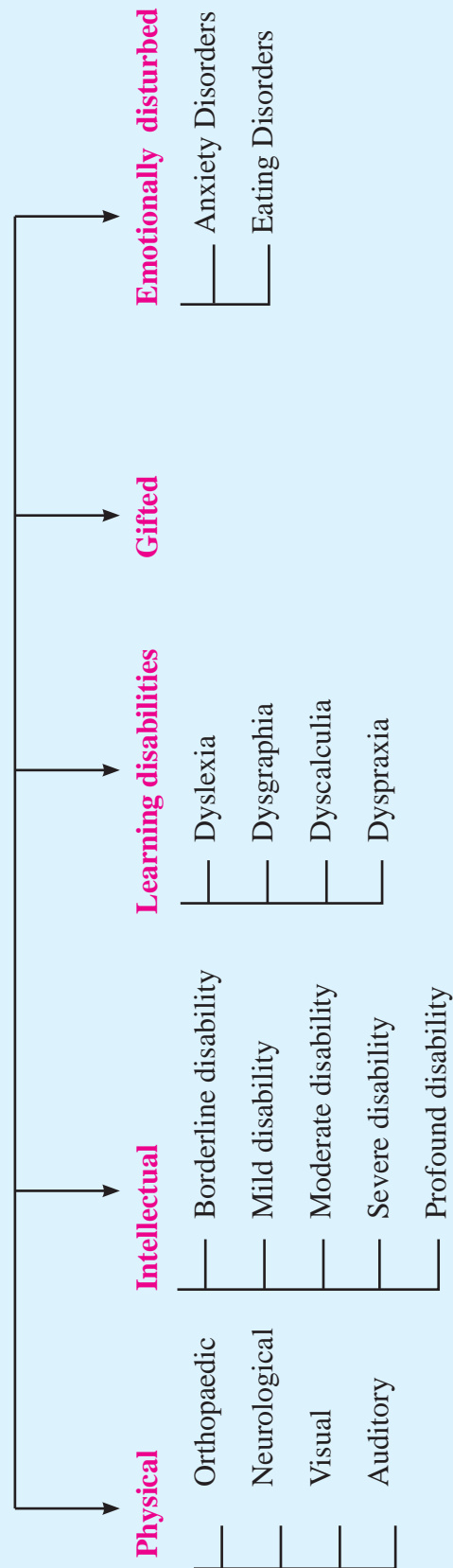
The Rights of Persons with Disability Bill, 2016, will replace the existing PWD Act 1995, which states that the responsibility has been cast upon the appropriate Governments to take effective measures to ensure that the persons with disabilities enjoy their rights equally with others.

Do you know?

The National Centre on Disability and Journalism (NCDJ) 2018, Arizona State University has given guidelines and suggestions on appropriate language of disability related terms in order to avoid the use of 'derogatory' terms and use more acceptable ones. For example, the term 'Intellectual disability' has replaced the term 'Mental Retardation'.



Classification of Special Needs



Revise the points

Glossary

Decibel : A unit to measure the intensity of sound.

Epilepsy : A Central Nervous System disorder marked by abnormal brain activity.

Neurological handicap : disorder of the nervous system.

Exercises

Q. 1. Choose the most appropriate word from the given alternatives.

1. Wasting of muscular tissue is.....
a) *Spina bifida*
b) *muscular dystrophy*
c) *spasticity*
2. Inclusion is about
a) *Limitation* b) *Equality*
c) *Discrimination*
3. A congenital malformation found in children is called
a) *Cleft Palate* b) *Atrophy*
c) *Club Foot*
4. A mathematical disability is known as
a) *Dysgraphia* b) *Dyspraxia*
c) *Dyscalculia*

Q. 2. Define the terms.

1. Impairment
2. Disability

3. Handicap
4. Dyslexia
5. Inclusion
6. Autism

Q. 3. List the types for the following disabilities.

1. Orthopaedic handicap
2. Emotionally disturbed
3. Neurological disability
4. Intellectual disability
5. Auditory disability

Q. 4. Write short notes.

1. Inclusive education
2. Dysgraphia
3. Emotionally disturbed

Q. 5. Write in detail.

1. Explain with an example the difference between 'Impairment', 'Handicap' and 'Disability'.
2. Explain Intellectual disability.

Project / Self Study

- Visit a school practising inclusive education and Write a report on it.
- Interview a child with learning difficulties 10 to 13 years of age. Find out the areas of his/her difficulties and suggest ways in bringing about a change in his / her curriculum.
- Make a chart using pictures to show the classification of special needs.