

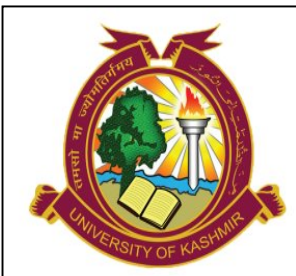
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Inclusive Education

Unit I Exceptionality

- i) Meaning, significance and scope.
- ii) Levels of intervention: Preventive, remedial and compensating.
- iii) Special education: Meaning, significance and scope.

Unit II Categories of Special Children

- i) Physically challenged: Visually and Hearing impaired.
- ii) Mentally Retarded
- iii) Gifted

(With special reference to causes, characteristics and educational measures)

Unit III Inclusive Education

- i) Historical background of inclusive education.
- ii) Principles of inclusion and necessary resources.
- iii) Inclusion, integration and mainstreaming.

Unit IV National initiatives

- i) Integrated education for disabled children(IEDC, 1974)
- ii) Rehabilitation Council of India (1992)
- iii) Sarva Shiksha Abhiyan (SSA 2000)
- iv) National Curriculum Framework (NCF, 2005)

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Inclusive Education**CONTENTS**

Lesson No.	Theme	Page No
1.	Exceptionality : Meaning and Scope	1-19
2.	Levels of Intervention	20-31
3.	Special Education : Meaning and Scope	32-42
4.	Physically Challenged	43-97
5.	Mental Retardation	98-128
6.	Giftedness	129-145
7.	Inclusive Education: Historical Background	146-167
8.	Principles of Inclusion	168-186
9.	Inclusion, integration, Mainstreaming	188-197
10.	Integrated Education for Disabled Children	198-205
11.	Rehabilitation Council of India	206-220
12.	Sarva Shikhs Abiyan	221-232
13.	National Curriculum Framework (2005)	233-245

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UNIT I

LESSON NO 01: EXCEPTIONALITY: CONCEPT OF POSITIVE AND NEGATIVE DEVIATIONS

Lesson Structure

- 1.1 Introduction**
- 1.2 Objectives**
- 1.3 Concept of Exceptionality**
- 1.4 Positive and Negative Deviations**
- 1.5 Significance of Exceptionality**
- 1.6 Needs and Problems of Exceptional Children**
- 1.7 Let Us Sum Up**
- 1.8 Check Your Progress**
- 1.9 Suggested Readings**

1.1 Introduction

We live in a world full of diversities. Every form of living and non-living being is quite unique and different from each other. At times we lack words to appreciate the unimaginable creativity of God when we find that no single creation of His is an exact replica of the other. As a result, a child comes to this earth with its own unique abilities and capacities of body and mind. Some are

fortunate enough to have extraordinary abilities or capacities, while others are averages or even suffer from so many deficits and deficiencies since from the birth. This gap between the abilities and capacities of the children related to their learning, adjustment and development found at the time of their birth, may further be widened by the nature of the environmental differences encountered by them in their nourishment and education. It results in labeling them as exceptionally superior or inferior, capable or incapable in one or the other aspects of their personality development.

Now the question arises how can such a level of exceptionality in one or the other field be assigned to them? Who can be called as an “exceptional child”? We shall discuss such issues in this lesson.

1.2 Objectives

After going through this lesson, you should be able to:

- Explain the meaning of exceptionality.
- Different definitions on exceptionality.
- Explain the positive and negative deviations; and
- Discuss the needs and problems of special education.

1.3 Concept of Exceptionality

Exceptionality is defined as any condition or situation that may significantly interfere with a child’s ability to learn in school. This could be a physical or mental condition or a social condition such as having a single parent. At some time or other, practically all school teachers will have exceptional children in their classrooms. These children can become contributing members of the community. It is consistent with a democratic

philosophy that every child has the right to education—the right to receive help in learning to the limits of his capacity, whether that capacity be small or great.

The term 'exceptional' means different things to different people. Some use it when referring to the particularly bright children or the child with unusual talents, others use it when they refer to any typical or deviant child. According to Telford and Sewrey (1972), to be exceptional is to be rare or unusual." Cruickshank (1974) defines an exceptional child as "a child who deviates intellectually, physically, socially, or emotionally so much from what is considered to be normal growth and development that he cannot receive maximum benefits from regular school programme and requires a special class or supplementary instruction and services."

Hewett and Forness (1984) have given a comprehensive definition of exceptional learner: "An exceptional learner is an individual who, because of uniqueness in sensory, physical, neurological, temperamental or intellectual capacity and/or in the nature and range of previous experience, requires an adaptation of the regular school programme in order to maximize his or her functioning level."

Kirk, Gallagher, Anastasiow and Coleman (2006): "Exceptional child is a child who differs from the average or normal child in (i) mental characteristics, (ii) sensory abilities, (iii) communication abilities, (iv) behaviour and emotional development, or (v) physical characteristics. These differences must occur to such an extent that child requires either a modification of school practices or special educational services to develop his or her unique capabilities".

If these definitions are analysed properly they may help in deriving some of the following conclusions about the typical features or characteristics of the exceptional children.

- (i) Exceptional children are quite deviant, distinct and different from the children of their age and grades including those who are termed as average or normal children.
- (ii) Their difference or deviation from the normal or average children is so marked and distinct that can be recognized, distinguished and separated them easily.
- (iii) This deviation of the exceptional children from the average children, may fall on any side, positive or negative of their exceptionality.
- (iv) On account of such significant deviation, falling on both the sides of their exceptionality, either they excel the normal in one or the other aspects of their personality or lag behind in a dismal way.
- (v) The term exceptional children is thus a quite generic term that includes the exceptional who show superiority or inferiority in almost all the aspects of one's growth and development—physical, mental, social, emotional, moral and behavioural, etc.
- (vi) The extent and degree of the differentiation and deviation of these children from the normal or average children is so marked that on account of their exceptionality (positive, negative or multiple) they may experience unusual or peculiar problems regarding their adjustment to their self and the environment and on account of this may acquire treatment in terms of their care and education for the proper adjustment and progress in life.

In the light of the features mentioned, we can hereby adopt a functional definition of the term exceptional children for the use of this text in the following words:

“The term *exceptional children* may be referred in a generic sense to all those children who deviate seriously on the negative, positive and multiple sides on one or the other aspects of the growth and development of their personality from the average children to the extent of requiring special provision in terms of their education and adjustment for helping them in seeking their proper adjustment, development and progress in life.”

1.4 Concept of Positive and Negative Deviation

The term deviation stands for a process or quality and the characteristic of deviating, differing or going away from something that is supposed to be fixed or decided. An exceptional child deviates somewhat seriously from what is supposed to be a normal standard for the possession of the trait in the group of his age and grade peers. For example if we take the case of 10,000 candidates appearing in an entrance examination as an illustration, then we can find from their IQ scores, that while some of them score just as 90, i.e., the average IQ score of the total group, the others deviate from the average or mean value of 90 by getting scores less or more than 90. It makes us clear that in a particular group, the deviations of the members of that group with regard to the possession of a trait or characteristics from the mean or average value may travel towards both sides—positive or negative. It is also implied that one is said to be less exceptional depending upon the largeness or smallness of his deviation from the norm or mean value of a characteristic of his group. If we try to focus on the type of individual differences and the nature of the

deviations generally found in the population of children of a particular age or grade, we may easily conclude that the children always have equal chances of being drifted towards the positive and negative side of their growth and development, personality make up and adjustment. Accordingly, depending upon the nature of positive and negative directions of their deviation from the mean or average value in a particular aspect of their personality, they may be labeled as positively or negatively exceptional or special children for being given special treatment to their education and adjustment.

Besides being marked as positive or negative, one's exceptionality may also exhibit somewhat mixed symptoms. Therefore, when we try to classify the deviations of the children from the norm or average of their population, usually we have the three categories namely positive deviation, negative deviation and multiple deviations.

Positive Deviation: Deviation of the children with respect to the possession of one or the other traits of their personality in a greater degree on the positive side in comparison to the norms or mean value of that trait among the population of their age or grade peers is referred to as positive deviation. The exceptional children possessing such deviation position may thus excel or demonstrate their superiority in the field of their exceptionality extended to every walk or dimensions of personality, i.e., physical, mental, social, emotional, moral, etc. A child while having positive deviation on the physical track may thus excel in term of the physical and motor capacities and the children deviating positively on the social, emotional or moral aspects, may excel on the social, emotional and moral functioning of one's personality.

Negative Deviation: In contrast to positive deviation, negative deviation may take an exceptional child to drift along the positive side of one's growth and

development. As a result, the child may be found to lag behind in comparison to the peers of his age and grade with respect to his development in one or the other personality dimensions like physical, mental, social, emotional and moral characteristics. Actually where positive deviation establishes one's superiority over the normal population, and presents to him a brighter side of the life and progress, the negative deviation brings a quite negative effect on the development and welfare of the individual. The exceptional children attributed with negative deviation are almost found to suffer with significant deficits, deficiencies and incapacities with regard to their personality. As a result, like positive deviation it has also quite wide coverage and the children are found to demonstrate marked deviation in all the traits of their personality development. In deviating negatively on the physical track, they may be found to suffer adversely in terms of their physical health, stamina, motor and sensory capabilities turning them into physically disabled, orthopedically impaired, or bringing communication disabilities and chronic health problems to them. Similarly, the marked negative deviation on the academic and cognitive track, may turn them into mentally disabled, slow learners, backward or learning disabled children, negative deviation on the social and emotional track may push them towards being labelled as socially handicapped children or delinquents, emotionally disturbed children, culturally disadvantaged or deprived children, or children suffering from one or the other behavioural problems.

Multiple Deviations: It is a bit complex concept than the simple positive and negative deviation. Here a child is found to demonstrate a complex blend of either positive, negative or a mixture of both deviations simultaneously at one or the other period of his life. An exceptional child in this way is found to

attributed with multiple, i.e., more than two exceptionalities at a time in the areas of his growth and development irrespective of the direction of these deviations. The characteristics or outcomes of such multiple deviations may be therefore further categorized as follows:

- (i) ***Multiple positive deviation:*** Such type of deviation is characterised with two or more deviations simultaneously running on the positive side of the growth and development of one's personality. It may make one extremely good in terms of his physical health, excelling in physical, sensory or motor capacities, besides presenting him quite exceptional in the field of social and emotional functioning, i.e. an exceptional social figure, leader in organizational project, etc. Similarly, he may be demonstrating multiple positive deviation on the cognitive and academic track by having merit position in the class and also doing wonders with the dazzling performance of his giftedness in sports or creativity in one or the other specific fields.
- (ii) ***Multiple negative deviation:*** This type of multiple deviation is characterised with two or more negative deviations associated at a time with the growth and development of one's personality. The individual suffering from such type of multiple deviation is found to be passing from the greater amount of disadvantages or difficulties in comparison to the difficulties inflicted by both of them individually. Such type of deviation therefore is resulted in causing multiple disabilities among the disabled population of the exceptional children, i.e. one may be both deaf and blind, other may be orthopedically impaired and mentally retarded, or delinquent or

emotionally disturbed besides being physically disabled, deaf and blind.

- (iii) *Multiple mixed deviation:* The children attributed with such type of deviation are found to be exceptional simultaneously with regard to more than two aspects of their personality in a quite mixed blend of positive and negative deviations. A child then may be found to be a highly gifted or creative besides suffering from one or the other type of disabilities like orthopaedic impairment, deafness or blindness, delinquency or emotional disturbance.

While the children with positive deviations by being equipped with extraordinary or surplus abilities or capacities in one or the other areas or aspects of their personality development bring hope for the fuller enrichment of their self and the progress of the society and humanity at large, the children suffering from negative deviations experience a greater number of disadvantages and deficits in overcoming the restrictions imposed on them by their environment for their proper adjustment and progress in life. However, in comparison with both of them, multiple deviated children in all their forms and shapes, pose greater challenge not only for themselves but for others also in helping them in the task of their adequate adjustment, progress and education.

