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CREATING AN INCLUSIVE SCHOOL

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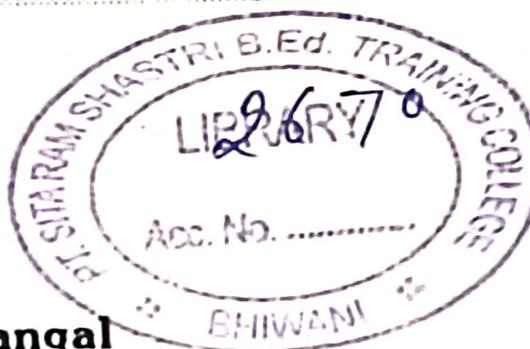
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CREATING AN INCLUSIVE SCHOOL

(MDU)

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SYLLABUS

Creating an Inclusive School

COURSE CONTENT

UNIT-1

Concept of Exceptionality and Children with Special Needs

- Understanding diversities/differences-concept, characteristics and types of various disabilities (Visual, Hearing, Mental Retardation, locomotors and neurological disorders, learning disability and multiple disability)
- Concept, meaning and need of inclusive education
- Transition from segregation to inclusion
- Principles of Inclusive Education
- Models of Inclusion

UNIT-2

Legal and Policy Perspectives

- International Declarations and Conventions:
- Salamanca statement and framework of action, 1994
- Educational provisions in the UN convention on the rights of person with disabilities (UNCRPD), 2006
- Constitutional Provisions
- Education of students with disabilities in NPE 1968, 1986, POA (1992)
- (PWD Act 1995), (RCI Act, 1992), (RTE Act 2009)
- Education in the national policy on disability, 2006

Role of Organizations for Education of Children with Disabilities

- Rehabilitation Council of India (RCI)
- National Institute/of Different Disabilities
- Composite Regional Centres (CRCs)
- District Disability Rehabilitation Centres (DDRCs)
- Non Voluntary Govt. Organizations (NGOs)

UNIT-3

Special Needs & Inclusion

- Special needs in terms of learning experiences in the context of disabilities and their learning styles
- Schools awareness and readiness for addressing learning difficulties
- Concept of an inclusive school- infrastructure and accessibility, awareness and positive attitude towards disability, human resources, whole school approach

UNIT-4

Practices and Support System for Inclusive Set up

- Pedagogical Strategies to respond to individual needs of learners in classroom: Peer tutoring, cooperative learning strategy, social learning, Buddy system, Reflective teaching, Multisensory teaching
- Support Services and Partnership in Teaching : Developing positive relationship between school and home. Teaching and co-teaching personnel : Parents and teachers, teacher and special teacher, Team of teacher, Parents Special Educator, Speech therapist, physiotherapist, occupational therapist and counselor, Professional training of teachers in inclusive schools .
- Assistive and Adaptive Technologies in Inclusive Set up, use of ICT, Equipments and other technologies for different disabilities.

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1

Disabilities – Concept and Types

Chapter Outline

- Introduction
 - Disabilities – Meaning and Concept
 - Various Types of Disabilities and their characteristics
 - Study Questions
-

Introduction

The earth we live on is full of diversities and differences. Nothing whether animate or inanimate, living or non-living is alike. It differs with others in so many features, characteristics and functioning. Soil of one region differs much from the soil of other regions. There are many varieties of plants, trees, leaves, birds, insects and animals. The variations are also very much visible in the same members of species. No two crows, cows, mangoes are all alike. These differ in various way. The same is also true for humans. No two individuals including the identical twins are alike. There are wide individual differences exist among the children of the same town, students of the same class or section or children of the same parents. A number of factors associated with heredity and environment of the children work in creating a variety of differences among them in respect of their physical, mental, social, emotional, moral and aesthetic abilities and capacities. As a result when on one hand, we may find the children imbibing with a quite superior abilities and capabilities allowing them to excel in sports and games, rise in academic pursuits and social fields, there are children on the other hand, who lack or suffer from so many deficiencies, deficits and incapacities in one or the other aspects of their growth and development causing trouble in their adequate adjustment and participation in the activities associated with their needed progress and development. Such children are usually referred to as disabled children and distinguished on the basis of the type and nature of disabilities suffered by them. But now here question arises what do we mean by the term disability? Let us think

about the meaning, concept and types of the disabilities suffered by children in the present chapter.

Disabilities – Meaning and Concept

The term disability is very much associated with the terms like impairment and handicap and that is why you must have heard quite often the terms like physical impairment, physical disability and physical handicap for addressing the deficiency, deficits and incapacity of an individual associated with his physical growth and development. Therefore, in getting acquainted with the meaning and concept of disabilities it would be quite proper to understand the underlying distinction and differences in the use of these three terms – impairment, disability and handicap. In the literature available, these terms have been widely defined and distinguished. However, let us here mention the attempts made by WHO.

In one of its publication entitled “The International Classification of Impairments, Disabilities and Handicap” WHO (1980) has defined these terms as follows :

- **Impairment** is defined as a fundamental, structural, psychological, or physiological deficit (e.g. disordered motor control in cerebral palsy).
- **Disability** is defined as the functional deficit that a person experiences as a result of impairment (e.g. spasticity interfering with walking).
- **Handicap** is defined as the disadvantage a person with disability experiences in various societal settings as a result of that disability (e.g. people who cannot walk may be denied access to particular places).

Let us try to understand these terms in a more specific way in the light of the guidelines provided by WHO.

1. Impairment in its simple meaning denotes or represents a sort of disturbance or abnormality in the structure and functioning of our body systems including psyche. In this way, it represents a certain type of loss or deficit, and deficiency at the organic or psychic level for an individual (e.g. loss of a limb, paralysis of speech, muscles or legs, disturbance in one’s vision or hearing system, disturbance and structural abnormalities in one’s neurological system, brain, spinal chord, etc.)
2. The term disability is used to mean the loss of function that individual experiences because of the impairment. It limits his ability to perform

certain task. For example, (i) vision or hearing impairment may result into one's loss or reduced function with respect to the use of his visionary or hearing system, (ii) orthopaedic or motor impairment may limit one's functions with regards to one's walking and other motor functioning.

3. Where impairment results into a specific type of disability, the disability in its own turn may give birth to a specific condition known as handicap. Actually a handicap stands for a disadvantage imposed on an individual on account of his disability. For example, some disturbance in the structural composition and functioning of ears may cause hearing impairment. This impairment may bring disability in terms of loss of hearing ability. Inability or incapacity in terms of hearing sounds then may turn one into aurally handicapped, i.e. experiencing problems in interacting with the environmental situations demanding hearing ability on one's part. In this way, the term handicap usually refers to environmental or functional demands placed upon an individual with a disability in a given situation. More specifically, a handicap is the effect of a disability on an individual's functioning in his environment. It may limit his social functioning or adjustment to his environment as per limits imposed upon him for doing so by his disability of one or the other kinds. As a result, a physically challenged child even after using wheel chair may feel handicapped in terms of making proper adjustment and adaptations to his self and the environment. He may find his motor disability as a major obstacle in his proper socialization. It may deny him the valuable opportunities of entering into the activities and profession of his choice, getting married and difficulty even in performing his day-do-day activities.

The previous discussion may lead us to conclude that all these three terms, impairment, disability and handicap have a perfect linear relationship (i.e. one leading to the other) in the following manner:

Impairment → Disability → Handicap

Linearity of such relationship may make us to think that it is always essential for an impairment condition to result into disability and the disabled condition to handicap. However, in practical situation it does not happen so. Let us have a few illustrations in support of such happenings.

- (i) Visual or hearing impairment may not lead to disability. The deficits and deficiencies in one's visual and hearing ability may be overcome

CREATING AN INCLUSIVE SCHOOL

by the use of lenses or hearing aid. So this may not cause handicap to him while studying in his class. However, it may create obstacle in meeting some or other environmental needs, i.e. he may not participate in such activities or games in which the wearing of lenses or hearing aid may prove a major inconvenience or obstacle. Similarly, he or she may feel difficulty in getting married or even seeking employment in a society where the wearing of lenses or hearing aid is taken otherwise. In such cases, as we see individuals with disabilities are bound to experience handicaps that have nothing to do with their disabilities, but are the result of negative attitudes and inappropriate behaviour of others who needlessly put hurdles in their paths in spite of their capabilities in participating fully in school, play and other activities at job and other work situations.

- (ii) Just as impairment may not necessarily cause disability, disability may not also necessarily lead to handicap. The fact remains with all handicaps is that these are absolutely situation-specific, i.e. a person with disability may feel handicapped in one situation but not in the other. Let us have few illustrations.
 - (a) A child sitting on a wheel chair (on account of his orthopaedic impairment and motor disabilities) in the class may not feel handicapped while listening to the lecture of his teacher and participating in class room discussion, but he may feel so while doing experiments in the science laboratory and working in a vocational course class.
 - (b) A child with an artificial limb may feel handicapped while competing against non-disabled peers at the time of playing football or cricket but may experience no handicap in the classroom.
 - (c) A blind child may experience major handicap in the situations where eye sight is most needed, i.e. travelling in an unfamiliar terrain, but he may also have advantages over sighted persons in situations where eye sight is not important, i.e. singing a song, playing on a musical instrument, etc.

However, whatever the mode may be, there exists a sound relationship between impairment, disability and handicap conditions. For the illustration of their positions in the context of person's disability and rehabilitation process, National Centre for Medical Rehabilitation Research (NCMRR), National Institute of Health, USA (1993) has developed a model, known as NCMRR Model of Disability. Let us know it in brief.

In this model of disability, (Figure 1.1) the components of disability are shown arranged around a pentagon. It emphasizes that instead of a linear or hierarchical relationship, the relationship among the components of disability is a quite complex one. The related five components in the model of disability have been explained in the following way.

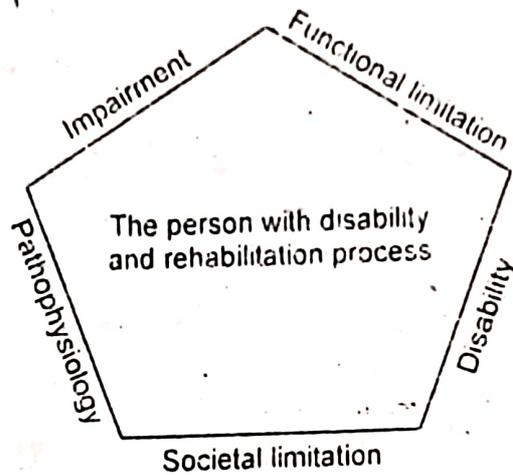


Figure 1.1 NCMRR Model of Disability.

- (i) Pathophysiology is the starting and initial phase for the development of disability in an individual. It is concerned with the basic biological and psychological disturbances.
- (ii) The second component in the name of impairment emphasizes the more generalized effects of these disturbances, e.g. brain abnormalities resulting from adverse prenatal conditions (i.e. the pathophysiology) may manifest as generalized abnormalities in muscle tone and motor control (i.e. the impairment).
- (iii) The third component in the name of functional limitation emphasizes a specific skill or set of related skills that cannot be executed and are often (but not always) a result of pre-existing impairment.
- (iv) The fourth component in the name of disability stands for the decrement in function that a person experiences as a consequence of his or her impairments and functional limitations (e.g. dysfunctional gait is a functional limitation that may result in impaired mobility, which is the disability experienced by the person).
- (v) Finally in the fifth component, the term handicap has been replaced in the NCMRR model by the term societal limitation emphasizing the role of the environment and society in limiting the opportunities for one's growth and development.

In this way, latest trend in the use of these terms clearly indicate to do away with the term handicap. (Since it may work as a stigma and also it is

never so consistent as the term disability for it is being situation related. Now a clear-cut hypothesis that usually seems to work is:

Basic biological and psychological disturbances lead to impairment. Impairment resulting into functional limitation leads one to disability and the effects of such acquired disability are experienced through societal limitations.

In view of such conclusion and underlying relationship among the terms impairment, disability and handicap, we may now safely define the term disability in the following words.

Disability refers to the state of a person in which he faces some sort of incapacity or inability to adjust and progress well in his environment on account of one or the other serious impairment brought out by a sort of disturbance or abnormality in the structure and functioning of his body system including psyche.

Various Types of Disabilities and their characteristics

Disabilities can be categorized in various types depending upon the nature of impairment and sort of inability or incapacity suffered on the part of affected children in terms of their adequate functioning for their needed adjustment, education and development. These types of disabilities may be classified and named as below.

- A. Physical disabilities further classified as visual disability, hearing disability, orthopedical or locomotor disability, speech disorders related disability etc.
- B. Mental Disabilities including mental retardation and neurological disorders related disability.
- C. Disabilities related to emotional disturbance.
- D. Learning Disabilities such as Dyslexia and Dyscalculia.
- E. Mixed types of Disabilities such as Multiple disability.

In this chapter below we would be focusing our discussion on the nature and characteristics of these various types of disabilities except a few ones like speech disorder and emotional disturbance related disabilities.

Visual Disability – Meaning Types and Characteristics

Visual disability refers to the state of an individual in which he suffers from the impairment and defects of his eyes to such an extent as to make him feel disabled or handicapped in terms of his visual ability and perception. This handicapness or disability may represent a continuum, ranging from poor and defective vision to no perception of light at all. As a result of such

variance the children suffering from visual disability of one or the other types are often given different names and classifications like partially sighted, children having low vision, legally blind and totally blind etc. Let us try to have a knowledge and understanding of all these terms indicative of level or degree of one's visual impairment, disability and handicapness in one aspect or the other.

(i) **Partial sightedness** : The visual disability referred to as *partial sightedness* stands for the type of disability in which individuals are found to suffer from some visual problems resulting in their partial perception of the object seen.

(ii) **Low vision Disability** : Visual disability characterized as *low vision* generally refers to a moderate to severe visual impairment, not necessarily limited to distance vision. It applies to all individuals with sight who are unable to read the newspaper at a normal viewing distance, even with the aid of eye glasses or contact lenses. The persons suffering with such disability is potentially capable of using vision for executing a task with appropriate assistive device.

(iii) **Legal Blindness** : Visual disability referred to as **legal blindness** (as defined in Rights of Persons with Disability Bill, 2012) is the characteristic of the individuals having less than 20/200 vision in the better eye after correction or a very limited field of vision (20 degrees at its widest point). Here the visual acuity of 20/200 means that the person can see an object that is normally seen at 200 feet only at a distance of 20 feet. Limited or reduced field of vision means that the individual has tunnel vision with limited peripheral vision.

(iv) **Total Blindness** : The visual disability referred to as **total blindness** is the characteristic of the persons who have no vision *i.e.* no perception at all of the objects seen and can learn via braille or other non-visual media.

In another way, we may classify visual impairments and disabilities as Congenial and Adventitious depending upon the nature of visual impairment (loss of vision) present at birth or occurring after birth (as a result of illness or accident).

The characteristics of visual impairments visible in the child's behaviour

The behavioural signs like below may be well visible in the behaviour of the children in the class suffering from one or the other types of visual disabilities.

- Child often complains of eye pain, itchiness, or discomfort.
- Constantly reading close to the face
- Attempts to brush away a blur
- Excessive rubbing of eyes
- Constant frowning
- Shutting or covering one eye for visual tasks
- Head-tilt or head-turn when looking at something
- Learning forward to see better
- Excessive blinking
- Undue sensitivity to light
- Excessive imitability during close work
- Stumbling or tripping over objects
- Clumsiness in reading
- Difficulty in reading letters on the blackboard
- Using finger as a line marker while reading

Source : NCERT (2014). Including Children with Special Needs. Primary Stage.

Hearing Disability – Meaning, types and Characteristics

Hearing disability refers to the state of the individuals in which they suffer from a wide range of hearing losses (including deafness) making them disabled wholly or partially in utilizing their hearing organs for getting and exchanging information with others. Children affected by hearing disability thus include hard of hearing (benefitted with the use of hearing aids) as well as those who experience a significant loss in hearing even if they use hearing aids.

The hearing losses as such thus affect the abilities of the children to communicate with others. Since communication *i.e.*, exchange of information is the key component of any knowledge getting process and the subsequent adjustment of one's environment, the children suffering from hearing impairment are bound to suffer adversely in terms of their adjustment and educational development. The situation gets worsened depending upon the intensity and severity of the hearing losses. In terms of physiological and medical language the hearing losses are usually classified into the following four types :

1. **Conductive hearing losses** are caused by diseases or obstructions

in the outer or middle ear (The condition pathways for the sound to reach the inner ear). Conductive hearing losses usually affect all frequencies of hearing evenly and do not result in severe losses. A person with a conductive hearing loss usually is able to use a hearing aid well or can be helped medically or surgically.

2. Sensorineural hearing losses result from damage to the delicate sensory hair cells of the inner ear or the nerves which supply it. These hearing losses can range from mild to profound. They often affect the person's ability to hear certain frequencies more than others. Thus, even with amplification to increase the sound level, a person with a sensorineural hearing loss may perceive distorted sounds, sometimes making the successful use of a hearing aid impossible.

3. A mix hearing loss refers to a combination of conductive and sensorineural loss and means that problem occur in both the outer or middle and the inner ear.

4. A central hearing loss results from damage or impairment to the nerves of nuclei of the central nervous systems, either in the pathways to the brain or in the brain itself.

Such type of classification of hearing losses and the subsequent distinction among hearing impaired is neither needed nor seems practicable in the field of education for devising ways and means of the adjustment and educational development of the hearing impaired. From this angle therefore it is more useful and practicable to classify the learning losses as slight, mild, moderate, severe or profound, depending upon how well a person can hear the intensities (loudness) of the sound, measured in units called decibels-dB or frequencies (pitch) of the sound, measured in units called hertz-Hz greatly associated with speech. Generally, only children whose hearing loss is severe or profound *i.e.*, greater than 90 decibels (dB) are considered deaf and the remaining ones suffering from slight, mild and moderate hearing losses are termed as hard of hearing.

In this way, we can attempt to classify the hearing impaired children into two broad types (*i*) deaf and (*ii*) hard of hearing for the clear purpose of helping them according to the degree of their disability.

Here we must be again clear in our conception that the terms deafness stands for the state or condition that prevents a child from receiving sound in all or most of its forms. In addition he may also be a dumb in case his deafness is by birth.

Consequently, he will be hardly make any profit from the sensory experiences associated with hearing even speech.

Contrarily, a child termed as hard of hearing can generally respond to auditory stimuli including speech and therefore he has the probabilities of making profits from the experiences associated with sense of hearing. Such distinction between these two types of hearing impaired thus can probe a solid base for the planning and structuring of any educational and adjustment scheme for them.

Signs of possible hearing impairments in children

The signs like below may provide necessary alarm about the presence of possible hearing impairments among the children.

- Child fails to respond to loud sounds
- Child fails to respond to soft sounds
- Child turns his head to localise (locate the direction) the sound only when it is presented on one particular side of the ear *i.e.* either left or right.
- Child stops babbling after 6 to 8 months of ages
- Child shows poor or no interest in playing with noise making toys like rattle, bell, etc.
- Child when young (one and half years) fails to start using meaningful words like mummy, daddy, bye-bye etc.
- Child does not understand simple commands like 'wave bye-bye' until and unless speech is accompanied by gestures.
- Child insists on watching your face while you speak (because he/she wants to lip read).
- Child is unable to respond to your call from a distance of 5 ft. to 10 ft.

Source : NCERT (2014), Including Children with Special Needs.

Mental Disability or Retardation – Meaning, Types and Characteristics

Mental retardation as a term stands for a special type of psychological disorder associated with the arrest or incomplete development of one's brain beginning usually at birth and leading to a diminution of intellectual powers relative to his chronological age. Actually retardation as a term is frequently used in the subjects Physics and Engineering as antonym to the term acceleration. Here acceleration stands for uniform increase in the velocity of a moving object and retardation for a gradual decrease..

The same sense is conveyed here in the subject Psychology through the term mental retardation. The rate of growth and development of one's intellectual powers gets diminished or arrested. It does not pick the normal speed expected from the children of that very chronological age. Certainly such affected children lag behind and become handicapped in performing expected normal intellectual behaviour. That is why, they are also named as mentally handicapped children. The other common term used for these children is mentally deficient children indicating that these children certainly suffer from a certain type of deficiency or incompleteness in terms of the expected normal intellectual development.

Let us further know about the meaning and nature of the term mental retardation or mental disability through some well-known definitions :

1. **J.D. Page.** "*Mental Deficiency or Retardation is a condition of subnormal mental development present at birth or early childhood and characterized mainly by limited intelligence and social inadequacy*". (1976, p. 354).
2. **American Association on Mental Deficiency.** "*Mental retardation refers to significantly sub-average intellectual functioning existing concurrently with deficits in adaptive behaviour and manifested during the developmental period.*" (1973, p. 326.).
3. **British Mental Deficiency Act.** "*Mental retardation is a condition of arrested or incomplete development of mind existing before the age of 18 years whether arising from inherent causes or induced by disease or injury.*" (1981, pp. 197-198).

A close analysis of the above definitions may reveal the following things about the meaning and characteristics of mental retardation or mental disability.

- Mental retardation is a condition or state of mind.
- It is not a disease or illness of the mind.
- It is related to the subnormal development of the mind or brain.
- It is also related to one's inadequate adjustment with the environment.
- The deficiency may be observed at birth or in early childhood.
- Both the inherent and external factors may cause mental retardation.

Equipped with the above meaning and characteristics of mental retardation we may now be able to evolve a definition of the term mentally retarded or mentally disabled children in the following way :

Mentally Retarded or disabled children are those children who suffer from the retarded subnormal or deficient growth and development of their brain affecting their intellectual capacities to the extent that they feel handicapped in their adaptation to the environment and thus require special care and provision for their welfare and development of their capacities.

Types of Mentally Retarded or Disabled Children

There have been many attempts to devise certain ways and means for classifying the mentally retarded into some definite types according to the degree of the seriousness of their mental deficiency or retardation. Two of such attempts based on I.Q. and adaptive behaviour are quite popular. Let us try to discuss these attempts now.

Classification based on Intelligence Tests

The concept of I.Q. and scores on intelligence tests have been found useful in labelling the individual as gifted, average (normal) or subnormal (retarded). Terman, using Stanford Binet Scale, tried to label the individual with I.Q. between 90 and 100 as normal or average and persons with I.Q. below 90 as below average or subnormal. The sub-normal were further categorized as under :

<i>Category</i>	<i>Range of I.Q.</i>
Idiots	below 25
Imbeciles	from 25 to 50
Morons	from 51 to 75
Border line and the dull	from 76 to 90

The individuals falling into the above categories (except a few border line cases as they have the equal chances of drifting towards subnormal and normal categories) and labelled as idiot, imbecile, moron and dull are known as mentally retarded or mentally handicapped:

But this classification based on I.Q. is quite arbitrary and we can find differences of opinion regarding the range of I.Q. and its corresponding category. But one thing is certain that all mentally retarded or mentally handicapped children possess sub-normal intellectual capacities *i.e.*, they are basically less capable of intelligent behaviour than normal children.

Diagnosis of such sub-normal intellectual capacities is not a simple task. Intelligence tests, alone do not suffice. Also latest researches in the field of sub-normality have raised doubts about the creditability of I.Q. scores. It was felt that a certain level of I.Q. score does not by itself designate

an individual a mental retarded. He must also be unable to adapt to the natural and social demands of the environment. Consequently, the importance of assessment of adaptive behaviour in the identification and demarcation of the level of mental sub-normality has been realised.

Adaptive Behaviour as a Means of Classification

This criterion describes one's adaptive behaviour expected of his age and cultural group in two ways for the required assessment.

- the degree to which the individual is able to function and maintain himself independently and
- the degree to which he meets satisfactorily the culturally imposed demands of personal and social responsibility.

Attempts have been made to devise measures for the assessment of deficiency in adaptive behaviour through Vineland Social Maturity Scale, Adaptive Behaviour Scale (AAMD) and Maxfield Buck Holz Social Maturity Scale.

The consideration of deficiency in adaptive behaviour along with the very low scores on an intelligence test resulted in the development of an altogether new classification of sub-normality. The terms moron, imbecile, or idiot are now completely avoided for determining the level of retardation. The new terminology in terms of obtained I.Q. on different tests scale is represented below :

Table 1.1 : Levels of Mental Retardation

Level of Retardation	Intelligence Quotient	
	Standford Binet	Wechsler scales
Profound	Under 20	Under 25
Severe	20-35	25-39
Moderate	36-51	40-54
Mild	52-67	55-69

In view of their typical sub-normal intelligence and deficient adaptive behaviour these categories are described below :

1. Mild Retardation

A majority of approximately eight-five per cent of the retarded belongs to this category. They are found to possess the following main characteristics :

- In adult life, these individuals attain intellectual levels comparable to that of the average ten years old child. Their social adjustment may be compared with that of the adolescent. Here too they lack the innovative and vigorous nature of normal adolescents.
- They show signs of delayed development early in life and learn to walk, talk, feed and toilet themselves an year later than the average. They may be identified in schools as slow learners and frequently required to repeat early grades. Speech disturbances are common among them.
- In comparison with normal individuals, the mildly retarded exhibit immature behaviour, have poor control over their impulses, lack judgement and fail to anticipate the consequence of their actions. Their sexual behaviour and adjustment, in spite of the normal sexual development and fertility, is unpredictable and leads to a variety of problems and difficulties.
- The mildly retarded individuals generally do not show any organic pathology and require little supervision.
- They are considered to be educable. With early diagnosis, parental assistance and aid of special classes, they can be expected to reach a reasonable degree of educational achievement and to make an adequate social and economic adjustment in the community.

2. Moderate Mental Retardation

About 10 percent of the total mentally retarded belong to this category. Their main characteristics may be summarized as below :

- In adult life they attain intellectual level similar to that of the average six year old child.
- Physically they appear clumsy, suffer from motor in co-ordination and present an affable, dull and somewhat vacuous personality.
- As a result of their inadequate development and deficient capacities and abilities they are regarded as 'trainable' instead of being 'educable' like the mildly retarded.
- From early infancy or childhood they show signs of retardation in almost all areas of development and though they manage to speak, their rate of learning is too slow. They are unable to do any work that requires initiative, originality, abstract thinking, memory or consistent attention and cannot be expected to acquire the basic skills of reading and writing.

However, with early diagnosis, parental help and adequate training and support, most of the moderately retarded can achieve considerable independence in all spheres of life. Nevertheless, they require constant supervision and support and need institutionalization depending on their general level of adaptive behaviour.

3. Severe Mental Retardation

Nearly 3.5 percent of the total retarded individuals—mostly children and adolescents belong to this category. Their main characteristics may be summarized as below :

- They never attain an intellectual level greater than that of the average four year old child.
- The mortality rate due to high susceptibility to disease is quite high among these individuals.
- They are grossly retarded in development from birth or infancy onward and show severe motor and speech retardation. Sensory defects and motor handicaps are common.
- The majority of them display relatively little interest in their surroundings and many of them never master even the necessary skills and functions like feeding and dressing themselves, or bladder and bowel control.
- The severe mental retardates are neither 'educable' nor 'trainable' and the majority of them remain dependent on others throughout their lives. They need care and supervision of others with a great need for institutionalization.
- They may profit with proper care, timely treatment and specialized training and managing their own physical well-being and doing manual labour.

4. Profound Mental Retardation

This group makes 1.5 percent of the total mentally retarded population. It is characterized by the most severe symptoms of mental retardation as given below :

- The individual belonging to this category never attain in adult life— an intellectual level greater than that of the average two year old child.
- They are severely deficient both in their intellectual capacities and adaptive behaviour. The symptoms associated with them are retarded growth, physical deformities, pathology of the central nervous

system, mutism, severe speech disturbances, motor in co-ordination, deafness and convulsive seizures. They are unable to protect themselves against common dangers and are unable to manage their own affairs and satisfy their physical needs.

- Their life span, as a result of their low resistance, is too short.
- Such individuals are completely dependent on others and need the care and supervision given to an infant.
- Essentially, they need to be institutionalized as their condition deteriorates on account of the biased attitude of the parents and stressfull demands of their environment.

Locomotor disability – Meaning and Nature

This type of disability involves locomotor disorders *i.e.* the difficulties and problems associated with locomotion – movements of the self and objects. Defining the term locomotor disability, Rights of Persons with Disabilities Bill, 2012 has remarked.

Locomotor disability refers to a person's inability to execute distinctive activities associated with movement of self and objects, resulting from affliction of musculoskeletal and/or nervous system.

Looking into this definition may clearly aware us that locomotor disability is caused

- (i) on account of one or other types of musculoskeletal disorders or deformities (such as defects and deformity of the bones, muscles or joints or even missing or malfunctioning of certain limbs of the body) as well as
- (ii) restrictions imposed on the movability due to some type of neurological disturbance or disorders suffered by the individual.

However, irrespective of the causes underlying the impairment the affected person experiences a lot of disability, incapacity and inconvenience in the tasks related to the movements of his body and it is why the locomotor disability is infact a physical functionability disability in its nature and consequences.

Functional limitations caused by Locomotor Disorders

The physiological and functional problems suffered by the affected children on account of the locomotor disorders are complex and diverse and their disabilities may be temporary, intermitten, chronic, progressive or terminal and thus may differ from individual to individual. However, in

general, the following types of functional limitations may be observed in the population of the children affected with locomotor disorders.

- (i) Poor muscle control
- (ii) weakness and fatigue
- (iii) difficulty in walking, talking, seeing, speaking, sensing or grasping (due to pain or weakness)
- (iv) difficulty in reading things
- (v) difficulty in doing complex or compound manipulations (push or turn)
- (vi) inability to use the limbs.
- (vii) difficulty or total inability with regard to twisting motion
- (viii) inability in operating even well-designed products directly without assistive devices (including mobility aids like crutches, wheelchair, communication aids like single switch based artificial voice etc.)
- (ix) paralysis (total lack of muscular control in part or most of the body)
- (x) Interference with control like problems in accuracy of motor programming and co-ordination, uncontrolled and purposeless motion, tense and contracted muscles, etc.
- (xi) Joint movement limitation (either mechanical or due to pain)
- (xii) difficulties and inability faced in motor functioning due to smallness of limbs, missing limbs or abnormal trunk size.

Cerebral palsy (Disability related to Neurological disorders)

Meaning and Definition

Cerebral palsy is a type of physical disability that is mainly associated with neurological disorders and has a quite significant impact over one's movement and balance. In its word composition the term cerebral palsy is composed of two separate words cerebral and palsy. The word 'cerebral' here stands for something on the part of the brain, thus appropriately emphasizing the importance of the brain in causing the condition. The second word 'palsy' signifies some weakness or problem in the way a person moves or positions his or her body. In this way, the term cerebral palsy as a whole stands for the loss or inability in exercising control over the movements of the body or motor behaviour as a result of something wrong in the nervous system or brain. As a matter of definition, the term cerebral palsy has been defined by the National Institute of Neurological Disorders, USA (2004) in the following words.

"Cerebral palsy is an umbrella term used to describe a group of chronic disorders impairing movement control that appear in the first few years of life and generally do not worsen over time. The term cerebral refers to the brain's two halves, or hemispheres, and palsy describes any disorder that impairs control of body movement. Thus, these disorders are not caused by problems in the muscles or nerves. Instead, faulty development or damage to motor areas in the brain disrupts the brain's ability to control movement and posture adequately."

Characteristics

The definition cited above and others may help us to get acquainted with the nature and characteristics of impairments and disability related to cerebral palsy in the way as below.

- The term cerebral palsy as an umbrella term does not refer to a particular type of disorder but a variety of disorders or chronic conditions that results in the impairment of one's motor functioning *i.e.* ability to control body movements and postures.
- This impairment in one's motor functioning is caused through abnormalities and anomalies of the brain, *i.e.* something going wrong with the functioning of one's brain.
- The anomalies or dysfunction of the brain occur during the period of early development (starting from prenatal stage in the womb of the mother then covering the time of delivery of the child and extended to the childhood stage upto 2 years of age.)
- The individuals with cerebral palsy are not affected by some disease of a muscles or nerves causing difficulty in their movement and coordination and it happens so on account of their ability to exercise control over the motor functioning resulted through the faulty development or damage to the motor areas of the brain.
- The anomalies or dysfunction of the brain can cause many types of disorders other than cerebral palsy like mental retardation, autism, seizures, hearing and visual impairments ADHD, etc. However, cerebral palsy stand quite segregated from them on account of its motor impairment syndrome, *i.e.* loss of ability to exercise control over motor functioning.
- Cerebral palsy represents a condition that is stable and non-progressive in the sense that the underlying brain anomaly or abnormality that initially caused the motor impairment does not

change. As a result, if cared and trained well, the children with cerebral palsy may learn to live well with their problems without letting their motor impairments and its functional consequences worsen with time.

Types of Cerebral palsy

Cerebral palsy – the neurological disorders causing impairment of motor functioning is usually classified into four categories or types mentioned below.

1. Spastic cerebral palsy : Muscles of the children affected with this form of cerebral palsy are quite stiff and permanently contracted. Usually such children have one or more tight muscle groups that causes limitations to their movements.

2. Dyskinetic cerebral palsy : It is chiefly characterized by the presence of involuntary movements and tonal abnormalities of the child's whole body. Children affected by this type of cerebral palsy are found to show purposeless involuntary movements especially in the arms, face and trunks seriously affecting the speech, feeding, reaching, grasping and other skills requiring coordinated movements of the child. They may also exhibit abnormalities in muscle tone causing difficulties in movements and maintaining postures or positions without support.

3. Ataxic cerebral palsy : It is mainly characterized by abnormalities of voluntary movements involving balance position of the trunk and limbs and depth perception. The affected children often have poor coordination, walk unsteadily with a wide-based gait, placing their feet unusually far apart and experience difficulty when attempting quick or precise movements, such as writing or buttoning a shirt. Difficulties in controlling the hand and arm during reaching and problems with the timing of motor movements are also seen in these children.

4. Mixed cerebral palsy : The children affected with this type of cerebral palsy exhibit symptoms or motor pattern of more than one of the three types of cerebral palsy mentioned above.

Learning Disabilities – Meaning, Characteristics and Types

Meaning and Definition

Children suffering from serious learning difficulties or disabilities are labelled as learning disabled children. Now question may arise what are these learning difficulties or disabilities. In fact learning difficulties or disability is nothing but a sort of handicap or helplessness that can be felt

by the sufferer in terms of his or his academic performance (learning or understanding something) in the same way as experienced by a mentally disabled in terms of his mental functioning or by a physically handicapped or disabled in terms of his physical functioning. Interpreting in this way a learning disabled child suffers with the inconveniences and problems in the learning areas in the same way as experienced by a mentally handicapped in mental or cognitive areas, or by a physically handicapped in the physical and motor areas or even by a socially or emotionally handicapped in the social and emotional areas.

In the matter of defining the term learning disability the famous author S.A. Kirk (1971), has remarked as below.

"The term learning difficulties or disability is not meant to be used for children with minor or temporary difficulties in learning but with a severe discrepancy between ability and achievement in educational performance and such several discrepancy described as learning disabilities with significant learning problems that cannot be explained by mental retardation, sensory, impairment, emotional disturbance or lack of opportunity to learn."

As observed thus learning disability refers to a state or condition of a child in which he experiences a lot of obstacles and difficulties in the path of his learning. Gradually the learning problem becomes so acute as to cause severely impaired learning inefficiency in one or the other cognitive areas. It leads to a distinctive gap between one's potential and actual educational achievement which require special care, attention and remedial measures and when it happens the learner is labelled as learning disabled.

Nature and Characteristics of Learning disabled

Researches in the fields of education and psychology have brought into notice a number of significant behavioural and personality characteristics as well as general outcomes of the nature and characteristics of the learning disabled children. Let us mention a few important ones.

1. Learning disabled children essentially suffer from serious learning problems or disorders for a number of reasons.
2. Their problems and disorders are usually manifested by significant difficulties in the acquisition and use of language (listening, speaking, reading, writing etc.), reasoning or mathematical ability or of social skills.
3. They may exhibit symptoms of hyperactivity and impulsivity.

4. Most of them may suffer from emotional problems and demonstrate signs of anxiety, moodiness or ups and downs in their behaviour.
5. Their learning disability is not apparent in the physical appearance or not demonstrable through their I.Q. Scores. They may have robust body, good vision, sound ears, and normal intelligence.
6. They essentially suffer from severely impaired learning inefficiency, or a handicap, which is just as real as a crippled leg.
7. All of them essentially exhibit a significant educational discrepancy *i.e.* a wide gap between their learning potential and actual educational achievement.
8. Some of them may demonstrate equivocal neurological signs and EEG irregularities.
9. They may exhibit disorders of memory, thinking, attention, general coordination, perception and motor functioning etc.
10. The main problem for all these children lies in their observable deficiency in learning and mastering academic tasks. They are handicapped in learning and acquisition in the same way as physically and mentally handicapped are, in physical and mental performance.
11. They usually exhibit the following learning characteristics responsible for their learning impairment (i) lack of motivation, (ii) inattention, (iii) inability to generalize, and (iv) lack of adequate ability in problem solving, information processing and thinking skills, etc.
12. Their learning impairment is so severe that they essentially require special attention, care and remedial programmes for the rectification of their learning problems and disabilities.

Types of Learning Disabilities

Learning disabilities in view of their nature and characteristics may be referred to such disabilities and incapacities of the learners that may make them handicapped or face a lot of difficulties in learning one or the other things related to some specific areas of their learning. It is also noted clearly here that the difficulties, inability and incapacities associated with the term learning disabilities are specifically and predominantly cognitive in nature rather than conative or affective as experienced in the case of physically disabled or emotionally disturbed children. Such learning difficulties may make the task of learning a quite difficult and challenging for a suffering child.

In such a sense, it is quite customary to classify or view learning disabilities of the learners (students in the classroom situations) in their two distinct forms popularly known as

- (i) Dyslexia (difficulty in language learning)
- (ii) Dyscalculia (difficulty in mathematics learning)

Most of the children who are designated as learning disabled are found to suffer from these two types of learning disabilities. Children suffering from these disabilities need to be looked after well for their adequate adjustment and education in the ongoing school set up. What are these learning disabilities and how the children suffering from such disabilities may be helped in terms of the needed adjustment and quality education, should thus be properly known by the teachers entrusted with the task of educating them. In the pages to follow, thus we would be focussing our attention on the different issues and aspects of these two types of learning disabilities.

DYSLEXIA

Meaning and Definition of the term Dyslexia

Etymologically, the word dyslexia is composed of dys and lexia. 'Dys' stands for a type of disorder or disturbance and the Greek word lexia originated from Lexis stands for 'pertaining to word'. In this sense the word 'dyslexia' in its word meaning stands for a type of disorder or disturbance related to word or language written or spoken (Webster's seventh New Collegiate Dictionary, 1969 : 259).

In this way, Dyslexia may represent a particular type of learning difficulty or disability that may create a big problem for a developing child in making use of the words or language in his study or day to day communication and adjustment.