1.5 Significance of Exceptionality

Children are unique. If we survey a busy playground we see a spectacle of this uniqueness. Some children move more quickly and will better coordinate with others. Some children are surrounded by admiring friends whereas others sit alone at some distance. The field of exceptionality is

concerned with children who deviate from normal children to the extent that matters very much for learning in schools and functioning successfully elsewhere. These children can be categorized as positively deviated and negatively deviated. It is not possible to ensure optimum human resource development without developing the potentials of exceptional children deviated from normals. Accommodation of needs of individual children: once the exceptionality of child is identified, it is possible to get an insight in the needs of the child. If the needs of negatively deviated children were identified then we can offer them education according. There are multiple problems which highlight the significance of exceptionality. In the following section we have discussed some problems to highlight the area of operation of exceptionality which otherwise reflects the significance of exceptionality.

1.5 Needs and Problems of Exceptional Children

Exceptional children are considered different from their age or grade peers by definition. But, however, if seen otherwise, they are more like other children than they are different. It is for the reason that exceptional children are children first for being described and labeled as exceptional. Therefore, it is natural for these 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. The various types of such *basic* as well as *special needs*, essential for their survival ,growth, development and adjustment to their self and the environment may be named as under:.

Physical and physiological needs: The satisfaction of these needs are essential for one's survival, maintenance of physical well being, bringing new generation on the earth and performing overall and biological functions as a human being. The following types of human needs can be included in this subcategory.

- Need for the intake of oxygen as a matter of essential survival
- Need for eating and drinking for the satisfaction of hunger and thirst drives, and survival
- Need for sufficient rest
- Need for enough work
- Need for enough sleep
- Need for sex for the satisfaction of sex urge and continuity of life on this earth
- Need for getting relief and treatment after getting ailment or injury
- Need for remaining healthy and free from ailment.

Socio-psychological needs: These needs although are not so important for the immediate survival of the children, yet they are quite essential for the adequate adjustment development and progress in their life. These needs may be sub-categorized as follows:

- Need to love and to be loved
- Need for feeling secure and safe
- Need for belongingness and social company
- Need for social approval
- Need for gaining status and recognition
- Need for being independent and self-supporting
- Need for self-respect and defending their phenomenon self

- Need for assertion and dominance
- Need for being dominated
- Need for self-actualization
- Need for getting education and experiences of life
- Need for developing their potentialities at least to their age linked characteristics.

The satisfaction of these basic needs mentioned before is quite vital for the survival, adjustment, well-being, adequate development and progress of the children. As long as the children feel at home in respect to the satisfaction of these needs, they remain on the right track of their adjustment and development, but if this equilibrium is disturbed on account of some or the other blockage on the path of the satisfaction of these needs, the children get maladjusted and as a result may fall victim of the one or the other physical and socio-psychological problem.

Need for the Awareness of One's Exceptionality or Specialty: What is exceptional or special about an exceptional child should come out as early as possible. His difference should be known to others and he himself be get acquainted with his exceptionality in a quite clear terms. In other words, exceptional children need an early detection, diagnosis, assessment and classification of their exceptionalities. Any delay in meeting out such need of the exceptional children may invite a number of complication and problem for them in their adjustment to be self and environment.

As a result, they may be mistakenly identified, misunderstood and their deviant behavior on account of exceptionality may be taken as deliberately problematic and indisciplinary. For example, a child who is hard of hearing, his inability of responding rightly to a question of the teacher (on account of his

inability to hear) may be taken otherwise by the teacher. Similarly an irresistible curiosity of a creative or gifted child expressed through asking questions between instructional activities, may label him a problem child. A child's hyper activity may be misinterpreted in positive or negative ways in quite contradiction to the real nature of his exceptionality. Therefore, the primary necessity and a major need of an exceptional child lies in the demand that his exceptionality, its nature, cause and degree should be clearly identified, assessed, classified and labeled for helping him and others in the subsequent task of proving needed special service to him.

Need for Coping with One's Exceptionality: The exceptional children need to be helped in the process of coping with exceptionality. For example, if a child is exceptionally bright or gifted, in one or the other field, then he may experience a strong urge for the proper nurturing and development of his giftedness. The same is the case with a creative who may feel the need of the nourishment of his creative urge. The disabled children who deviate negatively may feel the need and necessity of overcoming their deficiencies or may need assistance and help for minimizing/eliminating the negative effects of their impairment or disabilities. For instance, a child not able to read and write properly on account of his visual impairment 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 case with the children suffering from other disabilities like learning disabilities, hearing impairments, mental retardation, emotional disturbances, etc. Those 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.

Need for Being Accepted with their Exceptionality: The exceptional children are quite different from others. It is an admitted fact that the differences or deviations from the norms whether they fall on the positive or negative side are seldom taken easily by others. These exceptionality, therefore, are bound to invite so many resistance and negative reactions from the peers, teachers and even from the parents. That is why; there lies true perspectives of deficits, deficiencies or abundances of the capacities related to their positive or negative aspect of their exceptionality, i.e. giftedness, creativity or disability of any nature.

Need for Getting Appropriate Education: Exceptional 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 exceptional children.

Need for Being Independent in like Functioning: Exceptional children on account of their exceptionality demands some special measures for meeting out the needs of their being independent and self supportive in carrying out their one or the other life functioning activities. It does not apply only for the exceptional 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 but also for the positively exceptional, i.e. gifted and creative. Gifted and creative also need to learn the art of living for functioning properly in their day to day social and emotional life, as well as capable of earning their livelihood and becoming economically self sufficient capable members of their community and the country.

Need for the Satisfaction of Special Learning Capacities: Exceptional children deviate too much from their non-exceptional peers with regard to their capacities, nature and requirements of learning. On one hand we have gifted and talented students who may be found to have special learning needs in areas requiring functional use of intelligence and abilities related to talent. They may have a high speed of learning and functioning. Quite opposite to them stands a group of disabled children like learning disabled, mentally retarded, sensory, communication-ally 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 exceptional children thus may become an urgent necessity of any programme and provision for chalking out special measures for them.

Need for Proper Guidance and Counselling: Exceptional children need timely and proper guidance and counseling for dealing with the situation and consequences resulted through their exceptionalities. They may become victim of so many social, emotional, physical mental and moral problems 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.

Need for Getting Equal Educational Opportunities: Exceptional children need equal educational opportunities for their adequate adjustment and progress in their life irrespective of their exceptionalities—deficiencies or abundance with respect to one or the other abilities. In their life, since they have to remain along with the non-exceptional human beings, they must have their education along

with their nondisabled and non-exceptional peers in the normal schools in the integrated settings with some minor adjustments for their proper education and adjustment.

Need for Special Aids, Equipments and Assistive Devices: Exceptional 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 and 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, gifted children may need advanced learning materials, 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.

Need for getting incentives and financial assistance: The exceptional children require incentives and financial assistance for coping up with their exceptionalities, needs and problems. In many cases, the deficits and deficiencies are too 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 NGOs and other community sources as well as from government agencies is needed for meeting the special requirements of the exceptional. Moreover, there is requirement of providing due incentives and financial assistance in term of scholarships, fee learning

material, free conveyance, free day meal, etc. for sustaining the enrolment of the disabled children in the special schools or regular schools.

In this way exceptional children may be found to experience with both types of needs and problems – general and special in their path of battling with their deficits and extra capacities for seeking their adequate adjustment, education and progress in the lives. It is therefore essential to devise some means and ways in the shape of one or the other special measures for helping them in the satisfaction of these needs and overcoming their problems.

1.6 Let Us Sum Up

1. Exceptionality refers to the quality or characteristic of an individual for being exceptional, unique or different from others. The models or approaches like statistical model, medical or biological model and behavioural or social model may be used for understanding the concept of exceptionality.
2. Exceptional children may deviate from the norms of their group in various ways – positive, negative and multiple. Positive deviation helps them in excelling or being superior in the field of their deviation. Negative deviations may make them deficient and then disabled in their field of deviation. Multiple deviations have mixed consequences depending upon the positiveness and negativeness of their overall deviation.
3. The terms exceptional children is a quite generic term. It refers to all those children who deviate seriously on the negative, positive and multiple sides on one or the other aspects of one's personality from the average children to the extent of requiring special measures for their adjustment, development and progress in life.

4. Exceptional children have two types of needs and problems. The one is of general nature as felt by the other non-exceptional children, e.g. the basic physiological and socio-psychological needs. The others are of the special nature that are specially associated with the nature of their exceptionality in one or the other aspects of their growth and development, e.g. the need for being aware and coping with one's exceptionality, need for getting proper guidance, education and other essential services for the proper adjustment, development and progress in life as an independent and useful social being. In the satisfaction of those general or specific needs, there lies their proper adjustment. Disequilibrium may result into serious maladjustment of any sort which may in turn create a lot of problems not only for themselves but also for others. It is therefore quite essential to seek suitable measures in looking after the satisfaction of their needs—both general and special.

1.7 Check Your Progress

1. Discuss the concept of exceptionality?
 2. Explain the needs and problems of exceptional children?
 3. Explain the positive and negative deviation?
-

1.8 Suggested Readings

1. Deno, E. (1973), *Instructional Alternatives for Exceptional Children*, Reston, V.A. Council for Exceptional Children.
2. Heward, W.L. (2000), *Exceptional Children: An Introduction to Special Education* (6th ed.), Upper Saddle River, New Jersey; Merrill.

3. Kneedler, R. (1984), *Special Education for Today*, Englewood Cliffs, N.J.: Printice Hall.
4. Mangal S.K. (2007), *Educating Exceptional Children: An Introduction to Special Education*, PHI Learning Private Learning, New Delhi.
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UNIT I

LESSON NO 02: EXCEPTIONALITY: LEVELS OF INTERVENTION

Lesson Structure

- 2.1 Introduction**
- 2.2 Objectives**
- 2.3 Concept of Intervention**
- 2.4 Preventive Intervention**
- 2.5 Remedial Intervention**
- 2.6 Compensatory Intervention**
- 2.7 Let Us Sum Up**
- 2.8 Check Your Progress**
- 2.9 Suggested Readings**

2.1 Introduction

All children differ from one another to varying degrees. However, in some students the learning difficulties are more serious, and the children deviate more significantly in one way or the other. These are youth who are exceptional in that where learning behaviour deviate significantly from the norm. they may show difference in physical, intellectual, communicative, social or emotional domains, all in some combination of these. A child with

exceptionality is different from the average student in some or many areas of functioning; the study of child with exceptionalities is the study of differences. However, children with exceptionalities do not differ in every way from their normally developing peers, and it would be to focus the study of these children solely on differences. One commonality found in children and youth with exceptionalities is the need for skilled intervention and special care from trained professionals. Intervention may take many forms including medical, technical, and therapeutic and educational. Educational settings for children with exceptionalities range from the regular classroom to the residential school to home bound instruction. These diverse settings are represented by the cascade or continuum of educational services. Although the inclusion of students with disabilities into general classrooms is becoming more prominent, placement in any setting is determined by the unique needs of a particular child at a certain point during their school years. Accordingly there are three basic types of intervention: preventive, remedial, and compensatory. In this lesson we are interested to highlight such type of intervention.

2.2 Objectives

After going through this lesson, you should be able to:

- Explain the meaning of intervention
- Describe the preventive type of intervention?
- Explain the remedial type of intervention and
- Highlight the compensating type of intervention.

2.3 Concept of Exceptionality

An intervention is a deliberate process by which change is introduced into peoples' thoughts, feelings and behaviors. The overall objective of an intervention is to confront a person in a non-threatening way and allow them to see their self-destructive behavior, and how it affects themselves, family and friends. It usually involves several people who have prepared themselves to talk to a person who has been engaging in some sort of self-destructive behavior. In a clear and respectful way, they inform the person of factual information regarding his or her behavior and how it may have affected them. The immediate objective of an intervention is for the self-destructive person to listen and to **accept help**.

2.4 Preventive Intervention

Preventive intervention is designed to keep potential or minor problems from becoming a disability. Preventive intervention includes actions that stop an event from happening and those that reduce a problem or condition that has already been identified. Prevention can occur at three levels (Simeonsson, 1994). This type of intervention which is basically primary in nature is designed to reduce the number of new cases (incidence) of a problem; it consists of efforts to eliminate or counteract risk factors so that a disability is never acquired. Primary prevention efforts are aimed at all relevant persons. For example, in a school wide program to prevent behavior disorders, school- and classroom-wide systems of positive behavior support would be provided for all students, staff, and settings (Sugai & Horner, 2005). For example:

Primary stage of prevention (Before birth of a child)

Obtain pre-natal medical care.

Maintain good health.

Avoid alcohol drinking.

Avoid drugs.

Avoid smoking (fetal tobacco syndrome).

Obtain good nutrition

Prevent pre-mature births.

Precautions against injuries and accidents.

Prevent or immediately treat infections

Avoid sexually transmitted diseases.

Plan and space pregnancies.

Seek genetic counseling and prenatal tests.

Secondary prevention is aimed at reducing the number existing cases (prevalence) of an already identified problem or condition or eliminating the effects of existing risk factors; it is aimed at individuals exposed to or displaying specific risk factors. To continue the example of a school wide program to prevent behavior disorders, specialized interventions would be aimed only at those students exhibiting early signs of troubled behavior. For example:

Secondary stage of prevention (After birth of the child)

Ensure proper nutrition.

Place household chemicals out of reach.

Use automobile seat belts, safety seats and cycle helmets.

Provide immunization.

Prevent infection.

Provide medical care to treat existing infection.

Prevent lead intake (From paint and automobile exhaust).

Routinely test lead level.

Shunt (Drain) excess fluid around the brain.

Provide neo-natal intensive care service.

Guarantee proper medical care for all children.

Offer early educational programmes.

Eliminate child abuse.

Eliminate child neglect.

Tertiary prevention is intended to minimize the impact of a specific condition, to prevent the effects of a disability from worsening; it is aimed at individuals with a disability. For example, intensive interventions would be aimed at students identified with emotional and behavioral disorders. For example:

Tertiary stage of prevention (In society)

Eliminate child poverty.

Create appropriate education and rehabilitation programs for children with retardation.

Educate parents and provide support for good parenting skills.

Protect children from abuse and neglect.

Provide family planning services; support spacing of children.

Screen at birth for phenylketonuria (PKU) and other conditions that can lead to retardation if untreated.

Provide systematic state prevention programs.

Provide public education on fetal Alcohol syndrome.

Provide public education on HIV prevention.

Eliminate environmental toxins such as lead.

Assure proper nutrition for pregnant women.

Assure proper health care for pregnant women.

Assure proper health care for children.

Preventive efforts are most promising when they begin as early as possible—even before birth, in many cases. Unfortunately, primary and secondary prevention programs have only just begun to affect the incidence, prevalence, and severity of disabilities in this country. And it is likely that we will be well into the 21st century before we achieve a significant reduction in the incidence of disabilities. In the meantime, we must rely on remedial and compensatory efforts to help individuals with disabilities achieve fuller and more independent lives.

2.5 Remedial Intervention

Remediation attempts to eliminate specific effects of a disability. In fact, the word 'remediation' is primarily an educational term; the word

rehabilitation is used more often by social service agencies. Both have a common purpose: to teach the person with disabilities skills for independent and successful functioning. In school, those skills may be academic (reading, writing, computing), social (getting along with others; following instructions, schedules, and other daily routines), personal (eating, dressing, using the toilet without assistance), and/or vocational (career and job skills to prepare secondary students for the world of work). The underlying assumption of remedial intervention is that a person with disabilities needs special instruction to succeed in typical settings.

Exceptional children have a strong desire for independent function. Instead of assisting them to maximize their independent functioning in normal environment we make them dependent on others. It is perhaps for this reason that many blind and orthopedically handicapped children resort to begging. Remedial measure for such children is to teach self help skills, daily living skills, vocational skills, and to assist them to manage their own affairs independently during adulthood. An exceptional child, whether he is handicapped or gifted, has an individuality of his own. He thinks, learns, acts and adapts in his own way. He has the capabilities to live a better life and to improve his functioning level in the community. Exceptional children need free and appropriate education to maximize their capabilities. Such education should not be provided to them out of sympathy or as a privilege granted to them. Education is a basic human right and this must be granted to them just as we provide free and compulsory education to non-exceptional children. Appropriate education for exceptional children can only be provided in regular schools. But most teachers are reluctant to admit handicapped children in regular schools on the false impression that educating handicapped children in

regular schools will adversely affect the education of non-handicapped children. In most cases the blind, deaf, and mentally retarded children are refused admission in regular schools. The principle of 'zero reject' stipulates that no handicapped child should be denied the opportunity to receive education in a school of his choice. Exceptional children need special aids, equipments and learning materials to profit from regular and special education programs and to meet their specific needs. The blind children need Braille materials and other aids; the low vision children need large print materials, magnifying glasses and visual materials; the deaf children need hearing aids, speech trainer, etc; the mentally retarded children need games and play material and other concrete objects; the learning disabled children need alternate learning materials, work books, etc.; and gifted children need advanced learning materials, encyclopedia, etc. In 1970's the government launched the centrally sponsored scheme of Integrated Education for Disabled Children (IEDC). The scheme aimed at providing educational opportunities to learners with disabilities in regular schools, and to facilitate their achievement and retention. The objective was to integrate children with disabilities in the general community at all levels as equal partners to prepare them for normal development and to enable them to face life with courage and confidence. A cardinal feature of the scheme was the liaison between regular and special schools to reinforce the integration process.

The right of every child to education is proclaimed in the Universal Declaration of Human Rights (1948) and was strongly reaffirmed by the Jometien World Declaration of Education for All (1990). Futhermore, the standard rules on the Equalization of Opportunities for Persons with Disabilities (1993) was important resolution to improve the educational

conditions of persons with disabilities. This had major implications for the Indian situation in the form of three legislative acts – the Rehabilitation Council of India Act, 1992 (RCI Act), the Persons with Disabilities (Equal Opportunities, protection of rights and full participation) Act, 1995, (PWD Act), and the National Trust for Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disability Act, 1999. While the RCI Act was solely concerned with manpower development for the rehabilitation of persons with disabilities, the PWD Act is a significant endeavor to empower persons with disabilities and promote their equality and participation by eliminating discrimination of all kinds. It emphasizes the need to prepare a comprehensive education scheme that will make various provisions for transport facilities, removal of architectural barriers, supply of books, uniforms and other materials, the grant of scholarships, suitable modification of the examination system, restructuring of curriculum, providing amanuensis to blind a low vision students, the setting up of appropriate fora for the redressal of grievances. The National Trust Act aims at providing total care to persons with mental retardation and cerebral palsy and also manages the properties bequeathed to the trust.

2.6 Compensatory Intervention

Compensatory interventions involve teaching special skills or the use of devices that enable successful functioning. This third type of intervention involves teaching a substitute (i.e., compensatory) skill that enables a person to perform a task in spite of the disability. For example, although remedial instruction might help a child with cerebral palsy learn to use her hands in the same way that others do for some tasks, a headstick and a template placed over

a computer keyboard may compensate for her limited fine-motor control and enable her to type instead of write lessons by hand. Compensatory interventions are designed to give the person with a disability an asset that nondisabled individuals do not need – whether it be a device such as a head stick or special training such as mobility instruction for a child without vision.

2.7 Let Us Sum Up

Briefly speaking, Special education provides the student with disabilities purposeful, targeted intervention that is designed to help mitigate obstacles that may prohibit an individual from learning and actively participating in school and society. As advocated by Heward (2010) there are three basic elements of special education intervention: (1) preventive, (2) remedial, and (3) compensatory which are as under;

Preventive Intervention. Teaching strategies at the preventive level are designed to limit potential problems or conditions from becoming a disability. Early identification is a key to successful preventive efforts, as they are most effective when they begin as early as possible.

Remedial Intervention. Remedial intervention is provided to a student with a disability when they need specialized instruction and supplementary aids and services in order to succeed in the general education setting. The primary purpose of remedial intervention is to increase a student's ability to function as independently as possible. This type of intervention includes teaching a variety of skills, including academic skills (e.g., reading, writing, math computation), social skills (e.g., developing positive interpersonal relationships, following directions, and adhering to schedules/routines), personal/self-care skills (e.g., eating, dressing, using the toilet without

assistance), and/or vocational skills (e.g., job skills that prepare secondary students for the world of work).

Compensatory Intervention. Compensatory interventions encompass teaching specific skills or the use of specialized devices that enable students to function as independently as possible. This type of intervention involves teaching a replacement skill or behavior that empowers a student with a disability to successfully perform essential tasks even with their disability. Compensatory interventions are purposefully designed to help students with disabilities develop abilities that may come naturally to students without disabilities. Interventions at this level may include specialized communication devices or specific training, such as travel/mobility training for a student with an intellectual disability or visual impairment.

2.8 Check Your Progress

1. Describe the levels of intervention?
2. Explain the meaning of intervention?

2.9 Suggested Readings

1. Deno, E. (1973), *Instructional Alternatives for Exceptional Children*, Reston, V.A. Council for Exceptional Children.
2. Heward, W.L. (2000), *Exceptional Children: An Introduction to Special Education* (6th ed.), Upper Saddle River, New Jersey; Merrill.
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DDEKU

LESSON NO 3: SPECIAL EDUCATION: CONCEPT, SIGNIFICANCE AND SCOPE

Lesson Structure

- 3.1 Introduction**
- 3.2 Objectives**
- 3.3 Historical Background of Special Education**
- 3.4 Concept of Special Education**
- 3.5 Significance of Special Education**
- 3.6 Scope of Special Education**
- 3.7 Let Us Sum Up**
- 3.8 Check Your Progress**
- 3.9 Suggested Readings**

3.1 Introduction

All students require support from teachers, classmates, family, and friends in order to thrive and to gain full benefit from their school experience. Some students have special needs that require supports beyond those ordinarily received in the school setting. Students who have behavioural, communicational, intellectual, and physical or multiple exceptionalities, may have educational needs that cannot be met through regular instructional and assessment practices. These needs may be met through accommodations,

and/or an educational program that is modified above or below the age-appropriate grade level expectations for a particular subject or course. Such students may be formally identified as exceptional pupils. Institutions and schooling are the major formal modes of its delivery. When we intend to talk about the history of special education, we must have its description in terms of the growth and development of the ways and means of its delivery, objectives set and the system of schooling. However, special education in this sense does not seem to possess a long history. It is relatively a new term. In the usual mode of historical description, we try to describe it as “once upon a time there was.....”. We can hardly fill it with the word special education or a system related in name with the delivery of such education. It is because that the term special or exceptional children did not exist in our historical past. There was a common—descriptive term in the name of disability for any type of exceptionality or deviation—positive or negative. So most of the description related to the history of special education in the texts is covered by the history of the care and provision made by the society and states for the various types of disabilities found in the human beings.

Special Education in India

Special education in India was present since the pre independence time, with very few schools or NGOs helping intellectually impaired children. Today India has come a long way and made a good progress in the field of disability rehabilitation. Presently India has four national institutes for effective implementation of this special education through various government schemes. The popular national level institutes for disabled persons are the National institute for Hearing Handicapped, National Institute for the Mentally

Handicapped, National Institute of the Visually Handicapped and National Institute for orthopedically handicapped. National Institute of Rehabilitation, Training and Research and The Institute for Physically Handicapped are other two national level institutes run by government. Moreover, government has initiated District Rehabilitation Centre (DRC) scheme in ten states to make all-inclusive rehabilitation. Moreover, four Regional Rehabilitation Training Centers are there to train the staff and teachers who work with these institutes.

Today due to global competitiveness, education scenario in India is fast changing. Along with that, special education is also catching importance and various government agencies are working hard to make it available to masses.