In its broader aspect, Dyslexia causes difficulty in the acquisition of necessary language skills pertaining to reading, writing, listening and speaking of a language on the part of a developing child. Taking note of such outcomes of the disorder Dyslexia, World Federation of Neurologists has termed dyslexia as "a disorder in children who, despite conventional classroom experience, fail to attain the language skills of reading, writing and spelling commensurate with their intellectual abilities."

Classification and Types of Dyslexia

- **Visual Dyslexia** : It is characterized by number and letter reversals (writing 9 for 7, p for q or vice versa) and the inability to write symbols in the correct sequence.

- **Auditory Dyslexia** : Here one experiences difficulty in comprehending the sounds of letters or sentences on account of perceiving them jumbled or not heard correctly.
- **Dysgraphic or Kinesthetic Dyslexia** : It is concerned with the difficulty faced by the child in holding and controlling a pen or pencil and thus causing his disability in terms of writing something on the paper and board.

Dyscalculia

Meaning and Definition

The word “dyscalculia”, having its origin in Greek and Latin stands for “*counting or calculating badly*” as its prefix “dys” meaning “*badly*” has been derived from Greek and “calculia” derived from the latin means “*to count, calculate or compute*”. In this way etymologically, the term dyscalculia stands for a state or condition that adversely affects one’s ability to perform calculation or computation in mathematics. Dyscalculia is, therefore, fundamentally different from dyslexia. Whereas in dyslexia, a learner is found to experience difficulty and disability in dealing with words, in dyscalculia he faces similar difficulty and disability relating to numbers. Elaborating this concept, The Department For Education and Skills, United Kingdom (1999) defines dyscalculia as :

“A condition that affects the ability to acquire arithmetical skills. Dyscalculic learners may have difficulty understanding simple number concepts, lack an intuitive grasp of numbers and have problems learning number facts and procedures. Even if they produce a correct answer or use a correct method, they may do so mechanically and without confidence.”

However, the further researches in the field of dyscalculia have suggested that there may be several subsets of mathematical difficulties other than the number based difficulties that may be experienced by the dyscalculic learners. These may include procedural and sequencing difficulties, problem solving, understanding basic concepts in the areas other than arithmetic like algebra, geometry, trigonometry and statistics. In this way, dyscalculia may prove a great handicap and obstacle to the dyscalculic learners not only in terms of numeracy and calculations in arithmetic but also in learning essentials pertaining to all aspects and areas belonging to the subject mathematics. It is responsible for creating disinterest, fear and phobia towards mathematics, instilling in them a feeling of utter helplessness,

lack of confidence and raising their level of anxiety for engaging in any mathematical learning or performing a task involving mathematical abilities.

As a result of such adverse impact and ill influences conveyed through the term dyscalculia, it can be properly defined as a particular type of learning disability that is responsible for adversely affecting one's learning and performance in the subject mathematics demonstrable through the early symptoms like below.

- inability to write numerals and mathematical symbols correctly
- difficulty in recalling the meaning of the symbols
- difficulty in counting and performing mathematical calculations and computation work.
- difficulty in placing basic facts into long term memory and remembering and accessing information.
- difficulty in carrying out basic arithmetical operations e.g. addition, subtraction, multiplication and division.
- difficulty in following the proper steps and reasoning for the solution of mathematical problems, particularly the word problems.
- difficulty in acquiring proper understanding of the basic mathematical concepts like place value, directed numbers, directions and dimensions, decimals, fractions and percentages, measuring units and time sense etc.

Multiple Disabilities – Meaning, Characteristics and Types

Meaning and Definition

In its simple meaning, the term multiple disabilities stands for the disabilities many or multiple in nature *i.e.* existence of more than one disability at a time (*i.e.* mental retardation alongwith visual or hearing impairment ; locomotor disability alongwith cerebral palsy, etc.)

As a matter of definition, the term multiple disabilities has been defined in the Individuals with Disabilities Education Act (IDEA), USA in the manner like below.

“Multiple disabilities are those with concomitant impairments (e.g. mental retardation – blindness ; mental retardation – orthopedic impairments) the combination of which causes such severe educational needs that they cannot be accommodated in the special education programs solely for one of the impairments” [CRF Chapter III, Section 300.7 (c) (7)]

Analysis of this definition may reveal the following things about the nature and characteristics of multiple disabilities.

1. The term multiple disabilities, by definition and also through its nomenclature stands for any combination of two or more disabilities. This very fact is more than enough to make the term multiple disabilities as quite a broad generic and umbrella term. There may be a number of permutations and combinations of the two or more disabilities possible in the human beings that may be extended to the various areas and aspects of their growth and development.
2. It is true that the term multiple disabilities refer to the concurrence of two or more disabilities in the same individual. However, it does not mean that his resultant condition is simply the sum of his two or more disabilities. Multiple disability represents a close network of conditions or a complicated structure resulted through the presence of two or more disabilities. That is why we cannot adopt the same measures for the learning and adjustment of the multiple disabled children as used otherwise separately or in combination for the children suffering from the individual disabilities. For example in the case of deaf-blind children we can neither make use of visual mode nor the auditory mode but have to rely on other sensory stimulation (e.g. touch and smell) for their education and adjustment.
3. The complications resulted through the multiple disabilities are often so severe and unmanageable that the persons affected need extensive ongoing support or assistance in more than one major life activity related to their areas of impairments and disabilities like motor, sensory, cognitive, emotional, communication, etc.
4. The educational needs of the children with multiple disabilities are not only somewhat different to their non-disabled peers but also to most of those who suffer from a single disability. The focus of their education, therefore does not lie mainly on the academic progress but on the learning of the skills needed to improve and manage their major deficits and deficiencies resulted through their multiple disabilities e.g. mobility, communication, self-care, and learning etc.
5. For meeting their educational and adjustment needs, the children with multiple disabilities require a special education programmes not only some-what different to that meant for their non-disabled peers but also even that meant for the children suffering from a single impairment or disability. It is also required for their rehabilitation as independent and productive citizens.

In the light of what has been said above, we can try to adopt a workable definition of the term children with multiple disabilities as under:

Children with multiple disabilities are those children who suffer from more than one disability at a time in one or the other areas or aspects of their growth and development requiring specific educational and adjustment measures (beyond that, usually needed for a particular type of disability), essential for their independent living, and progress in life.

Types or Forms of Multiple Disabilities

Children with multiple disabilities as already emphasized, may constitute a highly diversified group of disabled population, each often having a combination of two or more obvious and not so obvious disabilities. Their so diversified multiple disabilities may however, be grouped as below on the basis of their generic or causative evolution (Waldtraut, Rath, 2001).

1. Coinciding disabilities which are inevitably casually linked: The children may be affected with such coinciding disabilities in which one disability (the primary disability) may be a natural cause for the evolution or eruption of another disability (the secondary or consequent disability), e.g. deafness results in speech disorders.

2. Coinciding disabilities which are not linked by a casual relationship: The children may be affected with such coinciding disabilities in which none of these disabilities is a result of the other, e.g. blindness and deafness.

3. Coinciding disabilities which are not inevitably linked: The children may be affected with such coinciding disabilities in which one disability may or may not be the result of another. Actually here very often, it is not easy to conclude about any existing casual relationship between the coinciding disabilities, e.g. learning disabilities and emotional disturbance or other behavioural disorders.

Characteristics of Children with Multiple Disabilities

By definition, any child suffering from more than one disability at a time in any area or aspect of growth and development like physical, mental, sensory, emotional, social or learning may be termed as a child with multiple disabilities. As a result, there may be a number of permutations and combinations available for the germination and perpetuation of one or the other type of multiple disabilities among the disabled population of our children. Keeping this thing in mind, it is obvious to conclude that the children with multiple disabilities constitute a widely accepted heterogeneous group

of all disabled children. The members of this group like deaf-blind; blind-mentally retarded; deaf-mentally retarded; blind or deaf-cerebral palsy, etc. may be found to differ widely in terms of their disability, characteristics, capability, educational and adjustment needs. In fact as Guess and Mulligan (1982) assert the differences among the children with severe or multiple disabilities are greater than their similarities. Moreover, their non-disability characteristics (e.g. interests, preferences, personalities, socio-economic levels, cultural heritage) are as diverse as the general population (Snell and Brown, 2006, p. 2).

Each of them represents a unique combination of physical, mental, social and emotional characteristics. It is therefore quite difficult to prescribe a specific set of behaviours common to all children with multiple disabilities. However, most of these children may be frequently observed to demonstrate at least two of the following types of deficits and deficiencies in their behaviour.

- **Deficits in self-help skills** like dressing, eating, exercising, bowel and bladder control, and maintaining personal hygiene.
- **Deficits and difficulties in terms of learning behaviour** like slow acquisition rate for learning new information and skills, difficulty in remembering previously learned skills and information, difficulty in paying attention to stimuli at the time of learning, missing steps in task performance, difficulty in having generalization of the acquired information or skills.
- **Deficits in terms of communication behaviour** like speech problems, inability to express oneself and to understand others, not even to follow the simplest instruction or request.
- **Deficits in terms of physical and motor behaviour** like difficulty in moving from one place to another, difficulty in maintaining postures and balance, difficulty in exercising control over gross or fine motor behaviour, impairments and deformities in various physical organs causing difficulty in day-to-day physical and motor behaviour.
- **Deficits and deficiencies in terms of social skills** like difficulty in having needed social interaction participation in group activities, difficulty in exhibiting normal human emotions, etc.
- **Presence of inappropriate behaviour and emotional disturbance** like aggression, withdrawal and shyness, suicidal tendency, self-stimulating behaviour (e.g. grinding the teeth, patting

the body), ritualistic behaviour (e.g. rocking back and forth, waving fingers in front of the face), self-injurious behaviour (e.g. hair pulling, head banging, eye poking, hitting or scratching oneself), etc.

Thus the characteristics listed may help us to have a general opinion about the needs and challenges faced by the children with multiple disabilities. It is important to have such knowledge in order to plan the types of educational and managerial services that need to be provided although the specific needs and difficulties of the individuals can only be individually determined. One thing is also to be remembered at this stage that there lies a silver lining behind every cloud no matter how dark it may appear. Besides suffering from so many deficits and limitations, the children with multiple disabilities may be found to exhibit warmth, persistence, determination, a sense of humor, sociability, and often various desirable characteristics. It is why many teachers find great satisfaction in working with the students who have severe or multiple disabilities and observing their progress in school, home and community settings (William Reward, 2000, p. 490).

STUDY QUESTIONS

A. Essay Type Questions

1. Throw light on the meaning and concept of the term 'disabilities' in detail by distinguishing it from the terms impairment and handicap.
2. Name the various types of disabilities usually encountered or faced on the part of the children in an inclusive set up and discuss any one of them in detail regarding its meaning, characteristics and types.
3. Discuss in detail the meaning, characteristics and types of any one of the following types of disabilities visible among the students of an inclusive set up.
 - (a) Visual disability (b) Hearing disability (c) Locomotor disability
 - (d) Cerebral palsy or disability associated with neurological disorders
 - (e) Mental retardation (f) Learning disability (g) Multiple disabilities.

B. Short Answer Type Questions

1. What is impairment/disability/handicap ?
2. Name six types of disabilities that may be visible among population of the students belonging to an inclusive set-up.

3. Define the term visual disability/hearing disability/locomotor ability/cerebral palsy/mental retardation/learning disability/multiple disabilities.
4. Point out four characteristics of the children suffering from any one of the following types of disabilities.
(a) Visual disability (b) hearing disability (c) severe or mild mental retardation (d) locomotor disability (e) cerebral palsy (f) dyslexia (g) dyscalculia (h) multiple disabilities.

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Inclusive Education – Need, Concept, Principles and Models

Chapter Outline

- Historical perspective – From Seclusion to Inclusion
 - Inclusive education – Need, Meaning and Concept
 - Principles of Inclusive education
 - Types or Models of Inclusive Education
 - Is Inclusion a viable alternative ?
 - Study Questions
-

Historical perspective – From Seclusion to Inclusion

There was a time when children with any exceptionality (deviation from normals) lying in them were thought as a matter of great concern, fear and anxiety for the rest of normal population. Therefore for the time immemorial, the exceptionals (whether geneous or creative, mentally, physically or sensory disabled) were forced to suffer from isolation or segregation from the main stream of the society. As history reveals these exceptionals were subjected to intimidation, harrassment and isolation in a variety of ways. A number of scientists, reformers, creative and artists had to face the victimization, isolation and even death penalty at the hands of the public and authorities who considered them quite separate and away from the normals. The mentally retarded were kept in isolated wards in the hospital or residential institutions and physically disabled were seen untouchable and sin on earth. As the time changed, voices were raised and attempts were made for the rehabilitation, adjustment and education of the disabled in the integrated or inclusive set up. The journey of seeking their welfare have witnessed three types of milestones in the name of (a) segregation (b) integration or mainstreaming and (c) inclusion. Let us see what these are and how these were adopted and employed for the upkeep and welfare of the children with special needs including disabled.

Segregation and its functionality

This approach is governed by an age old notion that exceptional children are no where the normal children. They need to be segregated and isolated from the mainstream of the society. There lies a potential danger of keeping them with the normal children. If they will be placed with the normals, they will spoil or influence the behaviour, adjustment and education of the normals in a negative way. Such attitude and feelings about exceptionals especially for the physically and mentally handicapped gave birth to have separate provision for the caring, living and education of the exceptionals in the form of separate schools and institutions. We can witness the presence of such segregation in the form of separate residential or day schools established in the country. There are schools and institutions for gifted and bright; visually handicapped (Blinds) deaf and dumb, mentally retarded, socially deviant or delinquents. The question arises how far this idea of segregation is able to provide a proper provision or option for the caring, adjustment and education of the exceptional children. Let us think over this alternative/option.

1. The children may be exceptional on one or the other ground. The categories of exceptionality thus may be quite large in number and we need to have separate provision for their adjustment and education by establishing separate institutions/schools for each category of the exceptional children. More over the proportion or percentage available in each category of the exceptional children may vary in a typical manner. We may need a large number of schools for one and a very few for the other. For taking estimate in planning and running of the institutions by taking into account the presence of exceptional children in a huge country like ours is not a joke. It is almost an impossible task for catering to the needs of all types of exceptional children by adopting the philosophy of segregation. When we are unable to provide schooling for the children belonging to each and every corner of the country in a normalized way, then how can it be thought to establish special schools for each category of the exceptional children. It makes us a point to think over their adjustment and education in the normal set up of schooling in one or the other ways.
2. In case we try to have good efforts and establish a sizable number of special schools/institutions for some challenging categories of exceptional children, then how can we guarantee to provide them the needed opportunities (equal and justified) for their adjustment and future living in the society to which they belong. Segregated set

up whether provided to the gifted or creative, physically or mentally retarded, emotionally or socially deviant may not provide such experiences or learning to them as needed for adjustment and living in the society or community to which they belong. We may witness the cases of such maladjustment in the future life of the children kept and educated in the segregated setup.

Moreover the idea and provisions in terms of abiding with the philosophy of separation and segregation, whether through special schools or special classes actually try to breed discrimination and differentiations among the exceptional and non exceptional (e.g. gifted and normal and disabled or non-disabled) children of the same society, country or humanity at large. It is against the law of nature which is kind enough to propagate equal opportunities for all to grow and develop without any differentiation and discrimination. The democratic systems all over the world, are also equally wedded to the principle of providing equal opportunities to learn and grow to all its members without any sort of discrimination. Consequently our country, wedded to democracy and equality can't afford to adopt the philosophy of separation and segregation for the education and welfare of the youngsters.

Integration and its Functionability

Integration is the second option or provision that has been employed for the placement and education of the exceptional children. Actually historically as well as philosophically, integration may be understood as a concept or philosophy that has emerged as a reaction or antithesis of the philosophy of separation and segregation. It has called halt to the system of providing education to the children in segregating settings of special schools by advocating to make provision for their education in the regular schools. In this way, historically, when disabled children were primarily educated in separate special schools, integration was accepted as an approach for carrying out their successful placement into regular schools.

In this way, instead of subjecting the exceptional students to a sort of segregation by putting them in separate special schools for their education, their integration (association) with the non-disabled population of their peers was targeted to achieve through this new philosophy of integration. It can thus be safely called a proper step in putting the disabled/exceptional children into the mainstream, *i.e.* the place and opportunities of getting education and training with the population of the normal and non-disabled peers in the regular schools.

While throwing light on the meaning and nature of the term 'integration' as placement and educational provision for the exceptional or disabled children Rane (1985) writes :

At the level of education the integration of a disabled children into a regular classroom situation means a concurrent education with a class of non-disabled (normal) children. In such a set up there are greater opportunities for the handicapped child to mix with his non-disabled counterparts in games, sports and other activities. The aim of integrated education is to assimilate a disabled child into a group of the non-disabled and providing opportunities to make him/her as independent as possible. (Rehman Hifzr, 2005, pp 119-120).

In this way, what we call as 'integration' may be clearly understood as an approach or philosophy for the placement and education of the exceptional/ disabled children along with their non-disabled/normal peers in the same school setting and general education classes allowing the exceptional to drift along with the normal/non-disabled children in the same stream of educational setup, adjustment and learning opportunities.

But, what goes wrong with integration ?

Looking superficially, the philosophy and provision of integration seems to be a quite useful and workable concept for the placement and education of the exceptional or disabled children. However in true sense it does not prove so. It is good that disabled children find entry into the system of a regular schooling and thus the formalities of including them into the mainstream may also be observed ? But what is the output ? The school authorities may admit them into mainstream on account of one or the other factors such as compulsion to follow the right to Education Act (implying that no child, including the disabled one can't be denied admission in case they belong to the residential areas/location marked for the school). In such a way, although integration makes a disabled child to get integrated *i.e.* allowed to sit in the class and receive education along with the non-disabled peers yet it does not guarantee for the needed attention, adjustment and opportunities as needed by him in view of his exceptionality/disability. Here more often an exceptional or disabled child may get admission in a school, is allowed to receive education along with the fellow students but all what is needed for him for his adjustment and education is altogether left as his own responsibility. School and school authorities are not prepared or even not willing to take any responsibility or make any special/extra arrangement for the care, adjustment and education of the exceptional children. In this

way it makes a little sense to include the child in the mainstream without making worthwhile arrangement for his proper education and needed adjustment. This approach therefore may prove more dangerous than the arrangement made on the basis of separation and segregation.

How Inclusion differs from Segregation and Integration ?

Inclusion describes much more than the acceptance of children with disabilities/exceptionalities in the mainstream. Inclusive education programmes do not focus on the accommodation of these children into a general education setting, but are focused on the restructuring of schools to accept and provide for the needs of all students. In inclusive education, mainstreaming and integration are viewed as intermediary steps to the ultimate goal of teaching all students together. In inclusive program specialized instruction and support are provided to any student who is in need of support without labelling him as disabled or exceptional. In other words, no discrimination is made among the exceptional or non-exceptional children. All the children in all shades of their exceptionality/disability are welcome by making necessary arrangements and accommodations for their education in the same school and classes along with their non disabled peers.

The acceptance on the part of schools of the exceptional or disabled children may be comparably depicted as below.

Sorry. we have no provision for you. Join the special school meant for you.	You are welcome. Although we are not prepared for meeting your needs yet some how we will accomodate you, at your risk.	School welcome you with open arms. You are like other children coming to school. We will try to care for your needs along with others.
School advocating Segregation	School accepting Integration	School providing Inclusion

Inclusive Education — Need and Concept

In a democratic setup its citizens must necessarily educated. Keeping this thing into consideration a campaign in the name of education for all has been started in our country for providing opportunities to all its citizens with no discrimination at all. In arranging education for all a big difficulty has been faced that how can a worth while school education be provided to the learners with special needs (Including the children suffering with one or

the other type of disabilities); For providing education for these children with special needs one alternative can be in the form of establishing special schools for them such as blind schools, deaf and dumb schools, mentally Retarded schools etc. However this alternative of providing separate provision/schools can not be a properly viable solution for the vast population of the India having so many disability figures of the prospective learners. Moreover children may differ extensively in relation to their incapacities and disabilities. In such situation how can we establish separate schools for every type of disabilities. In case we some how establish special schools at some selective places then would it be possible for the disabled belonging to the distant and remote places to come and attend the school by their own?

Decidedly these children should get opportunity to receive education at the nearest places possible and it should also be a quality education for them with no discrimination of any kind on account of their disabilities. Such opportunities and provisions of providing quality education to all types of children including children with special needs (non-disabled and disabled) near or to their places of residence can only be possible through the adoption of the philosophy of inclusion in place of segregation.

In an inclusive setup of the school needed specialized instruction and support are provided to any students who is in need of educational and developmental education without labelling him disabled or children with special needs or abilities. All the children in all shades of their abilities or disabilities are welcome here by making necessary arrangements and accommodation for their education in the same school and classes along with their non-disabled or normal peers.

For understanding the need, nature, meaning and concept of inclusive education in a more comprehensive way let us try to gather opinion from a few well known definitions of the term inclusive education.

1. Michael F. Giangreco (1997). Inclusive education is a set of values, principles and practices that seek more effective and meaningful education for all students regardless of whether they have exceptionality labels or not.

2. Advani and Chadha (2003). Inclusive education aims to provide a favourable setting for achieving equal opportunity and full participation for all, thus bringing children with special needs well within the purview of mainstream education. It recognizes the diverse needs of the students and ensures equality education to all through appropriate curricula, teaching strategies, support services and partnership with the community and parents.

In simple words, it means that all children with or without disabilities learn together, (p. 8)

3. Uppal and Dey (2001). Inclusive education implies synchronization of the educational needs of the normal children and the educational requirements of the children with special needs, so as to evolve a common curriculum with a view to provide education to all in regular schools itself. It is a flexible and individualized support system for children and young people with special educational needs. It provides an integral component of the overall education system and is provided in regular schools committed to an appropriate education for all.

5. Stainback and Stainback (1992). Inclusive school or set-up may be defined as "a place where every one belongs, is accepted, supports and is supported by his or her peers and other members of the school community in the course of having his or her educational needs met." (p. 3)

6. M. Manivannan (2001). Inclusive education is the implementation of the policy and process that allows all children to participate in all programmes. Policy means that disabled children should be accepted without any restrictions in all the educational programmes meant for other children. The process of inclusion denotes the ways in the system, makes itself welcoming to all. Inclusive education is nothing but making the programme for disabled children as an integral part of the general educational system rather than a system within general education.

A close look at the cited definitions may provide the following facts about the concept and nature of inclusive education.

1. It works on the principle of inclusion, *i.e.* including all. So all students are included in this system of education in their local schools and general classes without any discrimination and consideration of their exceptionalities or non-exceptionalities/disabilities or non-disabilities.
2. Here, for the general education the neighbourhood school (that a student would attend if he did not have exceptionality/disability) is regarded as the first placement option for any exceptional or disabled child.
3. Here exceptional/disabled children may get unique opportunities to get education with peers in the same age groups available to those without exceptionality.
4. Here in the inclusive settings children with all shades of exceptionality/disabilities/normalities get opportunities to participate

in shared educational experiences while pursuing individually appropriate learning objectives with necessary teaching-learning strategies, supports and accommodations needed for making inclusion as a success for all.

5. It aims to integrate and include the education of the disabled children with the general system of education so that the education of the disabled and non-disabled may proceed side by side by fulfilling the needs and objectives of both the groups without any differentiation or discrimination.
6. It helps in putting the disabled children (redefined as children with special needs) into the mainstream of the educational system in place of separating or segregating them as happens in the case of educating them in special schools or separate classes.
7. As a policy matter inclusive education provides a right to the disabled children for being educated with the non-disabled children without any differentiation or discrimination.
8. It seeks for all-round development of the disabled children by providing opportunities and integration in terms of academic, physical, social, emotional and vocational education programmes of the schools.
9. It aims to make the disabled children learn the art of living and get adjusted to the real life situations as independently as possible by erasing their feeling of insufficiency or limitedness, or of being different and disabled.
10. Inclusive education provides placing of exceptional/disabled children as equal partners and integrating them in the mainstream schooling it helps the children to be self-reliant and self-supporting individuals contributing in their own way to the advancement of community and prosperity of the state.
11. Special schools, if established in any country, are always few in numbers for providing accommodation to all and each variety of the exceptional children. Moreover, they are proved failures in integrating these children to the social mainstream. It is, therefore, unanimously agreed that the principle of inclusive education is the only way to realize the noble goal 'education for all' as anticipated by UNESCO from all the states of the world community.
12. It tries to bring desired educational opportunities at the doorstep of the exceptional/disabled children rather than expecting from them to move and try for themselves to avail these opportunities.

13. Inclusive settings by providing opportunities to the exceptional and non-exceptional peers for coming closer to each other helps in :
- helping children with exceptionalities / disabilities to establish friendship with non-disabled peers and persons in their community.
 - helping to change stereotypic thinking about disabilities among normally developing children, school personnel and community.
 - helping children with exceptionalities / disabilities to develop social skills which in turn will enable them to interact more effectively with broad increasing network of acquaintances, co-workers, family members and friends as the children grow older. (Fuchs and Fuchs, 1998, pp. 204-219).
14. By all means, an inclusion education provides a foundation for the exceptional/disabled children in ways that are not possible in special education schools and classes.

In view of such nature and characteristics of inclusive education it may stand for a type of education committed to educate every child to the maximum extent possible in the school and classroom, he or she would otherwise attend. It thus requires support to move towards the child (rather than moving the child to the services) and believes that the disabled child will benefit from such integration and mainstreaming in comparison to placing him in some segregating setting for his overall adjustment and progress.

Principles of Inclusive Education

Inclusive education, embracing all the school attending learners irrespective of their diversities and special needs in the system of a school is found to be guided through a number of principles discussed below.

1. Principle of acknowledging the right to education : Right to education is becoming a fundamental principle for the education of the children world wide. In our country, our schools are also under legal compulsion to provide education to the children seeking admission with no discrimination of any kind. Inclusive education is thus a need of hour as it helps the school for fulfilling its responsibility towards the implementation of right to education act. The first and foremost guiding principle of inclusive education is thus to acknowledge on the part of school authorities and staff their obligation to implement the right to education act.

2. Principle of acknowledging that all children can learn : Inclusion education rests on the very assumption that all children irrespective of their

shortcomings, impairments and disabilities not only have the right to education but are endowed with the capacity to learn in their own way and progress according to their potential and capabilities. Our duty is to help them and not to deny the opportunities for their learning and development.

3. Principle of celebrating diversity : Diversity is inherent in the Nature in its various forms and dimensions. Therefore, it is no surprise to find the learners endowed with diverse abilities, capacities and diverse needs for their education and development. A progressive society or country always welcomes the diversities of its citizens and tries to provide opportunities for their better adjustment, development and progress. Inclusive set up of the school also follows the same foot print by welcoming the learners of diverse backgrounds, cultures, abilities, capacities or disabilities and providing them the needed opportunities for meeting out their needs related to education and development. In this system diversities are not considered as something to avoid but are taken as challenge and a natural phenomenon existing in Nature. Everybody has something unique and meritorious and we can learn from others in so many ways irrespective of their limitations and deficiencies. The diversities should thus be regarded the matter of celebration and welcome rather than avoidance or danger in the system of inclusive education.

4. Principle of addressing all aspects of child development : Child welfare lies in his allround growth and development in all the dimensions – physical, intellectual, social, moral, emotional, creative, aesthetic etc. In inclusive education set up we have all shades of learners including deficient, deprived and disabled. We have not to only accommodate them in our system of schooling but to care for their utmost well balanced overall development. They should be given all what is needed for addressing the requirements in relation to their wholesome development and well being.

5. Principle of acknowledging individual differences and special needs : In inclusive set up these are a lot of diversities and differences existing among the learners. Although such diversities and differences also exist in a normal classroom set up yet these are more visible in an inclusive set up with the presence of the disabled. The disabilities possessed on their part may also have a wide variety such as visual, hearing, locomotor and neurological disorders differing in capacities or disabilities, learning disabilities, emotional and social behaviour related problems etc. These special types of individual differences among the learners generate diversified special needs and it is a challenge for the teachers and school authorities to

meet out them. The inclusive education accordingly should set its program and preparation well in tune with meeting this challenge.

6. Principle of due preparation on the part of school : The working in an inclusive set up have the clear cut mission and purpose of (i) welcoming or embracing all (ii) providing opportunities to meet the needs of all for their wholesome development and (iii) catering to special needs of all without sacrificing the interests and welfare of any body included in the inclusive set up. The realization of these missions on its part needs a meaningful through preparation. The school has to concentrate over the proper organization of the needed men-material resources for implementation of the inclusive education program. The school environment should be quite friendly and barrier free for the disabled. There should prevail positive feelings, attitudes and likings for the deprived, unprivileged, deficient and disabled instead of hatredness, apathy, antagonism or seclusion. The staff should be properly oriented for dealing with the special needs and individual differences of diversified learners. Thus in an inclusive set up a school should be in a proper position in terms of all the needed preparation on its part to welcome and provide needed education to all with no discrimination or consideration for their wholesome development well in tune with their potential.

7. Principle of seeking cooperation from all : The inclusion of all and seclusion of none is the fundamental principle of an inclusive education set up. It also aims to provide opportunities for the satisfaction of diversified special needs of all aiming towards their wholesome development. This huge responsibility needs the cooperation of all whose stakes are involved in taking care of the interests of diverse learners of the inclusive set up. These are parents, teachers, students, school authorities, community people and government agencies. The success of the inclusive education programs needs a cooperative joint efforts on the part of all the stakeholders by playing their due roles in an cooperative way. Teachers should teach and care for the specific needs of these learners ; school authorities should make provision for the needed infrastructure and men-material resources ; the parents should have proper knowledge and progress of their children and work with teachers and school authorities for the adjustment and progress of their wards ; community should come forward to change its attitude towards the deprived deficient and disabled population of the learners and provide due help to the schools for building resources and implementing inclusive education program ; and students should jointly share the teaching-learning of each other by doing away with the feeling of separation and unhealthy competition

In this way, the working and implementation of the program of inclusive education need to be guided through an important principle of inviting cooperation from all the corners where it is needed to avail.

8. Principle of promoting a supportive culture of learning : Individual attention is the key for success in individualizing teaching-learning attempts most needed in the inclusive set up of diverse learners. However, it is quite uphill task for the teachers to meet such individual attention need for the diverse population of the inclusive set up. The wayout is possible in promoting a supportive culture of learning in the school in which each learner is found to cooperate and share learning experiences with others. The disabled children may get a lot of advantages in their adjustment, education and progress from their non-disabled peers ; gifted and genius can play the role of peer tutors for their classmates and in turn may get opportunity to refine their own skills and develop their potential.

9. Principle of making use of practices, policies and resources available for inclusive education : There are many policies, provisions and resources available on national and international level for the welfare and progress of the children with special needs including disabled. Inclusive education asks for getting due benefits from the available assistance, guidelines and feedback from these legal provisions, acts, policies ; documents and resources available for the welfare of inclusive population. Hence the implementation of inclusive education program should try to take advantages of the assistance and guidance available from the state, national and international level resources and agencies. They may be benefitted in equipping their schools interms of needed men-material resources, development of infrastructure, suitable methodology of teaching, seeking involvement and participation of students, community and parents, developing a cooperative learning culture, evaluating the learning outcomes of the diverse learners and providing educational opportunities for meeting their specific needs through the use of good practices and resources available from various corners.

10. Principle of constant evolution of the system : Inclusive education is a dynamic process as new challenges of meeting special needs of the diverse learners are quite dynamic in nature. There arises a continuous need of adapting the system in tune with the needs and requirements of the diverse learners. We may need some modification in the infrastructure, use of material resources, employment of methods and devices, use of the new modern assistive devices and ICT techniques, and meeting out the physical, academic, social emotional and creative needs of the wide variety of learners.

Therefore, we should keep in mind that for the success of the working of an inclusive set up, we should always be ready to change for accommodating our system to the evolving needs of the learners belonging to our inclusive set up.

Types of Models of Inclusive Education

There is no clear consensus in the field of special education about the modes and meaning of inclusion to be practised actually in one or the other learning or educational situations (Kauffman and Hallahan 1995). When some of the thinkers and researchers in this field are the strong supporters of a full inclusive model (*i.e.* full time placement of all students with disabilities/exceptionalities along with non-disabled peers), the others are in favour of partial inclusion or any degree of integration into the mainstream. In this way, the types or models of inclusive education may be broadly based on the full inclusive and partially inclusive nature of the placement of the disabled students in the mainstream. Let us have brief description of these two types of inclusion proposals.

Model of Full Inclusion

Concept of inclusive or integrated mainstreaming education demands the education of the exceptional/disabled children in the regular classes and schools in the same way and to the same degree as received by the non-disabled children. It is known by the term full inclusion. In practice, this full inclusion model calls for the inclusion of all students, regardless of their exceptionality/disability or normality conditions in a regular classroom/programmes of the school (curricular and co-curricular) on full time as practised by a school in its regular time table. All types of services for helping the children according to their exceptionality and normality are being taken to the individual child in such type of setting.

Models of Partial Inclusion

In practical sense, however, in the opinion of many thinkers such type of full inclusion is neither feasible nor proves more productive from the viewpoints of both the disabled and non-disabled children. Thereby, attempts may be made to seek such integration that work well in prevailing situation/resources and needs of the disabled as well as non-disabled children. It is named as partially inclusive education. It may vary in styles and functioning as follows.

1. Disabled students attend the regular classes along with their normal peers. They get required support from the teacher, special education

expert and itinerant teacher within the classroom set-up without causing disturbance to the education of the non-disabled. However, they also get opportunity to attend and avail the services of the resource room/special classes for some time or periods of the school time table/day of the week besides attending the regular classes on all the working day along with their non-disabled peers.

2. Disabled students receive their education in special classes meant for their special education but, however, participate in all the programmes and activities including sports, literature, etc. for personality development.
3. Disabled students attend special schools meant for their specific special education but gets opportunities for the academic, social and societal interaction with the non-disabled in normal schools set-up.
4. In a reverse model of inclusion/integration, a large number of normal children are occasionally placed with the disabled children to seeks academic and non-academic interaction among them for helping each other to understand and adjust to each other's specific needs of life.

Thus, the help of various models of inclusive education are taken for the education of the exceptional/disabled children keeping in view of the severity of their impairments. they are provided free or restrictive environment for their learning and the situation or circumstances available for the inclusive/integrated education in a particular context.

Is Inclusion a Viable Alternative ?

It should be well realized that integration calls for the accommodation of exceptional children in the existing normal functioning of the school and classroom. It seems to be an attempt there of from outside for forcing or requesting the school set-up to keep the disabled in their school system. Placing the exceptional/disabled in a normal class with the non-disabled peers without having necessary preparation may seriously disturb the interests and purpose of all — teachers, students, school authorities and parents. In this context, inclusion should be preferred and adopted for the educational placement of the exceptional in the normal school set-up rather than seeking a mere integration of them in the school or classroom with their age peers. Inclusive education set-up demands from the schools to equip themselves in the man-material resources, programmes and activities, curriculum flexibilities and other needed support services for receiving all types of children (whether exceptional or normal) for providing necessary

education and training resulting into their all-round growth and development to the maximum extent possible.

In this way, the goal of our school educational system must be to seek inclusion rather than mere integration, accommodation or keeping up the exceptional with the normal schools.

Inclusion is the need of the hour. India, with its vast population of exceptional/disabled children scattered throughout its land cannot achieve its target — “a compulsory education for all children up to 14 years of age” without getting stuck to the policy of inclusion. Inclusion has been severely criticized. If planned and executed properly, it can prove a most potential instrument for serving the interests of all types of students, whether exceptional or non-exceptional providing least restricted environment and maximum cost effective education within their reach and at their door step. The following suggestions in this regard may prove fruitful.

1. Inclusion in the form of full inclusion model should be accepted as a broad based policy for the education of all the children without discrimination of any kind, both in the government schools and aided non-government schools.
2. Special schools which take care of a few well-known types of disabled children may be continued for the time being. However, the government, the NGOs and charitable minds working in such ventures, should focus on providing incentives to the schools, who needs support for making inclusion as a success.
3. Top priority should be given for the pre-service and in service education of the classroom and subject teachers, and other school personnel associated with the students for equipping them with the necessary knowledge, skills, attitude for working in an inclusive set-up.
4. Essential support services like services of the special education teaches, experts, resource room facilities, aids and equipment, the environmental modifications as per needs of the disabled children, guidance and counselling facilities, should be well available to the teachers and students working in inclusive set-up. A district or block wise pool of the needed resources may be maintained for providing such assistance to the schools.
5. Since, there lies too much diversities and the inclusive class set-up presents a heterogeneous grouping, the emphasis should nor be on designing suitable individualized curriculum and instruction. Instead

of it some common instructional goals, as often targeted in a normal non-inclusive set-up should be established.

6. The appropriate techniques and strategies suitable in the inclusive set-up like, collaborative team approach, activity based learning, cooperative learning and experiences, data based instruction, creative problem solving, peer to peer supports should be well learned and practised by the teachers while working in the inclusive set-up. These techniques and strategies are very much needed for being applied with the non-exceptional children simply on the ground that basic principles of teaching and learning are the same for all the children of a particular age group irrespective of their normality or exceptionality.
7. We must not emphasize or expect the same level of learning outcomes from the children belonging to a classroom of inclusive set-up. In such a set-up "from a holistic, constructive prospective, all children simply engage in a process of learning as much as they can in a particular subject area ; how much and exactly what they learn will depend upon their background ; interests and abilities (Stainback and Stainback 1992, p. 72).
8. In case, the need arises, special education services in the form of resource room facilities, individualized guidance and help from the special teacher and professionals may be arranged for the exceptional/disabled children for helping them to remain on track in their travelling along within an inclusive set-up.
9. The most pronounced goal of any system of education for the youngsters is to help them in leading their adult and community life as properly as possible. For this purpose, they must learn to cope with the demands of their social and community life. They should be able to get along with the non-exceptional/non-disabled by having necessary communication with them, seeking their friendship and participating with them in some or the other social, vocational, and leisure activities. All such things and virtues can only be available to them in the inclusive set-up. It is therefore essential that much of our energy should be utilized in the case of disabled/exceptional children to make them learn the way of adjusting to their physical and social environment and seek cooperation of the peers for their academic and overall personality development.

In this way, if we try to plan and implement the policy of inclusion with utmost sincerity and determination, then it can prove a quite fruitful and viable policy for achieving the national targets of "education for all" and "equal educational opportunities" besides serving the interests of all types of children within the limited means and resources of the country.

STUDY QUESTIONS

A. Essay Type Questions

1. What may be the different provisions for the placement and education of the exceptional or disabled children? Discuss their functionality or applicability in brief.
2. Discuss in detail the transition from segregation to inclusion.
3. Why the placement option of segregation is discarded or condemned?
4. What is integration? Discuss its applicability or functionality in brief.
5. What is inclusion? Discuss its concept along with its viability for the proper placement and education of the exceptional children.
6. Define the term inclusion and discuss various types or models of inclusive education.
7. "Inclusion is the only alternative to meet the needs of exceptional children for our country in the present scenerio." Throw light on this statement.
8. Discuss in detail the concept, meaning and need of inclusive education.
9. What is inclusive education? Discuss the various principles of inclusive education.