However over the years many scholars have questioned the importance of special education in India as they feel that it leads to segregation and isolation of the disabled children. They argue that by segregating the children at young age the very purpose bringing all children to the mainstream of the purpose of special education is defeated.

Therefore, to keep the special education at par with regular education, vocational courses are also initiated. Also, there has been a National Policy of Education, in which government has declared that education of children with gentle disabilities will be in regular schools. Due to such reforms and regulations, the quality and reach of special education in India has increased over the years giving new hopes and bright future for disabled. In this lesson we shall, discuss Concept, Scope and Objectives of Special Education length.

3.2 Objectives

After going through this lesson, you should be able to:

Discuss the Concept of Special Education.

Discuss the significance of Special Education.

Explain the scope of Special Education.

3.3 Historical Background of Special Education

How did the field of special education develop? Special education grew from an initial awareness that some children require a type or intensity of education different from typical education in order to achieve their potential. The history of special education is relatively short. It is less than 200 years ago that Jean-Marc-Gesparid Itard, a French physician who is considered to be the father of special education. Itard had been working with children with hearing impairment, but his most important work came out of his efforts to help the so-called wild boy of Aveyron. In 1799 a young boy, later named Victor, was discovered in the woods of France. The boy was thought to be a "wild child," untouched by civilization. It is likely that he had mental retardation as well as environmental deprivation. Most people thought the case was hopeless. But Itard, believing in the power of education, took on the task of teaching Victor all the things that typical children learn from their families and in school. He used carefully designed techniques to teach Victor to speak a few words, to walk upright, to eat with dishes and utensils, and to interact with other people.

Fortunately, Itard wrote detailed reports of his techniques, and his philosophy, as well as Victor's progress. Many of these techniques are still used in modern special education. This history has included periods of Optimism, periods of neglect, periods of fear, and finally acceptance of exceptionalities in children.

The Renaissance Movement spread in 17th century in the western world, brought out a new era of hope to the disabled children in the shape of establishing special schools (although in isolated settings away from the mainstream) for the special categories of disabled children, like deaf, blind and mentally retarded. As a result, by the close of 18th century, special education was accepted as a branch of education and separate special schools were considered as a perfect alternative for providing the education and care to the exceptional children. With the advent of 20th century, there began a new era in the history of special education in the shape of moving from the isolated settings of special schools to the segregated settings of the special classes within the regular schools. The last modern era in the history of special education belongs to the era of inclusive settings, i.e. educating all types of children whether exceptional or normal together in the regular classes of the mainstream schools. Most of the countries world wide, under the UN initially has now enacted legislative laws for making arrangement for the education of the disabled children population of their countries by committing to the philosophy of inclusive education in their schools.

The Indian scenario with regard to its history of special education is not much different than the global scenario. Although there has been instances with earlier ancient history of a quite human treatment and indiscriminating education to the disabled, the later periods of its history may be known to be passed through the same eras of exclusion and extermination, ridicule and amusement, prohibition and witchcraft, sympathy and asylum and the beginning of special education efforts in the shape of establishing separate special schools, segregated special education classes before coming finally to accept inclusive education as the policy of providing education to the

exceptional children with the non-disabled children in the regular classes of the mainstream schools. It has a quite effective legislative means for this purpose. It has recently arrived with a much needed policy in the name of the National Policy for Persons with Disabilities in February, 2006, for the caring, education and rehabilitation of its disabled population, with an assurance of providing free and compulsory education to all children with disabilities up to the minimum age of 18 years by emphasizing a need for mainstreaming them through inclusive education.

3.4 Concept of Special Education

First and foremost, special education is individualized education for children with special needs. Special education means "Specially designed instruction, at no cost to parents, to meet the unique needs of a child with a disability." Special education is something special—special materials, special training techniques, special equipment and special help or special facilities may be required for special categories of children having special needs. For example low vision children may require reading materials in large print. Hearing impaired children may require hearing aid, auditory training, lip reading etc. mentally retarded children may need skill training.

Common special needs include challenges with learning, communication challenges, emotional and behavioural disorders, physical disabilities, and developmental disorders. Students with these kinds of special needs are likely to benefit from additional educational services such as different approaches to teaching, use of technology, a specifically adapted teaching area, or resource room.

Intellectual giftedness is a difference in learning and can also benefit from specialized teaching techniques or different educational programs, but the term "special education" is generally used to specifically indicate instruction of students whose special needs reduce their ability to learn independently or in an ordinary classroom, and gifted education is handled separately.

In most developed countries, educators are modifying teaching methods and environments so that the maximum number of students are served in general education environments. Special education in developed countries is often regarded less as a "place" and more as "a range of services, available in every school". Integration can reduce social stigmas and improve academic achievement for many students.

Special education is a profession, a service with tools and techniques to meet the special needs of exceptional children. It is individually planned, systematically implemented, and carefully evaluated instruction to help exceptional learners achieve the greatest possible personal self-sufficiency and success in present and future environments.

3.5 Significance of Special Education

It is an evident truth that educationally backward children, handicapped children and gifted children are in need of specific facilities for their optimum development. Educators feel the importance of designing special instruction for the benefit of special children. The proponents of special education put forth the following reasons in support of their argument.

1) In order to overcome the deficiency, educationally backward children require specific teaching methods in special classrooms.

2) Special education is an essential requirement for gifted students also for it provides them with proper stimulation. Generally, the classroom teacher cannot provide proper stimulation to both the talented and the dull students in the general class. Unlike average children, gifted children are more sensitive and they are quick and alert in thinking. So they need enriched curricular programmes to work to their potentials.

3) A classroom teacher usually finds it very difficult to devise his instruction so as to reach out to all the categories viz physically and mentally handicapped, emotionally disturbed, learning disabled, slow learners and below average, average and bright . Hence, special education is needed to surmount their learning problems.

4) Special education is needed to develop independent living and social skills in special children. It helps them in meeting out their special needs, overcoming their deficiency and getting due gains from the regular and special education programmes.

5) With the help of special education visually or aurally impaired may be guided to make use of assistive devices for being capable of using the residual sense of sight or hearing.

3.6 Scope of Special Education

In fact the scope of special education is changing and widening with the new research findings coming up at international level. Let us discuss the scope of special education step by step:

In terms of types of children with disabilities special education covers children with visual handicaps (blind and low vision children), hearing

handicaps (deaf and hard-of-hearing children), mental retardation (mentally challenged children), learning disability (reading disability, writing disability and numerical disability), speech handicaps (auditory disorder, vocal disorder, stuttering, cleft palate, etc.), and multiple handicaps. In some literature delinquent children, emotionally disturbed children and socially disadvantaged children are also covered under special education. Gifted and creative children are also covered under special education by some authorities.

In terms of degree of disability, special education covers mildly, moderately and severely handicapped children. Mildly and moderately handicapped children are usually included in regular schools, and severely handicapped children are included in special schools and residential schools. After the World Conference on Special Education Needs held in Spain (1994) and the enactment of PWD Act (1995) in India the trend has been changed. Now special education is proposed to be provided to all children irrespective of their degree of disability in inclusive schools.

The scope of special education includes identification of disabled children based on physical and behavioural characteristics, assessment of such children (medical, psychological and functional assessment), their care and rehabilitation.

Placement of disabled children in the appropriate setting forms an important part of the scope of special education. Placement of disabled children in a particular setting depends upon the degree of disability, nature and extent of previous training and experience of the disabled child and his special educational needs.

The scope of special education includes various types of intervention measures such as, environmental, administrative, social and academic and various levels of intervention such as, preventive, remedial and compensatory efforts.

Various support services for children and teachers and allied services medical check up and care also come under the scope of special education. Provisions of aids and equipments for meeting the needs of exceptional children – their procurement and development by teachers from an important aspect of special education.

3.7 Let Us Sum Up

Special education, being relatively a quite new term, does not possess a long history as compared to the history of disability and its education which may be said to be as old as the history of the mankind. For looking into this history, it may be divided into different eras characterizing the way disability has been treated during its varying periods.

Special education is something special – special materials, special training techniques, special equipment and special help or special facilities may be required for special categories of children having special needs. It is a service with tools and techniques; it is individually planned, systematically implemented, and carefully evaluated instruction to help exceptional learners achieve the greatest possible personal self-sufficiency and success in present and future environments.

Special education is needed to meet the special needs and requirements of the special/exceptional children.

In fact the scope of special education is changing and widening with the new research findings coming up at international level. The scope of special education includes various types of intervention measures such as, environmental, administrative, social and academic and various levels of intervention such as, preventive, remedial and compensatory efforts.

3.8 Check Your Progress

1. Give the historical background of special education?
 2. Discuss the significance of Special Education?
 3. Explain the scope of special education?
-

3.9 Suggested Readings

1. Deno, E. (1973), *Instructional Alternatives for Exceptional Children*, Reston, V.A. Council for Exceptional Children.
2. Heward, W.L. (2000), *Exceptional Children: An Introduction to Special Education* (6th ed.), Upper Saddle River, New Jersey; Merrill.
3. Kneedler, R. (1984), *Special Education for Today*, Englewood Cliffs, N.J. Printice Hall.
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UNIT II

**LESSON NO 4: PHYSICALLY CHALLENGED:
 VISUALLY AND HEARING
 IMPAIRED**

Lesson Structure

- 4.1 Introduction**
- 4.2 Objectives**
- 4.3 Historical Background of visual impairment**
- 4.4 Nature of Visual Impairment**
- 4.5 Definitions and Categories of Visual Impairment**
- 4.6 Classification of Visual Impairment**
- 4.7 Incidence of Visual Impairment**
- 4.8 Causes of Visual Impairment**
- 4.9 Importance of Hearing sense**
- 4.10 Effects of hearing impairment on educational process**
- 4.11 Levels of Hearing loss**
- 4.12 Early Identification and Intervention**
- 4.13 Historical background of Education of the Deaf**
- 4.14 Education of the Deaf**
- 4.15 Let Us Sum Up**

4.16 Check Your Progress

4.17 Suggested Readings

4.1 Introduction

Senses are said to be the gateway to knowledge. Out of our five sense organs, the sense of sight possesses the most unique advantage of providing knowledge and information of the environment surrounding us in a most comprehensive and suitable way. That is why knowledge gained through a picture of the object, person or event is said to be hundred times better than its mere description in words. Vision and hearing are distance senses, senses that provide us with information outside our bodies. These senses developed to alert us to the presence of helpful as well as dangerous elements in the environment.

Clearly, those of us with unimpaired vision profit from this sense. We learn by observing events, we use our vision to move freely in our environment, and we are alert to danger by using our sight. People with visual impairment have limited use of their sight, but with systematic instruction and advances in technology, most can lead fully integrated lives. The rate of severe visual impairments is related to age and to ethnicity. The incidence of visual impairments increases with age for all groups of people. Older people have a higher probability of having a visual impairment. However, there is also a strong relationship between visual impairments and ethnicity across all ages. Kirchner and Peterson (1988) found that even among the school-age population a greater percentage of youngsters from culturally and linguistically diverse backgrounds have a severe visual impairment. Although problems with their

data base exist, this finding suggests that improved preventive and health care procedures need to be implemented for this group of youngsters. Also, educational programme need to be developed to better address the needs of students with severe visual impairments who come from diverse cultural and linguistic backgrounds. In this lesson we shall discuss the Incidence and causes of visual impairment

Hearing impairment is inability to receive sounds through the ear. A mild loss of hearing is being unable to hear low or distant sounds. It is a generic term including both deaf and hard of hearing which refers to persons with any type or degree of hearing loss that causes difficulty working in a traditional way. It can affect the whole range or only part of the auditory spectrum which, for speech perception, the important region is between 250 and 4,000 Hz. The term deaf is used to describe people with profound hearing loss such that they cannot benefit from amplification, while hard of hearing is used for those with mild to severe hearing loss but who can benefit from amplification.