B. Short Answer Type Questions

1. Name the different approaches or provisions for the placement and education of the exceptional children.
2. What is segregation/integration/inclusion?
3. Why segregation is not considered an in appropriate provision for the placement and education of the exceptional children?
4. Why integration is not considered a good alternative for the placement and education of the exceptional children.

5. Name the various types or models of inclusion.
6. Name three things supporting the policy of inclusion for the education of the exceptional children.
7. Provide a suitable definition of the term inclusive education.
8. What is full inclusion/partial inclusion ?
9. Name any five important principles of inclusive education.

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3

International Declarations and Conventions for the Disabled

Chapter Outline

- Introduction
 - Salamanca Statement and Framework of Action, 1994
 - Educational Provisions in UN Convention on the Rights of Persons with Disabilities (UNCRPD), 2006
 - Study Questions
-

Introduction

With the proclamation of Human rights and impact of the philosophy of humanism, there has been a world wide call for providing humane treatments to the disabled and stop their isolation and give up the policies and provisions of seclusion for their education and development. For this purpose a number of organized attempts have been made by the world society and nations from time to time under the banner of UNO in the form of a number of Joint International conventions and conferences. It has resulted into useful declaration of statements, framework for actions or provisions and policies for shaping the education of the disabled. In this chapter, here we would be focusing our discussion in getting acquainted with two of these ventures in the name of (i) Salamanca Statement and Framework of Action, 1994 and (ii) UN Conventions on the Rights of Persons with Disabilities (UNCRPD), 2006.

Salamanca Statement and Framework of Action, 1994

An International document and declaration in the name of "The Salamanca Statement and Framework for Action on Disability Education (1994)" has come into existence as a result of deliberations held in June

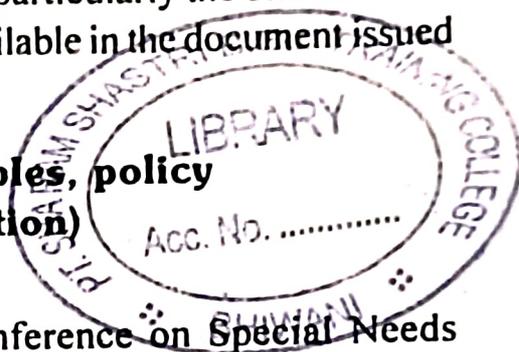
1994 in a World Conference on Special Needs Education. More than 300 participants representing governments of the 92 countries of the world including India and 25 International organizations met in Salamanca, Spain in this conference jointly held by the Ministry of Education and Science Spain and UNESCO.

The conference through its four days deliberations (7-10 June), came up with a report and resolutions in the form of Statement and Framework for action in implementing the policy of inclusive education for the education and welfare of the children with special needs particularly the disabled. We are hereby reproducing views in this regard available in the document issued as the deliberations of this conference.

The Salamanca Statement (on Principles, policy and practice in Special Needs Education)

The statement in original runs as under

1. We, the delegates of the World Conference on Special Needs Education representing ninety-two governments and twenty-five international organizations, assembled here in Salamanca, Spain, from 7-10 June 1994, hereby reaffirm our commitment to Education for All, recognizing the necessity and urgency of providing education for children, youth and adults with special educational needs within the regular education system, and further hereby endorse the Framework for Action on Special Needs Education, that governments and organizations may be guided by the spirit of its provisions and recommendations.
2. We believe and proclaim that :
 - every child has a fundamental right to education, and must be given the opportunity to achieve and maintain an acceptable level of learning,
 - every child has unique characteristics, interests, abilities and learning needs,
 - education systems should be designed and educational programmes implemented to take into account the wide diversity of these characteristics and needs,
 - those with special educational needs must have access to regular schools which should accommodate them within a child-centred pedagogy capable of meeting these needs,



- regular schools with this inclusive orientation are the most effective means of combating discriminatory attitudes, creating welcoming communities, building an inclusive society and achieving education for all ; moreover, they provide an effective education to the majority of children and improve the efficiency and ultimately the cost-effectiveness of the entire education system.
3. We call upon all governments and urge them to :
- give the highest policy and budgetary priority to improve their education systems to enable them to include all children regardless of individual differences or difficulties,
 - adopt as a matter of law or policy the principle of inclusive education, enrolling all children in regular schools, unless there are compelling reasons for doing otherwise,
 - develop demonstration projects and encourage exchanges with countries having experience with inclusive schools,
 - establish decentralized and participatory mechanisms for planning, monitoring and evaluating educational provision for children and adults with special education needs,
 - encourage and facilitate the participation of parents, communities and organization of persons with disabilities in the planning and decision-making processes concerning provision for special educational needs,
 - invest greater effort in early identification and intervention strategies, as well as in vocational aspects of inclusive education,
 - ensure that, in the context of a systemic change, teacher education programmes, both pre-service and in-service, address the provision of special needs education in inclusive schools.
4. We also call upon the international community ; in particular we call upon :
- governments with international cooperation programmes and international funding agencies, especially the sponsors of the World Conference on Education for All, the United Nations Educational, Scientific and Cultural Organization (UNESCO), the United Nations Children's Fund (UNICEF), United Nations Development Programme (UNDP), and the World Bank :
 - to endorse the approach of inclusive schooling and to support the development of special needs education as an integral part of all education programmes ;

- the United Nations and its specialized agencies, in particular the International Labour Office (ILO), the World Health Organization (WHO), UNESCO and UNICEF :
 - to strengthen their inputs for technical cooperation, as well as to reinforce their cooperation and networking for more efficient support to the expanded and integrated provision of special needs education ;
 - non-governmental organizations involved in country programming and service delivery :
 - to strengthen their collaboration with the official national bodies and to intensify their growing involvement in planning, implementation and evaluation of inclusive provision for special educational needs ;
 - UNESCO, as the United Nations agency for education :
 - to ensure that special needs education forms part of every discussion dealing with education for all in various forums,
 - to mobilize the support of organizations of the teaching profession in matters related to enhancing teacher education as regards provision for special educational needs,
 - to stimulate the academic community to strengthen research and networking and to establish regional centres of information and documentation ; also, to serve as a clearinghouse for such activities and for disseminating the specific results and progress achieved at country level in pursuance of this Statement,
 - to mobilize funds through the creation within its next Medium-Term Plan (1996-2002) of an expanded programme for inclusive schools and community support programmes, which would enable the launching of pilot projects that showcase new approaches for dissemination, and to develop indicators concerning the need for and provision of special needs education.
5. Finally, we express our warm appreciation to the Government of Spain and to UNESCO for the organization of the Conference, and we urge them to make every effort to bring this Statement and the accompanying Framework for Action to the attention of the world community, especially at such important forums as the World Summit for Social Development (Copenhagen, 1995) and the World Conference on Women (Beijing, 1995).

The Framework for Action (on Special Needs Education)

What is needed to be done for meeting the requirements of the education of CWSN has been summarized in the introduction portion of this document in the following way.

1. This **Framework for Action on Special Needs Education** was adopted by the World Conference on Special Needs Education organized by the Government of Spain in co-operation with UNESCO and held in Salamanca from 7 to 10 June 1994. Its purpose is to inform policy and guide action by governments, international organizations, national and agencies, non-governmental organizations and other bodies in implementing the **Salamanca Statement on Principles, Policy and Practice in Special Needs Education**. The **Framework** draws extensively upon the national experience of the participating countries as well as upon resolutions, recommendations and publications of the United Nations system and other intergovernmental organizations, especially the **Standard Rules on the Equalization of Opportunities for Persons with Disabilities**. It also takes account of the proposals, guidelines and recommendations arising from the five regional seminars held to prepare the World Conference.
2. The right of every child to an education is proclaimed in the **Universal Declaration of Human Rights** and was forcefully reaffirmed by the **World Declaration on Education for All**. Every person with a disability has a right to express their wishes with regard to their education as far as this can be ascertained. Parents have an inherent right to be consulted on the form of education best suited to the needs, circumstances and aspirations of their children.
3. The guiding principle that informs this **Framework** is that schools should accommodate **all children** regardless of their physical, intellectual, social, emotional, linguistic or other conditions. This should include disabled and gifted children, street and working children, children from remote or nomadic populations, children from linguistic, ethnic or cultural minorities and children from other disadvantaged or marginalized areas or groups. These conditions create a range of different challenges to school systems. In the context of this **Framework**, the term 'special educational needs' refers to all those children and youth whose needs arise from disabilities or learning difficulties. Many children experience learning difficulties

and thus have special educational needs at some time during their schooling. Schools have to find ways of successfully educating all children, including those who have serious disadvantages and disabilities. There is an emerging consensus that children and youth with special educational needs should be included in the educational arrangements made for the majority of children. This has led to the concept of the inclusive school. The challenge confronting the inclusive school is that of developing a child-centred pedagogy capable of successfully educating all children, including those who have serious disadvantages and disabilities. The merit of such schools is not only that they are capable of providing quality education to all children ; their establishment is a crucial step in helping to change discriminatory attitudes, in creating welcoming communities and in developing an inclusive society. A change in social perspective is imperative. For far too long, the problems of people with disabilities have been compounded by a disabling society that has focused upon their impairments rather than their potential.

4. Special needs education incorporates the proven principles of sound pedagogy from which all children may benefit. It assumes that human differences are normal and that learning must accordingly be adapted to the needs of the child rather than the child fitted to preordained assumptions regarding the pace and nature of the learning process. A child-centred pedagogy is beneficial to all students and, as a consequence, to society as a whole. Experience has demonstrated that it can substantially reduce the drop-out and repetition that are so much a part of many education systems while ensuring higher average levels of achievement. A child-centred pedagogy can help to avoid the waste of resources and the shattering of hopes that is all too frequently a consequence of poor quality instruction and a 'one size fits all' mentality towards education. Child-centred schools are, moreover, the training ground for a people-oriented society that respects both the differences and the dignity of all human beings.
5. **This Framework for Action** comprises the following sections :
 - I. New thinking in special needs education
 - II. Guidelines for action at the national level
 - A. Policy and organization
 - B. School factors
 - C. Recruitment and training of educational personnel

D. External support services

E. Priority areas

F. Community perspectives

G. Resource requirements

III. Guidelines for action at the regional and international level.

Out of the above cited Dimensions related to Framework for Action, we would here concentrate on the first two – New thinking in special needs education and Guidelines for action at the national level (especially related to school children).

New Thinking in Special Needs Education (especially related to school children)

- (i) The trend in social policy during the past two decades has been to promote integration and participation and to combat exclusion. Inclusion and participation are essential to human dignity and to the enjoyment and exercise of human rights. Within the field of education, this is reflected in the development of strategies that seek to bring about a genuine equalization of opportunity. Experience in many countries demonstrates that the integration of children and youth with special educational needs is best achieved within inclusive schools that serve all children within a community. It is within this context that those with special educational needs can achieve the fullest educational progress and social integration. While inclusive schools provide a favourable setting for achieving equal opportunity and full participation, their success requires a concerted effort, not only by teachers and school staff, but also by peers, parents, families and volunteers. The reform of social institutions is not only a technical task | it depends, above all, upon the conviction, commitment and good will of the individuals who constitute society.
- (ii) The fundamental principle of the inclusive school is that all children should learn together, wherever possible, regardless of any difficulties or differences they may have. Inclusive schools must recognize and respond to the diverse needs of their students, accommodating both different styles and rates of learning and ensuring quality education to all through appropriate curricula, organizational arrangements, teaching strategies, resource use and partnerships with their communities. There should be a continuum of support and services to match the continuum of special needs encountered in every school.

- (iii) Within inclusive schools, children with special educational needs should receive whatever extra support they may require to ensure their effective education. Inclusive schooling is the most effective means for building solidarity between children with special needs and their peers. Assignment of children to special schools - or special classes or sections within a school on a permanent basis - should be the exception, to be recommended only in those infrequent cases where it is clearly demonstrated that education in regular classrooms is incapable of meeting a child's educational or social needs or when it is required for the welfare of the child or that of other children.
- (iv) The situation regarding special needs education varies enormously from one country to another. There are, for example, countries that have well established systems of special schools for those with specific impairments. Such special schools can represent a valuable resource for the development of inclusive schools. The staff of these special institutions possess the expertise needed for early screening and identification of children with disabilities. Special schools can also serve as training and resource centres for staff in regular schools. Finally, special schools or units within inclusive schools - may continue to provide the most suitable education for the relatively small number of children with disabilities who cannot be adequately served in regular classrooms or schools. Investment in existing special schools should be geared to their new and expanded role of providing professional support to regular schools in meeting special educational needs. An important contribution to ordinary schools, which the staff of special schools can make, is to the matching of curricular content and method to the individual needs of pupils.
- (v) Countries that have few or no special schools would, in general, be well advised to concentrate their efforts on the development of inclusive schools and the specialized services needed to enable them to serve the vast majority of children and youth - especially provision of teacher training in special needs education and the establishment of suitably staffed and equipped resource centres to which schools could turn for support. Experience, especially in developing countries, indicates that the high cost of special schools means, in practice, that only a small minority of students, usually an urban elite, benefit from them. The vast majority of students with special needs, especially in rural areas, are as a consequence provided with no services whatsoever. Indeed, in many developing countries, it is

estimated that fewer than 1 per cent of children with special educational needs are included in existing provision. Experience, moreover, suggests that inclusive schools, serving all of the children in a community, are most successful in eliciting community support and in finding imaginative and innovative ways of using the limited resources that are available.

Guidelines for Action at the National Level

A. Policy and Organization : The major recommendations in this area are as below.

- To create legislative measures for recognizing the principle of equality of opportunity to the disabled in the field of education.
- To develop parallel and complementary legislative measures in the fields of health, social welfare, vocational training and employment in order to support and give full effect to educational legislation.
- To make educational policies at all levels, from the national to the local to stipulate that a child with a disability should attend the neighbourhood school that is, the school that would be attended if the child did not have a disability. Exception to this rule should be considered on a case-by-case basis where only education in a special school or establishment can be shown to meet the needs of the individual child.
- The practice of 'mainstreaming' children with disabilities should be an integral part of national plans for achieving education for all. Even in these exceptional cases where children are placed in special schools, their education need not be entirely segregated.

B. School Factors

Schools should be adequately prepared for meeting the needs of inclusive education. For this purpose they should work for

- Adapting curricular to children's needs, not vice-versa.
- Providing additional instructional support to CWSN in the context of the regular curriculum, not a different curriculum.
- Helping the CWSN in participating fully in the school programs meant for wholesome development.
- Incorporating formative evaluation into the regular educational process for getting the needed feedback on a continual basis.
- Arranging a continuum of support to CWSN, ranging from minimal help in regular classrooms to additional learning support programs

within the schools and extending, where necessary, to the provision of assistance from specialist teachers and external support staff.

- Arranging the appropriate and affordable technology to enhance success in the school curriculum and to aid communication, mobility and learning.

C. Recruiting and Training of Educational Personnel

The things like below need to be done in this concern.

- (i) Pre-service training programmes should provide to all student teachers, primary and secondary alike, positive orientation toward disability, thereby developing an understanding of what can be achieved in schools with locally available support services. The knowledge and skills required are mainly those of good teaching and include assessing special needs, adapting curriculum content, utilizing assistive technology, individualizing teaching procedures to suit a larger range of abilities, etc. In teacher-training practice schools, specific attention should be given to preparing all teachers to exercise their autonomy and apply their skills in adapting curricula and instruction to meet pupils needs as well as to collaborate with specialists and co-operate with parents.
- (ii) A proper system of inservice training to all teachers should be established supported well by distance education and other self-instruction techniques.
- (iii) Specialized training in special needs education leading to additional qualifications should normally be integrated with or preceded by training and experience as a regular education teacher in order to ensure complementarity and mobility.
- (iv) The training of special teachers needs to be reconsidered with a view to enabling them to work in different settings and to play a key role in special educational needs programmes. A non-categorical approach encompassing all types of disabilities should be developed as a common core, prior to further specialization in one or more disability-specific areas.
- (v) A recurrent problem with education systems, even those that provide excellent educational services for students with disabilities, is the lack of role models for such students. Special needs students require opportunities to interact with adults with disabilities who have achieved success so that they can pattern their own lifestyles and

aspirations on realistic expectations. In addition, students with disabilities should be given training and provided with examples of disability empowerment and leadership so that they can assist in shaping the policies that will affect them in later life. Education systems should therefore seek to recruit qualified teachers and other educational personnel who have disabilities and should also seek to involve successful individuals with disabilities from within the region in the education of special needs children.

D. External Support Services

The things like below may be useful in this concern.

- (i) Support to ordinary schools could be provided by both teacher education institutions and by the outreach staff of special schools. The latter should be used increasingly as resource centres for ordinary schools offering direct support to those children with special educational needs. Both training institutions and special schools can provide access to specific devices and materials as well as training in instructional strategies that are not provided in regular classrooms.
- (ii) External support by resource personnel from various agencies, departments and institutions, such as advisory teachers, educational psychologists, speech and occupational therapists, etc., should be co-ordinated at the local level. School clusters have proved a useful strategy in mobilizing educational resources as well as community involvement. Clusters of schools could be assigned collective responsibility for meeting the special educational needs of pupils in their area and given scope for allocating resources as required. Such arrangements should involve non-educational services as well. Indeed, experience suggests that education services would benefit significantly if greater efforts were made to ensure optimal use of all available expertise and resources.

E. Priority Areas

- (i) **Early childhood education** : The success of the inclusive school depends considerably on early identification, assessment and stimulation of the very young child with special educational needs. Early childhood care and education programmes for children aged upto 6 years ought to be developed and/or reoriented to promote physical, intellectual and social development and school readiness. These programmes have a major economic value for the individual, the family and the society in preventing the aggravation of disabling

conditions. Programmes at this level should recognize the principle of inclusion and be developed in a comprehensive way by combining pre-school activities and early childhood health care.

- (ii) **Girl's education :** Girls with disabilities are doubly disadvantaged. A special effort is required to provide training and education for girls with special educational needs. In addition to gaining access to school, girls with disabilities should have access to information and guidance as well as to models which could help them to make realistic choices and preparation for their future role as adult women.
- (iii) **Preparation for Adult life :** Young people with special educational needs should be helped to make an effective transition from school to adult working life. Schools should assist them to become economically active and provide them with the skills needed in everyday life, offering training in skills which respond to the social and communication demands and expectations of adult life.

F. Community Perspectives

The things like below may be attended in this concern

- (i) **Parents partnership :** The education of children with special educational needs is a shared task of parents and professionals. A positive attitude on the part of parents favours school and social integration. Parents need support in order to assume the role of a parent of a child with special needs. The role of families and parents could be enhanced by the provision of necessary information in simple and clear language ; addressing the needs for information and training in parenting skills is a particularly important task in cultural environments where there is little tradition of schooling. Both parents and teachers may need support and encouragement in learning to work together as equal partners.
- (ii) **Community Involvement :** Efforts should be made to encourage community participation by giving support to representative associations and inviting them to take part in decision-making. To this end, mobilizing and monitoring mechanisms composed of local civil administration, educational, health and development authorities, community leaders and voluntary organizations should be established in geographical areas small enough to ensure meaningful community participation.
- (iii) **Public Awareness :** Policy-makers at all levels, including the school level, should regularly reaffirm their commitment to inclusion and

promote positive attitudes among children, among teachers and among the public-at-large towards those with special educational needs. In this concern mass media (newspapers, films and television channels etc.) can play a powerful role in promoting positive attitudes towards the integration of disabled persons in society, overcoming prejudice and misinformation, and infusing greater optimism and imagination about the capabilities of persons with disabilities. The media can also promote positive attitudes of employers towards hiring persons with disabilities. The media should be used to inform the public on new approaches in education, particularly as regards provision for special needs education in regular schools, by popularizing examples of good practice and successful experiences.

G. Resource Requirements

In this connection Guidelines for Action has commented in the following way.

The development of inclusive schools as the most effective means for achieving education for all must be recognized as a key government policy and accorded a privileged place on the nation's development agenda. It is only in this way that adequate resources can be obtained. Changes in policies and priorities cannot be effective unless adequate resource requirements are met. Political commitment, at both the national and community level, is needed both to obtain additional resources and to redeploy existing ones. While communities must play a key role in developing inclusive schools, government encouragement and support is also essential in devising effective and affordable solutions.

Educational Provisions in UN Convention on the Rights of Persons with Disabilities (UNCRPD), 2006

Proceedings of the UN convention on the Rights of Persons with Disabilities (UNCRPD), 2006 represents a quite valuable document concerning the adjustment, education and welfare of the persons with disabilities. It begins with a preamble and includes 50 articles. As a matter of educational provisions for the disabled, necessary statements have been provided in the article 24 of this document and the overall purpose of the drafting of the document has been provided in the Article 1. Here at present for the benefit of our readers we would like to present (in original) what has been provided in the preamble, article 1 and article 24 of this document.

PREAMBLE

The States Parties to the present Convention,

- (a) *Recalling* the principles proclaimed in the Charter of the United Nations which recognize the inherent dignity and worth and the equal and inalienable rights of all members of the human family as the foundation of freedom, justice and peace in the world.
- (b) *Recognizing* that the United Nations, in the Universal Declaration of Human Rights and in the International Covenants on Human Rights, has proclaimed and agreed that everyone is entitled to all the rights and freedoms set forth therein without distinction of any kind.
- (c) *Reaffirming* the universality, indivisibility, interdependence and interrelatedness of all human rights and fundamental freedoms and the need for persons with disabilities to be guaranteed their full enjoyment without discrimination.
- (d) *Recalling* the International Covenant on Economic, Social and Cultural Rights, the International Covenant on Civil and Political Rights, the International Convention on the Elimination of All Forms of Racial Discrimination, the Convention on the Elimination of All Forms of Discrimination against Women, the Convention against Torture and other Cruel, Inhuman or Degrading Treatment or Punishment, the Convention on the Rights of the Child, and the International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families.
- (e) *Recognizing* that disability is an evolving concept and that disability results from the interaction between persons with impairments and attitudinal and environment barriers that hinders their full and effective participation in society on an equal basis with others.
- (f) *Recognizing* the importance of the principles and policy guidelines contained in the World Programme of Action concerning Disabled Persons and in the Standard Rules on the Equalization of Opportunities for Persons with Disabilities in influencing the promotion, formulation and evaluation of the policies, plans, programmes and actions at the national, regional and international levels to further equalize opportunities for persons with disabilities.
- (g) *Emphasizing* the importance of mainstreaming disability issues as an integral part of relevant strategies of sustainable development.

- (h) *Recognizing also* that discrimination against any person on the basis of disability is a violation of the inherent dignity and worth of the human person.
- (i) *Recognizing further* the diversity of persons with disabilities.
- (j) *Recognizing* the need to promote and protect the human rights of all persons with disabilities, including those who require more intensive support.
- (k) *Concerned* that, despite these various instruments and undertakings, persons with disabilities continue to face barriers in their participation as equal members of society and violations of their human rights in all parts of the world.
- (l) *Recognizing* the importance of international cooperation for improving the living conditions of persons with disabilities in every country, particularly in developing countries.
- (m) *Recognizing* the valued existing and potential contributions made by persons with disabilities to the overall well-being and diversity of their communities, and that the promotion of the full enjoyment by persons with disabilities of their human rights and fundamental freedoms and of full participation by persons with disabilities will result in their enhanced sense of belonging and in significant advances in the human, social and economic development of society and the eradication of poverty.
- (n) *Recognizing* the importance for persons with disabilities of their individual autonomy and independence, including the freedom to make their own choices.
- (o) *Considering* that persons with disabilities should have the opportunity to be actively involved in decision-making processes about policies and programmes, including those directly concerning them.
- (p) *Concerned* about the difficult conditions faced by persons with disabilities who are subject to multiple or aggravated forms of discrimination on the basis of race, colour, sex, language, religion, political or other opinion, national, ethnic, indigenous or social origin, property, birth, age or other status.
- (q) *Recognizing* that women and girls with disabilities are often at greater risk, both within the outside the home, of violence, injury or abuse, neglect or negligent treatment, maltreatment or exploitation.

- (r) *Recognizing* that children with disabilities should have full enjoyment of all human rights and fundamental freedoms on an equal basis with other children, and recalling obligations to that end undertaken by States Parties to the Convention on the Rights of the Child.
- (s) *Emphasizing* the need to incorporate a gender perspective in all efforts to promote the full enjoyment of human rights and fundamental freedoms by persons with disabilities.
- (t) *Highlighting* the fact that the majority of persons with disabilities live in conditions of poverty, and in this regard recognizing the critical need to address the negative impact of poverty on persons with disabilities.
- (u) *Bearing in mind* that conditions of peace and security based on full respect of the purposes and principles contained in the Charter of the United Nations and observance of applicable human rights instruments are indispensable for the full protection of persons with disabilities, in particular during armed conflicts and foreign occupation.
- (v) *Recognizing* the importance of accessibility to the physical, social, economic and cultural environment, to health and education and to information and communication, in enabling persons with disabilities to fully enjoy all human rights and fundamental freedoms.
- (w) *Realizing* that the individual, having duties to other individuals and to the community to which he or she belongs, is under a responsibility to strive for the promotion and observance of the rights recognized in the International Bill of Human Rights.
- (x) *Convinced* that the family is the natural and fundamental group unit of society and is entitled to protection by society and the State, and that persons with disabilities and their family members should receive the necessary protection and assistance to enable families to contribute towards the full and equal enjoyment of the rights of persons with disabilities.
- (y) *Convinced* that a comprehensive and integral international convention to promote and protect the rights and dignity of persons with disabilities will make a significant contribution to redressing the profound social disadvantage of persons with disabilities and promote their participation in the civil, political, economic, social

and cultural spheres with equal opportunities, in both developing and developed countries.

Have agreed as follows :

Article 1

Purpose

The purpose of the present Convention is to promote, protect and ensure the full and equal enjoyment of all human rights and fundamental freedoms by all persons with disabilities, and to promote respect for their inherent dignity.

Persons with disabilities include those who have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others.

Article 24

Education

1. States Parties recognize the right of persons with disabilities to education. With a view to realizing this right without discrimination and on the basis of equal opportunity. States Parties shall ensure an inclusive education system at all levels and lifelong learning directed to :
 - (a) The full development of human potential and sense of dignity and self-worth, and the strengthening of respect for human rights, fundamental freedoms and human diversity ;
 - (b) The development by persons with disabilities of their personality, talents and creativity, as well as their mental and physical abilities, to their fullest potential ;
 - (c) Enabling persons with disabilities to participate effectively in a free society.
2. In realizing this right, States Parties shall ensure that :
 - (a) Persons with disabilities are not excluded from the general education system on the basis of disability, and that children with disabilities are not excluded from free and compulsory primary education, or from secondary education, on the basis of disability ;
 - (b) Persons with disabilities can access an inclusive, quality and free primary education and secondary education on an equal basis with others in the communities in which they live ;

- (c) Reasonable accommodation of the individual's requirements is provided ;
 - (d) Persons with disabilities receive the support required, within the general education system, to facilitate their effective education ;
 - (e) Effective individualized support measures are provided in environments that maximize academic and social development, consistent with the goal of full inclusion.
3. States Parties shall enable persons with disabilities to learn life and social development skills to facilitate their full and equal participation in education and as members of the community. To this end, States Parties shall take appropriate measures, including :
- (a) Facilitating the learning of Braille, alternative script, augmentative and alternative modes, means and formats of communication and orientation and mobility skills, and facilitating peer support and mentoring ;
 - (b) Facilitating the learning of sign language and the promotion of the linguistic identity of the deaf community ;
 - (c) Ensuring that the education of persons, and in particular children, who are blind, deaf or deaf blind, is delivered in the most appropriate languages and modes and means of communication for the individual, and in environments which maximize academic and social development.
4. In order to help ensure the realization of this right, States Parties shall take appropriate measures to employ teachers, including teachers with disabilities, who are qualified in sign language and/or Braille, and to train professionals and staff who work at all levels of education. Such training shall incorporate disability awareness and the use of appropriate augmentative and alternative modes, means and formats of communication, educational techniques and materials to support persons with disabilities.
5. States Parties shall ensure that persons with disabilities are able to access general tertiary education, vocational training, adult education and lifelong learning without discrimination and on an equal basis with others. To this end, States Parties shall ensure that reasonable accommodation is provided to persons with disabilities.

STUDY QUESTIONS**A. Essay Type Questions**

1. Provide an account of what has been emphasized and stated in the International document and declaration "The Salamanca Statement and Framework of Action (1994)" in terms of the principles, policy and practice in Special Needs Education.
2. Describe the things emphasized in "Salamanca Statement and Framework of Action (1994)" as Framework for Action for the education of the CWSN including disabled.
3. Provide an account of what has been emphasized in the 'Preamble' of the proceedings of the UN Convention on the Rights of Persons with Disabilities (UNCRPD), 2006.
4. What type of educational provisions has been emphasized for the disabled in the proceeding of the UN Convention on the Rights of Persons with Disabilities (UNCRPD), 2006 ?

B. Short Answer Type Questions

1. What is Salamanca Statement and Framework of Action, 1994 ?
2. What is the document related to UN Convention on the Rights of Persons with Disabilities (UNCRPD) 2006 ?
3. What has been urged in "Salamanca Framework of Action" for CWSN ? Point out two important measures in this concern.
4. What has been urged to do on the part of UNESCO in the field of special needs education ? Point out any two important measures.
5. Point out any two things emphasized in the Framework of Action brought out in the proceeding of Salamanca Statement and Framework of Action, 1994 in any one of the following areas as a guide lines for action at the National level :
(a) Policy and organization (b) School Factors (c) Recruiting and Training of Educational personnel.
6. What has been emphasized as the purpose of the convention in the article I of the proceeding of the UNCRPD, 2006 ?
7. Tell two important recommendation made about the education of the disabled in the proceedings of the UNCRPD, 2006.

4

Constitutional Provision for the Disabled

Chapter Outline

- Introduction
 - Education of the Children with Disabilities in
 - NPE, 1968, 1986, POA (1992)
 - PWD Act, 1995
 - RCI Act, 1992
 - RTE Act, 2009
 - National Policy for Persons with Disabilities, 2006
 - Study Questions
-

Introduction

The world society and nations through their various meets, conventions and international agreements has recognized the right to education for all with no discrimination of any kind. The Salamanca Statement and UN convention on the Rights of Persons with Disabilities-2006 discussed in chapter third of this text provide a valid testimony for such understanding about the adjustment and mainstreaming of the disabled in the regular school.

For ensuring education for all and protecting the rights of the children with disabilities to attend the schools nearest to their locations alongwith their non-disabled peers, the state parties were urged (as well as commonly agreed) to frame the needed educational policies and make constitutional provisions for the same. Accordingly, the nations signatories to these international agreements and understanding tried to frame educational policies and made constitutional provision for safeguarding the interest of the disabled at their own level in their respective countries. India has also taken adequate measures on this account. It has made adequate provision, for the education and care of the disabled children and brought out a number of constitutional provisions in the name of acts and national policies. In this

chapter we would like to focus on such policies and provisions meant for the education and welfare of the disabled.

EDUCATION OF THE DISABLED IN NPE, 1968

The National Policy of Education brought out by Govt. of India in 1968 was aimed to improve the quality of education in the country and focussed on providing educational facilities to all the citizens. It provided following statement for the education of the disabled under section 4 maintaining equalization of educational opportunities in the school education system.

“Educational facilities for the physically and mentally handicapped children should be expanded and attempts should be made to develop integrated programs enabling the handicapped children to study in regular schools.”

EDUCATION OF THE DISABLED IN NPE, 1986

Indian parliament during the budget session in 1986 discussed and adopted the National Policy on Education, 1986.

It has provided the things like below for the education of the disabled under the title ‘Handicapped’ in Part IV of its description “Education for Equality”. The original version in this connection is reproduced below :

Handicapped

4.9 The objective should be to integrate the physically and mentally handicapped with the general community as equal partners, to prepare them for normal growth and to enable them to face life with courage and confidence. The following measures will be taken in this regard :

- (i) Wherever it is feasible, the education of children with motor handicaps and other mild handicaps will be common with that of others.
- (ii) Special schools with hostels will be provided, as far as possible at district headquarters, for the severely handicapped children.
- (iii) Adequate arrangements will be made to give vocational training to the disabled.
- (iv) Teachers training programmes will be reoriented, in particular for teachers of primary classes, to deal with the special difficulties of the handicapped children; and
- (v) Voluntary effort for the education of the disabled will be encouraged in every possible manner.

EDUCATION FOR DISABLED IN POA (1992)

Education of the disabled in Program of Action, 1992 according to a written document belonging to Ministry of Human Resource Development, Department of Education, Govt. of India (discussed under chapter 4 under the title "Education of the Handicapped") is reproduced below.

4. Education of the Handicapped

1. Present Situation

4.1.1 It is estimated that about 12.59 million children with disabilities are to be provided education in the school system.

Out of these, about half a million require vocational training.

4.1.2 The educability of another 2 million disabled children is to be improved through early intervention and services by ECCE.

4.1.3 At the end of 1991-92 about 30,000 children with disability were availing special benefits under the scheme of Integrated Education for Disabled Children (DBDC). In addition, about 60,000 children with mild disabilities received resource support without special benefits. A large number of children with disability are also receiving education in special schools which number about 1035.

4.1.4 The Project Integrated Education for Disabled (PIED) is being implemented, as a field demonstration, in one block each in ten States and Union Territories.

4.1.5 The innovative multi-category training of resource teachers has been found to be effective and has been institutionalised in the Regional Colleges of Education, the universities offering special education courses and the training programmes organised by Non-Governmental Organisations.

4.1.6 Each DIET has been provided a resource centre for orienting elementary teachers and establishing field demonstrations in lab areas. Faculty from 102 DIETs have so far received induction training at the NCERT.

4.1.7 The Ministry of Welfare had taken steps to ensure supply of trained manpower to special schools and improve standards in these schools through the National Institutes for the Handicapped (NIHs) and increased support to NGOs.

4.1.8 The Ministry of Labour manages 17 Vocational Rehabilitation Centres (VRCs) for the handicapped and helps in their placement also. About 66,000 persons with disability have been rehabilitated under this scheme by September, 1991. Three percent of seats for admission to ITIs and under the Apprenticeship Training Scheme are available for handicapped persons. These seats are being fully utilised.

4.1.9 The evaluation of special schools and the scheme of IEDC has revealed some grey areas. General education system is not yet mobilized to a noticeable extent, for education of the handicapped, either at the Central or State level. Inputs from different schemes like CBR, DRC, ECCE, non-formal education, adult education, vocational and technical education, etc. are not being brought together for the education of the physically handicapped. Some States are still reluctant to implement IEDC while some are implementing it rather indifferently. Few NGOs are active in rural areas. The standard of education in special schools needs improvement. Facilities for the education of children with multiple handicaps are yet to be developed. The early detection and intervention programmes so essential for education of these children have yet to be started. The goal of UEE for this disadvantaged group would remain an unachievable dream unless concerted and urgent measures are taken.

2. NPE Review Perspective

4.2.1 As part of its concern for equalisation of educational opportunities, the NPE, 1986 focuses on the needs of children with disabilities. The NPE, 1986 recommended an integrated education in general schools for children with locomotor handicaps and with other mild disabilities, orientation and pre-service training of general teachers to meet special needs of these children, provision of vocational training, establishment of special schools for severely disabled children and encouragement of voluntary organisations in these tasks. The POA suggested a pragmatic placement principle. It postulated that a child with disability who can be educated in a general school should be educated in a general school only and not in a special school. Even those children who are initially admitted to special schools for training in plus curriculum skills should be transferred to general schools once they acquire daily living skills, communication skills and basic academic skills.

3. Targets

4.3.1 For achieving equalisation of educational opportunities, children with disability should have access to quality education comparable to other children. However, considering the financial resources likely to be available during the 8th Plan the targets for education of disabled children would be as follows:

- (i) Children who can be educated in general primary schools
 - (a) Universal enrolment by the end of 9th Five Year Plan.
 - (b) Ensuring achievement of minimum level of learning through adjustment and adaptation of curriculum and teaching to special needs.

- (ii) Children who require to be educated in special schools or special classes in general schools
 - (a) Universal enrolment by the end of the 9th Five Year Plan.
 - (b) Ensuring achievement of level of learning commensurate with their potential.
- (iii) Reduction of drop out rates on par with other children.
- (iv) Providing access to disabled children to secondary and senior secondary schools with resource support and making special provision for vocational training of these children, particularly those with intellectual disabilities.
- (v) Reorienting pre-service and in-service teacher education programmes including pre-school teachers training programmes to meet special needs in the classroom.
- (vi) Reorienting adult and non-formal education programmes to meet educational and vocational training needs of persons with disability.

4. Implementation Strategies

4.4.1 The strategy of area-specific and population-specific micro-planning for UEE is equally relevant for this disadvantaged group. Planning for UEE and adult literacy at all levels - Centre, State, District, Block and Project - should provide for the educational needs of this category of children.

4.4.2 Education of children with disability will be a component in the training of educational planners and administrators as well as preservice and inservice teachers. DIETs, CTEs and IASEs which have been provided facilities for this component will have to pay particular attention to this aspect of teacher training. While drawing up schemes for strengthening SCERTs, cells for education of the handicapped may be considered as envisaged, in IEDC.

4.4.3 The material supplied under Operation Blackboard will have to take into consideration special needs of these children. School buildings will have to take note of architectural adjustments needed to ensure access to children with disability, at the construction stage itself so as to avoid expenditure on modifications later on. Special schools need to be opened in the districts which have no special school facilities. The education of the handicapped should form an essential component in all externally assisted basic education projects being implemented or proposed to be implemented.

5. Integrated Education for Disabled Children (IEDC)

4.5.1 The POA, 1986 target of increasing enrolment of children by 25 percent per year was achieved as enrolment of disabled children in general schools increased from 15,000 to 30,000. Subject to availability of resources,

the cumulative enrolment would reach 50,000 by the end of the 8th Plan. However, an additional 1,00,000 children with mild disabilities will be provided resource support from teachers and learning aids and equipment.

4.5.2 The following actions are needed for achieving the targets laid down:

- (i) Adequate allocations of resources.
- (ii) Provision for education of persons with disability should be made an integral component in externally assisted basic education projects.
- (iii) Provision for education of disabled children should be made in the Centrally Sponsored Schemes of Operation Blackboard, Vocationalisation of Education and Non-Formal Education.
- (iv) Co-ordinated implementation of schemes like Community Based Rehabilitation, ECCE, VRCs and IEDC so as to reduce cost and achieve higher coverage. This would require coordination among the Ministries/Departments of Health, Welfare, Education, Women & Child Development and Labour.
- (v) The NGOs have to be encouraged to implement IEDC, particularly in rural areas. The NGOs involved in other educational activities will be encouraged to work in this area also and assisted in developing their expertise.

6. Special Schools

4.6.1 The POA envisaged provision of an additional 400 special schools at the district headquarters. However, because of resource constraints no new special school has been established. The Ministry of Welfare has identified 240 districts without any special schooling facility. Efforts would be made to provide special schools in these districts by the end of 9th Five Year Plan.

7. Vocational Training

4.7.1 The Ministry of Labour is providing vocational training to the handicapped through the Craftsman Training Scheme (CTS), the Apprenticeship Training Scheme and separate Vocational Rehabilitation Centres (VRCs). Three per cent of the seats for admission to ITIs under the Craftsman Training Scheme and Apprenticeship Training Scheme are reserved for candidates who are handicapped but have aptitude and are otherwise fit to undergo the required training. The States/UTs have been advised from time to time to implement this reservation for the handicapped which will be continued during the 8th Plan also. Seventeen VRCs will continue to provide training to a larger number of handicapped persons during the 8th plan. The instructors in ITIs will receive orientation to meet special

needs of handicapped persons. This component will be added in ITI instructor's training programme. Adjustment and adaptation of equipment to provide full access to disabled persons will be ensured.

4.7.2 The National Institutes for the Handicapped under the Ministry of Welfare will continue their efforts to provide vocational training to the handicapped.

4.7.3 The Department of Education will also encourage voluntary organisations working in the area of vocational education and training for the handicapped. The CIVE will provide support to vocational training programmes for the handicapped through teacher training material and other resources.

8. Orientation and Training of Teachers

4.8.1 All the DIETs to be established by the end of the 8th Plan will have a resource room and trained faculty to teach the essential component of education of children with disability. They will also run orientation programmes for teachers at least from lab areas and practising schools to establish field demonstration of IEDC programme. The SCERTs will support field demonstrations under the scheme of IEDC. Similar action is suggested for the 250 CTEs and 50 IASEs. The budget provision is available in the scheme itself. The pre-service training curriculum will induct essential components in these areas, wherever it has not been done so far.

4.8.2 All in-service teachers should receive awareness input on education of children with disability in orientation programmes. In each area/institution where IEDC is implemented all teachers will receive orientation as envisaged in the scheme of IEDC. The heads of institutions and educational administrators will also receive training. Considering the large numbers to be covered, the Indira Gandhi National Open University and NCERT should plan credit courses on special education to equip general teachers to meet special needs. The NCERT will provide training to the IEDC cell staff. Multicategory training of resource teachers will be encouraged in UGC supported programmes.

9. Training of Educational Administrators

4.9.1 The NEEPA in collaboration with NCERT should develop programmes for training educational administrators and making them aware of the needs of this group. The IGNOU should design and offer courses for this target group also.

10. Special Teachers

4.10.1 The NIHs and its regional training centres have built up capacity to train single disability special teachers for special schools. Besides meeting

demands of the new special schools, the existing untrained teachers will be trained and backlog cleared by the end of the 8th Plan. Inservice training of special teachers will be planned in a way that each teacher receives a three-week course every four years.

4.10.2 Efforts will be made to promote special education units in university departments of education for training teachers to handle multicategory disabilities.

11. Educational and Vocational Guidance Personnel

4.11.1 The existing educational and vocational guidance counsellors should be provided training in dealing with disabled children and their parents. Essential component should also be added to their preservice training programmes. The NCERT and NIIs should design and offer in-service course for in-service counsellors.

12. Content and Process

4.12.1 Curriculum flexibility is of special significance for these children. Special needs of these children will be met, if child centred education is practised. The curriculum adjustment and adaptation of teaching methods and material will be worked out, field tried and provided to the users. The following actions will be taken:

- (i) Guidelines for child centred education, including special needs in the classroom, being developed at the NCERT will be made available by mid 1993.
- (ii) Guidelines for adjustment of curriculum and instructional material and methods for visually and hearing handicapped at primary level have been developed. These will be made available to teachers. Work for upper primary and secondary school level will be started and completed by the end of 1994.
- (iii) The achievement of minimum levels of learning by children with mild disabilities should be ensured through resource support and alternative learning material, wherever needed.
- (iv) The Boards of Examination should make adjustment and adaptations in examination for the handicapped children.
- (v) Study of more than one language should not be compulsory for deaf children.
- (vi) Teaching of Science and Mathematics is either not available to handicapped children or they opt for an easier substitute. Special efforts should be made by the NIIs and the NCERT to develop an action programme to improve access of disabled children to these important areas.

- (vii) Child-to-child help in education of children with disability is an effective resource in view of large classes and multigrade teaching. NCERT should develop a package and make it available to teachers by the end of 1993.
- (viii) The special learning aids and equipment like braille books, braille kit, audio visual material will be developed and made available to schools by NIHS and NCERT.

13. Use of Mass Media

4.13.1 Radio and television are being used in a limited way both for advocacy as well as educational purposes. The CIET, SIETs, NIHS and other organisations will develop a variety of programmes so that they can be regularly telecast/broadcast. The MHRD will approach the Ministry of Information and Broadcasting for providing adequate time for this purpose.

4.13.2 The CIET, SIETs and NIHS will also develop software in non-telecast mode and make it available to DIETs, other training centres and NGOs working with disabled persons.

4.13.3 Field publicity units should be utilised by States for advocacy programmes. Newspapers and magazines have started popular advocacy and educational writing in this area. The NCERT and the NIHS will develop packages and hand over to journalists in workshops-.

14. Availability of Special Learning Material and Aids

4.14.1 Learning material in braille is still not available to all children. Same is the case with aids like braille slate, Taylor frame, etc. Similarly language training material for speech and hearing handicapped is not available in regional languages. Steps will be taken by the NIVH, AYJNIHH, NIMH and the NCERT to ensure the availability of such material.

15. Monitoring and Evaluation

4.15.1 The availability of a reliable data base is essential for proper monitoring and evaluation of educational programmes for persons with disability. Towards this end the District Education Office, must, with the help of other agencies, collect data about the number of disabled persons in the District - disability wise, sex wise and age group wise; beneficiaries under IEDC, special schools, ITIs, VRCs, etc., number of special and resource teachers, their qualifications and pay scale, and budget utilisation. Similar information should also be included in the statistics collected by MHRD as also the Educational Surveys conducted by NCERT.

4.15.2 The MHRD and the Ministry of Welfare should make grants under IEDC and special schools contingent on the periodic returns giving the information. An interdepartmental Committee should be set up at the

State and Central levels for monitoring. In addition, regular visits by the officers of the MHRD, NCERT, Regional Colleges of Education and field offices, should lead to status reports.

4.15.3 Evaluation studies by external agencies, universities conducting courses on education and rehabilitation of persons in specific geographical areas will be commissioned by MHRD and the Ministry of Welfare.

EDUCATION OF THE STUDENTS WITH DISABILITIES IN PWD ACT, 1995

The Persons with Disabilities (Equal opportunities, Protection and Full Participation) Act, 1995 is an act enacted by Parliament of India. It provides legislative support and protection to the education, adjustment and welfare of the persons with disabilities (including disabled children studying in the schools). It clearly stands for legal protection to provide equal opportunities for their education and development in an inclusive set up with their full participation in all the programs of the school attended by them.

In its documentary form (published in Part II, Section I of the Extraordinary Gazette of India, Ministry of Law, Justice and Company Affairs, Govt. of India New Delhi) the PWD Act, 1995 has been divided into 14 chapters named as below.

- Chapter I. Preliminary
- Chapter II. The Central Coordination Committee
- Chapter III. The State Coordination Committee
- Chapter IV. Prevention And Early Detection Of Disabilities
- Chapter V. Education
- Chapter VI. Employment
- Chapter VII. Affirmative Action
- Chapter VIII. Non-Discrimination
- Chapter IX. Research And Manpower Development
- Chapter X. Recognition of Institutions For Persons with Disabilities
- Chapter XI institution For Persons With Severe Disabilities
- Chapter XII. The Chief Commissioner and Commissioners for Persons with Disabilities
- Chapter XIII. Social Security
- Chapter XIV. Miscellaneous

As far as the education and welfare of the children with disabilities is concerned, it has been well described in chapter IV and V of this document.

Accordingly we here are reproducing what has been provided in these two chapters for the well being and education of the children with disabilities.

Chapter IV. Prevention and Early Detection of Disabilities

Within the limits of their economic capacity and development, the appropriate Governments and the local authorities, with a view to preventing the occurrence of disabilities, shall :

- (a) Undertake or cause to be undertaken surveys, investigations and research concerning the cause of occurrence of disabilities;
- (b) Promote various methods of preventing disabilities ;
- (c) Screen all the children at least once in a year for the purpose of identifying "at-risk" cases ;
- (d) Provide facilities for training to the staff at the primary health centers ;
- (e) Sponsor or cause to be sponsored awareness campaigns and is disseminated or cause to be disseminated information for general hygiene. Health and sanitation ;
- (f) Take measures for pre-natal, parental and post-natal care of mother and child ;
- (g) Educate the public through the pre-schools, schools, primary health Centers, village level workers and anganwadi workers ;
- (h) Create awareness amongst the masses through television, radio and other mass media on the causes of disabilities and the preventive measures to be adopted.

Chapter V. Education

1. The appropriate Governments and the local authorities shall-
 - (a) Ensure that every child with a disability has access to free education in an appropriate environment till he attains the age of eighteen years;
 - (b) Endeavor to promote the integration of students with disabilities in the normal schools;
 - (c) Promote setting up of special schools in Government and private sector for those in need of special education, in such a manner that children with disabilities living in any part of the country have access to such schools;
 - (d) Endeavor to equip the special schools for children with disabilities with vocational training facilities.
2. The appropriate Governments and the local authorities shall by notification make schemes for-

- (a) Conducting part-time classes in respect of children with disabilities who having completed education up to class fifth and could not continue their studies on a whole-time basis;
 - (b) Conducting special part-time classes for providing functional literacy for children in the age group of sixteen and above;
 - (c) Imparting non-formal education by utilizing the available manpower in rural areas after giving them appropriate orientation;
 - (d) Imparting education through open schools or open universities;
 - (e) Conducting class and discussions through interactive electronic or other media;
 - (f) Providing every child with disability free of cost special books and equipments needed for his education.
3. The appropriate Governments shall initiate or cause to be initiated research by official and non-governmental agencies for the purpose of designing and developing new assistive devices, teaching aids, special teaching materials or such other items as are necessary to give a child with disability equal opportunities in education.
 4. The appropriate Governments shall set up adequate number of teachers' training institutions and assist the national institutes and other voluntary organizations to develop teachers' training programmes specializing in disabilities so that requisite trained manpower is available for special schools and integrated schools for children with disabilities.
 5. Without prejudice to the foregoing provisions, (be appropriate Governments shall by notification prepare a comprehensive education scheme which shall make Provision for-
 - (a) Transport facilities to the children with disabilities or in the alternative financial incentives to parents or guardians to enable their children with disabilities to attend schools.
 - (b) The removal of architectural barriers from schools, colleges or other institution, imparting vocational and professional training.
 - (c) The supply of books, uniforms and other materials to children with disabilities attending school.
 - (d) The grant of scholarship to students with disabilities.
 - (e) Setting up of appropriate fora for the redressal of grievances of parent, regarding the placement of their children with disabilities.

- (f) Suitable modification in the examination system to eliminate purely mathematical questions for the benefit of blind students and students with low vision.
 - (g) Restructuring of curriculum for the benefit of children with disabilities.
 - (h) Restructuring the curriculum for benefit of students with hearing impairment to facilitate them to take only one language as part of their curriculum.
6. All educational institutions shall provide or cause to be provided amanuensis to blind students and students with or low vision.

EDUCATION AND WELFARE OF THE CHILDREN WITH DISABILITIES IN RCI ACT, 1992

The Rehabilitation Council of India Act, 1992 is an act or legislative measure enacted by the Parliament of India. It was aimed to make provision for the constitution of the Rehabilitation council of India for regulating the training of rehabilitation professionals and the maintenance of a Central Rehabilitation Register and for matters connected therewith or incidental thereto.

As a document, it has been published in the Gazette of India Extraordinary Part II-Section I by the Legislative department of the Ministry of Law, Justice and Company Affairs, Govt. of India, New Delhi. It is comprised of three chapters named as 'Preliminary, The Rehabilitation Council of India and Functions of the Council. The latest version also contains Amendment carried out in the act in the year 2000. For the angle of the education and rehabilitation of children with disabilities, the chapter I (Preliminary) and chapter III (Functions of the council) are hereby reproduced leaving the chapter II which almost describes the constitution and organization of the RCI.

CHAPTER I. PRELIMINARY

Section 1. (1) This Act may be called the Rehabilitation Council of India Act, 1992.

(2) It shall come into force on such date as the Central Government may, by notification in the Official Gazette, appoint.

Section 2. (1) In this Act, unless the context otherwise requires –

- (a) "Chairperson" means the Chairperson of the Council appointed under sub-section (3) of section 3 ;
- (b) "Council" means the Rehabilitation Council of India constituted under section 3 ;

- (c) "handicapped" means a person :
- (i) visually handicapped;
 - (ii) hearing handicapped;
 - (iii) suffering from locomotor disability; or
 - (iv) suffering from mental retardation;
- (d) "hearing handicap" means deafness with hearing impairment of 70 decibels and above, in the better ear or total loss of hearing in both ears;
- (e) "locomotor disability" means a person's inability to execute distinctive activities associated with moving, both himself and objects, from place to place, and such inability resulting from affliction of either bones, joints, muscles or nerves;
- (f) "member" means a member appointed under sub-section (3) of section 3 and includes the Chairperson;
- (g) "Member-Secretary" means the Member-Secretary appointed under sub-section (1) of section 8;
- (h) "mental retardation" means a condition of arrested or incomplete development of mind of a person which is specially characterized by sub-normality of intelligence;
- (i) "notification" means a notification published in the Official Gazette;
- (j) "prescribed" means prescribed by regulations;
- (k) "recognised rehabilitation qualifications" means any of the qualifications included in the Schedule;
- (l) "Register" means the Central Rehabilitation Register maintained under sub-section (1) of section 23;
- (m) "regulations" means regulations made under this Act;
- (n) "rehabilitation professionals" means-
- (i) audiologists and speech therapists;
 - (ii) clinical psychologists;
 - (iii) hearing aid and ear mould technicians;
 - (iv) rehabilitation engineers and technicians;
 - (v) special teachers for educating and training the handicapped;
 - (vi) vocational counsellors, employment officers and placement officers dealing with handicapped;
 - (vii) multi-purpose rehabilitation therapists, technicians; or
 - (viii) such other category of professionals as the Central Government may, in consultation with the Council, notify from time to time;

- (o) "visually handicapped" means a person who suffers from any of the following conditions, namely :
- (i) total absence of sight;
 - (ii) visual acuity not exceeding 6/60 or 20/200 (snellen) in the better eye with the correcting lenses; or
 - (iii) limitation of the field of vision subtending an angle of degree or worse.

(2) Any reference in this Act to any enactment or any provision thereof shall, in relation to an area in which such enactment or such provision is not in force, be construed as a reference to the corresponding law or the relevant provision of the corresponding law, if any, in force in that area.

The Chapter II. Rehabilitation Council of India, contains Section 3 to Section 10 of the RCI Act. Here we are not presenting it as it pertains to organization and staff of the RCI.

CHAPTER III. FUNCTIONS OF THE COUNCIL

(1) The qualifications granted by any University or other institution in India which are included in the Schedule shall be recognized qualifications for rehabilitation professionals.

(2) Any University or other institution which grants qualification for the rehabilitation professionals not included in the Schedule may apply to the Central Government to have any such qualification recognized, and the Central Government, after consulting the Council may, by notification, amend the Schedule so as to include such qualification therein and any such notification may also direct that an entry shall be made in the last column of the Schedule against such qualification only when granted after a specified date.

12. The Council may enter into negotiations with the authority in any country outside India for settling of a scheme of reciprocity for the recognition of qualifications, and in pursuance of any such scheme, the Central Government may, by notification, amend the Schedule so as to include therein any qualification which the Council has decided should be recognized, and by such notification may also direct that an entry shall be made in the last column of the Schedule declaring that it shall be the recognized qualification only when granted after a specified date.

13. (1) Subject to the other provisions contained in this Act, any qualification included in the Schedule shall be sufficient qualification for enrolment on the Register.

(2) No person, other than the rehabilitation professional who possesses a recognized rehabilitation qualification and is enrolled on the Register,-

(a) shall hold office as rehabilitation professional or any such office (by whatever designation called) in Government or in any institution maintained by a local or other authority;

(b) shall practice as rehabilitation professional anywhere in India;

(c) shall be entitled to sign or authenticate any certificate required by any law to be signed or authenticated by a rehabilitation professional;

(d) shall be entitled to give any evidence in any court as an expert under section 45 of the Indian Evidence Act, 1872 on any matter relating to the handicapped:

Provided that if a person possesses the recognized rehabilitation professional qualifications on the date of commencement of this Act, he shall be deemed to be an enrolled rehabilitation professional for a period of six months from such commencement, and if he has made an application for enrolment on the Register within said period of six months, till such application is disposed of.

(3) Any person who acts in contravention of any provision of sub-section (2) shall be punished with imprisonment for a term which may extend to one year, or with fine which may extend to one thousand rupees, or with both.

14. Every University or institution in India which grants a recognized qualification shall furnish such information as the Council may, from time to time, require as to the courses of study and examinations to be undergone in order to obtain such qualification, as to the ages at which such courses of study and examinations are required to be undergone and such qualification is conferred and generally as to the requisites for obtaining such qualification.

15. (1) The Council shall appoint such number of Inspectors as it may deem requisite to inspect any University or institution where education for practicing as rehabilitation professionals is given or to attend any examination held by any University or institution for the purpose of recommending to the Central Government recognition of qualifications granted by that University or institution as recognized rehabilitation qualifications.

(2) The Inspectors appointed under sub-section (1) shall not interfere with the conduct of any training or examination but shall report to the Council on the adequacy of the standards of education including staff, equipment, accommodation, training and other facilities prescribed for giving such education or of the sufficiency of every examination which they attend.

(3) The council shall forward a copy of the report of the Inspector under sub-section (2) to the University or institution concerned and shall

also forward a copy, with the remarks of the University or the institution thereon, to the Central Government.

16. (1) The Council may appoint such number of Visitors as it may deem requisite to inspect any University or institution wherein education for rehabilitation professionals is given or attend any examination for the purpose of granting recognized rehabilitation qualifications.

(2) Any person, whether he is a member of the Council or not, may be appointed as a Visitor under sub-section (1) but a person who is appointed as an Inspector under sub-section (1) of section 15 for any inspection or examination shall not be appointed as a Visitor for the same inspection or examination.

(3) The Visitor shall not interfere with the conduct of any training or examination but shall report to the Chairperson on the adequacy of the standards of education including staff, equipment, accommodation, training and other facilities prescribed for giving education to the rehabilitation professionals or on sufficiency of every examination which they attend.

(4) The report of a Visitor shall be treated as confidential unless in any particular case the Chairperson otherwise, directs:

Provided that if the Central Government requires a copy of the report of a Visitor, the Council shall furnish the same.

17. (1) When upon report by the Inspector or the Visitor it appears to the Council-

(a) that the courses of study and examination to be undergone in or the proficiency required from candidates at any examination held by any University or institution, or

(b) that the staff, equipment, accommodation, training and other facilities for instruction and training provided in such University or institution,

do not conform to the standard prescribed by the Council, the Council shall make a representation to that effect to the Central Government.

(2) After considering such representation, the Central Government may send it to the University or institution with an intimation of the period within which the University or institution may submit its explanation to that Government.

(3) On the receipt of the explanation or where no explanation is submitted within the period fixed then, on the expiry of that period, the Central Government after making such further inquiry, if any, as it may think fit, may, by notification, direct that an entry shall be made in the Schedule against the said recognized rehabilitation qualification declaring

that it shall be the recognized rehabilitation qualification only when granted before a specified date or that the said recognized rehabilitation qualification if granted to students of a specified University or institution shall be recognized rehabilitation qualification only when granted before a specified date, or as the case may be, that the said recognized rehabilitation qualification shall be recognized rehabilitation qualification in relation to a specified University or institution only when granted after a specified date.

18. The Council may prescribe the minimum standards of education required for granting recognized rehabilitation qualification by Universities or institutions in India.

19. The Member-Secretary of the Council may, on receipt of an application made by any person in the prescribed manner enter his name in the Register provided that the Member-Secretary is satisfied that such person possesses the recognized rehabilitation qualification.

20. Subject to the conditions and restrictions laid down in this Act regarding engagement in the area of rehabilitation of the handicapped by persons possessing the recognized rehabilitation qualifications, every person whose name is for the time being borne on the Register shall be entitled to practice as a rehabilitation professional in any part of India and to recover in due course of law in respect of such practice any expenses, charges in respect of medicaments or other appliances or any fees to which he may be entitled.

21. (1) The Council may prescribe standards of professional conduct and etiquette and a code of ethics for rehabilitation professionals.

(2) Regulations made by the Council under sub-section (1) may specify which violations thereof shall constitute infamous conduct in any professional respect, that is to say, professional misconduct, and such provision shall have effect notwithstanding anything contained in any other law for the time being in force.

(3) The Council may order that the name of any person shall be removed from the Register where it is satisfied, after giving that person a reasonable opportunity of being heard, and after such further inquiry, if any, as it may deem fit to make,-

(i) that his name has been entered in the Register by error or on account of misrepresentation or suppression of a material fact;

(ii) that he has been convicted of any offence or has been guilty of any infamous conduct in any professional respect, or has violated the standards of professional conduct and etiquette or the code of ethics prescribed under sub-section (1) which, in the opinion of the Council, renders him unfit to be kept in the Register.

(4) An order under sub-section (3) may direct that any person whose name is ordered to be removed from the Register shall be ineligible for registration under this Act either permanently or for such period of years as may be specified.

22. (1) Where the name of any person has been removed from the Register on any ground other than that he is not possessed of the requisite rehabilitation qualifications, he may appeal, in the prescribed manner and subject to such conditions, including conditions as to the payment of a fee, as may be prescribed to the Central Government whose decision thereon shall be final.

(2) No appeal under sub-section (1) shall be admitted if it is preferred after the expiry of a period of thirty days from the date of the order under sub-section (3) of section 21:

Provided that an appeal may be admitted after the expiry of the said period of thirty days if the appellant satisfies the Central Government that he had sufficient cause for not preferring the appeal within the said period.

23. (1) It shall be the duty of the Member-Secretary to keep and maintain the Register in accordance with the provisions of this Act and any order made by the Council and from time to time to revise the Register and publish it in the Official Gazette.

(2) The Register shall be deemed to be a public document within the meaning of the Indian Evidence Act, 1872 and may be proved by a copy thereof.

24. (1) The Council shall furnish such reports, copies of its minutes, abstracts of its accounts, and other information to the Central Government as that Government may require.

(2) The Central Government may publish in such manner as it may think fit, any report, copy, abstract or other information furnished to it by the Council under this section or under section 16.

25. Notwithstanding anything contained in the Code of Criminal Procedure, 1973, no court shall take cognizance of an offence punishable under this Act except upon a complaint, in writing, made by any person authorized in this behalf by the Council.

26. No suit, prosecution or other legal proceeding shall lie against the Central Government, Council, Chairperson, members, Member-Secretary or any officer or other employee of the Council for anything which is in good faith done or intended to be done under this Act.

27. The Chairperson, members, Member-Secretary, officers and other employees of the Council shall, while acting or purporting to act in pursuance

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of the provisions of this Act or of any rule and regulation made there under, be deemed to be public servants within the meaning of section 21 of the Indian Penal Code.

28. The Central Government may, by notification, make rules in carry out the purposes of this Act.

29. The Council may with the previous sanction of the Central Government, make, by notification, regulations generally to carry out the purposes of this Act, and without prejudice to the generality of the foregoing power, such regulations may provide for-

- (a) the management of the property of the Council;
- (b) the maintenance and audit of the accounts of the Council;
- (c) the resignation of members of the Council;
- (d) the powers and duties of the Chairperson;
- (e) the rules of procedure in the transaction of business under sub-section (3) of section 4;
- (f) the function of the Executive Committee and other committees, constituted under section 7;
- (g) the powers and duties of the Member-Secretary under sub-section (1) of section 8;
- (h) the qualifications, appointment, powers and duties of, and procedure to be followed by, Inspectors and Visitors;
- (i) the courses and period of study or of training, to be undertaken, the subjects of examination and standards of proficiency therein to be obtained in any University or any institution for grant of recognized rehabilitation qualification;
- (j) the standards of staff, equipment, accommodation, training and other facilities for study or training of the rehabilitation professionals;
- (k) the conduct of examinations, qualifications of examiners, and the condition of the admission to such examinations;
- (l) the standards of professional conduct and etiquette and code of ethics to be observed by rehabilitation professionals under subsection (1) of section 21;
- (m) the particulars to be stated, and proof of qualifications to be given, in application for registration under this Act;
- (n) the manner in which and the conditions subject to which an appeal may be preferred under sub-section (1) of section 22;
- (o) the fees to be paid on applications and appeals under this Act;
- (p) any other matter which is to be, or may be, prescribed.

EDUCATION OF THE CHILDREN WITH DISABILITY IN RTE ACT, 2009

Right to Education Act 2009 is a legislative measure and act enacted by Parliament of India aimed to provide for free and compulsory education to all children of the age of six to fourteen years. It received the assent of the President on 26th August, 2009 and published in the Gazette of India on 27th August, 2009. Its enforcement and functioning rests with the Legislative department of the Ministry of Laws and Justice, Govt. of India.

As a written document, RTE Act 2009 is divided into seven chapters named as below.

Chapter I. Preliminary (providing legal meanings to the terms used in the act)

Chapter II. Right to Free and Compulsory Education

Chapter III. Duties of Appropriate Government, Local Authorities and Parents

Chapter IV. Responsibilities of Schools and Teachers

Chapter V. Curriculum and Completion of Elementary Education

Chapter VI. Protection of Rights of Children

Chapter VII. Miscellaneous

In the end a schedule has also been provided enlisting norms and standards for a school supposed to implement the RTI.

For a detailed description of the provisions of the act, readers may go through all the 13 pages of this written document available on internet at the Website of the Ministry of Law and Justice, Govt. of India or may get a printed copy from the publication department of Govt. of India. However, the main provisions lying in this act, particularly in reference to the education of the children with Disability may be outlined as below.

1. Right of child to free and compulsory education :

Every child of the age six to fourteen years shall have a right to free and compulsory education in a neighbourhood school till completion of elementary education.

Here it should also be clear that

- (i) no child shall be liable to pay any kind of fee or charges or expenses which may prevent him or her from pursuing and completing the elementary education.
- (ii) a child suffering from disability, as defined in clause (i) of section 2 of the Persons with Disabilities (Equal Opportunities, Protection and Full Participation) Act, 1996, shall have the right to pursue free

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and compulsory elementary education in accordance with the provisions of Chapter V of the said Act (The same as given to non-disabled peers).

2. Special provision for children not admitted to, or who have not completed elementary education : Where a child above six years of age has not been admitted in any school or though admitted, could not complete his or her elementary education, then, he or she shall be admitted in a class appropriate to his or her age.

Provided that where a child is directly admitted in a class appropriate to his or her age, then, he or she shall, in order to be at par with others, have a right to receive special training, in such manner, and within such time-limits, as may be prescribed.

Provided further that a child so admitted to elementary education shall be entitled to free education till completion of elementary education even after fourteen years.

3. Right of Transfer to other school :

- (i) Where in a school, there is no provision for completion of elementary education, a child shall have a right to seek transfer to any other school, excluding the school belonging to a specified category and an unaided school not receiving any kind of grants to meet its expenses from the appropriate Government and local authority.
- (ii) Where a child is required to move from one school to another either within a state or outside for any reason whatsoever, such child shall have the right to seek transfer to any other school excluding the school belonging to specific category or an unaided school.

4. Duty of Appropriate Government or Local Authority to establish a School : For carrying out the provisions of this act the appropriate Government and local authorities shall establish, within such area or limits of neighbourhood as may be prescribed a school where it is not so established within a period of three years from the commencement of this act.

5. Sharing of Financial and other responsibilities : The Central Government and the State Government shall have concurrent responsibility for providing funds for carrying out the provision of this act.

6. Duty of Parents and guardians : It shall be the duty of every parent or guardian to admit or cause to be admitted his or her child or ward, as the case may be, to an elementary education in the neighbourhood school.

7. Appropriate Government to provide for Pre-school education : With a view to prepare children above the age of three years for elementary education and to provide early childhood care and education for all children

until they complete the age of six years, the appropriate Government may make necessary arrangement for providing free pre-school education for such children.

8. Extent of school's responsibility for free and compulsory education : For the purpose of this act, a school

- (a) established, owned and controlled by the appropriate govt. or local authority shall provide free and compulsory elementary education to all children admitted therein.
- (b) receiving aid or grants to meet whole or parts of its expenses from the government or local authority shall provide free and compulsory elementary education to such proportion of children admitted therein as its annual recurring aid or grants so received bears to its annual recurring expenses, subject to minimum of twenty-five percent.
- (c) belonging to specific category (such as Kendriya Vidyalaya, Sanik School, Navodaya, or owned by minorities) or unaided shall admit in class I to the extent of atleast twenty-five percent of the strength of that class ; children belonging to weaker section and disadvantaged group (including disabled) in the neighbourhood and provide free and compulsory elementary education till completion.

Provided further that where any school govt., non-govt., aided or unaided imparts pre-school education, the provision of clauses (a) to (c) mentioned above shall apply to admission to such pre-school education.

9. No capitation fee and screening procedure for admission :

- (i) No school or person shall, while admitting a child, collect any capitation fee and subject the child or his or her parents or guardian to any screening procedure.
- (ii) Any school or person, if in contravention of the provisions of sub-section (1) —
 - (a) receives capitation fee, shall be punishable with fine which may extend to ten times the capitation fee charged.
 - (b) subjects a child to screening procedure, shall be punishable with fine which may extend to twenty-five thousand rupees for the first contravention and fifty thousand rupees for each subsequent contraventions.

10. Proof of age for Admission :

- (i) For the purposes of admission to elementary education the age of a child shall be determined on the basis of the birth certificate issued in accordance with the provisions of the Births, Deaths and Marriages

Registration Act, 1886 or on the basis of such other document, as may be prescribed.

(ii) No child shall be denied admission in a school for lack of age proof.

11. No denial of admission : A child shall be admitted in a school at the commencement of the academic year or within such extended period as may be prescribed.

Provided that no child shall be denied admission if such admission is sought subsequent to the extended period.

Provided further that any child admitted after the extended period shall complete his studies in such manner as may be prescribed by the appropriate Government.

12. Prohibition of holding back and expulsion : No child admitted in a school shall be held back in any class or expelled from school till the completion of elementary education.

13. Prohibition of physical punishment and mental harassment to child : No child shall be subjected to physical punishment or mental harassment. Person breaking this rule shall be liable to disciplinary action.

14. No school to be established without obtaining certificate of recognition : No school other than a school established owned or controlled by the appropriate Government or the local authority shall after the commencement of this act be established or function without obtaining a certificate of recognition from such authority by making an application in such form and manner, as may be prescribed. Provided that no such recognition shall be granted to a school unless it fulfils norms and standard specified for this purpose.

15. School Management Committee : A school (leaving the schools specified or unaided) shall constitute a School Management Committee consisting of the elected representatives of the local authority, parents or guardians of children admitted in the school and teachers.

16. School Development Plan : Every school committee shall prepare a school development plan, in such manner as may be prescribed. The plan so prepared will work as the basis for grants sanctioned by the appropriate Government or local bodies.

17. Qualifications for appointment and terms and conditions of service of teachers :

(i) Any person possessing such minimum qualification, as laid down by an academic authority ; authorized by the central government, by notification, shall be eligible for appointment as a teacher.

- (ii) The salary and allowance payable to, and terms and conditions of service of, teachers shall be such as may be prescribed.

18. Duties of teachers and redressal of their grievances :

- (i) A teacher in the school shall perform the following duties, namely :—
- (a) maintain regularity and punctuality in attending school.
 - (b) conduct and complete the curriculum in accordance with the provisions laid down in this act.
 - (c) complete entire curriculum within the specified time.
 - (d) assess the learning ability of each child and accordingly supplement additional instructions, if any, as required.
 - (e) hold regular meetings with parents and guardians and appraise them about the regularity in attendance, ability to learn, progress made in learning and any other relevant information about the child, and
 - (f) perform such other duties as may be prescribed.
- (ii) A teacher committing default in performance of duties shall be liable to disciplinary action under the service rules applicable to him or her.
- (iii) The grievance, if any, of the teacher shall be redressed in such manner as may be prescribed.

19. Pupil-Teacher Ratio : Within six months from the date of commencement of this act, the appropriate government and the local authority shall ensure that the pupil-teacher ratio as specified in the schedule (of this act) is maintained in each school.

20. Prohibition of deployment of teachers for non-educational purposes : No teacher shall not be deployed for any non-educational purpose other than the decennial population census, disaster relief duties or duties relating to elections to the local authority or the state legislatures or parliament, as the case may be.

21. Prohibition of private tuition by teacher : No teacher shall engage himself or herself in private tuition or private teaching activity.

22. Curriculum and Evaluation procedure : The curriculum and evaluation procedure for elementary education shall be laid down by an academic authority to be specified by the appropriate Government, by notification.

23. Monitoring of child's right to education : In this regard, the National Commission for Protection of Child Rights or the State Commission for Protection of Child Rights as the case may be, shall perform the following functions, namely —

- (a) examine and review the safeguards for rights provided by or under this Act and recommend measures for their effective implementation;
- (b) inquire into complaints relating to child's right to free and compulsory education; and
- (c) take necessary steps as provided under sections 15 and 24 of the said Commissions for Protection of Child Rights Act.

EDUCATION OF THE CHILDREN WITH DISABILITY IN NATIONAL POLICY FOR PERSONS WITH DISABILITIES, 2006

A National Policy For Persons with Disabilities was brought out in the year 2006 as to fulfill an essential demand or need of having a comprehensive document or policy statement for the care, education and well being of the persons with disabilities on a national basis. The official document on National Policy for Persons with Disabilities was released on 10th February, 2006 by the Minister of Social Justice and Empowerment, Government of India, New Delhi.

The Document is mainly divided into four major sections.

- A. Introduction
- B. National Policy Statement
- C. Principal Areas of Intervention
- D. Responsibility for Implementation

In introduction, the present available measures and efforts made for the care, education and wellbeing of the disabled have been highlighted in brief and the need of having a national policy for disabled has been emphasized. The second section entitled as 'National Policy Statement' provides a mention and essential description of the areas that have been targeted by the "National Policy for Persons with Disabilities" by concluding that the focus of the policy shall be on the following.

- I. Prevention of Disabilities
- II. Rehabilitation Measures – Physical rehabilitation, educational rehabilitation and economic rehabilitation
- III. Women with Disabilities
- IV. Children with Disabilities
- V. Barrier-free environment
- VI. Issue of Disability Certificates
- VII. Social Security
- VIII. Promotion of Non-Government Organizations (NGOs)

- IX. Collection of Regular Information on Persons with Disabilities
- X. Research
- XI. Sports, Recreation and Cultural life
- XII. Amendments to existing Acts dealing with the Persons with Disabilities

The third section entitled as 'Principal Areas of Intervention' provides the action plan to be carried out for the care, education and well-being of the persons with disabilities (including children) under the following heads.

- I. Prevention, Early Detection and Intervention
- II. Programmes of Rehabilitation
- III. Human Resource Development
- IV. Education of Persons with Disabilities
- V. Employment
- VI. Barrier-Free environment
- VII. Social Protection
- VIII. Research
- IX. Sports, Recreation and Cultural activities

The fourth section entitled as 'Responsibility for Implementation' discusses the measures taken for looking after the progress and getting feedback about matters relating to the implementation of the policy.

As far as the present text is concerned we will be focusing our attention for looking into what has been laid down in the National Policy for persons with disabilities, 2006 about the education of the disabled. Let us thus reproduce what has been prescribed in the policy document about the education of the disabled.

Education of Persons with Disabilities

It will be ensured that every child with disability has access to appropriate pre-school, primary and secondary level education by 2020. Special care will be taken to -

- (i) Make schools (building, approaches, toilets, playgrounds, laboratories, libraries etc.) barrier free and accessible for all disability.
- (ii) Medium and method of teaching will be suitably adapted to the requirements of most disability conditions.
- (iii) Technical/supplementary/specialized system of teaching/learning will be made available within the school or at a common center easily accessible to a cluster of schools.

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- (iv) Teaching/learning tools and aids such as educational toys, Braille/talking books, appropriate software etc. will be made available. Incentives will be given to expand facilities for setting up of general libraries, e-libraries, Braille-libraries and talking books libraries, resource rooms etc.
- (v) National Open School and distance learning programmes will be popularized and extended to other parts in the country.
- (vi) Sign language, Alternative and Augmentative Communications (AAC) and other modes as a viable medium in inter personal communication will be recognized, standardized and popularized.
- (vii) Schools will be located within easy traveling distance. Alternatively, viable travel arrangements will be made with the assistance of the community, State and NGOs.
- (viii) Parent-Teacher counseling and grievance redressal system will be set up in the schools.
- (ix) There will be separate mechanism to review annually the intake and retention of the girl child with disability at primary, secondary and higher levels of education.
- (x) Many children with disabilities, who cannot join inclusive education system, would continue to get educational services from special schools. Special schools shall be appropriately re-modeled and re-oriented based on technological development. These schools will also help prepare children with disabilities to join mainstream inclusive education.
- (xi) In some cases due to the nature of disability (its type and degree), personal circumstances and preferences, home-based education will be provided.
- (xii) Course curriculum and evaluation system for children with various disabilities shall be developed keeping in view their capabilities. Examination system will be modified to make it disabled friendly by exemptions such as learning mathematics, learning only one language, etc. Further, facilities like extra time, use of calculators, use of Clarke's tables, scribes etc would be provided based on the requirement.
- (xiii) Model Schools of Inclusive Education will be set up in each State/ U.T to promote education of persons with disabilities.
- (xiv) In the era of knowledge society, computers play very important role. Efforts will be made so that every child with disability gets suitably exposed to the use of computers.

- (307) Children with disabilities upto the age of 6 years will be identified and necessary interventions made so that they are capable of getting regular education.
- (308) Educational facilities will be provided in government educational centers for mentally ill persons.
- (309) Many schools for saving enrollment of students in account of their disability has to put it awareness about the capabilities of disabled persons. Programmes will be taken for sensitization of teachers, principals and other staff members in all schools.
- (310) Special schools presently being supported by the Ministry of Social Justice & Empowerment will progressively become resource centers for inclusion education. Ministry of Human Resource Development shall open new special schools depending upon the requirement.
- (311) Adult learning/ leisure centers for adults with severe learning difficulties will be promoted.
- (312) There present reservation for persons with disabilities in admission to higher educational institutions shall be enforced. Universities, colleges and professional institutions will be provided financial support to establish Disability Center to take care of educational needs of students with disabilities. They will also be encouraged to make classrooms, hostel, cafeteria and other facilities in the campus accessible to students with disabilities.
- (313) Include a module in induction and in-service training programmes of teachers on issues relating to management of children with disabilities.