Although the degree of hearing loss is important, the age when the hearing loss occurs is also important. Individuals who become deaf before they learn to speak and understand language are referred to as prelingually deaf. They either are born deaf or loss their hearing as infants. According to data gathered by the Commission on the Education of the Deaf (1988) approximately 95% of all children and youth who are deaf are prelingually deaf. Those whose hearing impairment occurs after they have learned to speak and understand language are called postlingually deaf. Many are able to retain their abilities to use speech and communicate with others orally. The challenges facing all those who are deaf, and particularly those who are

prelingually deaf, are great. In this lesson , we shall throw light on importance of hearing senses and effects of hearing impairment on educational process.

Infants identified with hearing loss can be fit with amplification by as young as 4 weeks of age. With early identification and appropriate intervention, children with hearing loss can be mainstreamed in regular elementary and secondary education classrooms. Recent research has concluded that children born with a hearing loss who are identified and given appropriate intervention before 6 months of age demonstrated significantly better speech and reading comprehension than children identified after 6 months of age. Even mild hearing loss can significantly interfere with the reception of spoken language and education performance. Research indicates that children with unilateral hearing loss (in one ear) are ten times as likely to be held back at least one grade compared to children with normal hearing. Similar academic achievement lags have been reported for children with even slight hearing loss. Children with mild hearing loss miss 25-50% of speech in the classroom and may be inappropriately labelled as having a behaviour problem. Recent clinical studies indicate that early detection of hearing loss followed with appropriate intervention minimizes the need for extensive rehabilitation during the school years..

For those members of our society who have disabilities, education is critical. Children who are disabled, and their families, need to receive an intensive educational experience as early as possible. Children with severe to profound hearing losses have much to learn, and a considerable amount of that learning will be challenging. Professionals in this field debate a number of issues, such as where education should be delivered, how much speech and

language development should be stressed in the curriculum at the expense of more academic subjects, and what mode (oral, manual, or total) of communication is best. Regardless of such disagreements, professionals agree: Education should begin at birth or at the time the hearing impairment was discovered for the individual and the entire family, particularly for those with severe hearing impairments.

4.2 Objectives

After going through this lesson, you should be able to:

- Discuss the nature of visual impairment.
- Discuss the history of the visual impairment
- Discuss the classification of visual impairment.

- Discuss the incidence of visual impairment.

- Discuss the causes of visual impairment

- Discuss the importance of hearing sense.
- Discuss the effects of hearing impairment on educational process

- Discuss the levels of hearing loss.
- Discuss the early identification and intervention and

- Discuss the education of the deaf.

4.3 History of the Field

Our knowledge of people with visual impairments in Western civilization dates back to the days of Homer in ancient Greece. Records from ancient Egypt confirm that people with visual impairments were accepted in society. Despite these indications of attention and acceptance in early societies of Western civilization, there was no systematic attempt to educate and

integrate people who were blind into Western society until the eighteenth century.

The first school for blind, the institution for Blind Youth, was founded in Paris 1784 by Valentin Haüy, who also conceived a system of raised letters on the printed page. Unfortunately, his developmental efforts ended when the French Revolution began in 1789. In 1829, Louis Braille, a French musician who was blind, developed a tactile system for reading and writing that uses an embossed dot code. This system is a backbone of the education of the blinds in whole world.

Taking inspiration from the pioneer efforts of Valentine Haüy, a number of institutes for blind were then founded in France, Britain and the other countries of the western world including USA. In this connection, the first British school for the blind children was established in Liverpool in 1791 by Edward Ruston, a blind poet who lost his sight on a slave ship. The curriculum followed in his school was totally focused on trade skills and learning of music capable of making the blind children to earn their living and respect in the society.

In USA, the initiation in this direction came from Samual Grindley Hows (1801–1876) who established in 1821, the Perkins school for the blind, the oldest and the best known residential school for the blind children. This school is well known for the development of many methods and materials used for the education of the blind children. The special education personalities like Anne Sullivan and Helen Keller have been the famous pupils of this institution.

The another significant landmark in the education of the blind children came from the development of the Snellen chart by Herman Snellen, a Dutch ophthalmologist in 1862. The chart provided a fast, standardized test of visual

acuity and a good visual screening tool even nowadays. Similarly, other inventions and technological advancement like production of talking books and other materials for the blind on long playing records, in 1934; printing of large type of books and development of the Perkins Braille in 1947, invention of the mega-scope to project and magnify printing materials in 1953 and development of the laser cane for use by the blind in 1966, the development of talking text writer in 1987 along with the services of computers available nowadays for converting Braille text to normal text and its audio translation and vice-versa have gone a long way to improve the quality of special education services to the visually impaired children.

4.4 Nature of Visual Impairment

The terms partially sighted, low vision, legally blind, and totally blind are used in the educational context to describe students with visual impairments. They are defined as follows:

"Partially sighted" indicates some type of visual problem has resulted in a need for special education;

"Low vision" generally refers to a severe visual impairment, not necessarily limited to distance vision. Low vision applies to all individuals with sight who are unable to read the newspaper at a normal viewing distance, even with the aid of eyeglasses or contact lenses. They use a combination of vision and other senses to learn, although they may require adaptations in lighting or the size of print, and, sometimes, braille;

"Legally blind" indicates that a person has less than 20/200 vision in the better eye or a very limited field of vision (20 degrees at its widest point); and

Totally blind students learn via braille or other non-visual media.

Visual impairment is the consequence of a functional loss of vision, rather than the eye disorder itself. Eye disorders which can lead to visual impairments can include retinal degeneration, albinism, cataracts, glaucoma, muscular problems that result in visual disturbances, corneal disorders, diabetic retinopathy, congenital disorders, and infection.

4.5 Definitions and Categories of Visual Impairment

Let us try to have a knowledge and understanding of all those terms indicative of one's visual impairment, in one respect of the other through some well known definitions like the following:

Love (1975): "Visually impaired children are those children who have such marked visual difficulties that even with the best medical and optical care they cannot see well enough to profit by the educational facilities that are provided for children with normal vision" (p. 63).

Barraga (1983): "A visually handicapped child is one whose visual impairments interfere with his optimal learning and achievement, unless adaptations are made in the methods of presenting learning experiences, the nature of materials used and/or in the learning environment" (p.25).

Individuals with Disabilities Education Act, USA (IDEA. 1993): "Visual impairment including blindness means impairment in vision, that even with correction, adversely affects a child's educational performance. The term includes both partial sight (low vision) and blindness" (34 CFR, Ch. III, Sec 300.7 July 1, 1993).

American Medical Association: "Blindness is central visual acuity for distance of 20/200 or less in the better eye with correction or, if greater than 20/200, a

field of vision not greater than 20 degrees at the widest diameter" (Hatfield, 1975, pp.3-20).

Rehabilitation Council of India Act 1992: Visually handicapped means a person who suffers from any of the following conditions, namely:

- i) Total absence of light.
- ii) Visual acuity not exceeding 20/200 (snellen) in the better eye with the correcting lenses, or
- iii) Limitation of the field of vision subtending an angle of 20 degree or worse.

The broad definition of visual impairment in India as adopted in the Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995 as well as under the National Programme for Control of Blindness (NPCB) is given below:

Blindness : refers to a condition where a person suffers from any of the following conditions, namely:

- Total absence of sight; or
- Visual acuity not exceeding 6/60 or 20/200 (Snellen) in the better eye even with correction lenses; or
- Limitation of the field of vision subtending an angle of 20 degree or worse.

For deciding the blindness, the visual acuity as well as field of vision have been considered.

Low Vision: The Persons with Disabilities Act, 1995 also recognizes low vision as a category of disability and defines it as follows:

"Person with low vision" means a person with impairment of visual functioning even after treatment or standard refractive correction but who uses or is

potentially capable of using vision for the planning or execution of a task with appropriate assistive device”.

This definition is incomplete as it inadvertently omits quantification of the acuity as well as the field of vision as is done in the case of the WHO definition. It is desirable to modify this definition and the following quantification should be added:

“Low vision are those who suffer visual acuity between 20/200 to 70/200 (Snellen) or 6/18 to 6/60 in the better eye after the best possible correction or a Field of Vision between 20 to 30 degrees”.

The WHO working definition of Low Vision (WHO, 1992) is as follows:

“A person with low vision is one who has impairment of visual functioning even after treatment, and/ or standard refractive correction, and has a visual acuity of less than 6/18 to light perception or a visual field of less than 10 degrees from the point of fixation, but who uses, or is potentially able to use, vision for the planning and/or execution of a task”.

The points emphasized are that there is significantly reduced vision, visual performance is affected but that there still is vision that can be used. This last point is very important: if there is usable vision, training to use that vision might be possible. In addition, this person is not labeled blind.

Categories of Visual Impairment

Category	Corrected VA-better eye	WHO Definition Standard*	Working#	Indian Definition
0	6/6-6/18	Normal	Normal	Normal
1	<6/18-6/60	Visual Impairment	Visual Low	Visual Low

2	<6/60-3/60	Severe Impairment	Low Vision	Blind
3	<3/60-1/60	Blind	Low Vision	Blind
4	<1/60-PL	Blind	Low Vision	Blind
5	NPL	Blind	Total Blindness	Total Blindness

The standard WHO definition is used in medical reports and publications and is solely based on visual acuity and does not take into account functional vision.

The WHO working definition has been adopted since WHO Consultation in 1992. This working definition is solely used for reporting purposes and should not be used for eligibility of services.

The importance of the functional definition lies in the 'label' people are given, someone with a visual acuity of 2/60 can have useful vision, for example, for mobility. However, he or she will be labelled blind person. The consequence is this person is than treated as if he/she is a blind. This ignores the usable vision. There should be a difference between legal blindness and functional blindness or low vision.

The WHO standard definition defines blindness as visual acuity of less than 3/60 in the better eye with the best possible correction as compared to that of 6/60 in India. The WHO functional definition, however, considers blindness starting at light perception or when a person has no usable vision. Similarly, a person with visual acuity better than 3/60 but equal or less than 6/60 is graded as "blind" in India, while WHO grades him as low vision.

In India a person with a VA < 6/60 is legally blind, which enables to receive certain services and financial benefits. However, a person who is legally blind can still have useful vision to do certain tasks, as can be seen in the

working definition. This refers to the fact that they still have functional vision, which is the use of vision for a particular purpose.

For India or other developing countries, it is essential to maintain the legal definition of blindness at the level of visual acuity of 6/60 (20/200 Snellen) or less and field of vision of 20 degree or less. Already the travel concessions, scholarship and other benefits are very meagre, if “*perception of light*” to “*no perception of light*” is considered blindness, a large of persons who are at present availing these concessions would fall outside the eligibility criteria and thus remain bereft of these benefits. Alternatively, if these concessions are extended to all the persons with low vision in the acuity range of 6/18 to “*perception of light*” as defined by WHO, the appropriate Government may not be able to meet the demand due to financial constraints. For India and other developing countries, it is desirable to maintain the definition of blindness as adopted in the Persons with Disability Act, 1995, i.e. visual acuity of 6/60 (20/200) or less and field of vision of 20 degree and less and to consider all the persons in the range of acuity of 6/18 to 6/60 (20/60 to 20/200) as persons with low vision.

Thus the recommended definition for low vision in Indian context should be “*Low vision are those who suffer visual acuity between 20/200 to 70/200 (Snellen) or 6/18 to 6/60 in the better eye after the best possible correction.*”

- 1. One-Eyed Person:** There is a controversy regarding the inclusion of one-eyed persons in the category of blindness. The definition of blindness adopted in India exclude people with impairment only in one eye from the purview of blindness. Even in medical parlance, disability is synonymous to the physical impairment and the level of such impairment has been prescribed for certifying a person to be disabled.

Generally, the impairment of 40 percent or more is considered a handicap. As percentage of impairment in the case of a one-eyed person is only 30 percent, according to the approved definition in medical parlance, a person with one good eye is not a blind person. In short, a person with visual impairment of 40 per cent or more is considered a blind person.