The Ministry of Human Resource Development will be the nodal Ministry to coordinate all matters relating to the education of persons with disabilities.

STUDY QUESTIONS

A. Essay Type Questions

1. Discuss any one of the following in laying down measures and provisions for the education of the children with disabilities.
(a) POA, (1952), PWD Act, (1995), (c) RCI Act (1952), (d) National Policy For Persons with Disabilities (2006).
2. What has been recommended in the National Educational policies, 1968 and 1986 about the education of the disabled?

3. What is PWD Act, 1995 ? What has been prescribed in this act about (i) Prevention and early detection of disabilities (ii) Education of the disabled ?
4. What is RCI Act, 1992 ? Give an account of the function of the Rehabilitation Council of India in the interest and welfare of the disabled.
5. What is RTE Act, 2009 ? Mention what has been provided in the various clauses of this act for the education and welfare of the children including disabled.
6. What is National Policy For Persons with Disabilities, 2006 ? Mention what has been laid down in this policy for the education of the disabled.

B. Short Answer Type Questions

1. Mention what has been recommended in NPE, 1968 for the education of the disabled.
2. Mention three main things emphasized in NPE, 1986 about the education of the disabled/handicapped.
3. Mention any three important things emphasized in POA, 1992 about the education of the disabled/handicapped.
4. What is the responsibility of appropriate government/local authority towards the education of the disabled laid down in PWD Act, 1995 ?
5. What are the two main functions of Rehabilitation Council of India ?
6. What was the objective of bringing out RCI Act, 1992 ?
7. What does RTE Act, 2009 say about Right of child to free and compulsory education/Right of transfer to other school/Duty of parents and guardians.
8. Mention three important things laid down for the education of persons with Disabilities in the National Policy for Persons with Disabilities, 2006.

5

Role of Organizations for Education of Children with Disabilities

Chapter Outline

- Introduction
 - Rehabilitation Council of India (RCI)
 - National Institutes of Different Disabilities
 - Composite Regional Centers (CRCs)
 - District Disability Rehabilitation Centers (DDRCs)
 - Voluntary Non-Government Organizations (NGOs)
 - Study Questions
-

Introduction

As a policy, matter as well as concern for all its citizens each country has to take care of the necessary welfare measures to all of them. In this respect, the persons with Disabilities are also recognized as valuable human resources for the country and the necessary attempts for their adjustment, education and well being are made in various modes, ways and means. We have discussed such ways and means in the previous chapter through the views expressed in National policies of education ; necessary legislative measures (like PWD Act 1995, RCI Act 1992 and RTE Act, 2009) ; and the National policy on Disability (2006) over adjustment, education and well-being of the disabled.

In addition to these constitutional provisions (in the form of Policies and Acts) there has been a continuous striving on the part of Government and non-Government organisations to meet the special needs of the disabled of various nature and kinds. Here in this chapter, we would concentrate our discussion on the role of such various organisations for the care, education and welfare of the disabled.

Rehabilitation Council of India (RCI)

(A Statutory Body for the Empowerment of Persons with Disabilities)

Rehabilitation Council of India (RCI) was initially set up as a registered society in 1986 in pursuance of the National Policy on Education (1986). However, it was soon realized that a society could not ensure proper standardization and acceptance of the standards by other organizations working in the field of education and rehabilitation of the disabled. As a consequence, Government of India brought out a legislative provision duly passed by the Parliament on September, 1992 in the form of an Act, known as the RCI Act, 1992 for the establishment and functioning of a statutory body named as "Rehabilitation Council of India (RCI)." Accordingly the present Rehabilitation Council of India, officially came into existence as a statutory body on 22nd June, 1993.

The RCI Act was amended by the Parliament in 2000 to make it more functional and comprehensive. The Act has provided arms to RCI (i) to regulate and monitor services given to persons with disability. (ii) to standardize syllabi and (iii) to maintain a Central Rehabilitation Register of all qualified professionals and personnel working in the field of Rehabilitation and Special Education. The Act also prescribes punitive action against unqualified persons delivering services to persons with disability.

**Organizational Structure of the RCI
(Including the Amendment, 2000)**

Chairman and Members of the Council

As for mandate given by RCI Act, the council should have the following members, namely :-

- (a) a Chairperson from amongst the persons having experience in administration with professional qualification in the field of rehabilitation, disabilities and special education, to be appointed by the Central Government ;
- (b) such number of members not exceeding seven, as may be nominated by the Central Government, to represent the Ministries of the Central Government dealing with matters relating to persons with disabilities ;
- (c) one member to be appointed by the Central Government to represent the University Grants Commission ;
- (d) one member to be appointed by the Central Government to represent the Directorate General of Indian Council of Medical Research ;

- (e) two members to be appointed by the Central Government to represent the Ministry or department of the States or the union territories dealing with Social Welfare by rotation in alphabetical order ;
- (f) such number of members not exceeding six as may be appointed by the Central Government from amongst the rehabilitation professionals working in voluntary organizations ;
- (g) such number of members not exceeding four as may be appointed by the Central Government from amongst the medical practitioners enrolled under the Indian Medical Council Act, 1956 and engaged in rehabilitation of the handicapped ;
- (h) three Members of Parliament of whom two shall be elected by the House of the People and one by the Council of States ;
- (i) such number of members not exceeding three as may be nominated by the Central Government from amongst the social workers who are actively engaged in assisting the disabled ;
- (j) the Member-Secretary, ex officio (Appointed by Central Government).

(The council shall meet at least once in each year at such time and place as may be fixed by the council and shall observe such rules of procedure in the transaction of business at a meeting as may be prescribed).

The Executive Committee (for day to day functioning of the council)

1. The Council shall constitute from amongst its members an Executive Committee and such other committees for general or special purpose as the Council deems necessary to carry out the purpose of this Act.
2. The Executive Committee shall consist of the Chairperson who shall be member ex officio and not less than seven and not more than ten members who shall be nominated by the Council from amongst its members.
3. The Chairperson shall be the Chairperson of the Executive Committee.
4. In addition to the powers and duties conferred and imposed upon it by this Act, the Executive Committee or any other committee shall exercise and discharge such powers and duties as the Council may confer or impose upon it by any regulations which may be made in this behalf.

The Objectives and Functions Served by RCI

1. The first important objective served by RCI is concerned with the Regulation of training programs and courses targeted at disabled, disadvantaged and special education requirement.
For the realization of this objective, RCI
 - (i) develops syllabi, and courses for the institutions running programs for the training of personnels/teachers associated with the education, adjustment and welfare of the disabled.
 - (ii) tries to maintain quality and standard in these institutions through prescribing scheme of evaluation and follow up and arranging for the inspection of their functioning.
2. The second important objective served by RCI is to maintain the Central Rehabilitation Register which mainly documents details of all qualified professionals who operate and deliver training and educational programs for the disabled or work as a rehabilitational professionals.
For this realization of this objective, RCI
 - (i) Invites applications from the individuals who are interested in getting RCI's accreditation for being enrolled as trainer, teacher or rehabilitation professional. The persons who can apply for RCI accreditation in this concern are specified as below.
 - Prosthetists and Orthotists
 - Audiologists and Speech Therapists
 - Clinical Psychologists
 - Rehabilitation Counsellors, Administrators
 - Rehabilitation Workshop Managers
 - Rehabilitation Psychologists
 - Rehabilitation Social Workers
 - Rehabilitation Practitioners in Mental Retardation
 - Speech Pathologists
 - Special Teachers for Educating and Training the Handicapped
 - Vocational Counsellors, Employment Officers and Placement Officers
 - Multi-purpose Rehabilitation Therapists, Technicians
 - Orientation and Mobility Specialists
 - Hearing and Ear Mould Technicians
 - Rehabilitation Engineers and Technicians

- (ii) A close scrutiny of the information and documents submitted by the candidates is then carried out at the hands of RCI in the light of the prescribed qualifications and other requirements as standardized by it for the purpose. The professionals that fit into the standard are then enrolled in the national register of qualified rehabilitation and training professional for being allowed to give their services for the education, training and rehabilitation of the disabled.
3. The third objective served by RCI is to make efforts for promoting research in rehabilitation and special education by acting as a nodal agency for providing grants, advice and assistance to persons and institutions engaged in this venture.

NATIONAL INSTITUTES OF DIFFERENT DISABILITIES

There are Seven National Institutes under Ministry of Social Justice and Empowerment, Govt. of India functioning in our country to cater the various types of educational, physical and economic needs of persons suffering from one or the other types of disabilities. In the pages to follow here we will try to provide a brief introduction of their nature, purposes and functions.

A. Ali Yavar Jung National Institute for the Hearing Handicapped (AYJNIHH), Mumbai

The Ali Yavar Jung National Institute for the Hearing Handicapped was established on 9th August, 1983 under the Societies Registration Act, (1860). The Institute has been established for manpower development, research, clinical and therapeutic services, outreach and extension services for the persons with hearing disabilities.

Functions and Objectives served by the Institute

- Development of manpower by undertaking or sponsoring the training of trainees and teachers, employment officers, psychologists, vocational counselors and such other personnel as may be deemed necessary by the Institute for promoting the education, training or rehabilitation of the hearing handicapped.
- Sponsoring, coordinating and subsidizing research work into all aspects of the education and rehabilitation of the hearing handicapped.
- Developing model services for rehabilitation of the hearing handicapped.

Activities undertaken in the Institute

- Manpower Development
- Clinical Services
- Research and Publications
- Extra Mural Research
- Educational Services
- Outreach and Extension Services
- Socio Economic Rehabilitation
- Information and Documentation
- Disability Information Line
- Material Development and Distribution

B. National Institute of Visually Handicapped (NIVH), Dehradun

The National Centre for the Blind was upgraded as National Institute for Visually Handicapped in July, 1979. It was registered as an autonomous Institution under the Societies Registration Act (1860) in October, 1982.

Objectives of the Institute

- To conduct sponsor and coordinate all aspects of education for rehabilitation of persons with visual disabilities.
- To coordinate all types of research work in these areas.
- To set the direction and working as model for the education, research and rehabilitation of visually handicapped.

Activities of the Institute

- Conducting work and activities related to education, vocational training, training of teachers and other personnel.
- Working towards research and development of service modules.
- Producing Braille books, aids and appliances for the visually handicapped.
- Providing assistance in running a composite regional center (CRC) for persons with disabilities at Sundermargar in Himachal Pradesh.
- Providing help, assistance, and guidance for the institutes/schools engaged in the education, training and rehabilitation of the visually handicapped.

C. National Institute for Orthopaedically Handicapped (NIOH), Kolkata

National Institute for the Orthopaedically Handicapped is an apex organization in the area of locomotor disability which came into the service since 1978 as an autonomous body under the ministry of Social Justice and Empowerment, Government of India. It is located in the city Kolkata and expanding its services whole countrywide.

Objectives served by the Institution

- to provide services to
- (i) To develop Human Resource (manpower) for providing services to the Orthopaedically Handicapped population, namely training of Physiotherapists, Occupational Therapists, Orthotists and Prosthetists, Employment and Placement Officers and Vocational Counsellor etc.
 - (ii) To conduct and sponsor research in all aspects related to the rehabilitation of the Orthopaedically handicapped.
 - (iii) To provide services in the area of rehabilitation, restorative surgery, aids and appliances and vocational training to the persons with disability.
 - (iv) To standardize aids and appliances and to promote their manufacturing and distribution.
 - (v) To provide consultancy to the State Government and voluntary agencies.
 - (vi) To serve as an apex documentation and information centre in the area of disability and rehabilitation.
 - (vii) To develop model services in the areas of restorative surgery, aids and appliances, vocational training etc. for the orthopaedically handicapped population.

Daily Services available in the Institute

Two types of services are available in the institute as a matter of its day to day functioning for the orthopaedically handicapped population, namely, clinical, and Rehabilitation Services.

(a) Clinical Services : The comprehensive clinical services to the orthopaedically handicapped are available in Out Patient Department (OPD) of Institute. A detailed assessment of individual is done OPD by a team consisting of Psychiatrist/Orthopaedic Surgeon, Physiotherapist, Occupational

Therapist, Social Worker, Vocational Counsellor and Prosthetist/Orthotist etc. outlining the Short and Long Term rehabilitation plan.

(b) **Rehabilitation Services** : The patients/cases referred from clinical service can avail the following types of follow-up and rehabilitation services.

1. Disability Evaluation and Assessment : A team of experts consisting of Psychiatrist/Orthopaedic Surgeon, Physiotherapist, Occupational therapists, Prosthetist cum Orthotist, Social Worker and Vocational Counselor etc. work together in evaluation and rehabilitation planning of individual. Specialized rehabilitation services are provided with the help of different departments subsequently.

2. Physiotherapy Services : Physiotherapy services are provided to the indoor, outdoor patients and to disabled attending outreach service camps. The teaching, training and research were also carried out along with the services to the patients.

3. Occupational Therapy Services : The patients are treated by means of this modality of therapy, where occupational activities were especially designed with the objectives to restore pre-disability functional status of the individual. The teaching/training and research in occupational therapy are carried out along with services at institute and in camps.

4. Prosthetic and Orthotic Services : The rehabilitation assistive aids/appliances are planned, designed, fabricated and modified and fitted to disabled taking into consideration of individual's requirement, at institute and outreach camps. Research, teaching/training and outreach service programs are also the part of aid services.

5. Socio-Economic Services :

- (i) For self-reliance and economic empowerment, to the disabled, facilitation, counseling and guidance services are provided. The objective is to promote social acceptance/integration and mainstreaming of persons with disability. Services include individual, family and group counseling besides technical consistency to NGOs.
- (ii) Vocational training, self-employment guidance and facilitation services are provided. Institute, being a nodal agency for National Handicapped Finance Development Corporation, assists disabled in development of entrepreneurship.
- (iii) Through 'Placement Cell' under department, employment registrations were also done to coordinate between individual and employer/employment agencies.

6. Indoor Medical rehabilitation Services : For providing indoor medical services, there are beds in the wards. Out of them, some beds are earmarked for corrective and reconstructive surgical intervention, while others for conservative management and ADL training.

7. Diagnostic Services : The facilities of pathological, radiological and electro diagnostic investigations provided to patients both at indoor and outdoor.

8. Facilitation Services : The information on facilities available for disabled, Schemes and programs of Govt./NGO, Physical Medicine and Rehabilitation, Orthopaedic surgery, Physiotherapy, Occupational therapy, Prosthetic and Orthotics, Socio-Economic Rehabilitation related literature etc. are made available. The services of library are used by the students, faculty, staff as well as by outside professionals working in the field of disability rehabilitation. The information and guidance are also provided through postal services.

Outreach Services

To reach the un-reached persons with disability, composite rehabilitation camps are organized. Besides providing aids and appliances, these camps are also used for community awareness on disability identification, prevention and sensitization on schemes/programs for persons with disability. Out reach camps are also used for the training to students and to develop local manpower.

D. National Institute of Mentally Handicapped (NIMH), Secundrabad

The Institute was registered in the year 1984 under the Societies Registration Act, (1860) as an autonomous body under the administrative control of the Ministry of Social Justice and Empowerment. The Institute has been established with the objective to prepare human resources equipped to deliver services through quality models of rehabilitation, based on life cycle needs.

Functions and Objectives Served by the Institute

- To develop models of care for the mentally handicapped being employed in the country.
- To conduct research in the area of mental handicap as well as sponsor, coordinate and guide the research work done by other institutions in this area.

CREATING AN INCLUSIVE SCHOOL

- To work for the development and promotion of human resources through training of trainees and teachers, other personnel for working with mentally handicapped in their care, adjustment, education and rehabilitation.
- To adopt ways and means for the social and vocational rehabilitation of the mentally handicapped.

Services provided in the Institute

NIMH conducts activities-educational, training, guidance and counselling, research, rehabilitation, organisations of workshops and seminars etc. for the realization of the above said objectives. In addition following activities are also conducted on day to day basis for the benefit of the mentally disabled population.

1. Special education services
2. Psychological services
3. Medical services
4. Therapeutic services – Physiotherapy occupational therapy and Speech therapy
5. Early Intervention services for children below 3 years
6. Vocational training and Rehabilitation for adults above 18 years
7. Follow up services in the form of behaviour modification, educational guidance and counselling, speech therapy/audiology, occupational physiotherapy, medical assistance.
8. Referral services in the form of (i) referring to collaborating institutions for further examinations and (ii) educational placements.
9. Biochemistry services in the form of identifying metabolic and biochemical disorder.
10. Electroencephalogram (EEG) for the diagnosis of epilepsies and related brain disorders.
11. Nutritional counselling in the form of nutritional advice for undernourished.
12. Hydrotherapy for the treatment of various physical problems.
13. Vocational training for individuals with mental retardation (above 18 years) in the form of
 - (a) Generic skill training
 - (b) Specific skill training
 - (c) Job placement

14. Educational training programs for global development (classes ranging from Early Childhood Special Education (ECSE) to pre-vocational depending upon the ability levels of children from 3 yrs. to 18 yrs. in the form of training in
 - (a) Personal (b) Social (c) Academic
 - (d) Occupational and (e) Recreational skills
15. Home based service in the form of the rehabilitation of individuals with severe and profound mental retardation.
16. Accommodation for the family from outstation for providing training to the parents to handle their children.
17. Temporary relief to the parents in case of exigencies (Round the clock service) in the form of supervision of children by special teacher and caretakers.
18. Resource Room for helping individuals with sensory impairments in the form of sensory integration using adapted materials and methods.
19. Resource Room for helping individuals with profound mental retardation for the purpose of their rehabilitation.
20. Resource Room for helping individuals with Mild retardation and slow learners in the form of coaching for NIOS examinations.
21. Resource Room for helping individuals with Autism in the form of individualized educational programming.

E. National Institute for Empowerment of Persons with Multiple Disabilities (NIEPMD), Chennai

Institute for empowerment of persons with Multiple Disabilities (NIEPMD) is functioning from July, 2005 in Chennai (Tamil Nadu). Under Department of Disability Affairs, Ministry of Social Justice and Empowerment, Government of India. It serves as a national resource center for empowerment of persons with Multiple Disabilities such as those with two or more disabilities in a person. The disabilities found in various combinations among the persons getting benefitted from the services of this institution may include the disorders and impairments like below.

Low vision, Blindness, locomotor disability, hearing impairment, mental retardation, mental illness, leprosy cured persons, autism, cerebral palsy, learning disabilities etc.

Objectives served by the Institution

- To undertake development of human resources for management training rehabilitation, education, employment and development of persons with Multiple Disabilities.
- To promote and conduct research in all areas relating to Multiple Disabilities.
- To develop Transdisciplinary models and strategies for social rehabilitation and to meet the needs of diverse groups of persons with Multiple Disabilities.
- To provide guidance and services to the CRC, Kozhikode, Kerala.
- To undertake services and out reach programs for the persons with Multiple Disabilities.
- To promote quality of life for persons with Multiple Disabilities through equal participation of clients, families, professionals and community agencies.

Vision of the Institution

The Persons with Multiple Disabilities have equal rights to lead a better quality of life. This may be enabled with committed professionalism, accessible environment, equal opportunities, positive attitudes and appropriate, affordable, acceptable and available technological interventions.

Mission of the Institution

To provide need based comprehensive rehabilitation through team approach facilitating inclusion, ensuring empowerment of persons with Multiple Disabilities and their families and by substantiating field based research and development of human resources.

Services Provided in the Institution

- Rehabilitation Medicine
- Physical therapy
- Occupational therapy
- Sensory Integration
- Early Intervention Services
- Prosthetics and Orthotics

**F. Pandit Deen Dayal Upadhyaya Institute
for the Physically Handicapped (IPH), New Delhi**

Pt. Deendayal Upadhyaya Institute for the Physically Handicapped is an autonomous organization under the administrative and financial control

of Ministry of Social Justice and Empowerment, Government of India. The Institute for the Physically Handicapped came into being when the erstwhile Jawahar Lal Nehru Institute of Physical Medicine and Rehabilitation and other allied institution run by the council for the Aid of crippled and handicapped were taken over by the Government of India on 22nd May 1975 and converted into an autonomous body in the year 1976. It was renamed after Pt. Deendayal Upadhyaya in the year 2002.

Objectives of the Institution

- To develop trained manpower for rehabilitation of persons with orthopaedically disabilities.
- To promote and conduct research in all areas relating to orthopaedical impairments.
- To provide outreach services to the persons with orthopaedical disability.
- To provide education, training, work adjustment and other rehabilitation services to the orthopaedically disabled.

Activities undertaken by the Institution

- Training of personnel associated with the education training, rehabilitation of the orthopaedically impaired including physiotherapists, educationists and occupational therapists.
- Providing education, training, work-adjustment and such other rehabilitative services as needed on the part of orthopaedically impaired persons of the society.
- Providing facilities for the manufacture and distribution of such aids and appliances as are needed for education training and rehabilitation of the orthopaedically handicapped.
- To help and guide the District Disability Rehabilitation Centers (DDRCs) including the use of its sophisticated, Prosthetic, Orthotic and Rehabilitation aids and appliances on their parts.
- To organise out reach comprehensive rehabilitation camps in collaboration with National Institutes, DDRCs, and reputed Non-Government Organisations.
- Special education
- Psychological Assessments and Interventions
- Speech, Hearing and Communication

- Vocational training
- Vocational Guidance and Counseling
- Deaf blind
- Community based Rehabilitation
- Special Clinics (Psychiatric, Neurology and Ophthalmology)

Family Cottage Services

- To obviate the need for every day commutation by persons with multiple disabilities
- To encourage multiply disabled persons from all over the country to avail the services.
- To train the clients and educate the parents in a home like atmosphere.

Family cottages are provided to families of clients from distant places for not more than one week.

G. National Institute for Rehabilitation, Training and Research (NIRTAR), Cuttack

NIRTAR, was originally, started as an adjunct Unit of ALIMCO (Artificial Limbs Manufacturing Corporation of India), Kanpur. Later on it was registered in 1984 under the Societies Registration Act, (1860) and developed into National Institute for the Rehabilitation, Training and Research meant for the empowerment of the persons with disabilities.

Objectives of the Institution

- Development of human resources for the rehabilitation training and research area, particularly related to orthopaedically impaired.
- Implementation of service delivery programs meant for the physically disabled.
- Promoting and conduct research in the areas related to education, training and rehabilitation of orthopaedically handicapped.

Activities undertaken by the Institute

- Undertaking, sponsoring and coordinating education and training for rehabilitation personnel.
- Conducting research on bio-medical engineering and surgical or medical subjects for orthopaedically handicapped.
- Producing and distributing aids and appliances needed for the use of disabled.

- Developing models of service delivery programs for the rehabilitation of disabled.
- Undertaking vocational training, placement and rehabilitation of the physically handicapped.

COMPOSITE REGIONAL CENTERS (CRCs)

The establishment of composite Regional Centers falls in the line of well thought schemes for taking initiatives with regard to the redressal of Disability in India on the part of the Ministry of Social Justice and Empowerment. It is primarily aimed as a part of an overall strategy (i) to reach out to the persons with disabilities in the country and (ii) to facilitate the creation of the required infrastructure and capacity building at center, state, district and local levels aimed at generation of awareness, training of rehabilitation professionals, service delivery etc. to all types of persons with disabilities.

At present Eight Composite Regional Centers for the Persons with Disabilities are working in the country under the Ministry of Social Justice and Empowerment, Govt. of India at different Regions and places specified below.

1. Srinagar in Jammu and Kashmir
2. Sundernagar in Himachal Pradesh
3. Lucknow in Uttar Pradesh
4. Bhopal in Madhya Pradesh
5. Guwahti in Assam
6. Patna in Bihar
7. Ahmedabad in Gujarat
8. Kozhikode in Kerala

Objectives laid down by MSJE for the functioning of CRCs in their Region

- To serve as Resource Center for rehabilitation and special education of persons with disabilities.
- To undertake human resource development by training rehabilitation professionals, village level workers, multi-rehabilitation workers and other functionaries in Government and non-Government sector, required for providing service to persons with disabilities.

CREATING AN INCLUSIVE SCHOOL

- To undertake public education programs for creation of awareness in the parents and the community towards the needs problems and welfare of the disabled.
- To undertake designing, fabrication and fitment of aids and appliances meant for the disabled.
- To undertake services of education and skill development leading to enhancement of opportunities for employment, rehabilitation, mobility, communication, recreation, and integration in society.
- To undertake research and development with specific reference to needs of diverse groups of people with disability, keeping in view the nature and severity of disability in the region.
- To develop strategies for delivery of rehabilitation services by encouraging and supporting voluntary organizations, parent groups and self-help groups.
- To establish linkage with existing medical, educational and employment services, following the principles of community based rehabilitation and other extension services in the rural areas.

The strength of the staff essential for running a CRC

S. No.	Name of Post	Name of Staff Appointed again the Post
1.	Director	One
2.	Assistant Professor (Physical Medicine and Rehabilitation Expert)	One
3.	Assistant Professor (Speech Pathology)	One
4.	Assistant Professor (Clinical Psychology)	One
5.	Assistant Professor (Special Education)	One
6.	Lecturer (Physiotherapy)	One
7.	Lecture (Occupational Therapy)	One
8.	Administrative officer	One
9.	Rehabilitation officer (Social work and Placement)	One

Role of Organizations for Education of Children with Disabilities 113

10.	Prosthetist and Orthotist	One
11.	Accountant	One
12.	Special Educators/orientation Mobility Instructor	Two
13.	Vocational Instructors	One
14.	Assistant (office)	One
15.	Clinical Assistants	Two
16.	Workshop Supervisor-Cum Store Keeper	One
17.	Clerk	One
Total Posts :		Nineteen

Regarding the overall control, policy decisions and financial matters all these Eight CRCs are directed through the concerned authorities of Ministry of Social Justice and Empowerment, Government of India. However, for monitoring their functioning and providing them needed assistance, guidance and leadership in achieving their objectives and missions the task has been assigned by MSJE to either a "National Institute for the empowerment of Disabilities (operating in the region)-or the Secretary of the Ministry of Social Welfare of the respective state (in which the CRC is functioning).

District Disability Rehabilitation Centers (DDRCs)

Initially the Ministry of Social Justice and Empowerment, Government of India established District Rehabilitation Centers (DDRCs) during the period 1985-1990 as an outreach activity taken on its behalf for (i) providing comprehensive services to the persons with Disabilities at the grass root level and (ii) facilitating creation of the infrastructure and capacity building at the district level for awareness generation, rehabilitation and training of rehabilitation professionals.

Later on after having a legislative measure in the name of Persons with Disabilities (Educational opportunities, protection of Rights and Full Participation) Act, 1995. Ministry of Social Justice and Empowerment expanded and strengthened its so called outreach activity in the form of well planned scheme for the proper implementation of the Act. Consequently MSJE with the active support of the State Governments started sanctioning of the establishment of District Disability Rehabilitation Centers in all the

unserved districts of the country aimed to provide comprehensive services to the persons with disability in all its needed ways.

Establishment of a DDRC in a State

A. Funding by the Center

According to the Scheme Implementation of the PWD (Persons With Disability) Act-2005", the establishment of a DDRC is a Joint Venture of the Central and State Government. The Central assistance is provided to the State (as king for the establishment of a DDRC in the State. On the pattern as specified in the PWD Act.

DDRCs are presently funded under the "Scheme for the implementation of Persons with Disabilities (Equal Opportunities, Protection of Rights and Full participation) Act 1995" (SIPDA) for the first 3 years for all States excepts in case of North Eastern States, J&K and the UTs of A&N Islands, lakshadweep, Puducherry, Dadra and Nagar Haveli and daman and Diu where it is funded for 5 years. Thereafter, DDRCs receive funds under another Scheme namely "Deendayal Disabled Rehabilitation Scheme (DDRS).

B. Role of State Government

State Governments are expected to play a more pro-active role in the establishment and effective functioning of the DDRCs in their states by getting involved in the activities like below.

1. Formation of the District Management Team (DMT): The DMT under the Chairmanship of District Collector may be formed which should comprise of officials from Social Welfare/Disabled Welfare, Health, Panchayati Raj, Women and Child Welfare Departments and any other experts which District Collector feels to associate. Each DDRC is to be run under a District Management Team headed by the District Collector and also to include nodal officer from implementing agency and representative from reputed NGOs/public representatives for better coordination and monitoring. This team will also be the custodian of the assets of the center. A nodal officer in the capacity of the District Disability Rehabilitation officer be identified among the district officials included in the DMT to monitor and coordinate the activities of DDRC.

2. Identification of suitable Implementing Agency by DMT for running DDRC: The implementing agency should preferably be a Red Cross Society or any such autonomous/semi-autonomous bodies of State Govt. or a reputed NGO with a good track record who should be capable of managing the DDRC right from its inception.

The functional District Red Cross Societies/registered agencies of State Health Department should be given priority over other NGOs. The DMT through local publicity could call for proposals from the interested registered organizations and then identify the most appropriate among them.

3. Accommodation for DDRC : The District authorities should identify and allocate as suitable rent-free accommodation for setting up of DDRC. The building should preferably barrier-free and easily approachable by the disabled in addition to having electricity and water facility. Minimum space required is 150 sqm approx.

4. Identification of Staff for DDRC : Each DDRC may have a maximum of 10 staff members, having specified qualifications, who are paid fixed honorarium as per described norms. The rehabilitation professionals should preferably be registered with Rehabilitation Council of India (RCI). The Scheme does not envisage creation of permanent posts, and staff has to be appointed on honorarium/contractual basis by the Implementing Agency/DMT as far as possible through the local resources. The personnel like following need to be identified for the submission of the proposal for establishing DDRC in the district on behalf of the District Collector (the chairman of DMT) to the Ministry of Social Justice and Empowerment, Govt. of India.

- (i) Clinical Psychologist/Psychologist
- (ii) Sr. Physiotherapist/Occupational therapist
- (iii) Orthopaedically Handicapped Sr. Prosthetist/Orthotist
- (iv) Prosthetist Orthotist Technician
- (v) Sr. Speech therapist/Audiologist
- (vi) Hearing Assistant/Junior Speech therapist
- (vii) Mobility Instructor
- (viii) Multipurpose Rehabilitation Worker
- (ix) Accountant-cum clerk-cum Storekeeper
- (x) Attendant-cum Peon-cum Messenger

5. Sending Proposal to the MSJE for the Sanction of DDRC : The District Collector as a chairperson of DMT are required to submit proposal for establishing DDRC in their districts in a prescribed format (by submitting the needed information) to the concerned authority of MSJE for seeking approval for the same from MSJE.

6. Workdone after getting approval for establishing DDRC :

- (i) Procurement of equipments required for the functioning of DDRC DMT with the lead of nodal officer and implementing agency and identified staff, then can go for the purchase of essential equipments (as listed in the directions given by MSJE) to run the DDRC from the assistance available from the center.
- (ii) Taking help of the State Government for aids and assistive devices for persons with disabilities.
- (iii) Appointing staff (from the persons identified) for the functioning of the DDRC.
- (iv) Training to Manpower of DDRC in coordination with State Govt. through National Institutes for disabled.

C. Objectives to be Served by a DDRC

A District Disability Rehabilitation Center (DDRC) is supposed to provide rehabilitation support to persons with disabilities through

- Survey and identification of persons with disabilities through camp approach ;
- Awareness Generation for encouraging and enhancing prevention of disabilities, early detection and intervention etc.
- Early Intervention ;
- Assessment of need of assistive devices, provision/fitment of assistive devices, follow up/repair of assistive devices ;
- Therapeutic Services e.g. Physiotherapy, Occupational Therapy, Speech Therapy etc. ;
- Facilitation of disability certificate, bus passes and other concession/ facilities for persons with disabilities ;
- Referral and arrangement of surgical correction through Govt. and Charitable institutes ;
- Arrangement of loans for self employment, through banks and other financial institutions ;
- Counselling of persons with disabilities, their parents and family members ;
- Promotion of barrier free environment ;
- Supportive and complimentary services to promote education, vocational training and employment for persons with disabilities through ;

- Providing orientation training to teachers, community and families
- Providing training to persons with disabilities for early motivation and early stimulation for education, vocational training and employment.
- Identifying suitable vocations for persons with disabilities, keeping in view local resources and designing and providing vocational training and identifying suitable jobs, so as to make them economically independent.
- Providing referral services for existing educational training, vocational institutions.

D. Activities undertaken by DDRC

1. **Survey of the Persons with Disabilities :** DDRC needs to make attempts for collection of all available information or data regarding the number of disabled and the nature of the disabilities. In this task the grassroot workers like Anganwadi Workers ; Asha workers, Patwari, Gram Panchayat members, etc. may prove quite helpful.

2. **Assessment/Fitment/Follow-up and repair of assistive devices :**

- (i) Actual fitment of assistive devices would be done of the major activities of District Centre. A blend of camp approach and institutional approach should be used in fitment of assistive devices. The expenditure on materials/assistive devices should be met out of ADIP Scheme. The implementing agency would be responsible for making exact arrangements and following proper procedure in account keeping, as per the ADIP Scheme.
- (ii) The implementing agency must ensure through rigorous *follow-up* of persons provided with assistive devices their proper and early repair.
- (iii) PWDs may also be provided training for effective and correct use of assistive devices and therapeutic services. They may also be given instructions in local language in the form of a pamphlet having sketches/pictures for use and upkeep of the device(s).

3. **Promoting the Prevention of Disability :** Prevention has been promoted through various National Health Programs like 'fight against Malnutrition among mothers and children ; proper environmental and sanitary conditions, deficiency of Iodine, prevention of Blindness, Leprosy and Campaign related to routine immunization programs like Pulse polio etc. The orientation of these programs need to focus not only on prevention

of diseases or mortality, but also on disability. The district centers, therefore, need to modify the information dissemination on prevention to emphasize the linkage between health programs and schemes and prevention of disability.

4. Early Intervention : Early identification of disabilities and early intervention is very important for avoiding sensory disabilities and ensuring successful integration of children with disabilities with other children at all levels. Hence each DDRC must set up an early intervention unit. Parents of children with disabilities must be encouraged to visit these. In addition, low cost intervention using locally available material should be suggested to them for continuing the intervention at place of their residence.

5. Barrier Free Environment : Provision of barrier free environment is another much important compliment of assistive devices for providing accessibility to persons with disabilities. For this purpose.

- (i) All new buildings, especially public sector and public utility e.g. schools and hostels, Panchayat and other Govt. buildings, hospitals, markets, bus stands, parks, public toilets are to be made barrier free, as per the standard bye-laws circulated by Ministry of Urban Affairs and Employment.
- (ii) The basic responsibility should be of the local governments.
- (iii) Public buildings like Collectorate, District hospital, local bus stand, colleges and schools should be converted into barrier free, to begin with.
- (iv) District Centres must be able to provide technical support to implementing agencies.

6. Promoting Education/Vocational Training/Placement : Education, training and employment are important components of rehabilitation, therefore

- (i) The implementing agency should organize orientation-training programme for teachers/communities/families.
- (ii) They may also provide information on suitable vocations, possible job placements and other facilities through the agencies like NHFDC and VRCs etc.

7. Progress Report : DDRCs are needed to furnish progress report related to their functioning through the state government to the MSJE. MSJE also tries to get functioning of these district centers evaluated by external

agency on sample basis every year for getting aware of what is being done by these centers on the national basis.

VOLUNTARY NON-GOVERNMENT ORGANISATIONS (NGOS)

Voluntary Non-Government Organisation can play and are already playing a quite substantial role in the care, education and rehabilitation of the persons with disability. These organisations and institutions work on a voluntary basis with the objective to serve the cause of society and humanity at large. These are non-government in the sense that their functioning and management do not lie in the hands of the Government-local, state or central, their workers and functionaries do not get salary or remuneration from the government treasuries and they do not depend much on the government for the expenses incurred in providing services to the disabled, although they may be found to avail some financial assistance or grant from the government agencies for one or the other purposes.

It is true that no campaign or movement for providing one or type of the services for masses in terms of sensitizing them on a issue, building their opinion and positive attitude towards something, seeking their cooperation for eradication, central and treatment of some prevailing evils, problem or difficulties cannot attain the desired success unless we involve in this campaign or movement the general masses, the grass root workers and the people and institutions who are interested to provide their services for the noble cause on a voluntary basis. It is here the need for involving and encouraging the participation of the voluntary non-government organizations in the care, education and rehabilitation of the disabled children is very much felt on the part of any one whose stakes are highly involved in seeking adjustment and welfare of the disabled.

There is no dearth of people and institutions to devote their time, energy, money and comfort for the service of the needy people, society and humanity at large. There are thousands of NGOs working in the States and Union territories of India for serving mankind in many ways and many of them are entirely working for providing care, education and rehabilitation to the disabled population including children. The service offered or role played by them on this account is generally of two varying nature. Either they are independently serving the cause of the disabled or are supplementing the efforts made by government through its policies schemes and institutions like National Policy on Disability, 2006, Schemes carried and for the

implementation of PWD Act 1995, RTE Act, 2009; efforts made for providing education to the disabled children in an inclusive set up, providing services to the disabled through CRCs, DDRCs and National and Regional Institutes of different disabilities.

As far as the role of voluntary non-government organizations (NGOs) in providing their services for the education and rehabilitation of children with disabilities is concerned, we may find them engaged in the activities like below.

- Running Special Schools (Residential or non-residential) for the different types of disabled children, in the name of deaf and dumb school, blind school, mentally retarded school etc.
- Providing support and assistance to the schools and Institutions engaged in the education and rehabilitation of the disabled children (Government and Non-Government) in the form of (i) arranging human resources (ii) collecting donations from the public for helping these institutions in building their infrastructure and purchasing assistive devices and teaching aids.
- Building data bank about the number of disabled, the nature of their disabilities, the special needs of the children suffering from different types of disabilities, the education and rehabilitation facilities available in a particular region to the disabled, the government or non-government help available and reaching to the disabled for the purchase and maintenance of assistive devices and aids awareness of the parents and general public about the special needs, problems and provisions made for the disabled, the attitudes and feelings of the public towards disabled children ; etc.
- Providing data available to them about the disabled and disabilities to the government agencies, and institutions engaging in the implementation of the policies, schemes related to the education and rehabilitation of the disabled or helping these institutions or agencies for the data collection task in the manner and nature as to fulfill their requirements.
- Providing help and assistance to the concerned authorities, institution and agencies for building a barrier free environment to the disabled.
- Creating awareness in the general public for having positive attitude and feelings towards the disabled children and have faith in their potential not only in developing as an independent individual but to prove as a productive and useful organs of the society.