The Committee of the Ministry of Social Justice and Empowerment on Recommendation of Standard Definition of Disability recommended that one eye-eyed persons should be excluded from the other categories of visual impairment so that facilities and concessions available to severely and profoundly visually impaired persons are not eroded. The committee, however, felt that loss of one eye would not be considered as a disqualification on medical grounds unless a particular post is of such a technical nature that it requires of a person to have the coordinated use of both eyes or three dimensional vision.

2. Persons with Deafblindness: Deafblindness is a condition presenting other difficulties than those caused by deafness and blindness. It is an “umbrella” term which can include children and adults who may suffer from varying degrees of visual and hearing impairment, perhaps combined with learning difficulties and physical disabilities, which can cause:

- severe communication
- developmental, and
- educational problems.

It includes children and adults who are:

- blind and profoundly deaf

- blind and severely or partially hearing
- partially sighted and profoundly deaf
- partially sighted and severely or partially hearing

3. **Explanation of Various Terms:-** In defining visual impairment, three aspects of vision namely visual acuity, field of vision and visual functioning are considered simultaneously. In a broad sense, visual defects result into loss of clear vision, central vision or peripheral vision. All these losses are considered by measuring visual acuity, field of vision and level of visual functioning.

(a) **Visual Acuity :** It refers to the ability of the eye to see details.

The visual acuity for distance is measured as the maximum distance at which person can see a certain object, divided by the maximum distance at which a person with normal eyesight can see the same object. Thus a visual acuity of 6/60 means that the person examined cannot see, at a distance of 6 meters, the object which a person with normal eyesight would be able to see at 60 meters. If vision is so impaired that to see the biggest E of the E-chart, the person has to come within 6 meters or even nearer, he is considered blind. The simplest method of testing visual acuity is to see whether the person can count fingers at a distance of six meters.

(b) **Field of Vision :** It refers to the field which both the eyes can easily see in the front. The normal field of vision is 180 degrees in front of eye. It is determined by the Confrontation Test in which mapping is done on a chart having concentric circles marked upon it. The simplest method of testing is to bring

snapping finger from the side of the ear to the front, move it up and down, and mark the position where the person can see the finger.

- (c) **Visual Functioning** : It relates in part to the condition of the eye. It is determined by the experience, motivation, needs and expectation of each individual in relation to whatever visual capacity is available to satisfy curiosity and accomplishment activities for personal satisfaction. The visual functioning refers to the degree to which/ability of a person to use vision for all (daily) activities.

4. **WHO Disability Sequence**:- Generally various terms like impairment, disability and handicap are used interchangeably and at random. WHO has adopted a sequence underlying illness-related phenomenon as:

Disease → Impairment → Disability → Handicap

The International Classification of Impairments, Disabilities & Handicaps (ICIDH-2) likely to be officially adopted in 2001 proposes a common language of functioning and disability. The new terms proposed are "Activity Limitation" for "Disability"; and "Participation Restriction" for "Handicap". "Disability" will be used as an umbrella term covering all three terms: Impairment, Activity Limitation and Participative Restriction.

In context of vision defects, a variety of terms viz. Totally blind, stone blind, blind, partially blind, legally blind, economically blind, visually limited, low vision, partially sighted, visually handicapped, visually impaired etc. are being used.

Explanation of Various Terms as Adopted by WHO

Condition	Concerned with	Represents
Impairments	Abnormalities of body structure and appearances; organs or system functioning	Disturbances at organ level
Disabilites	Impairment in terms of functional performance and activities	Disturbances at personal level
Handicaps	Disadvantages resulted from impairment and disabilities	Interaction with and adaptation to individual's surroundings

Source: WHO Classification of Impairments, Disabilities & Handicaps

The visually impaired is an umbrella term, used widely and understood in an educational context. This term is used to describe the total group of persons whose vision is affected by impairments in seeing, irrespective of the nature or extent of these. The term refers to all the persons where vision disadvantage has resulted from impairment as well as disabilities.

In case of persons who are completely without vision, or who have light perception only, it is desirable to use the term "blind". In all other cases of visual defects falling in the definition, the term "visually impaired" should preferably be used. For the persons who do not fall in the category of blindness as defined in the Act and whose visual acuity falls between 6/ 18 and 6/60 in the better eye after the best possible correction, the term "low vision" should be used. In addition, the following should be done:

- (a) Use the term “blind” (VA 6/60 or lower) only for legal reasons or to get benefits.
- (b) For educational and rehabilitation purposes, all persons with a visual acuity <6/18 to light perception, who still have useful vision, should be labelled “low vision, not blind” so as to encourage the use of vision.

4.6 Classification of Visual Impairment

The classification of visual impairment varies worldwide. The WHO classifies levels of visual impairment based on visual acuity and/or visual field limitation, and defines blindness as profound impairment (this can refer to blindness of one eye or blindness of the individual). The World Health Organization International Classification of Impairment, Disabilities, and Handicaps (ICIDH) system is used to classify disorders, impairments, disabilities, and handicaps.

The definitions are as follows:

- A *disease* is an illness or medical condition, irrespective of origin or source, that represents or could represent significant harm to humans.
- An *impairment* is any loss or abnormality in an anatomical structure or a physiological or psychological function.
- A *disability* is any restriction or lack (resulting from an impairment) of ability to perform an activity in the manner or within the range considered normal for a human being.
- A *handicap* indicates a person’s disadvantaged position in society, resulting from impairment and/or disabilities.

The eye is a very complicated mechanism damage to any part of the eye can result in serious limitations in one’s abilities to see and process information

through the visual channel. This can result blindness or severe visual impairments. Many can be corrected or reduced through medical technology. Unfortunately, not all can be resolved by medical treatment at the present time. Disorders of the eye are classified as follows:

Disorders of the Eye:

Myopia or nearsightedness – condition allows focus on objects close but not at a distance.

Hyperopia or farsightedness – condition allows focus on objects at a distance but not close.

Astigmatism – an eye disorder that produces images on the retina that are not equally in focus.

Disorders of the eye muscles:

Strabismus – improper alignment of the two eyes causes two images being received by the brain, with the possible result of one eye becoming unfunctional.

Nystagmus – rapid, involuntary movements of the eye that interfere with bringing objects into focus.

Disorders of the cornea, iris and lenses:

Glaucoma – fluid in the eye is restricted, causing pressure to build up and damage the retina.

Aniridia – undeveloped iris, due to lack of pigment (albinism), results in extreme sensitivity to light.

Cataract – a cloudy film over the lenses of the eye.

Disorders of the Retina: *Diabetic retinopathy* – changes in the eye's blood vessels are caused by diabetes.

Muscular degeneration—damage to a small area near the centre of the retina results in restricted fine central vision and difficulties in reading and writing.

Retinopathy of prematurity (ROP)—excess oxygen to infants causes retinal damage; was called retrolental fibroplasia.

Retinal detachment—detachment of the retina interrupts transmission of visual information to the brain.

Retinitis pigmentosa—genetic eye disease leads progressively to blindness; night blindness is the first symptom. *Retinoblastoma* – tumor.

Optic nerve:

Atrophy—reduced function of the optic nerve.

4.7 Incidence of Visual Impairments

Blindness affects approximately 45 million people worldwide. Because of aging and population growth, this number is expected to double by the year 2020. Indeed, in the US alone, macular degeneration is responsible for low vision experienced by more than 15 million people.

Estimates of the number of visually impaired persons vary, depending upon the criteria used. Criteria which may vary include whether the visual impairment is self reported or verified by screening or examination, whether uncorrected refractive error is included in the definition of visual impairment, and the ages included in the estimate. Several studies report the prevalence of visual impairment (not correctable with conventional lenses) to be between 1.5 and 3.4 million visually impaired adults (40 and older) in the United States. It should be noted that because these estimates are based on visual acuity alone,

they likely underestimate the true prevalence of visual impairment (which includes visual field loss and other functional deficits).

The incidence of visual impairment increases with age; more than two thirds of persons with low vision are over the age of 65. Statistical data regarding the prevalence of visually impaired school-age children and younger adults 46 is lacking, however this remains an important population in need of vision rehabilitation care and services.

Risk Factors

The factors that place a patient at risk for visual impairment are numerous and are related not only to ocular diseases and abnormalities but also to trauma and systemic health conditions. The most common causes of visual impairment in the adult population are:

- Age-related macular degeneration
- Cataract
- Glaucoma
- Diabetic retinopathy.

The incidence of these conditions increases with the average age. Medical advances that increase the survival of infants and adults with severe health problems will also contribute to the rising numbers of persons with visual defects. The increasing incidence and survival of persons with traumatic brain injuries further add to the numbers of visually impaired persons in need of appropriate rehabilitation. The causes of visual impairment are numerous, including not only congenital and acquired ocular conditions, but systemic diseases with ocular complications and neurological insult and trauma.

According to the Twelfth Annual Report to Congress on the Implementation of the Education for the Handicapped Act, 4 of every 10,000

school-age children are visually handicapped and receive special services (United States Department of Education, 1990). It is difficult to get an accurate count of students with visual impairment (Packer) and Kirchner, 1985; Kirchner, 1988a). For example in the 1984-85 school year, 30,375 students were identified as visually handicapped, in the 1987-88, school year, 22,864 students were so reported, and in 1988-89, 17,116 students were classified as visually impaired. A primary reason for differences in such counts is that different states use different definitions and criteria in determining who is eligible for special services. Also, more than half of those identified as having severe visual impairments have an additional disability (Kirchner and Peterson, 1988b). Many of these students are counted in the multiply handicapped category rather in the visual impairment category, even if visual impairment is their primary handicapping condition. Some students with mild to moderate visual impairment are never identified throughout their school years. It is possible that many students with and even moderate visual impairments are not identified and do not receive services for which they are eligible.

One might think that, because of advances in medical technology and preventive techniques (e.g, vaccinations for rubella), the number of students with visual impairment should be on the decline. However the incidence of severe visual impairments among school children, which was stable across the 15 years period from 1963 to 1978, has continued to remain stable because of the high rate of visual impairments in children being caused by hereditary factors.

4.8 Causes of Visual Impairment

There are various causes of visual impairment. Some of the most common are as follows:

- a) Errors of refraction
- b) Glaucoma
- c) Cataracts
- d) Diabetes Retinopathy
- e) Prenatal causes
- f) Improper muscle functioning

Errors of Refraction: The most common problems are the result of errors of refraction. Myopia (near sightedness), hyperopia (far sightedness), and astigmatism (blurred vision) are all examples of refraction errors that affect central visual acuity. Each of these can be serious enough to cause significant impairment. Myopia and hyperopia are the most common impairments of low vision. In these cases, glasses or contact lenses can bring vision within normal limits.

When the eyeball is too long, the light rays from the object would be in focus in front rather than on the retina. This results in myopia, which affects vision for distant objects, but close vision may be unaffected. When the eyeball is too short, the light rays from the object would be in focus behind rather than on the retina. This results in hyperopia, which affects vision for close objects, but far vision may be unaffected. When cornea or lens of the eye is irregular, the light rays from the object would be blurred or distorted. This results in astigmatism (blurred vision).

Glaucoma: is a disease of the eye that is caused by a gradual degeneration of cells in the optic nerve. The loss of these cells leads to a gradual narrowing of the field of vision beginning at the periphery. There is no known cause for the most common form of glaucoma, primary open angle glaucoma, but it is commonly believed to be associated with the inability of fluid to properly drain from the eyes causing an increased intraocular pressure. Primary open angle glaucoma affects more than 2.2 million people, ages 40 emphasizes the point that glaucoma does not result from a single eye disease that can be treated by simply relieving intraocular pressure, but is a “final, common pathway of many diseases that affect the eye.” Onset generally occurs later in life and people over 60 are six times more likely to get glaucoma than the younger population. In some cases congenital glaucoma will be found in children as young as two and three. Not only do these children experience more signs and symptoms of eye disease, but these cases directly relate to an inability of fluid to drain from the eye. Glaucoma is the leading cause of blindness among African-Americans, and Hispanic Americans over the age of 60 are also at an increased risk. Common symptoms include elevated inter-ocular pressure, optic disk cupping, and visual field loss. Often people will lose vision from primary open angle glaucoma with little warning or noticeable symptoms. Major risk factors include advanced age, African or Hispanic descent, heredity, and prolonged smoking or steroid usage. While there is no way to prevent glaucoma, it can be successfully treated if diagnosed early.