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- Building resources or work towards the promotion of preventing measures necessary for avoiding disabilities on the part of children specially related to health and sanitary measures, vaccination and pulse polio programs, dietary measures and caring of the mothers during pregnancy, delivery and afterwards, accidents and health hazards, pollution and adulteration etc.
- Building a positive attitude and supporting the schools for providing education and facilities for the wholesome development of the disabled children in the inclusive set up with no discrimination of any kind alongwith their non-disabled peers.

STUDY QUESTIONS

A. Essay Type Questions

1. What is Rehabilitation Council of India (RCI) ? Tell about its organizational structure, objectives and functions served in reference to the education and rehabilitation of the children with disabilities.
2. Name the Seven National Institutes of different disabilities and point out their objectives and functioning in reference to the education and rehabilitation of the children with disabilities.
3. Point out in brief the objectives and activities undertaken by any four of the following National Institutes of different disabilities.
 - (a) Ali Yavar Jung National Institute for the Hearing Handicapped, Mumbai.
 - (b) National Institute of visually Handicapped, Dehradun.
 - (c) National Institute for Orthopaedically Handicapped, Kolkata.
 - (d) National Institute of Mentally Handicapped, Secundrabad.
 - (e) National Institute for Empowerment of Persons with Multiple Disabilities, Chennai.
 - (f) Pandit Deen Dayal Upadhyia Institute for the Physically Handicapped, New Delhi.
 - (g) National Institute for Rehabilitation, Training and Research, Cuttack.
4. What are composite Regional Centers (CRCs) ? Point out the objectives laid down by Ministry of Social Justice and Empowerment for the functioning of CRCs, alongwith the staff needed for running a CRC.

5. What are District Disability Rehabilitation Centers ? Discuss the establishment procedure and role played by the Central and State Governments in the functioning of a DDRCs.
6. What are DDRCs ? Point out the objectives served and activities undertaken by DDRCs in relation to the education and rehabilitation of children with disabilities.
7. What are voluntary Non-Government Organizations (NGOs) ? Discuss their role regarding contribution in the education and rehabilitation of the children with disabilities.

B. Short Answer Type Questions

1. What is Rehabilitation Council of India (RCI) ?
2. Tell about the objectives served by RCI ?
3. Name the Seven National Institutes of different disabilities.
4. Point out the objectives served by any one of the Seven National Institutes of different disabilities.
5. Name the place of locations of the Seven National Institutes of different disabilities.
6. What are Composite Regional Centers/District Disability Rehabilitation Centers ?
7. Point out three objectives served by a CRC/DDRC.
8. What are voluntary Non-Government Organizations (NGOs) ?
9. Point out any three functions or role played by NGOs in the education and rehabilitation of the children with disabilities.
10. Name the Eight CRCs established by Ministry of Social Justice and Empowerment in the country.

6

Special Needs and Learning Styles of Children with Disabilities

Chapter Outline

- Introduction
 - Special Needs of Children with disabilities
 - Special Learning Needs of the Different types of disabled children and their redressal
 - Learning styles in the context of disabilities
 - Helping learners with disabilities adopting different learning styles
 - Study Questions
-

Introduction

The Disabled children are considered quite different from their non-disabled peers. But however, if seen otherwise, they are more like other children than they are different. It is for the reason that disabled children are children first before being described as disabled. Therefore, it is natural for them to experience the same basic needs and problems as experienced by the otherwise normal children of their age and grade. In addition to these basic needs and problems, however, they also have some extra needs and problems, described as special, which are necessarily associated and caused on account of their being too different and exceptional from the other children of their population. It is why, these children are designated as Children With Special Needs (CWSN) signifying that they are special in reference to the needs felt by them for their proper adjustment and education in the mainstream of school education. Moreover, in relation to their specific needs and different abilities, they are found to be benefitted from the adoption of one or other unique and special learning styles. In this chapter we would

like to throw light on the special needs and learning styles of the different types of disabled children. Let us first begin with the special needs felt by these children.

Special Needs of Children with Disabilities

The disabilities of the children according to their nature and different types are deeply associated in one way or the other with the need of the satisfaction of some of their special needs. These needs felt on the part of the children with disabilities, in general, may be categorized as below.

1. The need for the awareness of one's disability/disabilities

What is different or special about a disabled child should come out as early as possible. He is different, it should be known to others and he himself be get acquainted with his disability in a quite clear terms. In other words disabled children need an early detection, diagnosis, assessment and classification of their disabilities. Any delay in meeting out such need of the disabled children may invite a number of complications and problems for them in their adjustment to the self and environment. As a result they may be mistakenly identified, misunderstood and their deviant behaviour on account of disability may be taken as deliberately problematic and indisciplinary. For example, a child who is hard of hearing, his inability of rightly responding to a question of the teacher (on account of his inability to hear) may be taken otherwise by the teacher. Therefore, the prime necessity and a major need of a disabled child lies in the demand that his disability, its nature, cause and degree should be clearly identified, assessed, classified and labeled for helping him and others in the subsequent task of providing needed special service to him.

2. The need for coping with one's disability

The disabled children need to be helped in the process of coping with ones disability. The disabled children who deviate negatively may feel the need and necessity of overcoming their deficiencies or may need assistance and help for minimizing or eliminating the negative effects of their impairments or disabilities. For example a child not able to read and write properly on account of his visual disability may feel a strong need of being helped through medical, physical or educational measures to become able to read and write properly. The same may be true with the children suffering from other disabilities like learning disabilities, hearing impairments, mental retardation, emotional disturbances, etc. These children may certainly require the measure and means either to get rid of these deficiencies or try to learn

the ways and means of coping with them for seeking harmony with the self and the environment.

3. Need for being accepted with their disability

The disabled children are quite different from others. It is an admitted fact that the differences or deviations from the norms on the negative side are often taken easily by others. The disability therefore, is bound to invite unwelcome resistance and negative reactions from the peers, teachers and even from the parents. It is why, there lies an essential need for the disabled children for being accepted by others in their true perspectives of deficits and deficiencies related to growth and development of their personality attributes.

4. Need for getting appropriate education

Disabled children are in great requirement of some appropriate educational measures for helping them in meeting out their exceptionalities and to cope with their deficits or extraordinary abilities. It is therefore essential for having an appropriate way to organize adequate special education services for the disabled children.

5. Need for being independent in life functioning

Disabled children on account of their disabilities demand some special measures for meeting out the needs of their being independent and self-sufficient in carrying out their one or the other life functioning activities. It equally applies to all the disabled children who suffer from one or the other deficits, deficiencies and disabilities in terms of their seeing, listening, sitting, walking, learning or functioning in their daily lives or world of work. All types of disabled children need to learn the art of living for functioning properly in their day to day social and emotional life, as well as earning their livelihood and becoming economically self-sufficient members of their community and the country.

6. Need for the satisfaction of special learning capacities

Disabled children deviate too much from their non-disabled peers with regard to their capacities, nature and requirements of learning. Disabled children make up a huge group of children like learning disabled, mentally retarded, sensory, communicationally and emotionally deficient who may have difficulty learning in one way or the other. The redressal of such specific needs of these diversified groups of disabled children thus may become an urgent necessity of any programme and provision for chalking out special measures for them.

7. Need for proper guidance and counselling

Disabled children need timely and proper guidance and counselling for dealing with the situation and consequences resulted through their disabilities. They may become victim of so many social, emotional, physical, mental and moral problem on account of their extreme deviations from the normal course and pattern of life. The visually or aurally impaired thus may be guided to make use of assistive devices for being capable of using their residual sense of sight or hearing. An emotionally disturbed child may be advised to take control of his emotions and channelize his emotional energy in some other useful ways.

8. Need for getting equal educational opportunities

Disabled children need, equal educational opportunities for their adequate, adjustment and progress in their life irrespective of their disabilities deficiencies or limitations with respect to one or the other abilities. In their life, they have to remain along with the non-disabled human beings, therefore, they must have their education along with their non-disabled peers in the normal schools in the integrated settings with some minor adjustments for their proper education and adjustment.

9. Need for special aids, equipments and assistive devices

Disabled children need special assistance for meeting out their learning developmental and adjustment needs. They, therefore, always feel the need of being helped through some or other special learning material, aids, and equipments, assistive technology and devices in the course of their being brought up and receiving education. It helps them in meeting out their special needs, overcoming their deficiencies and getting due gains from the regular and special education programmes. For example, the hearing impaired may need hearing aids, speech trainer and visual materials etc., the learning disabled may need alternate learning material, blind children may require Braille system and the children with low vision may need magnifiers and large print materials while the orthopedic impaired may require crutches and other supporting material.

10. Need for getting incentives and financial assistance

The disabled children require incentives and financial assistance for coping up with their disabilities, needs and problem. In many cases, the deficits and deficiencies are too much inproportionate for their parents and family in terms of spending money on the physical treatment, medical expenses and purchasing of assistive devices. In such cases help from the NGO and other community sources as well as from the Government agencies

is needed for meeting the special requirements of the disabled. Moreover, there is requirement of providing due incentives and financial assistance in terms of scholarships, free learning material, free conveyance, free day meal etc. for sustaining the enrolment of the disabled children in the special schools or regular schools.

Special learning needs of the different types of disabled children and their redressal.

Upto so far above we have discussed about the common needs of all types of disabled children in relation of their adjustment and education. However the nature of the special needs felt by the disabled, differs in reference to their learning in an inclusive setup. It varies according to the nature of the impairments and disabilities suffered by them in their living and learning environments. Let us try to look into the nature of their special needs in this respect.

A. Hearing impaired or disabled

The special needs felt by the hearing impaired vary according to the degree of the severity of their hearing impairment. In fact in this way, it seems to be an individual phenomenon. However, in practical sense, we can analyze it on two fronts *i.e.* taking cognizance of the learning needs felt for the adjustment and education on the part of (a) deaf children and (b) hard of hearing.

The special learning needs of the deaf children and their redressal

Deaf children are totally unable to have oral communication. The use of oral means *i.e.* the use of sense of hearing in their learning and training of any kind does not bear any fruit. Moreover they may experience a lot of difficulty in their adjustment, and living in their social environment and inclusive set up of the school. Their problems becomes more acute when their learning impairment is accompanied with dumbness. In such cases, they even can't call others for their security and help at the time of danger and difficulties. It is why in an inclusive set up there arises urgent need of teaching and training them in one or the other types of life saving skills, ways and means of adjustment and methods and modes of learning in the manner outlined below.

1. Visual communication modes such as sign language, finger spelling and cued speech (as you must have seen in the news broadcast of the television for hearing impaired) should be adopted for

communicated with the deaf children. These children should be made to learn and communicate in these communication mode for their needed adjustment and education.

2. A great pain should be taken for the language development of these children with the help of training received in visual communication as well as utilisation of other senses (sense of sight, smell, touch and taste). The special provision is therefore made in their curriculum for making them to learn vocabulary, grammar, word order, idiomatic expressions, and other aspects of verbal communication.
3. Their curricular and co-curricular experiences should be so organised as to impart them all the necessary education for the adjustment and education with the help of the utilisation of all other senses besides the hearing. They may thus be allowed and encouraged to see, touch, taste, smell and work out the things and experiences by themselves forgetting the desired learning experiences.
4. The deaf children are seen to be specifically endowed with the increased abilities and capacities in terms of their power of sight, smelling, touching, tasting and physically as well as mentally working capacity etc. as a matter of compensation for their disability in hearing. Therefore, special provisions in the form of curricular and co-curricular experiences should always be made to the deaf children for developing their inner abilities to make them good artists, cartoonist, writers, fashion designers, architects, scientists, and craftsmen etc.
5. Vocational training and education is also made a compulsory part of their curricular programmes in these schools for making them able to learn the means of their livelihood and becoming self reliant in the future life.
6. The developed means of ICT and computer based technology should also be utilized for meeting the learning and adjustment needs of the deaf and dumb children. The facilities regarding text telephone (enabling persons to type phone messages over the telephone), having e-mail messages and web text material should be well utilized for meeting the learning and adjustment needs of these children.

The special learning needs of the Hard of hearing and their redressal

The special needs of the hard of learning (those who can benefit from their residual sense of learning) are quite different than those of their deaf

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and dumb-peers. The measures like below may prove quite helpful in meeting their adjustment and learning needs.

1. The first and foremost task in the education and adjustment of the hard of hearing is to help them to acquire specific bearable hearing aid (selected according to the degree of hearing loss) and make them habitual in its proper use and handling. The early bearing of such hearing aid may prove quite advantageous, to some of the hearing impaired as it may bring desirable improvement in their hearing functioning.
2. Care should be taken in their brought up and schooling as not to make them feel small or inferior on account of their hearing impairment. They should never be ridiculed, made a matter of amusement or sympathy or ignored and hated. Contrarily, they should always be treated in a normal way like other normal children for helping them not to become unnecessarily conscious of their disability.
3. Teachers and audiologists both should try to work together to teach the child to use his or her residual hearing to the maximum extent possible for the task of adjustment and educational progress.
4. These children as well as the parents and teachers should be trained in the utilization of proper means of communication in the task of adjustment and education of these children. The oral or manual means of communication or a combination of the two can be utilised with these children. Oral communication includes speech, reading and the use of residual hearing. Manual communication involves signs and fingerspelling. Total communication as a method of instruction may thus be a combination of the oral method plus signs and fingerspelling.
5. The hard of hearing may be trained and made habitual to listen the sound of low intensity and frequency (by keeping the hearing aids at the time of training) with the help of the services of audio-aids like radio, tape recorder, VCR, television and computer assisted multimedia presentation etc.
6. The use of television, video recording and computer assisted multi-media presentation as well as the sincere efforts of the teachers, parents and instructors may help the hard of hearing not only to get the desired learning experiences and instructional material like the normal children but also to make them trained in making maximum

- use of their residual hearing in close combination with the learning of the art of lips reading and language of the body movements, gestures and postures.
7. The hard of hearing usually remains backward in terms of proper language development specifically in the areas related to communication of speech. The specific efforts should need to be made for the proper development of the languages. For example some of them are unable to maintain a proper language level of the loudness or pitch of their voice in their communication. It happens because on account of their hearing impairment they have no idea about the proper level of the loudness or pitch in a communication at a given situation or time. Here they should be helped and trained for communicating properly with the proper intonation, intensity and frequency, pronunciation etc. specifically with the use of modern aids and equipments.
 8. In the case of hearing impairments of psychogenic origin, the services of qualified therapists ; counsellors and psychologists may be taken for providing necessary assistance to the affected children for getting rid of the maladaptive behaviour and symptoms of hearing impairment.
 9. Help of the one or the other suitable special educational services and measures like below may also be taken for helping the hearing impaired in their proper adjustment and educational development.
 - (i) favourable seating in the class and other learning situations (front bench and near to the teacher).
 - (ii) taking regular help of blackboard writing, sketching, charts, maps and other visual presentation along with the oral communication.
 - (iii) using captioned films/videos etc. in the instructional process.
 - (iv) regular speech, language and auditory training from a specialist services of an interpreter for those students who use manual communication.
 - (v) use of amplification systems.
 - (vi) assistance of a note-maker, who takes note for the hearing impaired, so that the impaired child can be fully benefited from instruction.
 - (vii) training facilities for the parents, teachers and peers in alternative communication methods such as sign language, speech reading, body language etc.

- (viii) appropriate counselling and therapeutic measures for the proper adjustment of the hearing impaired to the socio-psychological environment.
- (ix) use of the modern helpful devices available to hearing impaired like text telephones, computer assisted or managed instructions and multi-media presentation etc.

B. Visually Impaired and Disabled

The special needs felt for their adjustment and education in the case of usually impaired children differs from individual to individual depending upon the degree of severity of their visual impairment. However, for understanding about their training and learning requirements and helping them in their adjustment and education, it remains useful to divide them in two major categories : (i) Totally blind or nearly so blind children. (ii) Low vision and partially blind children. Let us see the types of special learning needs felt by these children for their adjustment and education in their living and inclusive setup of the school along with the possible need redressal.

The Special learning needs of the blind children and their redressal

1. The blind children need to be trained for becoming independent in terms of carrying out their day to day activities and having, necessary movements related to their social environment and work situations. With the use of stick and their sense of hearing and touch they should be specially trained in their physical movements so much so as to across the busy road as much independently as possible.
2. They need to be trained to carry out the different types of co-curricular activities with the help of special programmes and equipments used in the inclusive setup of the schools. As a result, they should be made to learn many things regarding physical education activities sports and games, debates and declamation contests, literary activities like poem recitation, dramatisation and acting, music and dancing, working with clay and plasticine etc.
3. The blind children have special attitude for music, hearing and listening, touching and smell sensational activities. Therefore, much attention should be paid to train and provide curricular and co-curricular experiences to the blind children in the activities related to these sensory experiences.
4. The blind children need to be properly trained in craft activities and vocational works of varying nature for becoming economically

independent and usefully employed in the Govt. and privately managed establishments or even becoming self-employed to earn their livelihood. As a result they may be seen to carry out simple organisational activities like running of telephone system and STD both but also to operate delicate machines and computer working.

The special learning needs of partially blind children and their redressal

1. The first and most important need of these children is to help and train them in using their corrective measures like spectacles, eye glasses in a proper safe way and also become habitual in their use with ease and convenience.
2. The second important need of these children is to teach and train them for making wise use of their residual vision with care in the minimum way as possible. Consequently they should never be loaded with unnecessary reading and writing, work. Similarly delicate artistic work, geometrical construction, drawing and painting, needle work, minute observation work etc. should be altogether avoided with such students.
3. In terms of their learning these children also need proper modification in the class room and work situations such as need for allotting seats in the front line of the teaching-learning situations and adequate arrangement for lighting etc.
4. In addition these children also need to adopt the measures like below for their proper education and adjustment in an inclusive classroom setup.
 - (i) Paying individual attention for removing their difficulties with regard to their perception of the instructional material written on the black-board, charts, maps etc.
 - (ii) Taking precaution to speak out the things written on the black-board and other visual aids.
 - (iii) Making much use of the material and devices needing senses other than the vision etc. making use of audio cassettes, radio broadcasting, tape recorder, etc.
 - (iv) Equipping them with the extra vision equipments like hand lens, magnifying glass etc.
 - (v) Provision of having bold lettered books in the library for the use of these children.

- (vi) Taking other helpful measures for making the things perceived depending upon their disability e.g. a colour blind or any such perception impaired child may be told about the facts with other ways.

C. Special needs of Children suffering from Orthopaedical impairment or locomotor disabilities and redressal

The learning needs of the children suffering from orthopaedical impairment or locomotor disabilities are no different from their normal peers since their sense of vision, hearing and mental functioning are not affected with their locomotor impairments or disabilities. The only difference lies in their inability to exercise proper locomotor functioning in their movements restricting the use of their motor organs for engaging into motor activities related to reading, writing and doing practical work etc. It is here they need special care and training in terms of their proper adjustment and education in inclusive setup of the school. Let us try to analyse some of such learning and adjustment needs of these children alongwith the possible redressal measures.

1. The prime need of the orthopaedically handicapped is to make them self reliant in terms of the disability and handicapness felt by them in managing their day to day affairs. The essential training for this purpose must be made an integral component of their education. In cases when the help of additional aids and equipments for their proper movements and activities are needed, they should be helped in their acquiring and adapting to their use.
2. They need to have all opportunities through curricular and co-curricular experiences for their proper academic growth and balanced personality development much on the same lines and the way as provided to their normal peers. At no time we must make them feel that they are different or in any way inferior to the normal children in the matter of learning and acquiring curricular facts.
3. The awareness of the self, the acquaintance with the abilities and disabilities is very much essential for any individual for his proper progress. Therefore, there is no harm if the impaired may know the hard facts of their disability and handicapness. However, the main thing is that they should not be allowed to develop any complexes, anxiety and frustrations on account of such handicapness. On the contrary, they should be made to learn to make their life more

- adaptable, enjoyable and optimistic by using suitable adaptive modes including social maturation, interactive and communication skills.
4. The vocational training and learning of such experiences as to make them economically self-reliant, self-employed or getting suitable employment must be made an integral part of their educational programme.
 5. They must be given such concrete experience, knowledge and skills that may successfully equip them for their better adjustment in their future life activities and socio-psycho-physical environment. These experiences may be given through various co-curricular activities and other community and social participation processes.
 6. Nature has every compensation for the disabilities and handicaps and limitations felt by the impaired children in one area by rewarding them to have necessary abilities, interests and aptitudes for excelling them in another areas and venues of life. As a teacher and parents, we must be consciously and deliberately find out the areas and avenues where an individual impaired child may excel with a little motivation, training and educational efforts.
 7. These children also need to have adaptation and modifications in the ways of their teaching and training well in tune with the nature of their orthopedical or locomotor impairment *e.g.*
 - (i) The children who face difficulties in writing must be assigned little or no written assignments. The provision of oral tests in stead of written should also be made for them. In some cases where the need arises they should be given more time for completing their assignments or answering the questions.
 - (ii) They need to be provided seating arrangement *i.e.* table, chair and other working seats in the class, laboratory and workshop in tune with the nature of their deformities.

D. Special needs of children suffering from learning disabilities like Dyslexia and Dyscalculia and their redressal

The special needs related to learning and adjustment of these two types disabled children in the inclusive set up are centered around their typical learning difficulties arising in the area of language and mathematics. Children suffering from dyslexia are found to exhibit significant problems in terms of language acquisition *i.e.* learning of language skills like reading, writing, listening, and speaking and thus exhibit an urgent special need of being

INCLUSIVE SCHOOL

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helped in the development of these language skills. The dyscalculia children on the other hand, have significant problems related to the learning of mathematical concepts and their applications and thus are found to exhibit a strong demand for being helped in getting rid of these learning difficulties.

In both these cases of meeting the learning needs of the suffering children, redressal is clearly based on the adoption of suitable ways and means on the part of teachers to help the children in the proper acquisition and development of the needed concepts and skills related to language and mathematics at various levels of their age and mental development.

In brief the dyslexia and dyscalculia children can be helped in the ways summarized as below :

1. Reading difficulties

- (i) Providing phonetic guidance and drill.
- (ii) Providing model reading and ask student to copy or imitate.
- (iii) Taking the help of audio-visual aids, stories narration etc. or getting away with the difficulty to comprehend the text material.
- (iv) Adopt the strategies like peer tutoring, highlighting texts, passages key words or concepts, etc.

2. Writing difficulty

- (i) Provide sufficient drill and practice for the proper figuring of letters, writing in straight line and maintaining legibility in its presentation.
- (ii) Providing a structure or model of writing and getting it copied in a proper way.
- (iii) Providing sufficient drill and practice work for doing away with spelling mistakes.
- (iv) Adopting strategies like repeated short writing assignments, using computer for word processing, spelling and grammar checks and learn to practice correctly spelled words.

3. Spoken language or oral communication difficulties

- (i) Provide model behaviour of speaking and ask student to repeat, record and evaluate by using proper devices.
- (ii) Use structure language program or take the services of language laboratory for helping the students in his oral communication.
- (iii) Adopt the strategies like using visuals for description, using cues and prompts, to help the child know when to speak and what to speak, using rhythm or music for incentive and encouragement,

providing sufficient practice and opportunities for speaking and comprehending, etc.

4. Learning difficulties in Mathematics

- (i) decreasing distractions in the class during teaching-learning of mathematical concepts.
- (ii) Providing examples and non-examples for the classification of the fundamental concepts and principles of mathematics.
- (iii) Using concrete aid material, multimedia for understanding the fundamentals and applications of mathematics.
- (iv) Providing model behaviour at your own level for learning the right way of doing calculation and solving problems and also making use of peers as models.

E. Special needs of Children suffering from mental retardation or disabilities and their redressal

The learning and adjustment needs of the children suffering from mental or intellectual disabilities differ from individual to individual depending upon the degree of severity of their impairments or level of their mental retardation. As a result, it can be quite fruitful to look at the special needs of these children in the light of the level of their mental retardation in our inclusive education setup.

(a) **The children suffering from severe and profound mental retardation.** The children suffering from profound mental retardation never attain in adult life an intellectual level greater than that of the average two years child. Therefore, their need is only limited to have their look after and care on the part of their parents and care taker just a baby of two years throughout their life span (which is usually quite shorter in duration).

The children suffering from severe mental retardation also have a distinction not to attain on intellectual level greater than that of the average four year old child. Hence their need is only limited to make them somehow independent for looking after their our physical well being and doing some manual work. They are not fit for being included in the inclusive set up of the school and therefore institutionalization is always recommended for them.

(b) **The children suffering from moderate mental retardation.** The children suffering from moderate mental retardation are able to attain intellectual level similar to that of the average six year old child. In their cases thus they may not get any much benefit from the ed

provided in the inclusive set up along with the normal peers. But however they have the ability to get benefitted from the properly organised training for getting some reasonable independence in terms of their living, doing their day to day task, and perform in crafts and vocational activities. Thus in terms of the satisfaction of their learning and adjustment needs, the children suffering from moderate mental retardation need constant encouragement and guided training for attaining independence in performing their day to day task, social adjustment and doing vocational work requiring less stress on their intellectual abilities.

(c) **The children suffering from mild mental retardation.** The children suffering from mild mental retardation are much better in terms of their intellectual functioning than their peers suffering from moderate, severe or profound mental retardation. They are capable of attaining intellectual levels comparable to that of the average ten years old child and hence can be properly benefitted from the educative as well as training experiences. In terms of the realization of their specific learning needs, therefore, these children require proper care and attention towards their education so that they may be helped to reach a reasonable level of educational attainment at least upto primary level (reading, writing, arithmetic, general knowledge, understanding of their environment etc.), participation in games and other cocurricular activities and gaining needed proficiency in arts, crafts and vocational activities for leading their life as independently as possible.

LEARNING STYLES IN THE CONTEXT OF DISABILITIES

Children with disabilities are quite unique in terms of using one or the other styles for their learning and training depending upon the nature of their disability. The learning styles adopted by these children in context of the different nature of disabilities may be broadly categorized as auditory learning styles (the specific learning styles needed to be adopted by the children with visual and locomotor impairments), visual learning styles (the specific learning style needed to be adopted by the children with hearing impairments) and kinesthetic or tactile learning style (adopted by hearing visual, learning disabled and mentally retarded children). Let us know about these different types of learning styles one by one. But before this, let us try to define the term 'learning style'.

The term learning styles in its word meaning stands for the styles adopted by the learners for their learning. The variations in the styles — ways and means of learning, certainly rest on the individual differences found in the learners. In their learning pursuits some may be benefitted

from one type of experience and other from another types depending upon so many factors lying within the learners and their learning environment. In this sense, *the term learning styles may be defined as the ways, means and methods adopted by an individual learner for allowing him to learn best in tune with his own nature, capability, motivations and inclinations in a particular teaching-learning situation.* It is therefore become essential for the teachers to have necessary cognizance of the learning styles of their students for adjusting their teaching to the learning styles of their students.

Auditory learning style

Auditory learning style may be defined as a style of learning in which the learners are found to be ear minded, *i.e.*, showing the preference for utilizing their sense of learning in the learning or acquisition of a piece of knowledge or skill related to one or the other subject areas or tasks. In general, the learners preferring this style may be found to be characterized with the abilities and behaviour like below :

- Auditory learners prefer listening to things being explained rather than read about them.
- They are good listener's and talkative and learn best through the use of verbal communication and between lectures.
- They learn to talk early and as toddlers, enjoy listening to tapes and playing musical instruments.
- They like to read aloud, recall commercials word forward, and do tongue twisters. In schools they memorize math facts much more easily in a song or poem than from flash cards.
- In case they have information before them in writing (such as in the case of the teacher writing on the blackboard) it is not going to make sense or "click" until the information has been heard (presented in the auditory style).
- There are many things that auditory learners listen for while they are learning a new skill. They listen for the tone of voice, the pitch within the voice and even the speed of the person that is teaching the new skill or information. All of this information that has been interpreted is then used by them for learning.
- Many of the auditory learners may not feel at home or experience difficulty with reading and writing tasks.

and graphics while learning. Through the use of hand-outs, charts and visual information on the flash cards, slides and graphics the visual learner may be seen to earn enough ability to readily absorb the communicated information.

- Visual learners are seen to be quite good in terms of spatial awareness. They have better sense of directions and understand how things fit into a space in relation to other things. Their ability to draw and understand map reading, designing, drawing, thus may be easily utilized in making them learn and understand the things related to their studies and applications in life.

Kinesthetic or tactile learning style

Kinesthetic or tactile learning style may be defined as a style of learning in which the learners are found to follow the principle of learning by doing or experiencing, *i.e.*, showing the preferences of utilizing their sense of touch or movement in the learning or acquisition of a piece of knowledge or skill related to one or the other subject areas or tasks. In general, the learners preferring this style may be found to be characterized with the abilities and behavioural characteristics like below :

- Kinesthetic learners are hands-on types. Kids who love taking things apart to see how they work are Kinesthetic learners. As babies they are in constant motion, their movements are well coordinated, and they are anxious to crawl and walk as quickly as possible.
- These learners want to have direct physical contact with the objects and events for learning and knowing about them instead of merely having a theoretical idea about them.
- They process information or learn best through a “hands-on” experience. Actually doing an activity can be the easiest way for them to learn.
- In school Kinesthetic learners can be fidgety (restless for getting engaged in activity).
- These learners need to be actively involved in the teaching-learning process as sitting still for a long period while studying or attending the class may be a difficult task for them.
- They are very good in handling the objects and instruments. They love experimentation and learning the things through their own experience about the things and events.

- They are found to have a short attention span. Therefore, they need to be fully absorbed in the learning task by adopting hands on approach (learning by doing).
- They are able to communicate well through body language and have a good sense of balance and eye-hand coordination.
- They learn well through real life experiences or simulated experiences. The activities like role-playing, excursions or visits, establishment of museum, aquarium and vibarium, handling of the objects, instruments and appliances, drama dance, construction, drawing and figural activities may prove a good teaching-learning source for them.
- These are natural good in doing physical activities, games and sports and mechanical work needing eye and hand coordination or body movements.

HELPING LEARNERS - WITH DISABILITIES ADOPTING DIFFERENT LEARNING STYLES

We may find that children with disabilities are bound to adopt auditory, visual and kinesthetic or tactile learning style suiting to the special needs, requirements and nature of their disabilities (e.g. auditory by visually impaired and visual by hearing impaired). But, here now the question may arise what should be the teachers or instructor's role in helping disabled children for getting more proficient with their learning styles as well as utilizing their learning style for their better education and adjustment. Let us see how it can be done in reference to the adoption of different learning styles on the part of the learners with disabilities.

Disabled Learners with auditory learning style (Such as Visually impaired)

While teaching and interacting with the learners comfortable with the auditory style of learning the teachers are supposed to adopt their teaching according to their needs in the ways outlined below :

- Making use of lecture, discussion and question-answering method.
- Making use of the strategies and devices like explanation, narration, illustration, exposition.
- Encouraging group activities involving verbal communication such as debate, declamation, symposium, poem recitation.
- Providing enough verbal instructions or directions for doing a task.

- Making use of the story telling, biographical approach and experience narration in explaining the facts, principles and processes.
- Encouraging students to have verbal dialogue and interaction for the satisfaction of their curiosity and acquire needed information.
- Making use of rhythm, music and poetic touch for the presentation of the subject matter and its practice or repetition.
- Encouraging the activities that may provide opportunities to the students for their appropriate verbal expression, dialogue and communication with each other as well as teacher.
- Making use of aural aids and equipments such as radio broadcasting, audio tapes, audio-phones, tape recorder language laboratory devices etc.
- Providing verbal summary of the things taught or discussed in the class.
- Making use of brain storming strategy through verbal interaction.

Disabled Learners with visual learning style

In teaching and interacting with these learners, (such as hearing disabled) the teacher is supposed to adapt like below :

- Providing directions and instructions in the written form.
- Giving emphasis on the use of visual aid material such as charts, pictures, maps, diagrams, posters, real objects and specimen, cartoons, display boards like chalk board, and bulletin board, flash cards, video material, VCR, slides and transparencies and projecting instruments.
- Encouraging library reading, and on-line reading.
- Providing handouts, agenda, outlines of the things discussed, summary of the discussion for the things taught and discussed in the class.
- Encouraging the habit of notes taking on the part of the students.
- Asking students to do their practice work, drill work, homework and project assignment in writing or visual presentation.
- Encouraging students to make use of graphic and visual material for their expression, learning and evaluation.
- Writing the summary of the things taught and point discussed on the blackboard and encourage students to respond by writing on the board.

- Assessing the learning outcomes through the written mode of evaluation.

Disabled Learners with Kinesthetic Learning Style

This type of learning style is preferred among the disabled by those who are somewhat intellectually impaired or suffer from one or the other types of learning disabilities (such as dyslexia or dyscalculia). In teaching and interacting with these learners, the teacher is supposed to adapt like below :

- Making use of the activity aids like demonstration, asking the students to do experimentation in laboratory, work in the workshop, taking students on excursion.
- Resorting to simulation, role playing, and dramatization activities.
- Asking students to actively participate in the teaching-learning process such as helping the teachers in the demonstration work, solving the problems on black-board and helping in the use of audio-visual aid presentation.
- Providing opportunities to the students for gaining direct experience of the things, events and phenomenon by resorting to learning by doing and experiencing.
- Arranging and encouraging the learning situations providing maximum physical involvement and participation of the learners.
- Encouraging the learning based on "learning while playing", "learning while doing project" and "learning while engaging in cocurricular activities."
- Providing importance to the practical work and activities in teaching as well evaluation.

STUDY QUESTIONS

A. Essay Type Questions

1. What types of special needs are in general, felt by the children with disabilities. Discuss them in brief.
2. Throw light on the nature of special needs felt by the following types of disabled children in terms of their learning and adjustment in an inclusive set up.
 - (a) Hearing impaired (categorized as deaf and hard of learning)
 - (b) Visually impaired (Blind and partially blind)

- (c) Orthopaedically impaired or locomotor disabled
 - (d) Dyslexic and Dyscalculic children
 - (e) Mentally retarded (educable and trainable)
3. What are learning styles? Discuss the various types of styles adopted by the learners for their learning in the form of audio, visual and kinesthetic learning styles.
 4. Throw light on the types of learning styles adopted or preferred by disabled children for their learning and discuss how as a teacher you can help them in adapting to their learning styles.

B. Short Answer Type Questions

1. Name the special needs in general felt by the children with disabilities in an inclusive set-up.
2. Name the special learning needs of deaf/hard of hearing/blind/partially blind/locomotor disabled/Dyslexic/Dyscalculic/educable mentally retarded.
3. Define the term learning styles.
4. Point out in brief the meaning of auditory learning style/visual learning style/kinesthetic learning style.
5. Point out in brief the learning style preferred or adopted by visual impaired, hearing unpaired and intellectually impaired children.

7

Functioning of an Inclusive School

Chapter Outline

- Concept of an Inclusive School
 - The Essentials and Measures for the proper functioning of an Inclusive School
 - Proper Infrastructure and Accessibility
 - Awareness and Positive Attitude towards Disability
 - Proper Human Resources
 - Adoption of Whole School Approach
 - Study Questions
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Concept of an Inclusive School

The concept of an inclusive school is well linked with the concept of "inclusion and inclusive set up". Inclusion as we have already discussed in the chapter two of this text means non-exclusion i.e. including or embracing all the intended learners in the mainstream or the teaching-learning set up of the school without having any differential or discrimination on any ground whatever it may be. It is the latest concept and trend in providing care and education to the differently abled or disabled along with the non-disabled peers in line with the special education measures and concepts previously known as segregation (having provision for institutionalization and special schools for the disabled) and integration (accommodating the disabled somehow in the normal school set up without getting prepared for their proper education and development). Here in the inclusive setup we take it granted that all children irrespective of their abilities or disabilities are part and parcel of any system of school education. It is the responsibility of the regular schools to include all children in the main stream along with their non-disabled peers by making adequate provisions for their education and

all round development. The differences between the school education setups related with the philosophies of separation. Integration and inclusion can be explained well by the comparison used below.

- A school advocating separation may say to the disabled students "Sorry this school is not meant for you".
- Another school believing in the philosophy of integration may be found to say to the disabled students seeking admission ; "Well you may come here, we have no arrangement for you but we will try to accommodate you somehow.
- Another school running on the philosophy of inclusion must say "Well you are most welcome. We will try to provide you all what is needed for your education and development along with the other students of the school."

In this way, an inclusive school and its set up is found to differ in a variety of ways from the normal or integrated education providing schools meant for the normal student population or the schools having provision for including children with special needs/disabled in its mainstream with no proper facilities and positive attitude towards their proper education and wholesome development.

In fact, an inclusive school and its inclusive set up may be found to be characterised with (i) positive attitude and warm feelings towards disability and disabled children (ii) provision of adequate infrastructural facilities, men-material facilities for the adjustment, education and wholesome development of the disabled alongwith their normal peers. (iii) the provision of adequate support services for helping the disabled in their proper education and development (iv) Training facilities for the teaching and non-teaching personnel for helping the disabled in adjusting and getting proper opportunities for their education and development alongwith the peers.

Looking in this way, we may now define and understand an inclusive school and its set up as a school and set up that is capable of embracing all the learners and providing them facilities, infrastructure, human resources, means and methods for their proper adjustment, education and all round development with no discrimination of any nature well in tune with their capacities and individualities.

The Essentials and Measures for the proper functioning of an Inclusive School

Inclusive schools can exercise their responsibility well only when sufficient attention is given for equipping them with the necessary

A. Proper Infrastructure and Accessibility

The first and foremost requirement for the establishment and running of an inclusive school is to get it equipped with the needed infrastructural facilities in terms of its building, material facilities, and their proper accessibility to all the users with no discrimination of any kind.

The measures like below may prove quite beneficial in this concern.

1. Regular school building including the pathways and stairs etc. need to be constructed or modified by keeping in mind the accessibility to all types of students – disabled and non-disabled. It must provide needed entrance, mobility and functioning for all including orthopedically or locomotor disabled, as well as visually impaired. The need for the use of the wheel chair on the part of orthopedically impaired, and cane travelling on the part of visually impaired should also be given due consideration. Therefore, the building and pathways of the inclusive school should not only be free from architectural barriers but should also be quite accessible to all by having provisions of simple ramps, hand-rails, wide doorways, proper toilet and water arrangement etc.
2. Adequate attention should also be paid over the suitability of accommodation, seating arrangement and working facilities in all the learning and working places of the school like classes, assembly hall, laboratories, workshops, playgrounds, canteen and boys/girls common rooms so that the students with disabilities may not feel any accessibility problem regarding their mobility, adjustment and functioning.
3. To facilitate needed accessibility of the learning and working experiences to the children with disabilities, there should be proper provision of their sitting and working in tune with the nature of their impairment or disability. The hearing and visually impaired, children with locomotor or multiple disabilities, autism etc. should thus be provided needed spacing, front seats, nearness to the teacher and the support systems for accommodating their learning or working difficulties etc. We should see that inclusion of the disabled does not mean to get them excluded from special supports, they need for their proper adjustment, education and development and it should always be available to them in an inclusive setup.

B. Awareness and Positive Attitude towards Disability

The policy of inclusion and its implementation in the shape of the proper and useful functioning of the inclusive schools can't be carried out on sound footing unless there comes a change in the environment of the regular schools towards disabilities and the disabled. The school authorities, teachers and other personnel working in the school, non-disabled students and their parents are needed to give up the age old notion of remaining away from the disabled. The school should welcome and embrace the disabled as it welcomes the other non-disabled students and try to provide them education and other developmental facilities with no discrimination of any kind. There should be proper awareness among the school authorities and teachers about the needs and problems of the disabled (general and specific) and efforts should be earnestly made to address these problems for facilitating proper adjustment and development of the disabled alongwith the non-disabled students population. In fact, there is a need to develop a desirable positive attitude towards disability and disabled on the part of school authorities and teachers on the lines suggested below.

- Diversities and differences are bound to exist on this earth. We all differ from each other in so many things.
- The children may possess different types of abilities and capacities and it is quite natural to have some students differing or deviating much from the normal level of abilities or capacities found in majority of children in one or the other attributes of their development/ personality. The disabled children thus should be treated as differently abled having differences or deviation from the non-disabled student in terms of the possession of some traits or unique characteristics rather than being considered hopeless, problem creators, and misfit in the mainstream of the regular schools.
- The school authorities and teachers should be well informed about the legislative measures *i.e.* right to education and the need of creating an environment in the school in favour of the policy of inclusive education. There should be a clear understanding on their part that equal access to education for all the students is a matter of right and not a privilege and they should work for the success of inclusive education in their school with their all sincerity and efforts.
- School authorities and teachers should believe in the uniqueness of the disabled and consider that every child has a unique potential for being developed in an unique way. Simply he or she wants proper

help, guidance and timely feedback/encouragement for doing so and it is their duty for meeting the learning needs of every child (disabled or non-disabled) with no discrimination of any kind.

C. Proper Human Resources

The third essential requirement for the proper functioning of an inclusive school is concerned with empowering it with the needed appropriate human resources. In this regard, the things like below need to be cared well.

- There should be an appropriate teacher-student ratio in the school so that proper individual attention can be paid over the students population belonging to an inclusive set up.
- The staff appointed in the school should be properly oriented towards the philosophy of inclusion and expectations from them in fulfilling their duties in an inclusive set-up.
- Every teacher appointed in the school should be properly equipped with the knowledge, skills, interests and attitudes necessary for working in the inclusive set-up. Their preparation in this regard may be well organized through pre-service and in-service teacher education well designed programs and only competent teachers capable of working in the inclusive set-up should be appointed and continued to serve in the inclusive schools.
- Since every regular school need to work as inclusive school as a result of the implementation of Right to Education Act, there should be an intensive efforts on the part of schools and education authorities at the State and Central level for providing needed attention towards the orientation and preparation of the teachers to face the challenge of the inclusive set-up.
- There is a need of appointing a teacher in the capacity of special education teacher who can be entrusted with the task of
 - (i) establishing and managing a resource room for the children with special needs (CWSN).
 - (ii) providing guidance and help to the subject teachers, laboratory assistants/instructors, physical education teachers in dealing with the disabled or differently abled children.
 - (iii) providing help and guidance to the disabled and differently abled population of the school in meeting their special needs and getting them properly adjusted and developed according to their capacities and interests.

- (iv) providing guidance and seeking cooperation from the parents of differently abled for their adjustment and welfare.
- In addition to the special teacher there should be proper arrangements of availing the services of other experts helpful in the adjustment, and development of the differently abled students (part time or call basis) like below.
 - Psychologist/Clinical psychologist
 - Eye and Ear specialist
 - Speech therapist and audiologist
 - Physiotherapist
 - Occupational therapist and Counselor
 - Orthotist and Prosthetist
 - Orientation and mobility specialist
 - Rehabilitation Counsellor/psychologist
 - The staff working in school office, library, sports grounds, workshop and laboratories should also be properly oriented towards the need and requirement of functioning in an inclusive set up, particularly towards keeping a proper attitude towards disability and special needs of differently abled students.

D. Adoption of Whole School approach

Adoption of whole school approach may also prove quite beneficial to the successful working of an inclusive school. The question here may arise what do we mean by the whole school approach and how does it help in the success of an inclusive set up ?

Whole school approach towards inclusive education is a term that is generally employed for utilizing all the resources, efforts, links and connections owned by the school alongwith building a positive climate and healthy relationships among all the stakeholders (students, teachers, school personnel, school administration, parents and community people) to join hands for the success of the system of inclusive education.

In fact as a philosophy thus a whole school approach is nothing but to do on the part of the school whatever it can do at its utmost through its resources, efforts and relationships at its disposal for building a healthy positive climate in the school to achieve its desired mission or goal of providing education to all in an inclusive set up.

The whole school approach to inclusive education thus may be found to work towards a shared and committed efforts on the part of all the stakeholders (students, teachers, school personnel, school administration, parents and community) for building a positive healthy climate and engage in the purposeful activities for the education, adjustment, development and progress of all the students in an inclusive set up. For this purpose, in the whole school approach, the duties and responsibilities are properly shared among the stakeholders and functioning of the school system is well geared for achieving the mission *i.e.* the successful running of the inclusive set up. Let us see how it can be done and what type of activities and responsibilities are shared by the various stakeholders.

The Role of the school administration and authorities

- To believe and accept the philosophy of inclusion as a way of doing justice for all the intended learners irrespective of their being disabled or non-disabled.
- To arrange for all the needed infrastructural facilities aimed (i) to provide restriction free environment to all learners (ii) facilitating accessibility to all types of learning experiences—curricular and co-curricular with no discrimination.
- To arrange for all types of human resources needed for the appropriate functioning of inclusive education curricular and co-curricular programs including caring and meeting of the individual specific needs of the differently abled students.
- To arrange for the aids and equipments, means and devices, resource room facilities etc. for the use of the teachers and students in their teaching and learning as well as meeting the adjustment and specific learning needs of the disabled.
- To provide means and facilities for the proper orientation of the staff about their functioning and role in an inclusive set up.
- To provide the services of special education teacher and other supporting staff like educational psychologist, clinical psychologist, guidance personnel, medical professionals, Rehabilitation professional etc.
- To take care of building positive attitude and healthy climate in the school about inclusive education and especially towards disability. No children in the school should be harassed or discriminated on account of his being differently abled.

- To arrange for the type of continuous and comprehensive evaluation, timely feedback and reinforcement, early diagnosis and remedial measures needed for the success of the programs and activities run for the education, adjustment and progress of all the learners belonging to inclusive set up.
- To seek active cooperation and involvement of the school staff, parents, students and community for making inclusive practice a success.

The Role of Teachers

- To have proper pre-preparation and orientation for fulfilling their responsibilities well in an inclusive set up.
- To work for demonstrating a quite positive unbiased healthy attitude towards the learning and capacities of the differently abled.
- To learn and practice needed methodology, aid material equipments and devices for meeting the needs of differently abled in the inclusive set up.
- To work for providing individual attention and care for meeting the learning needs of all learners in the inclusive set up with no discrimination of any kind.
- To seek cooperation of the non-disabled peers for adjustment, education and development of the disabled.
- As a outside partner to seek involvement of the parents, community people and NGO for the education, adjustment rehabilitation and welfare of the differently abled.
- To encourage, stimulate, train the differently abled for their full participation in the curricular and co-curricular activities according to their capacity and limitations.

The main responsibility for the successful functioning of an inclusive set up in the adoption of whole school approach lies on the shoulders of school administration and teaching staff. Both of these functionaries, then may attempt to seek involvement and cooperation of all other stakeholders in the manner and ways outlined below for the success of inclusive education practice.

- (i) Parents are the main stakeholders in the work and tasks related to the education and welfare of their children. The whole school approach towards inclusive education demands that their active cooperation and involvement is quite essential for success of this

program. They themselves are quite worried for the adjustment and education of their children especially for the differently abled. They have all fear that the child may be ridiculed, harassed, side lined or get depressed on account of his or her disability. All such concerns can be successfully handled by getting the parents involved in the welfare of the children through the parent-teacher organization meetings, seeking their cooperation in the organization of co-curricular activities or paying individual attention to the learners with special needs.

(ii) The whole school approach also needs active cooperation and involvement of the community people through their varying functions and roles. Therefore, earnest attempts should be made by the school authorities and staff for establishing needed rapport with the community in which school is functioning. Community people may provide their valuable services and contributions in the form of donations, doing away with discrimination and negative feelings towards the disabled in the community, providing their services as professionals, experts, counsellors, clinical and therapists and working as volunteers and the members of NGO's for the assistance, adjustment and education of the differently abled in the inclusive set up.

(iii) In the whole school approach to inclusive education it is the cooperation, collaboration and group work of the children that is most valued for the successful functioning of an inclusive classroom or work situation. Peer caring, and peer tutoring may play wonder in meeting out the special adjustment, caring and learning needs of the disabled peers of the inclusive set up. Thereby deliberate attempts are made in the whole school approach for utilizing the cooperation and contributions of non-disabled peers for taking along with them their disabled peers in relation to the execution of a number of curricular and co-curricular activities of the inclusive set up in tune with their potential and capabilities.

(iv) The whole school approach to inclusive education also seriously asks for the full scale involvement, motivation, enthusiasm and participation of all the learners irrespective of their abilities and disabilities in all the curricular and co-curricular programs and activities planned in the inclusive set up. The disabled and differently abled learners should themselves be well prepared and ready for getting benefited through the experiences of the inclusive set up.

Their hesitation or fear of getting along with others and facing the odds of the school situation must be properly removed and their confidence in their abilities (irrespective of their limitations) should be so built as to get duly benefitted from the processes and outcomes of the inclusive set up.

In addition to seeking active involvement and cooperation of all the stakeholders, the whole school approach also asks for doing necessary efforts and adopting desirable measures like below for the success of the inclusive education program.

- The needed flexibility in providing curricular and co-curricular learning experiences should be adopted in an inclusive set up depending upon the needs of the situation and type of children present in the inclusive set up.
- The teaching-learning style should be accommodated according to the teaching-learning needs of the inclusive group.
- The evaluation tasks and activities be so designed as to provide needed timely feedback and assessment measures according to the demands of the inclusive set-up.

In this way whole school approach tries to seek active cooperation and involvement of all the stakeholders, including restructuring the teaching learning environment in a suitable way for providing a total effect aimed at being the needed desirable outcomes of the processes and product of the inclusive education.

STUDY QUESTIONS

A. Essay Type Questions

1. Discuss in detail the concept of an inclusive school.
2. Throw light on the essentials and measures of the proper functioning of an inclusive school with special reference to
 - (a) proper-infrastructure and accessibility
 - (b) Awareness and positive attitude towards disability
 - (c) Proper human resources.
3. What do you mean by the term adoption of whole school approach for inclusive education? Discuss in detail.

B. Short Answer Type Questions

1. What is an inclusive school ?
2. What type of infrastructure and accessibility is required in an inclusive school ?
3. What type of human resources are needed for running an inclusive school ?
4. What do you mean by positive attitude towards disability ?
5. What is whole school approach towards inclusive education ?

8

Pedagogical Strategies in Inclusive Set up

Chapter Outline

- What are Pedagogical or Teaching Strategies ?
 - Peer Tutoring
 - Cooperative learning
 - Social learning
 - Buddy System
 - Reflective teaching
 - Multisensory teaching
 - Study Questions
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What are Pedagogical or Teaching Strategies ?

In simple words the term pedagogical or teaching strategy stands for the type of strategy employed by the teacher in carrying out his teaching task in a way most helpful for him to attain the desired teaching-learning objectives. The term strategy in its own way slightly differs from the commonly used terms methods and devices employed by a teacher for carrying out the task of teaching. It stands for specific plans and ways desired and employed by the teacher for attaining his teaching goals or objectives much in the same way as used by a chess player or operation in charge of a warfare. A teaching strategy is so planned and designed as to provide maximum help to the learners in getting them engaged in a learning task as effectively as possible for the realization of the set goals. A strategy used by the teacher must help a learner (i) in remaining motivated, interested and absorbed in the process of learning (ii) to acquire necessary knowledge, skill, attitude etc. for bringing desired changes in his behaviour (iii) to discover or construct the knowledge with his own independent efforts, guided learning or cooperative and group learning. Whatever strategies may be

employed by the teacher for his teaching, in a particular teaching-learning environment the goal is to seek best output for the learners through their consistent and meaningful learning efforts and endeavours. There are number of teaching strategies available for the teachers for their teaching which can help their learners to learn well (i) with the assistance of a teacher or peer tutor or (ii) in a group involving cooperative and collaborative spirit generally in a reflective way or with the use of multi-sensory aids. In this context, we would be focusing our discussion on the few of these pedagogical or teaching strategies.

Peer Tutoring

You must have heard about the terms tutors and tutorial classes and this must be acquainted with their use in day to day life. A tutor is usually differentiated from a teacher on the ground that he is relatively more nearer to the student than the teacher teaching in the classrooms situation. He can establish more rapport with the student. Students can communicate more comfortably and intently with their tutors and can avail their cooperation, guidance and help more easily in comparison to teachers. It is this image of tutor, that helps much in deriving necessary benefits on the part of a student from their tutors. Its value and impact gets more enhanced when a student finds an opportunity to avail the services of one of his peer as a tutor in place of a particular teacher of the school playing the role of a tutor. Such tutorial services provided by a peer to his fellow student or students are referred to as peer tutoring.

In practice in peer tutoring, a fellow student is seen to help one or more of his fellow students in their learning and development. It is quite natural for a peer tutor to have more rapport, nearness and simplicity in relationship with his fellow students on account of their being of the same age and grade. There is no much difference in their status in respect of experience, abilities and educational status. The only difference that can be seen in a peer tutor and a fellow student is that the former knows a little more or is somewhat more skilled than the latter and by virtue of his nearness and acceptability can help the fellow student in a more desirable way.

In this regard the famous Russian Psychologist Lev Vygotsky has tried to convey through the concept of "Zone of Proximal development" (ZPD) that a child can be helped well in getting instruction from the peers who are near to him in respect of the possession of desired knowledge and experience. They can enjoy more rapport, nearness and trust between them and it results in appropriate instruction and cooperation much helpful for the success in

instructional process. It is why the peer tutoring proves a better alternative from many of the students in their instruction and training in comparison to the help rendered by parents, teachers and experts in this regard.

In the inclusive setup peer tutors can play a quite significant role in carrying out the teaching learning activity. The adoption of peer tutorial system here can help well in realising the dreams of individualised instruction in a better way.

Regarding the role of a peer tutor, it can be played by a non-disabled peer who may be seen to help his or her disabled peer in one or the other task or activity aimed for better adjustment, explanation and illustration of a concept, demonstration of a skill, providing help in performing one or the other task by working as a model or manually helping him or her imitate and practice the model behaviour. It is not essential that a non-disabled peer should always act as a peer tutor. This role can also be played by a disabled peer to his or her disabled counter parts, who has reached to a better level of performance and excellence (in one or the other scholastic or non-scholastic areas) a little earlier than the other disabled peers.

A student whether disabled or non-disabled while playing the role of a peer teacher in the inclusive set up may be found to perform the following four types of activities (Dash, 2001).

(i) **Monitoring** *i.e.* supervision and regulation of the performance of a tutee.

(ii) **Reinforcing** *i.e.* providing appropriate contingencies for approved behaviour (such as praising the tutee if he/she has completed the work to a required standard).

(iii) **Modelling** *i.e.* the demonstration of a particular activity or behaviour by the peer tutor.

(iv) **Explaining** *i.e.* exposing the relationships on a topic and providing appropriate examples to clarify doubts.

The role played by peer tutors in the ways mentioned above may prove quite beneficial to the slow learners, backward and differently abled or disabled students in their proper adjustment, education and wholesome development. In an inclusive set up where there is a need of too much individualization in respect of addressing the needs of the variety of students characterized with too much diversity and differences the peer tutoring system may help well in a fruitful way. Moreover, peer tutoring as the research evidences show has all possibilities of many extra advantages over the traditional mode of instruction and guidance

services provided to the differently abled in an inclusive set up in the manner outlined below.

- While engaging in the process of instruction and guidance along with their peer tutors students do not experience the hesitation, fear or uneasiness as experienced by them in the interaction with their teachers. Here in this system they feel more confident and ready to learn and definitely it results in knowing and learning the things that they were unable to learn and to know from their teacher and other experts.
- The peer tutors are in a position to provide instruction to their fellow students by coming to their level or status. It can happen because after all they are also the students like their fellow beings. They have know fear for their self-dignity and status like an usual classroom teacher. As a result, the fellow students may come quite nearer to them for attending what they say or show in comparison to the classroom or subject teachers.
- Peer Tutors are in a position to get the fellow students acquainted with their own experiences. They can tell them that they have also been passed through the difficulties and hurdles in learning as felt by the fellow students at this stage. How did they get away from these difficulties, the narration of such experiences may prove quite beneficial to the fellow students in their learning tasks.
- The type of help and guidance that can be availed in the practice work and training activities from the peer tutors is many times prove unmatched. We can't expect it from the teachers in the usual classroom teaching situation. Student are not troubled by a bitter criticism and frequent testing work performed by the classroom teachers but contrarily get timely help and assistance in a very friendly and cordial way from their fellow peer tutors.

COOPERATIVE LEARNING

The Concept of Cooperative Learning

Cooperative learning as the name suggests stand for a learning process or learning strategy in which students are provided opportunities to learn by themselves in a group in a cooperative way. They share each and every information among themselves and help each other for having required knowledge, understanding and application of one or the other aspects of the content material, or course units included in their syllabus. It seems quite

contrary to the practice of teaching-learning prevalent in our current educational system. Our on going classroom teaching is totally teacher dominated and content centered. Here teachers are regarded as the repositories of subject knowledge and their role is simply to pour into the open, empty and willing (or non-willing) minds of students their vast reservoir of knowledge. They do not trust their students to learn. They think that they must tell them what to learn and provide all the structure for the learning to take place. This structure of learning provided by them to their students is highly individualistic. It encourages individual as well as competitive learning in place of group and cooperative learning. Here students are tempted to learn more and more in order to gain good grades, divisions, certificates, appreciation or attractive prizes etc. by excelling their own peers or reaching the set target of excellence. Cooperative learning says no to such practices. It advocates cooperative learning (*i.e.* the learning in group by cooperating with one another) in place of the competitive and individualistic approach (encouraging cut throat competition and immoral practices of getting ahead) prevalent in our present system of education and evaluation.

Cooperative learning in the context of inclusive set up

In the inclusive set up there is the presence of a wide variety of learners with significant divergence in their learning capacities and learning needs. All have to grow and develop according to their own individual capacities and limitations. There is less competition and more emphasis on mutual adjustment and cooperation in an inclusive set up in comparison to the normal regular classrooms. There seems no point for the non-disabled peers to have unnecessary competition with their disabled counterparts. Here, they are naturally driven towards cooperative learning instead of getting engaged in competitions with each other. The teacher should take advantage of this spontaneity for organizing the classroom activities of the inclusive set up on cooperative footings.

How to make use of the strategy of cooperative learning.

In inclusive set up we find the presence of diverse groups of learners with diversified learning interests, abilities and capacities. While making use of cooperative learning the teachers should be quite cautious about the formation of groups. A class consisting of 30 students may be broken down into 5 or 6 sub-groups or teams each consisting of equal number of students with different abilities. In these groups (called mixed ability groups) thus

we may have differently abled or disabled children working side by side with their non-disabled peers for contributing in their own ways towards the attainment of the group goals and getting valuable opportunities to learn and develop themselves in the company of the non-disabled peers.

After formation of the mixed ability groups from the population of an inclusive set up class, the teacher may try a number of typical cooperative learning set up/working modes in the manner exemplified below.

Mode I. A unit of the course in a subject may be broken down into certain meaningful sub-units. These sub-units may then be assigned to the different teams (mixed ability groups). The team members may collect relevant information and go through learning experiences, activities etc. for gaining the required knowledge, understanding and insight about the assigned sub-unit in a quite cooperative way mutually helping and complementing each other's efforts for doing so.

After sometime (this duration may be fixed in advance), the members of the different teams may sit together for discussing their learning out comes with respect to the sub-units assigned to them. In fact, they may teach each other the content material or learning experiences acquired by them in their respective sub-unit. After grasping the knowledge and understanding of the whole unit, the students may again be asked to work in their respected groups/teams for gaining more insight and understanding of the unit through cooperative efforts and then show the outcomes of their striving to all the students of the class.

Mode II. Students of a class in any subject/grade may be asked to work on a group project, for which they may have a hand in selecting. It may give extensive opportunities to them for cooperative learning as well as working in the group. Such group projects or investigations may be highly structured to emphasize higher order thinking, analysing and evaluating skills. They may also provide a proper platform for the demonstration of practical and working abilities on the part of students while working cooperatively in a group.

Mode III. In another cooperative learning set up, students with varying academic abilities may be assigned to 4-5 member teams for studying what has been initially taught by the teacher and to help each other to reach his or her highest level of achievement. After doing such cooperative efforts, all the student of the class are then tested individually. After then the different teams of the class may be awarded certificates or other recognition on the

basis of the extent to which all team members have progressed over their past records.

Mode IV. Another cooperative learning set up may involve the strategy of reciprocal questioning. It may be used with a wide range of ages and subjects. In this set up beginning is made with the delivery of a lesson or some presentation on the part of the teacher. After that students are asked to work in pairs or triads (group of three), to ask and answer questions about the contents of the lesson or presentation. For gaining proficiency in asking and answering questions students may be given some training initially by the teacher. Afterwards, they may be encouraged to create questions and take turns asking and answering. Such set up of reciprocal questioning has been found to be more effective than traditional discussion groups because it seems to encourage deeper thinking about the material presented to them by the teacher and also it provides all the due benefits of cooperative learning.

Mode V. In another cooperative learning set up a particular topic or unit of the subject is assigned to five or six groups or teams of a class. Each group or team may have a small number of students of varying interests and abilities. In respective team, each team member is responsible for learning a specific part or sub-unit of a topic. He him-self strives hard in the learning of this assigned sub-part in close collaboration with his or her counter parts in other teams. In fact they work closely in a quite cooperative spirit for acquiring necessary knowledge, experience and application related to that very sub-topic. After then all members of the team sit together for discussing the fruits of their striving and acquire complete picture of the knowledge and understanding of the sub-topics or sub-units related to a particular topic. They may go for its deep understanding and advanced study by repeating their cooperation exercise in the process of learning.

Social Learning

Social learning in its word meaning stands for a type of learning that results from the consequences of observational experiences gained on the part of developing children in the social company of others (elders and more knowledgeable peers). Such observational experiences and their imitation and practice may help a lot to the differently abled or disabled children receive from their non-disabled peers or structured social experiences arranged for them in an inclusive education set up.

Social learning as an approach and theory of learning was first brought into existence by the social psychologist Albert Bandura (1977). As proposed by Bandura through his social learning theory most of what we learn is

acquired through simply watching and listening to other people. The children from the very beginning keenly observe the behaviour of others, most commonly of the people nearest to them like parents, members of the family, teachers, the older members of society, etc. In turn, they try to imitate and do what they observe. The power of observational learning can be confirmed through laboratory experiments as well as through observation in our daily life. A child who sees his father throwing utensils around simply because he has not been served food of his taste, learns such behaviour and reproduces it in similar circumstances. He may also incorporate and imitate the behaviour of the characters he reads about in novels, hears about over the radio or sees on TV or in movies. The persons whose behaviour he observes and often imitates are known as models and observational learning is referred to as *modelling*.

Social learning as a teaching strategy in inclusive set up

Social learning as an approach and strategy can be quite effectively utilized in inclusive set up for the learning of the differently abled/disabled children. Here the teacher, trainer, non-disabled peers as well as the more capable or an early disabled peer may work as a model for helping and meeting the learning needs of the differently abled. The step like below suggested by Bandura (1977) may be followed in making use of the social learning strategy for the teaching and learning of the students belonging to inclusive classroom set up.

Step 1. Attending to and perceiving the behaviour : In this step the learner is made to observe the behaviour of the person acting as a model. Here the total behaviour or a particular aspect of it may attract attention and become the subject of close attention.

Step 2. Remembering the behaviour : In this step, what the learner observes is filed away in his memory in the form of mental images.

Step 3. Converting the memory into action : In this step, a behaviour observed and remembered by the learner is analysed in terms of its acceptability to the learner with reference to the demands of his self and his environment. It is transformed into action only afterwards and thus the observed relevant and accepted aspects of the model's behaviour are imitated by the learner.

Step 4. Reinforcement of the imitated behaviour : In this final step, the behaviour of the model imitated by the learner is reinforced for proper adoption and further continuance.

In this way, by following the above mentioned stages or steps involved in one's social learning, the children belonging to inclusive set up may be helped to acquire a number of skills, applications and understanding of one or the other concepts/principles essential for their adjustment, education and development.

Buddy System

In the inclusive set up paying of individual attention is utmost needed specially for caring and meeting the special needs of the differently abled to their adequate adjustment education and wholesome development alongwith their non-disabled peers. The task is quite challenging for the classroom/subject teacher. There is the presence of locomotor/orthopaedically impaired learners in the classroom who may need a variety of assistance and help for their proper mobility in one or the other types of learning situations i.e. turning the pages of their texts, holding the things in their hands or placing on the table, performing one or the other activities associated with practical tasks related to curricular or co-curricular needs. Similarly, the children with hearing impairment may need the help of providing them lecture notes/instructions in writing form or convey what has been required by the teacher in the form of home work, assignment or project work. Visually handicapped on the other hand may need to be helped in getting audio description or translation of the learning events of the classroom alongwith necessary assistance for their proper mobility. Similarly children suffering from intellectual impairment, autism and learning disabilities may need to be assisted and helped in getting adjusted in the inclusive set up alongwith the satisfaction of their learning and developmental requirements. We can't have so many hands and minds to assist and help them at the time of the need unless the cooperation from the fellow students present in the class is not secured. Moreover, it should be availed in proper form from the persons who are properly trained in meeting these special needs of the differently abled at the proper time in a proper way.

The adoption of buddy system is advocated for meeting out the demands of the above narrated situations arising frequently and necessarily in the learning set up of inclusive classrooms. The question arises what do we mean by the buddy system? Who are buddy and what type of roles they need to play in helping and assisting their needy peers?

Buddies in relation to inclusive set up are the student volunteers mostly the peers of the same age and grade selected from the group of non-disabled students who are further trained for understanding the needs of their

differently abled peers and providing help and assistance to them at the proper time in a proper way.

Mostly the system known as peer-to-peer buddy system (pairing two or more students acting as buddies) is adopted for helping and assisting the disabled or differently abled for their adjustment and education in the inclusive set up. In this system a differently abled peer is looked after by a peer or small group of the students called buddies (of the same class in the classroom situations) or by the senior students (in or out of the class school situations). This small group may vary in size but every time there must be some one present from the non-disabled buddies for assisting and helping the particular disabled student belonging to their buddy circle in his adjustment and learning.

Regarding their functions, buddies have the opportunities to play their roles both in curricular and co-curricular life of the school. Buddies in the classroom *i.e.* (the non-disabled volunteers alongwith the disabled peer of their buddy circle) may work together, share equipments and participate together in cooperative group work or project activities. In the games and other co-curricular activities, the students belonging to a buddy circle (comprising non-disabled volunteers and the disabled peer) may work and participate in a cooperative way. Their activities may also be extended to beyond school boundary such as attending social gatherings in the community or inviting each other in family functions, etc.

The essentials for successful employment of Buddy System

The things like below may prove quite helpful in the successful employment of buddy system for the realization of its objectives in an inclusive education set up.

1. While initiating the buddy system in an inclusive set up, the teacher/school authorities may have an orientation talk and dialogue with the students acquainting them with the nature of difficulties faced by their differently abled peers in their adjustment and education alongwith them in the inclusive set up. They may call then the students volunteering them for the running of the buddy system in the school.
2. The selection of the non-disabled peers as buddies should be made with a great care. Usually, the students selected for playing the role of buddies to the disabled students should be chosen for their maturity, kindness and voluntary spirit of giving their time and efforts for taking away the disabled alongwith them in the performance of

- curricular and cocurricular activities by providing help and assistance according to their special needs.
3. The non-disabled students volunteers playing the role of helping buddies must be provided appropriate training for exercising their responsibilities in the most appropriate way possible so that (i) they don't try and do everything for their disabled buddy turning him/her heavily dependent up them. (ii) they should learn and be made competent to meet the special needs of the disabled buddy in adjusting them to the inclusive set up and joining hands with them in their learning.
 4. In the buddies circle, the members should see each other as competent human beings irrespective of the differences in their abilities. The differently abled may be imbued with a number of unique abilities (irrespective of their impairment in one or two developmental areas) and the non-disabled buddies should also try to learn a number of specialties owned by the differently abled buddy belonging to their buddy circle. For example a hearing impaired may be a good photographer, cartoonist, poet or craftsman, a visually impaired may be a good musician, a philosopher, creative genius, etc. The relationship in the buddy circle thus may be on mutually sharing and helping basis for each other's progress in curricular and co-curricular areas.
 5. There should be rotation system applied in the inclusion of non-disabled peers assisting and helping a disabled peer in the buddies groups working in an inclusive class since there is a possibility of growing resentment among the non-disabled volunteers that they "have to" work with a particular disabled child.

Benefits of Buddy System

As you know in friendship both the parties remains in a win-win situation. The same is true with a buddies group working in an inclusive set up. According to convey (2008), the use of buddies in and out of the classrooms can benefit children with or without disabilities in the manner like below.

Benefits for non-disabled

Non-disabled children budding the disabled children may be benefited in terms of

- (i) getting experiences of interacting with children who they may have not interacted with before.

- (ii) developing an awareness and respect for diversity, thus helping themselves to develop socially and emotionally.
- (iii) Developing a deeper understanding of the task or activity (related to curricular and cocurricular areas) as they help clarify ideas and rules for their disabled buddy.
- (iv) Learning positive skills from their disabled buddy, learn to see things from a different perspective, or learn the value of something they take for granted (*i.e.* value of the sense of hearing, vision, sound intellectual development, locomotor ability that has been denied to the disabled buddy).

Benefits for Disabled

Children with disabilities can benefit from a well-planned, well-implemented buddy system properly through :

- (i) Seeing social and academic skills modelled
- (ii) Hearing things explained in "child" language
- (iii) Getting more one-on-one support than adults can provide in a busy school environment.
- (iv) Becoming more independent, connected and confident.

Reflective Teaching

Teaching in the classroom is generally found to be organized at the three levels known as memory level, understanding and reflective level of teaching. Memory level teaching based on the traditional behaviouristic theories of learning is aimed to pour information directly in the minds of the students for getting it memorized with least care of its proper comprehension, understanding or application on their parts. Understanding level teaching represents relatively a high level in the teaching-learning process as compared to memory level. It provides meanings to what is being taught or learned in a learning situation. Students can properly understand, grasp and apply the learned generalizations in other learning or working situations. However, such type of teaching also does not carry much benefit on account of being too much teacher centered and its inability to develop the power to reflect characterized with independent problem-solving ability, creativity and constructiveness demonstrated by the students in their learning and acquisition behaviour.

For serving this purpose, the teaching needs to be organized at the reflective level instead of the traditional memory or understanding levels. Let us know what we mean by teaching organized at reflective level ?

Meaning and definition

According to the dictionary meaning the word 'reflecting' stands for the act of reflection (turning back), contemplating or paying serious consideration etc. Consequently, teaching at reflecting level must have an association with the process of reflecting or turning back the existing facts or knowledge for more careful consideration or critical examination to derive a fresh conclusion. It is in this sense that Morris L. Bigge has defined it as *"careful, critical examination of an idea or supposed article of knowledge in the light of the available evidence which supports it and the further conclusions towards which it points."* (1967, p. 324)

A careful examination of this definition may reveal the following facts about the nature of the reflecting level of teaching :

- It provides opportunities to the learners for the close, careful and critical examination of the existing facts, ideas, insights and generalizations.
- The learners try to test them in the light of the relevant evidence.
- They are free to set independent hypothesis, test them and draw their own conclusion for learning new facts or acquiring new insight.

Looking into the above cited nature, it is the must that teaching at the reflecting level be organized at some quite advanced level providing opportunities for the utilization of the learner's cognitive abilities. Such opportunities may be best provided if the teaching-learning situations are turned into problematic one and the students are made to discover the solution of problem in the light of their own thinking and independent pursuit of the knowledge. They enjoy freedom of choosing their learning path, devise their own means and ways for arriving at the conclusions, and construct or create knowledge and its applications in their own ways.

Reflective teaching and inclusive classrooms

In inclusive classroom set up we have the presence of diversified learners having diversified interests, potential and abilities for their learning and development. No single prescription in the form of direct telling of the information or training them in one or the other arts and skills can serve the purpose of inclusive education i.e. providing equal access and opportunities to all the learners for their wholesome development according to their learning needs and potential with no discrimination of any kind. The reflective level teaching here can work as most suitable alternative in place of direct

teaching or instruction mode adopted in the memory or understanding level of learning.

For proceeding in this concern the teacher may put the students of an inclusive class in a situation, (i) to work out the solution of a problematic situation (ii) to collect data and information about getting acquainted with some facts (iii) to seek application and truth value of a generalized principle (iv) to construct, create and produce something new or of some use at their own while working alone or in group.

Putting them in such problematic, self-learning and pushing situations, every learner in the inclusive set up has sufficient freedom to reflect upon his own abilities, previous experiences, skills and potential for proceeding on his learning path. No one has to wait for others as he or she is free to utilize his/her capacities or potential at the utmost for his highest learning or development. Intellectually superior, normal, slow or backward, and the variety of disabled such as hearing, visually, locomotor disabled, learning disabled and mentally sub-normals all can strive and gain the desired milestones in such reflective level teaching-learning set up well in tune with their strengths and limitations.

The fears that only capable, non-disabled and intellectually superior students can benefit from reflective teaching is unfounded or baseless. The reverse is more true as everybody has the opportunity and access for getting proper return of his striving well in tune with his own potentials, and differential abilities. Moreover, there is more cooperation and collaboration in the reflective teaching set up instead of the mutual rivalries and unhealthy competitions as would otherwise possible in memory and understanding level teaching.

A blind child may enjoy fine and rich imagination, the strength and utilization of his all other senses than the sight for reflecting upon in the confronting learning, creative, and constructive work situation. The same is true for the hearing disabled who can focus more in the minute observations of the details of the observed phenomenon and thus reflect well in knowing and applying the things in a better way. The learning disabled although feeling difficulty in some particular learning area may be found to possess extraordinary potential of learning and doing so many things and thus may be found to show quite encouraging results in facing the challenges of reflective teaching. In this way, if analyzed properly there is nothing that may hamper or provide major hurdles on the path of adopting reflective teaching strategy on the part of teachers for the education and development

of the students in an inclusive education set up. It help in individualizing the process of instruction as well as benefitting from the collaborated efforts if challenges of reflective thinking in learning one or the other things are thrown to groups comprising of non-disabled and disabled peers.

Multisensory Teaching

Multisensory teaching as the name suggests, is a teaching that is executed or performed with the adopting ways and means resting on the use of a number of sensory organs (*i.e.* senses of sight, hearing, smell, taste and touch). Since senses are termed as the gate way of knowledge and key means for the acquisition of valuable learning experiences, multisensory teaching has a great potential for proving beneficial and useful in any scheme or program of teaching-learning planned and organized for the school children. Its importance, use and significance is much enhanced in the case of its employment for the adjustment and education of the children belonging to inclusive education set up for the reasons outlined below.

In inclusive set up we have the presence of diverse learners with their diverse needs, potential and capacities for learning. Where non-disabled students, as happens in the usual classroom set up, can be taught by making use of any one or two available sensory means (such as only through lecturing, demonstrating, lecture cum demonstration or experiences given through the senses of smell and touch in the laboratory or workshops), the group of disabled or differently abled present in the inclusive set up need the use of a variety of senses for their adjustment and education depending upon the nature of their impairment and special learning needs. For example,

- (a) The hearing impaired remain in loss in terms of getting benefitted from the use of their hearing sense, visually impaired suffer this loss in terms of the use of the sense of sight. In their cases thus it becomes quite essential to compensate their losses by making use of their other available senses for the learning and adjusting to the demands of the inclusive set up.
- (b) The children with intellectual impairment, suffering from autism and one or the other type of learning disabilities may be properly benefitted through the provision of multisensory experiences in the teaching-learning process specially in the form of concrete visualization and manipulation of the things by themselves.
- (c) The children suffering from locomotor disability or orthopedical impairments may be unable to manipulate the things on account of some impairments in their action organs. While sitting on the wheel

chain, they may gain advantages from the display of audio-visual experiences, sensing and smelling the things in their environment as well as taking parts in conversations and dialogues.

- (vi) The children suffering from communication disorders on account of language problems, being deaf and dumb, emotional disturbances or intellectual impairments may get necessarily benefitted through the multisensory means and ways available for them for the acquisition of the required learning experiences.

In the inclusive classroom setting thus a subject teacher may be seen to be engaged in the multisensory teaching for providing all the learners belonging to inclusive set up the sensory experiences suitable to their abilities or disabilities, learning styles and learning requirements. In the adoption of such multisensory approach in his teaching the use of multimedia technology of the modern age may also prove quite helpful and beneficial. The use of multimedia in the inclusive classroom set up may include a combination of text, audio, still images, animation, video or interactive content forms. Multimedia is usually recorded and played, displayed, or accessed by the computerized and electronic devices, but can also be part of a live performance. Thus, what is presented by the teachers in the classroom as multimedia presentations for the teaching-learning of the subjects may be recorded or live. A recorded presentation may allow interactivity via a navigation system. A live multimedia presentation may allow interactivity via an interaction with the presenter or performer.

In addition to seeing and hearing, the developments in the field of computer and technology have made it possible to provide feeling sensations and illusion of taste and smell to the virtual objects. In this way, utilization of multimedia in the inclusive set up has opened every possibility of providing useful multi-sensory experiences to the learners with the utilization of the multiple senses, (senses of hearing, sight, smell, taste, and touch).

Characteristics features of multimedia used in the Inclusive classroom for multisensory teaching

- Multimedia contents are very rich in the sense that they may involve a combination of a variety of media contents-audio, visual, audio-visual, text, pictures, graphs, animation and interactive format.
- Multimedia presentations may require from the teachers to make use of the traditional and computerized electronic devices.

- Multimedia presentations may be viewed by the students in person alive on stage, as well as projected, transmitted or played locally with a media player.
- A teacher may make use of a live or recorded multimedia presentation for helping in his instructional task.
- A teacher may make use of either analog or digital electronic media technology for preparing and presenting his multimedia presentations.
- In the case of making use of the Digital online multimedia on the part of a teacher he may go for its own loading from the related websites or may try to receive it alive or on demand through the respective agencies broadcasting useful educational programs.
- There is specific provision of multimedia presentation in all the modern available electronic and computer applications such as personal computer, laptop, tablet and Smart phones. Microsoft corporation also provides the power point software program along with its MS office package for producing power point presentation in the classroom setting. The laptops, PC's and Tablets also have provision of the display of CDS loaded with multimedia teaching learning material for devising necessary benefit on the part of learners for realizing the set learning objectives.