Cataracts: result from a clouding (opacification) of the normally slightly yellowish lens of the eye. The loss of transparency causes light to be diffused as it enters the eye which impacts the clarity of the visual image. The lens slowly develops a greenish and later a brownish tint which impedes the ability of light

to pass through the lens. Symptoms of cataract include blurred vision, light sensitivity, double vision, and an apparent fading or yellowing of colors. Night vision is generally impacted as is the amount of light needed to complete near tasks. While the most common cataracts are age-related, there are other types of cataracts, including secondary cataracts (resulting from other diseases, such as glaucoma or diabetes); traumatic cataracts (which may develop as a result of injury to the eye); or radiation cataracts (which develop as a result of exposure to radiation). Congenital cataracts, a very common cause of blindness in the pediatric population, can result in bilateral vision impairment if not treated meticulously. Additional risk factors include prolonged use of corticosteroids, excessive consumption of alcohol, smoking, and excessive exposure to sunlight. Many people develop cataracts as a result of the normal aging process.

Diabetic Retinopathy: is a disease of the eye that all people with diabetes should be aware of. It is a visual disorder associated with diabetes that causes retinal blood vessels to leak into the retina causing macular oedema. In the advanced stages, called the proliferative stage, new blood vessels grow along the retina and into the vitreous humour. Vision loss from diabetic retinopathy generally worsens over time. It will begin with a blurring of the vision and as it develops will cause development of cloudy vision, blind spots, or floaters. Careful control of diabetes and regular eye exams can delay the development of the disorder. While diabetic retinopathy will often develop with no pain and minimal symptoms in its early states, it can be treated if it is diagnosed early. Photocoagulation is a treatment option for people with diabetic retinopathy.

Prenatal Causes: There are several other visual impairments that primarily affect children. Visual impairment of school-age children are often due to prenatal causes, many of which are hereditary. Like congenital cataracts and

glaucoma, there are other congenital conditions like Coloboma is a degenerative disease in which the central and/or peripheral areas of the retina are not completely formed. This results in impairment of the visual field and/or central visual acuity. Retinitis Pigmentosa is yet another prenatal condition. It is a hereditary disease resulting in degeneration of retina. Retinitis pigmentosa causes the person's field of vision to narrow. Prenatal also include infectious diseases that affect the unborn child, such as syphilis and rubella.

Improper muscle functioning: It causes two other conditions, which results in visual problems.

Strabismus is a condition in which the eye(s) is(are) directed inward (crossed eyes) or outward. If it is left untreated, strabismus will result in permanent blindness because the brain will eventually reject signals from a deviating eye. Fortunately, most cases of strabismus can be corrected with eye exercises or surgery.

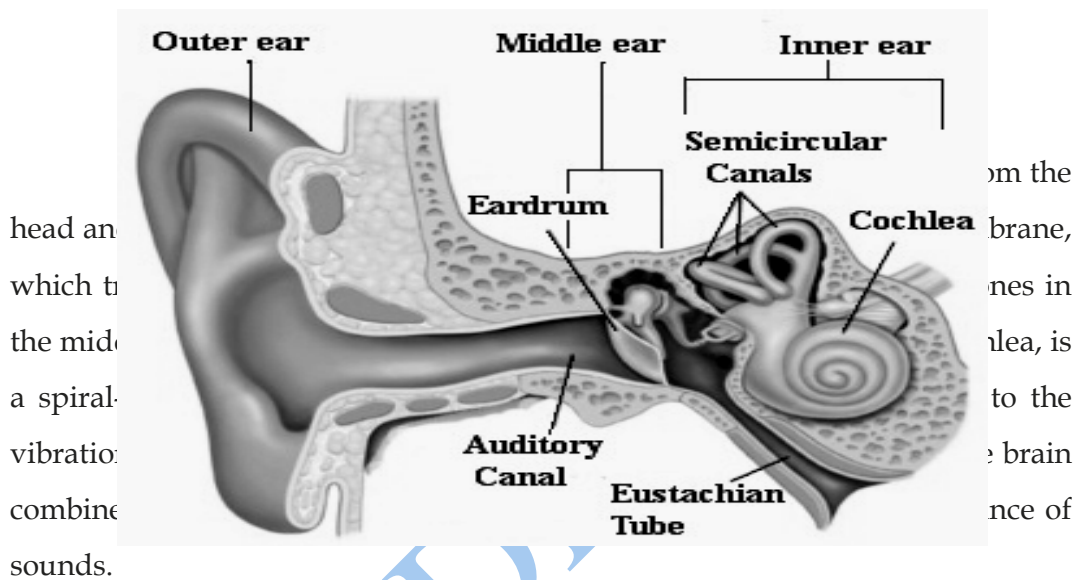
Nystagmus is a condition in which there are rapid involuntary movements of the eyes. This results in dizziness and nausea. Nystagmus is sometimes a sign of brain malfunctioning and/or inner ear problems.

4.9 Importance of Hearing Sense

We use our senses to learn what is going on in the world around us. In ancient times, a person's survival depended upon being able to hear and see dangers in the environment. The other senses of taste, touch, and smell also helped people to survive. Many people think that sight is the most important sense. Early humans would have run right into danger without their sense of sight. Even today, it is hard for most of us to imagine living without our sense of sight. However, today's survival skills are different than the survival skills

that the cave man used. Today, communication is one of man's most important skills, and communication depends on the sense of hearing. Even when we communicate by visual means, such as writing or typing, we are still using the language that most of us first learned by listening.

The process of hearing is quite remarkable; our ears in general, play a major role as a hearing sense organ in gathering sound (acoustical energy) from the environment and to transform that energy in the form of neural energy. The hearing sensation in the form of neural energy is then sent to auditory department of our brain (central nervous system) for its interpretation and as a result we have perception of what we hear.



The inner ear has a vestibular system formed by three semicircular canals that are approximately at right angles to each other and which are responsible for the sense of balance and spatial orientation. The inner ear has chambers filled with a viscous fluid and small particles (otoliths) containing

calcium carbonate. The movement of these particles over small hair cells in the inner ear sends signals to the brain that are interpreted as motion and acceleration.

4.10 Effect of Hearing Impairment on Educational Process

Sense of hearing constitutes not only one of the five senses that are designated a gateway of knowledge and a natural means for becoming aware of one's environment but also works as a potent tool for helping child in the task of language and speech acquisition. One who cannot hear thus may be subjected to a number of disadvantages in terms of his adequate adjustment, progress and education-oriented society of ours.

Effects on language development: Hearing loss can be either prelinguistic—that is, it precedes a child's language development—or postlinguistic, occurring after a child has acquired some degree of speech and language skill. Hearing disabilities can also be described as congenital or adventitious. Congenital means that the hearing loss is genetic or occurred at birth, and adventitious means that it occurred because of an accident or illness after birth.

Students who have lost their hearing postlinguistically or adventitiously may continue to use speech as a method of communication. Or they may use speech together with sign language or speech reading (lip reading). Students who lose their hearing before developing speech may not use speech at all, communicating solely with sign language. However, as with all other types of disability, no two students are alike. Trying to fit a student into a preconceived category will likely lead to embarrassment or frustration for you, the student, and the parents.

The long-term educational effects of a hearing loss can depend to a great extent on the age at which the loss occurred. Children with hearing and those with hearing losses (of normal or above average intelligence) follow the same pattern of cognitive development, including initial phases of language development such as babbling and the production of other sounds. Further development may, however, proceed at a different rate in children with hearing loss. Between the ages of one and three, the average child's vocabulary jumps from 200 words to 900 words. This is when both hearing and nonhearing children make the greatest gains in language acquisition. A child who has not begun to build a vocabulary or to figure out the rules of grammar by age three can find these tasks extremely difficult later on. That is why early intervention programs for students with hearing disabilities are extremely important.

Placement Decisions: Educators who must decide whether to include a child with a hearing problem in the regular classroom follow the same general process as they do when evaluating inclusion for other exceptionalities. In order to provide the best learning environment for a child, teachers, parents, and related services specialists review the child's particular needs before making any placement decision.

In the case of a child with a hearing problem, communication issues are the first addressed. A student who has learned speech reading and sign language in an early intervention program and is comfortable around hearing persons might be best placed in a regular classroom where he can focus on age-appropriate academic material. A student who is not comfortable with speech reading and lacks good communication skills might learn best in a self-contained classroom. Although some students with hearing disabilities find inclusion easy, others struggle with loneliness in inclusive classrooms. They

have difficulty communicating with peers and with hearing teachers and parents; often they feel “different.” As a teacher, be prepared to help the hearing-disabled student in your classroom who does experience feelings of isolation.

Many students succeed in the regular classroom once they have mastered communication techniques. However, some parents of children with hearing disabilities prefer that their child be placed with children who have similar issues and experiences. Some children with hearing disabilities may attend a residential program. In fact, many families of children who are deaf or hard of hearing want their children to have a school experience with other students like them, rather than be included in a regular school where they might be the lone student with hearing disabilities.

In addition to school-year programs, students with hearing disabilities may participate in summer-school programs. These schools for the Deaf have summer sports camps, driver-education programs, communication skills workshops, and high school retreats.

Meeting the Needs of Students with Hearing Disabilities: Teachers who have students with hearing disabilities in a regular classroom find a challenge in achieving effective communication that assures the child complete access to an education. The challenge implies both a classroom environment and instructional techniques that have a strong visual orientation. Here are some suggestions to keep in mind:

- The teacher should refrain from speaking with his or her back to the students. This is of particular importance when a child is using speech reading.

- The student with a hearing disability should be able to see the teacher and peers from his or her vantage point in the classroom. During discussions, too, the student should be able to see the faces of all the other students (a circle can work nicely).
- If a sign-language interpreter is present, the lesson pace should allow the interpreter enough time to convey the information before the instructor moves on to the next point.
- The student should receive visual aids to reinforce the instructor's verbal delivery of lessons. Copies of overhead transparency lecture notes, writing on the board, and written handouts of instructions can all reinforce learning. As a side note, giving all your students copies of a presentation outline can be helpful, especially for any student who has trouble taking notes or focusing on the important elements of a lecture or presentation.

Self-Esteem for Children with Hearing Disabilities: How children perceive and act towards other children is very important to young ones whether they are accepted by their friends or society is what gives a child good self-esteem. Most kids with hearing disabilities feel as though they are different and people perceive them differently and don't give them a fair chance. How can children learn and want to be in a classroom when they feel that the other kids don't like them because they are deaf or wear hearing aids. This article discusses the attitudes of the hearing impaired children.

Facilitating Interaction with Other Students: Successful classroom discussions and socialization rely on helping your hearing students to understand how to communicate effectively and respectfully with a student who has a hearing disability. Be sensitive in planning discreet opportunities to convey this

information to keep the student with special needs from feeling separated from the rest of the class. A few modifications to your basic classroom procedures can give the student with a hearing impairment an opportunity to be included more fully with his or her peers.

To make communication easier for the student with a hearing impairment, have students arranged in a circle or semicircle and remind them to speak one at a time. A simple strategy is to point to the person who will speak next and wait for the hearing-disabled student to locate the speaker. You might also pair each student with a partner or study buddy. Each person can count on her partner's help to fill any gaps in class notes, clarify directions or assignments, or assist with class work. The buddy would not be responsible for taking care of the student with a hearing disability, but could provide support and act as a special contact in the classroom. Using a buddy system can also give the student with hearing loss an opportunity to share responsibilities and to feel that he or she can contribute to the learning of another.