STUDY QUESTIONS

A. Essay Type Questions

1. What are Pedagogical or teaching strategies ? Name a few strategies employed in the teaching-learning of an inclusive education set up and describe any one of them in detail.
2. What is peer tutoring ? Discuss the use and utility of this strategy for the teaching-learning in the inclusive education set up.
3. What is cooperative learning ? Discuss the use of cooperative learning strategy in the context of inclusive set up in its various forms and modes.
4. What is social learning ? As a teaching strategy, how it can be employed in the inclusive education set up ? Discuss.
5. What do you understand by the term buddy system ? What is its role in the teaching-learning carried out in an inclusive education set up ? Point out the essentials for successful employment of buddy

system for the adjustment and education of the learners in an inclusive set up.

6. What is reflective teaching? How does it differ from memory and understanding levels teaching? Discuss the employment of reflective teaching strategy in the inclusive education set up.
7. What is multisensory teaching? Discuss the use and significance of multisensory teaching strategy for the learners belonging to inclusive education set up.

B. Short Answer Type Questions

1. What are pedagogical or teaching strategies?
2. Name any four pedagogical or teaching strategies used for the teaching-learning of the students belonging to inclusive education set up.
3. What is peer tutoring/cooperative learning/social learning/reflective teaching/multisensory teaching in context of its use in inclusive education set up?
4. What is buddy system?
5. Mention about the two uses/benefits of making use of any one of the following pedagogical or teaching strategy for the teaching-learning in an inclusive set up.
(a) Peer tutoring (b) Cooperative learning (c) Social learning
(d) Buddy system (e) Reflective teaching (f) Multisensory teaching.

9

Support Services and Teaching Partnership in Inclusive Set up

Chapter Outline

- Introduction
 - Developing positive relationship between school and home
 - Partnership between Teaching-Co-teaching personnel
 - Teacher and special education teacher
 - Teacher and parents
 - Team work in Inclusive Set up
 - Professional training of teachers in Inclusive Schools
 - Study Questions
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Introduction

In an inclusive school there is a provision for including all the learners in the mainstream of its education with no discrimination of any kind with a commitment of providing equal opportunities for their wholesome development in tune with their capabilities and learning needs. It is a great challenge before the school administration and teachers for meeting the adjustment and learning needs of the non-disabled and disabled children of wide variety through the limited resources at their disposal in the inclusive set up of their school. Here arises the need of calling for the assistance of essential support services and partnership with those who can provide valuable help and assistance in the needed adjustment and wholesome development of the learners belonging to inclusive set up specially the differently abled or disabled. The family including parents, co-teachers and support providing personnel like special education teachers, guidance personnel, a team of professionals such as clinical psychologist, hearing and speech therapist, audiologist, occupational therapist, eye specialist, medical professional, etc. may

need to be involved for providing needed support services and teaching partnership in the inclusive set up. What it is and how it can be worked out, let us try to know about it in this chapter.

Developing positive relationship between School and Home

Schools function for serving the educational and developmental needs of the students. To serve the interests and welfare of the students admitted in the school is the prime consideration of what is done in a school through the various men-material resources at its disposal. Its responsibilities get much enhanced and the tasks in hand become more challenging for providing education and developmental opportunities to all the learners in an inclusive set up irrespective of a wide variety of differences and deviations found among them. For exercising its responsibility well towards the learners especially differently abled or children with special needs, a school has to seek one or the other types of support from the people and community, the interests of whose children it is supposed to serve. The home as prime organ and institution of the community can work as a main support giving functionary for an inclusive school to serve its objectives in a proper way.

For getting support and seeking the needed partnership with the home in its efforts for providing better opportunities and help to the differently abled, in their education and development an inclusive school has to work well for establishing proper rapport and positive relationship between school and home. The question here may arise that what measures should be adopted for proceeding in this direction? We may summarise them, in general, in the ways laid down below.

1. The anxiety and fears of the parents and family members about the care and education of their differently abled children in the inclusive education set up should be removed and abolished in the best possible way on the part of an inclusive school. For this purpose, the school authorities should try to convince them.
 - That in inclusive set up every child is accepted with open arms for getting benefitted from the curricular as well as co-curricular experiences provided to all the students of the school with no discrimination of any kind due to their disabilities or impairments.
 - That school is doing at its utmost to feel the differently abled adjusted in the school's learning and work environment through the needed improvement in its infrastructural facilities.

- That due efforts have been made for creating healthy environment and positive attitude towards the special needs of the differently abled. The disabled should not get harassed or feel uncomfortable – psychologically as well as physically on account of their impairments or learning difficulties of one or the other nature.
 - That to get education and opportunities for the wholesome development alongwith the non-disabled on the equal footing is the right of their disabled children and school is legally as well as morally obliged for fulfilling its responsibilities towards all the differently abled children seeking admission to the school.
2. The chain of communication between the home and school should be well established. The queries of the parents and family members about the education, adjustment and welfare of their differently abled children should be properly answered. They should be properly welcome in the premises of the school for getting them informed about the adjustment and education of their children and their concerns related to them should be properly addressed. The school should also send their observational and evaluation reports of their children to them in a regular fashion. The activities and programs related to inclusive education (curricular as well as co-curricular) should be on the website of the school.
 3. The parents and family members of the children should be properly invited in the school's functions and student's programs. Special attention should be paid over the attendance and presence of the parents/family members of the differently abled and seeking their cooperation in motivating and reinforcing the encouraging behaviour, participation and involvement of their disabled child in the programs and activities of the school.
 4. There should be appropriate forum in the shape of parents-teacher associations, establishment of community centers in the school, representation to parents of the students in the managing committee/ administration of the school, etc. for the proper dialogue, interaction, planning and management of the education and welfare of the children belonging to inclusive set up of the school. Here, the schemes, and programs for the education and welfare of the differently abled children in the inclusive set up should be properly discussed and problems felt should be resolved through the mutual cooperation between the school and home.

5. Help of the parents and family members may be properly secured for the organization of a number of co-curricular activities in the school involving disabled children. The parents/family members of the disabled (well acquainted with the type of support, assistance and encouragement needed for the children suffering from a particular impairment) may prove quite helpful in handling the work and activities related to the disabled. They may feel delighted in watching and supporting the activities of their differently abled children and in turn school may also get due benefit of getting their support and assistance for the education and welfare of the differently abled in the inclusive set up.
6. Many of the parents and family members may provide their valuable services for the success of an inclusive education set up on account of their being experts in special education for the CWSN, professional in the form of physiotherapist, occupational therapist, clinical psychologist, speech therapist, medical professional, guidance provider or counsellor etc. They should be properly honoured for providing talks, participating in seminars/workshop and providing interaction or service facilities as a supporting team and helping professionals for the adjustment, education and welfare of the differently abled.

By adopting the measures like, above thus adequate efforts can be made for developing positive relationship between school and family.

Partnership between Teaching-Co-teaching personnel

There are a number of activities and programs planned and organised in the inclusive set up of a school for the education, adjustment and development of the differently abled students alongwith their non-disabled peers. In all these programs and activities, sufficient attention is always paid for caring about the special adjustment and learning needs of the differently abled children. A teacher inspite of his best efforts and sincerity on this account can't do it alone unless he/she is helped in his efforts by one or the other co-teaching personnel. He may avail such services of co-teaching from the (i) students acting as monitor of the class/peer tutors (ii) the fellow subject teachers or instructors (iii) special teacher specialized in providing special education for the special (children with special needs or differently abled) (iv) parents of the differently abled (who know the ways and means of handling their children and making them to learn and behave)

We have already pointed about the role of peer tutors in assisting the disabled in the task of teaching and helping them in need. The fellow subject teachers and instructors may also provide assistance and help to the class/subject teacher in his classroom teaching and other work situation by taking care of the teaching revision, practice and guidance work of the students in an inclusive set up. Let us see how does a teacher may seek partnership with a special teacher or parents as a co-teaching personnel in the work and activities carried out in an inclusive set up.

Partnership between teacher and special teacher

Teaching in inclusive set up is a big challenge for the subject teachers. There are many occasions where a teacher, while facing the students of inclusive class, may experience a lot of difficulty in meeting the adjustment and special learning needs of the diverse children especially of those who are differently abled/disabled on account of his lack of experience, knowledge and skill required for dealing with differently abled children. The special education teachers are specifically trained for the adjustment and education of the special (differently abled) children. They are thus the persons whose help and assistance is very much needed for a class/subject teacher in dealing with the issues of adjustment and education of the differently abled. As a partner in the teaching-learning process and other developmental tasks carried out for the differently abled by teacher thus a special teacher may be found to assist him as a co-teaching personnel in the work and activities like below.

- (i) To diagnose the nature of impairment and learning difficulty faced by the child in his adjustment, learning and progress alongwith its possible causes and ways of rectification.
- (ii) To suggest ways and means, methods and strategies, aids and device used for the teaching-learning of the differently abled in tune with the nature and types of their impairments/disability in one or the other areas of their development.
- (iii) To suggest and help in the use of assistive devices on the part of the differently abled for their adjustment, living as well as meeting their learning needs *i.e.* training blinds for the use of braille, hearing impaired for the use of hearing device, orthopaedically impaired for becoming comfortable on wheel chair and using technological means for his learning and living etc.
- (iv) To suggest ways and means as well as demonstrate the skill of meeting the learning needs/styles of diverse learners belonging to inclusive set up.

Partnership between teacher and parents

Partnership between teachers and parents is quite crucial and essential for the needed care, adjustment, education and wholesome development of the differently abled children. What is done by one in one situation can be supplemented and enriched by others in the other situation of the child's learning, living and developing. The children learn so many things from their parents and home environment about so many things related to their adjustment, living and development. Parents know about the level or potential of the abilities or disabilities of their children, alongwith the possible causes of their impairments and developmental deficiencies. They know about the learning of their children in their day to day living, behaving and progressing. The knowledge and information submitted by the parents to the teachers working with the differently abled may prove quite helpful in knowing and dealing with these children in the inclusive set up. Based on this data the teachers may prepare themselves well for meeting the adjustment and special learning needs of these children depending upon the nature and types of the impairment and learning difficulties. It can also help them to consult the special education teachers/experts and the team of the professionals (like medical professional, speech therapist, physiotherapist, occupational therapist, Guidance and counselling personnel) etc. for the needed adjustment, rehabilitation, education and progress of the differently abled children belonging to their inclusive class.

In turn what they are experiencing with these children, alongwith the efforts made and progress achieved in relation to the adjustment, education and progress of these differently abled children may be properly shared with the parents in a quite continuous and comprehensive way. The difficulties in their hearing, clear observation of the things on blackboard or working in laboratory and other working situation and advice received through the experts should be immediately brought out in the notice of the parents and now both of these parties-parents and teacher incharge should work together for the further remediation task. The same should also happen with the other symptoms and information related to the child's difficulties in the other developmental areas such as emotional behaviour, intellectual sub-normality, autism, learning disabilities (*i.e.* dyslexia or dyscalculia) where the partnership or joint efforts (*i.e.* working together for serving the special needs of the child) of the teacher and parents may prove quite beneficial as well as essential for the adjustment, education and progress of the developing child.

The follow up of any identification of the developmental and learning difficulty of a differently abled child in the form of remediation is essential and in turn these remediation measures need to be practiced in a quite appropriate and regular ways for getting necessary desired outcomes. It can't be carried out properly with the active cooperation and partnership between the teacher incharge and the parents. What is told and conveyed by the school about the differently abled children to be done and followed by the parents at the homes and community surroundings should be implemented by the parents and family members in an appropriate way for getting good results about the adjustment and progress of their differently abled children. Conversely, what is reported by the parents about these differently abled children should also be made a subject of serious consideration on the part of the teacher incharge in the inclusive school. The parents for the necessary follow-upwork should also be invited in the school for having a close watch on the learning progress of their differently abled children in the various curricular and cocurricular experiences provided to them in the inclusive set up. Their help in participation as volunteers may also be taken in the teaching and non-teaching tasks organized in the school. They may work as teacher, trainer, or members of the professional team (counsellor, medical professional, therapists etc.) and thus provide their valuable cooperation as partners with teachers for carrying out their responsibilities towards the adjustment, education and progress of their differently abled children.

Team work in Inclusive Set up

The objectives of inclusive education provided in the school can be realized well only through a well coordinated work carried out by a team of teachers and professionals consisting of the following.

- (i) Subject teachers and other teachers/instructors engaged in providing curricular (theory and practice) experiences to the learners including physical education/yoga teacher.
- (ii) Special education teacher responsible for running a resource room for the differently abled and providing needed assistance and help for the teaching professionals and instructors for fulfilling their responsibilities in an inclusive set up.
- (iii) The professionals whose services are availed by the school on part time basis or they are called off and on in time of need or their services are availed through the district, regional centers run by the local/state/central government for the welfare of the disabled. They may be the personnel like below.

- Medical professionals for diagnosing and treating the medical problems of the disabled children.
- The therapists professionals like speech therapist, occupational therapist, physiotherapist, psychotherapist for providing needed therapy at the proper time in a proper way.
- The psychologists like educational psychologist and clinical psychologist providing psychological help and assistance to the suffering children.
- Rehabilitation professional providing rehabilitation and assistive aid services for the disabled.
- Social workers including social organization helping differently abled children in their physical and social adjustment in a variety of ways like providing adaptive devices and assistive technology, artificially limbs, mobility and hearing aids, etc.

(iv) Parents and Family : The efforts of the interdisciplinary team listed in (i) to (iii) can't stand anywhere if proper cooperation and coordination with the parents and members of the family of the children is not available. Therefore, while adopting team approach for the adjustment, education and progress of the differently abled in the inclusive set up due efforts should always be made for the involvement and participation of the parents and family as a part of the interdisciplinary team.

Professional Training of teachers In Inclusive Schools

Whatever the support system may be provided or partnership is involved for carrying out the business of an inclusive school, the desired results in this direction can't be properly realized unless the teaching faculty of the school is not prepared or trained for exercising its responsibilities and functions well in relation to their working in the inclusive set up. We have to make an appropriate provision for the professional training of teachers at the pre-service and in-service stages for equipping them with the knowledge, skills, attitude and interests necessary to face the challenges of teaching the students in the inclusive set up. In the inclusive set up of a class, they may find the presence of a wide variety of learners, *i.e.*, non-disabled and disabled, normal as well as children with special needs or differently abled, gifted and slow learners etc. Meeting the learning as well as adjustment needs of the diverse learners is a quite uphill task. A teacher working in an inclusive school, thus need a well chalked program for his professional training carried out at the pre-service and in-service stages of his professional carrier. The

question here may arise what type of training is needed for getting the intended teachers prepared for making their task in inclusive school easier and fruitful? The things like below should be taken into proper consideration for chalking out a plan or scheme for the professional training of the teachers working in the inclusive schools.

1. In the teacher education programs preparing/training teachers for the elementary and secondary education stages (Diploma and Bachelor Courses), sufficient weightage should be given for orienting and training the prospective teachers in the arts and skills of inclusive education. The subject "inclusive education" or "working in the inclusive school" should be included in the syllabi of teacher preparation courses as a compulsory paper.
2. The teacher trainees should be provided orientation in the art and skill of inclusive education and working in an inclusive school through the inclusion of the topics like below in the above mentioned compulsory paper.
 - (i) Concept of 'inclusive education' and 'inclusive school'.
 - (ii) The Need and Significance of accepting the philosophy of inclusion for the education of the children in our country.
 - (iii) The obligation and compulsion of making provision of inclusive education in all the schools providing elementary education for the children belonging to age group 6-14 years.
 - (iv) The consideration about the types of children possibly present in an inclusive classroom/school for providing them equal access to the teaching-learning activities (curricular and co-curricular) for their wholesome development.
 - (v) The concept of 'impairments', 'disabilities' and 'handicap' suffered by the children with disabilities present in the inclusive set up.
 - (vi) The knowledge and understanding about different types of impairments and disabilities owned by the disabled students in relation to their symptoms, identification, causes and providing remedial measures for their adjustment, education, development and rehabilitation in a suitable way.
 - (vii) Knowledge and understanding about the prevalent legal provisions, schemes and programs for the education, rehabilitation and welfare of the differently abled children at the local, regional, national and international level.

- (viii) Equipping the regular schools with the essential infrastructure, non-material facilities, and essential preparations and provisions for working as inclusive schools.
 - (ix) The acquisition of knowledge, understanding and skills related to methods, devices, techniques, aids and equipments needed to be used for meeting the diverse learning needs of the students belonging to an inclusive education set up including the use of ICT means, assistive and adaptive technology for the adjustment and education of the differently abled.
 - (x) Knowledge and skills regarding the establishment of resource center in the inclusive school for meeting the special learning and adjustment needs of the differently abled students.
 - (xi) Knowledge and understanding regarding the use and application of support services available through the government and non-government agencies for the welfare, education and rehabilitation of the differently abled children at the local, regional and national level.
 - (xii) Art and skill of seeking cooperation from the parents and team of professionals like special education teacher, guidance personnel, therapists, medical professionals, etc. made available by the school authorities or resource centers at the local or regional level.
 - (xiii) The knowledge and skill regarding the evaluation and assessment of the learning and behavioural outcomes of the learners belonging to inclusive education set up and the ways and means of providing them needed feedback for their learning and progress.
3. Proper efforts should be made for bringing desirable positive changes in the attitude of the trainees towards the inclusive set up and its working, the disabled and their disabilities and education and welfare of the differently abled children.
 4. Theory and practice should go side by side in the training/education programs of the prospective teachers. The teaching practice of these trainees should be preferably held in the schools adopting inclusive education practice.
 5. Proper educative and innovative experiences should be given to the prospective teachers in their colleges/institutions of teacher education by a qualified and experienced staff (having knowledge and skills regarding inclusive school). It should be supported by offering them

opportunities for visiting the good inclusive schools, the specialized institutions working for the education and welfare of the differently abled children such as National Institutes for different disabilities, RCI, the working of special education department of NCERT, SCERTs and other national or regional level bodies and special schools.

6. The teacher training institutes should try to provide exposure to their trainees about the knowledge and experiences of the scholars and experts working in the field of special and inclusive education and caring or rehabilitation of the disabled. These scholars and experts should be invited in the institute for extension lectures, seminars and workshops and necessary interactions with them should also be arranged for the prospective teachers.
7. There should be proper provision of reorienting, refreshing and enriching the knowledge and skills of the working teachers through the in-service training programs organised by the concerned agencies like teacher associations, teaching training institutes, SCERT, NCERT, RCI and other functionaries working in the states and central institutes for the education and welfare of the differently abled.
8. The teachers through pre-service and in-service programs should be trained in carrying out action research in the field of inclusive education for improving their practices in the inclusive schools.

The measures like above pointed out for the effective professional training of the teachers of inclusive schools may prove quite helpful in equipping the teachers with the necessary knowledge, understanding, skill, attitude and interests for fulfilling their responsibilities and exercising their functions in a proper way in the system of inclusive schools.

STUDY QUESTIONS

A. Essay Type Questions

1. What steps can be taken for the development of positive relationship between school and home? Discuss the essential measures to be adopted for this purpose.
2. Why partnership between teaching and co-teaching personnel is essential for the smooth functioning of an inclusive set up? Discuss the type of partnership relations existing between (i) teacher and special teacher and (ii) teacher and parents for this purpose.

3. What type of support services are usually available in the inclusive set up for the working of classroom subject teachers? Discuss their utility in brief.
4. What type of partnership can be secured by a teacher with other functionaries helpful for him in carrying out his responsibilities in an inclusive school? Discuss in brief.
5. Why team work is essential among the different functionaries (teacher and other professionals) for the successful outcomes in an inclusive set up? Throw light on the nature of such team work.
6. Why proper professional training is essential for the teachers in exercising their responsibilities in the inclusive schools? Discuss the essentials that should be observed and cared for arranging appropriate pre-service and in-service training programs for them.

B. Short Answer Type Questions

1. What is the need of developing positive relationship between school and home for the successful functioning of an inclusive set up?
2. Point out the role of special education teacher in an inclusive school in brief.
3. What type of help and assistance can be provided by the parents to the teachers working in the inclusive set up?
4. Name a few types of support services available to the teachers in exercising their responsibilities in the inclusive set up.
5. Name the professionals working as members in the team work carried out for the proper functioning of an inclusive set up.
6. Name a few suggestions for improving the present pre-service teacher training programs in relation to the implementation of inclusive education practice in the regular schools.

10

Assistive and Adaptive Technologies in Inclusive Setup

Chapter Outline

- What is Assistive Technology ?
 - The objectives of Assistive Technology in Inclusive Setup
 - Assistive Technology and Adaptive Technology
 - Assistive and Adaptive Technologies for varying types of disabled or differently abled students in the Inclusive Setup.
 - Study Questions
-

What is Assistive Technology ?

Assistive technology is an umbrella term that includes assistive, adaptive, and rehabilitative devices for people with disabilities and also includes the process used in selecting, locating, and using them. Assistive technology promotes greater independence by enabling people to perform tasks that they were formerly unable to accomplish, or had great difficulty accomplishing, by providing enhancements to, or changing methods of interacting with, the technology, needed to accomplish such tasks. As a formal definition of the term assistive technology we can here cite a definition adopted in "Individuals with Disabilities Education Act (IDEA)", federal law of USA. *Assistive technology device means any item, piece of equipment, or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain, or improve the functional capabilities of a child with a disability.*

Examples of Assistive technology include (i) the screen readers that enable people to hear electronic text as synthesized speech. (ii) speech-to-text software that enable people to use their voices to enter text. (iii) Text telephones. (iv) Accessible keyboards, (v) standing frames, (vi) Large print (vii) Braille, and (viii) speech recognition software etc.

The Objectives of Assistive Technology in Inclusive Setup

- To enable them to get adapted or adjusted to the environment of the inclusive set up.
- To enable them to approximate normal fluency, rate, or standards-a level of accomplishment in the classroom teaching-learning which could not be achieved by any other means.
- To provide access for participation in programs or achieves which otherwise would be closed to them.
- To increase endurance or ability to persevere and complete tasks that otherwise are difficult to be attempted on routine basis.
- To enable them to concentrate and focus on learning tasks, rather than other objects or activities in the environment.
- To help them in raising their communication activities and skills.
- To provide greater access to information and environmental exposure.
- To help them in making use of the assistive technology including computer technology for their adaptation, education and development.
- To support social interactions with peers, schoolmates, teachers and other school personnel.

Assistive Technology and Adaptive Technology.

The term adaptive technology is often used as the synonym for assistive technology. However, they are different terms. Assistive technology refers to "Any item, pieces of equipment, or product system, whether acquired commercially, modified, or customized, that is used to increase, maintain, or improve functional capabilities of individuals with disabilities" while adaptive technology covers items that are specifically designed for persons with disabilities and would seldom be used by non-disabled persons. In other words, "assistive technology is any object or system that increases or maintains the capabilities of people with disabilities. "While adaptive technology is "any object or system that is specifically designed for the purpose of increasing or maintaining the capabilities of people with disabilities." Consequently, adaptive technology is a subset of assistive technology.

Adaptive technology often refers specifically to electronic and information technology access.

Assistive and Adaptive Technologies (AT) for varying types of disabled or differently abled students in the Inclusive set up

A. Assistive Technology for Orthopedically or Mobility Impaired

Orthopedically or mobility impaired students need a wide variety of assistive technologies enabling them to adapt and learn in the inclusive class room set up. With their limited physical capacities and difficulty in movements they essentially need some ways and means of assisting them in a proper way for coping with such deficiencies or deficits. Surely and certainly the assistive technology options should match here with the specific needs associated with the nature of their impairment deficiencies of these. Let us see how the challenges posed by the impairment deficiencies of these students can be faced with the help of assistive and adaptive technologies in an inclusive classroom set up.

- **Helping the Orthopedically impaired by equipping them with artificial limbs.** Initially attempts should be made to help the Orthopedically impaired with the use of Prosthesis. Prosthesis, prosthetic, or prosthetic limb is a device that replaces a missing body part. Prostheses are typically used to replace parts lost by injury (traumatic) or missing from birth or to supplement defective body parts. Inside the body, artificial heart valves are in common use. Other devices and aids can be considered prosthetics include artificial leg, foot or hand, hearing aids, artificial eyes, Gastric bands and dentures etc.
- **Equipping the Orthopedically impaired with mobility devices.** The Orthopedically and mobility impaired students may be helped in their proper mobility with the devices like wheel chairs and walkers. These devices allow them to perform mobility related activities of daily living and necessary movements in the school and classes. The devices comes in a number of variations where they can be propelled either by hand or by motors where to occupant uses electrical controls to manage motors and seating control actuators through a joystick, sip-and-puff control, or other input devices.
- **Helping the Orthopedically impaired in providing written responses.** Some of the Orthopedically impaired students may feel difficulty in providing written responses on account of their disability or physical incapacities. Such students may be helped (i) by asking them to make use of those pens and pencils that require less pressure

and are easier to grasp and also have a provision for the hand splinters or holders, e.g. for helping the pen, pencil or crayon holding, (ii) by a fellow non-disabled student for taking class notes and providing written responses on his behalf, (iii) training the child in using the other hand or even legs etc. If his writing hand (left or right) is impaired, and (iv) making provision for the use of computers, laptops, mobiles for written communications and computations by making suitable adaption as per needs and impairments of the affected students.

- **Helping orthopedically impaired in attending to reading tasks.** Some of the orthopedically impaired students may feel difficulty in attending the reading tasks by making provisions like below.
 - (i) Providing talking books, recorded texts and lectures for helping the disabled who are unable to hold or use books and printed material of reading. It can also be made easy to read the some on computer screen by adjusting the visibility of the letters/drawings etc. as per requirements of their convenience.
 - (ii) Providing reading stands, book holders, etc. adapted to their needs- sitting, standing and reclining position at the time of engaging in the reading tasks.
 - (iii) Making provisions of page turners and elastic or rubber bands and larger paper clips for securing pages on either side of the open book as per their need and requirements.
- **Carrying out essential adaptation in terms of material facilities and environmental modifications.** For helping the orthopedically impaired in their proper movements as well as taking parts in the activities of the inclusive set up along the normal peers it is very much essential to bring essential adaptation in material facilities and environmental surroundings related to classrooms, libraries, laboratories, assembly halls, work places, toilets, drinking water places etc. It may include the adaptations in terms of providing proper ramps and walkways; arrangement of proper seating and working in the classrooms, laboratories, and workshops, and ways for interacting and taking parts in the group activities etc.
- **Helping Orthopedically impaired in accessing computers, and mobile technology.** Students who are not able to use their hands to interact with a computer, laptop or mobile phones can be helped through alternative access and input assistive technology. Some

examples of hardware and software used by students with mobility challenges include switch activation and scanning software, speech recognition software, touch pads and touch screens, on screen (e.g. iPad, iPhone and iPod touch) and alternative keyboards, head mouse, foot mouse, joystick, and sip and puff activation technology (allowing a person with substantial disability to make selections and navigate computerized interfaces by controlling inhalations and exhalations).

B. Assistive Technology for Visually Impaired

Visually impaired students while receiving instructions and going through the learning experiences in an inclusive classroom set up may be helped a variety of assistive technology and means in the manner given below.

- **Assistive technology to help in visual assess.** It is meant for increasing the visual assess to printing material or other visionary objects for gaining desired information. It may include the devices and equipment like magnifiers (hand held, stand magnifier, or spectacle magnifier) closed circuit television, and computers (magnifying screen images through specialized hardware and software).
- **Assistive technology to help in auditory access.** Visually impaired children are privileged to have proper auditory access, therefore it remains beneficial for them to have good opportunities and means for the auditory access of the things to be visualized. In a useful auditory access they can make use of Synthetic speech technology (production of sound by means of computers.) With its services of converting writing words into speech it can properly assist the visually impaired to have easy auditory access to books, newspapers, typed material and manuscripts, etc. We have at present such advanced reading equipment or machines that can *be* successfully used for scanning and reading printed material to the visually impaired with a synthetic voice. They may also facilitate them to regulate the speed and tone of the voice and can even have the machine spell out words letter by letter if desired. These can safely be used with a personal computer to convert print to speech. Head phones are also available for using these devices/machines on the part of visually impaired without disturbing other students of the inclusive classroom.

- **Assistive technology to help in the tactile access.** Visually impaired are also in a position to have a proper tactile access of the printed material and visionary objects. There is now availability of such devices that can help visually impaired to read regular print effectively by converting print into a tactile mode. Coupled with computer technology now, these devices are now proving helpful both in converting regular print to Braille (tactile access) and Braille to print vice versa. It can help them to take notes and tests along with other student of the inclusive class and prepare assignments and papers at home. With the help of user friendly key-board, visually impaired students can store their work in a pen drive or may produce standard print copies for being used by their teachers or other sighted peers.
- **Assistive technology to help in orientation and mobility.** It includes the use of devices and equipment that may prove helpful to the visually impaired students in their safe, smooth and efficient orientation and mobility with regard to day-to-day living and functioning in inclusive set up. Here they may be trained to make use of canes (made of wood or aluminum) and other electronic travel aids such as laser beam cane and sonic guide. A lesser bema cane is an electronic device that emits three beams of infrared light (one up, one down and one straight ahead). These are converted into sound after hitting the objects in the path of visually impaired and thus enabling them to get proper single of the objects or hurdles in their path. Sonic guide represents a sort of an electronic device which after being born by a visually impaired child on his head is capable of emitting ultrasound and converting reflection from objects lying in the path into audible sound. The characteristic of this sound then may further help the visually impaired child for making judgment in terms of the distance, textures and directions of objects lying in his environment.
- **Assistive technology to help in instructional output.** It includes the sue of the devices, equipment and other aid material that may prove helpful to the visually impaired students to gain desired learning experiences through the formal instructional activities of an inclusive set up. As examples of such aid material for teaching various school subjects and content material we may cite the use of (i) Cranmer abacus (an special abacus to be manipulated and read

more easily by touch) for learning number concepts and making calculations in terms of counting, adding and subtracting etc. (ii) speech plus talking calculator, (iii) embossed relief maps and diagrams, (iv) three dimensional models, (v) electronic probes that give valuable signals in response to light, (vi) raised line writing paper and graph paper, (vii) talking clocks, (viii) talking thermometers and barometers, (ix) spelling and grammar aids and (x) talking books and dictionaries, etc.

C. Assistive Technology for Hearing impaired

Students with hearing impairments benefit from accommodations that may include the use of interpreters, preferential seating, and visual cues. Many of these students also use assistive listening devices such as hearing aids and personal FM systems. Increasingly, schools are experimenting with classroom sound amplification systems to accommodate students with hearing impairments and central auditory processing disorders. These are now some sophisticated and expensive speech recognition technologies available such as communicator that translates an instructor's voice to text and sign language on a computer screen. Some students who are deaf are discovering this technology is helpful in classroom settings. Assistive or adaptive technology devices and means employed for assisting and helping the hearing impaired students in one or the other ways in an inclusive classroom set up may include the following.

- (i) **Preferential seating.** Here the hearing impaired students are made to sit as near as possible to the teacher/instructor. It benefits the students who suffer from the mild or moderate hearing loss.
- (ii) **Receiving help through the peers.** Hearing impaired students may be helped by the peers sitting next to them in the class or also after the class by the tutor or other friend peers in taking and sharing class notes, attending to the speakers, and helping in other oral communication activities.
- (iii) **Use of hearing/listening aids.** Hearing impaired students may be made to bear and use the modern electronic hearing aids for picking up sound, magnifying its energy and delivering this louder sound to their ear and brain. There is much development in the field of assistive listening technology used with hearing aids or without for the hearing impaired children summarized as below.

As an example of such development, we can name the vibro-tactile device. It consists of a microphone (usually clipped to the collar).

and electronic sound receiver/analyzer in some type of pocket carrier (often worn at the waist) and a wrist vibrator that is activated when sounds are picked up. With such a setting, the device is quite helpful for the hearing impaired to increase their awareness of sound and improve speed reading skills, reception for speech and quality of expressive language. As an example of the available group assistive listening devices, we can name the FM sound system (a system enabling to establish a radio link between the teacher and the hearing impaired children). In the classroom set up, the teacher is here required to transmit on an FM frequency through microphone transmitter (often wore on the lapel, near the lips) and the children are receiving the transmitted message through their pre-set individual receivers. Since no wires or separate amplifiers are used in this system, Teachers and students can move freely around the classroom area and the system can be used indoors or outdoors depending upon the needs of inclusive set up.

- (iv) **Cochlear implants.** In case when the child is unable to be helped much through hearing aids, then the next alternative lies in implanting an electronic device in his cochlear through surgery. It is helpful in stimulating those hearing nerves in the cochlea that are not impaired resulting into the hearing of the sound on the part of the child. This implantation functions in the same way as implantation of a pace maker in the heart.
- (v) **Providing captions for the video presentation.** Since the oral communication/dialogues etc. of a telecast program or video presentation are not accessible by the hearing impaired, the due provision can be made for it accessibility by captioning the subtitle of the communicated feelings and ideas for the desired education and instructional activities of the hearing impaired.
- (vi) **Using text message for communication.** For the desired communication, the hearing impaired can make use of mobile phone of sending and receiving text messages to their peers as well as teachers/ instructors regarding the class room instruction, assignments or project activities.
- (vii) **Using computer technology.** Use of computer technology can offer a lot of assistance to the hearing impaired for their proper communication, education, and adjustment in the inclusive classroom set up in the ways mentioned below.

- Many useful software programs are now available for the teaching and learning of the curricular subjects to the hearing impaired in an appropriate way.
- Computer technology is able to provide hearing impaired interactive videos for self-instruction, graphic displays of voice production to improve spoken language and online message boards for exchanging information.
- Computer technology is able to provide valuable interest and web services for helping the hearing impaired in their attempts of seeking education, training and any information they need for their adjustment and development.

D. Assistive technology for children with speech disability or communication disorder.

The children suffering from speech disabilities or communication disorders may be helped through the adoption of Augmentative and alternative communication (AAC) technology. Augmentative and alternative communication (AAC) is an umbrella term that encompasses methods of communication for those with impairments or restrictions on the production or comprehension of spoken or written language. AAC systems are extremely diverse and depend on the capabilities of the user. They may be as basic as pictures on a board that are used to request food, drink, or other care; or they can be advanced speech generating devices, based on speech synthesis, that are capable of storing hundreds of phrases and words. There are a number of products, devices, hardware and software available for the adoption of AAC technology to the students suffering from speech and communication problems ranging from low-tech symbol/picture boards and wallets to high-tech portable or handheld computer equipped with AAC software.

E. Assistive Technology for Learning Disabled

Learning Disabilities Students with learning disabilities can be strong candidates for assistive technology support. Some of these learning disabilities include development speech and language disorders (articulation, expressive language and/or receptive language disorders) as well as academic skills disorders (reading, writing and/or arithmetic disorders). The assistive or adaptive technological measures like below may prove quite fruitful in this direction.

- **Use of audio recording devices.** The use of such devices may be able to rectify many of their language learning difficulties particularly

related to pronunciation, proper intonation, and way of speaking etc. Reading, speaking, and conversation skills can be better developed with the help of audio recording devices.

- **Use of video or power point presentations for the instruction.** It may provide high quality visual and auditory presentation of the facts, and principles related to the instruction of school subjects. The learning disabled students can watch useful and interesting academic as well as social presentations on video format and simultaneously listen to the carefully prepared narration for providing useful instruction.
- **Use of Computer Assisted Instruction (CAI).** It can help in doing away with the deficiencies regarding reading, writing, communication, mathematics, sciences and other practical oriented subjects. As examples of the advanced developments in CAI we can cite hypertext and Hypermedia technologies used for the instruction of learning disabled, *Hypertext technology* use pop-up text windows with a simple press of key, moving of the mouse or touch of the screen. It may give definitions or illustrations of difficult words, may reword or rewrite the confusing or complicated language of the text, provide useful additional hints for solving the problems, give diagrams, pictures, and maps etc. for proper understanding of the text material, concepts and generalizations on the part of the learning disabled students.

Hypermedia technology makes use of a variety of formats to supplement enrich the text by merging computer and media technologies. The learning disabled thus may be helped to listen, watch, store, locate and search the needed information through the use of the multimedia application of the computer technology.

F. Assistive Technology for students suffering from Autism Disorders

The characteristics of students with Autism disorders (AD) vary considerably. Students with AD process and react to information and other stimuli in unique ways. Some students with AD enhance their communication abilities through Augmentative and alternative communication (AAC) support. The use of computers, specialized software, and other technologies may provide organizational support and improve levels of focus.

In this way necessary efforts can be made for providing help or assistance to the disabled or differently abled students in the inclusive

classroom setup along with the other non disabled peers for their adequate adaptation, education and development by resorting to the desired assistive technologies and means meant for this purpose.

STUDY QUESTIONS

A. Essay Type Questions

1. What do you mean by Assistive technology used for providing inclusive education to the students ? Mention the purposes and objectives of making use of such technology for inclusive education.
2. What are the assistive and adaptive technologies used for providing inclusive education ? Make a clear distinction between these technologies.
3. What types of Assistive and adaptive technology can be used for the adjustment and education of the disabled children in an inclusive set up ? Answer in detail by keeping in view of the special needs of these inclusive children.
4. Discuss about the assistive and adaptive technologies used for the adjustment and education of the following types of disabled or differently abled children in an inclusive set up.
 - (a) Orthopedically Impaired children
 - (b) Visually impaired children
 - (c) Speech and communication impaired children
 - (d) Learning disabled children.
 - (e) Autistic children.

B. Short Answer Type Questions

1. What is inclusive set-up ?
2. What do you mean by assistive technology used for providing inclusive education.
3. Point out the difference between the Assistive and adaptive technologies.
4. Name any five equipments/devices or means of Assistive and adaptive technology used for inclusive education.
5. Mention any four means/ devices used for the adjustment and education of any one of the following types of disabled children :
 - (a) Orthopadically Impaired children
 - (b) Visually Impaired children
 - (c) Hearing Impaired children
 - (d) Learning disabled children
 - (e) Autistic children.

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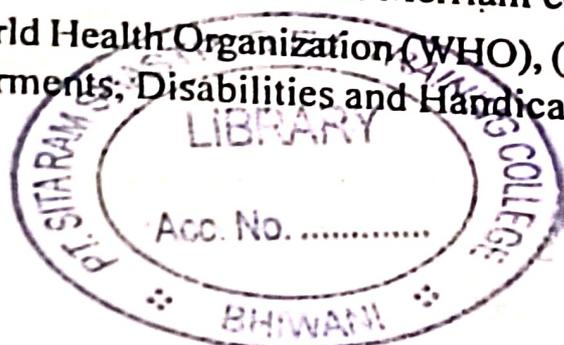
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