Working with Specialists

Your school may have a sign-language interpreter available to assist students with hearing disabilities. Some schools and school districts assign an interpreter to each student with a hearing disability. Others place several students with hearing difficulties in a classroom where the interpreter is working. A sign-language interpreter translates the spoken communication of the classroom into signs for the hearing-disabled student, and also voices (speaks aloud) the signs that the student is making.

Keep in mind these two points if you have a sign-language interpreter in your classroom:

- The interpreter's job is to facilitate communication between the student with hearing problems and you and the other students, not to teach. Do not expect the interpreter to act as a teacher's assistant or classroom aide.
- You and your students should be sure to address the student, not the interpreter, when talking or asking questions. Don't ask the interpreter, "What did he just say (sign)?" Instead, tug on the interpreter's sleeve and then turn to the student and ask, "What did you say?"
- Don't be afraid of using words like say or hear when addressing a student with a hearing disability. These words are regular parts of our vocabulary, and the student knows what you mean.

Close communication with the school speech-language specialist can also furnish you with practical suggestions for modifications in the curriculum or its presentation. The speech-language specialist may also work individually with a particular student and have tips to share about past successes with that student.

4.11 Levels of Hearing Loss

There are two general types of hearing loss: Conductive and Sensorineural. Conductive hearing loss is caused when something interferes with the transmission of sound from your outer ear to the inner ear. Sensorineural hearing loss is caused when there is a problem with your inner ear, or the pathway from the inner ear to your brain. These two types have different levels of hearing loss measured in decibels:

Conductive Hearing Loss: Conductive hearing losses are due to blockage or damage to the outer or middle ear that prevents some waves from travelling

(being conducted) to the inner ear. Generally, someone with a conductive hearing loss has a mild to moderate disability. Some conductive hearing losses are temporary. Infact, we have all probably experienced a conductive hearing loss at some point in our lives. Many conductive hearing losses include mild and moderate can be corrected through surgery or other medical techniques.

Mild Hearing Loss: On average, the most quiet sounds that people can hear with their better ear are between 25 and 40 dB. People who suffer from mild hearing loss have some difficulties keeping up with conversations, especially in noisy surroundings.

Moderate Hearing Loss: On average, the most quiet sounds heard by people with their better ear are between 40 and 70 dB. People who suffer from moderate hearing loss have difficulty keeping up with conversations when not using a hearing aid.

Causes of Conductive Hearing Loss

Conductive hearing loss is caused by a blockage that prevents the conduction of sound from the outer to inner ear. This blockage can be due to one of the following reasons:

- **Infection:** The most common cause of conductive hearing loss is fluid in the middle ear. This may be a result of repeated or chronic infection (otitis media).
- **Injury of the outer ear:** Holes in the eardrum (tympanic membrane perforation) and skin cysts (cholesteatoma)
- **Blockage of the ear canal:** It may develop as a result of eustachian tube obstruction (eg, due to allergies) or due to excessive ear wax that plugs

the ear canal or other small objects like food, beads or insects. Narrowing of the ear canal can also be due to surgery or disease.

- **Otosclerosis:** It is a condition in which the ossicles of the middle ear become immobile and hence there is a defect in the proper conduction of sound through the middle ear, leading to conductive hearing loss.
- **Congenital (in-born) deformities:** e.g., Down syndrome, Franceschetti Syndrome, Treacher Collins Syndrome or Achondroplasia (dwarfism)

Sensorineural Hearing Loss.

Sensorineural hearing loss occurs when there is damage to the inner ear or the auditory nerve (the eighth cranial nerve), and usually cannot be improved medically or surgically. Individuals affected by a sensorineural loss are able to hear different frequencies at different intensity levels; their hearing losses are not flat or even. Sensorineural losses are less common in young children than the conductive types. It includes severe and profound hearing losses.

Severe Hearing Loss: On average, the most quiet sounds heard by people with their better ear are between 70 and 95 dB. People who suffer from severe hearing loss will benefit from powerful hearing aids, but often they rely heavily on lip-reading even when they are using hearing aids. Some also use sign language.

Profound Hearing Loss: On average, the most quiet sounds heard by people with their better ear are from 95 dB or more. People who suffer from profound hearing loss are very hard of hearing and rely mostly on lip-reading, and/or sign language.

Hearing deficits in early childhood can result in lifelong impairments in receptive and expressive language skills. The severity of the handicap is determined by the age at which the hearing loss occurred; the nature of the loss (its duration, the frequencies affected, and the degree); and the susceptibilities of the individual child (eg, coexisting visual impairment, intellectual disability, primary language deficits, inadequate linguistic environment). Children who have other sensory, linguistic, or cognitive deficiencies are affected most severely.

Causes of Sensorineural Hearing Loss

The origin of this type of hearing loss, besides the most common reason of noise exposure, is thought to be:

- Genetic (runs in the family)
- Prenatal (occurs in fetus as a result of infection to the mother)
- Peri-natal (Occurs to the baby during the birth process) e.g. premature/difficult delivery
- Acquired e.g. meningitis, physical trauma (accident)
- Cancer treatments such as:
 - ✓ Chemotherapy: The most common types of chemotherapy that cause hearing loss are the platinum drugs or compounds. Common names include Cisplatin and Carboplatin.
 - ✓ Radiation: Radiation may damage the hair cells, much like chemotherapy. Radiation may also damage the area of the brain that changes sound into meaning or the nerves that transmit electronic signals between the hair cells and the brain.
- Surgery or tumors: The areas of the brain that process sound can be damaged during brain surgery. The auditory (hearing) nerve can be

bruised or even cut. Swelling (edema) or a tumor pressing on the nerve can keep the nerve from working properly.

4.12 Early Identification and Intervention

Experts who work with children who have disabilities have long believed that early intervention services improve educational and social outcomes. The early years of life are important, particularly for communication and language development, because this is the time of life when the brain is at its highest capacity to undergo structural changes in response to external stimulation, a process known as neural plasticity. Although no studies have investigated outcomes associated with early intervention for children who are deaf-blind, numerous studies have shown that infants who receive early identification and intervention for hearing loss in the first few months of life achieve significantly greater language skills than those who are identified later. Additionally, research on the plasticity of the brain related to hearing and visual perception strongly supports the need for early identification and early provision of services.

It is widely recognized that the critical learning period for speech and language development is birth to three years of age. If a child has a hearing loss during this critical time period, there can be detrimental effects involving speech and language development. An infant or child with hearing impairment is not able to receive adequate auditory and linguistic information needed to acquire normal speech and language skills. Delays in developing speech and language skills can also have an adverse effect on social development. Lack of receiving auditory information due to hearing loss, can also affect neural development of the auditory pathways due to auditory deprivation. The earlier

a child with hearing impairment is diagnosed, the sooner early intervention can begin to help limit and or prevent the negative effects of hearing impairment.

A few researchers have examined the benefits of early diagnosis of hearing loss and early intervention. Researchers have examined some 150 deaf and hard of hearing children. The ages ranged from 1 year 1 month to 3 years 0 months. The researchers found that the group who was diagnosed before 6 months of age exhibited significantly better receptive and expressive language skills than the group who had been diagnosed after 6 months of age. In addition, for normal cognitive development, the finding was evident across all test ages, communications modes, degrees of hearing loss, and socioeconomic strata. Moreover, the finding was independent of gender, minority status, and the presence or absence of additional disabilities.

Researchers conducted a longitudinal study to examine the impact of early intervention in the hearing impaired children. Children with severe and profound hearing impairments who were fitted with amplification prior to six months of age displayed communicative and linguistic skills very similar to those of their normally hearing peers. They further concluded that a delay in the fitting of amplification for as little as 3 to 6 months was enough to cause a significant delay in speech and language acquisition.

The topic discussed above clearly demonstrate the importance and advantages of early identification and intervention of hearing impairment. Physicians' role in this early diagnosis is very important as they have the means to evaluate a child on a regular basis for developmental milestones, and can make prompt referrals for hearing testing as appropriate.

Role of the Practitioner:

It is the role of the practitioner to be able to recognize when to refer a child for a formal hearing test. A formal audiologic evaluation performed by a certified audiologist is the best and most appropriate means to assess a child's hearing sensitivity and to rule out hearing loss. Hearing impaired children can "pass" typical hearing screenings such as playing noisemakers and clapping hands. Current technology allows for hearing testing to be performed as young as the first days of life, therefore a child can be referred for a formal hearing test at any age.

Due to the current trend towards universal hearing screening, physicians may wish to consider referring their infant patients for a hearing test if the infant did not receive an appropriate hearing screening in the hospital. An appropriate screening would be considered testing via auditory brainstem response or otoacoustic emissions. It has been recommended that hearing impaired children be identified by 3 months of age and intervention be in place by 6 months of age.

The National Institutes of Health Consensus Development Conference Statement on the Early Identification of Hearing Impairment in Infants and Young Children and the Joint Committee on Infant Hearing are in agreement as to when a child should be referred for formal hearing testing. NIH recommends that parental concern about a child's hearing or speech/language development at any age is enough reason for a prompt referral for a formal hearing test. Physicians should also refer promptly for a hearing evaluation if a child does not meet appropriate language milestones especially during the first 18 months. In addition, if a child acquires an auditory risk factor in early childhood, they should be referred for a formal hearing test. This includes

middle ear problems. Although middle ear problems do not typically cause permanent hearing loss, it is important to refer a child who has middle ear problems for a hearing test, as middle ear problems can cause temporary hearing loss.

Advantages of Early Identification and the Consequences of Late Identification of Hearing Impairment

The primary justification for early identification of hearing impairment in infants relates to the impact of hearing impairment on speech and language acquisition, academic achievement, and social/emotional development. The first 3 years of life are the most important for speech and language acquisition. Consequently, if a child is hard of hearing or deaf at birth or experiences hearing loss in infancy or early childhood, it is likely that child will not receive adequate auditory, linguistic, and social stimulation requisite to speech and language learning, social and emotional development, and that family functioning will suffer. The goal of early identification and intervention is to minimize or prevent these adverse effects.

The consequences of hearing impairment are many. Animal studies show that early auditory deprivation interferes with the development of neural structures necessary for hearing. Human infants with hearing loss, particularly those with sensorineural impairments, may experience similar disruptions that will have a direct impact on language acquisition. Significant hearing loss interferes with the development of phonological and speech perception abilities needed for later language learning, e.g., meaningful language at the word, phrase, and sentence levels. These impairments in communication skills can lead to poor academic performance (especially reading), and ultimately, to limitations in career opportunities.

The degree and type of hearing impairment impact on a child's development. Other factors can further exacerbate the consequences of hearing impairment. For example, some children have additional sensory disabilities and/or associated neurological disorders that further interfere with perceiving and processing information. Environmental factors, such as the quality of language input provided by the parents, can either facilitate or impede communication skills. Socioeconomic-related factors, such as the lack of access to health care, other associated health problems, high-risk populations, and social stresses, also may exacerbate the consequences of deficits. Early identification and intervention can address these factors, thus minimizing their effects.

Over the past two decades, advances in technology have provided ever-improving opportunities to identify hearing impairments in infants soon after birth. Consequently, the systematic evaluation of the effects of earlier identification and earlier intervention can now be conducted. Because such data are not presently available, it is difficult to evaluate fully the effectiveness of early identification and intervention on language development. There are, however, a wide range of clinical observations, a number of descriptive studies, and a few statistically controlled, nonrandomized trials that support the benefits of early identification and intervention. The benefits to be gained from early intervention may vary, depending on the severity and type of hearing impairment. Children with sensorineural hearing loss who receive early amplification, when indicated and a comprehensive habilitation program may show improved speech and language skills, school achievement, self-esteem, and psychosocial adaptation when compared to hearing-impaired children who do not receive amplification until 2 to 3 years of age. The advantages of

early intervention can only be attained when the appropriate services are available and accessible to these children and their families.

4.13 Historical Background

In the 1800's Thomas Hopkins Gallaudet went to England in order to find a teaching method to teach deaf students. First he visited the Braidwood School whose main methods were oral, but the school refused to share the exact methods they used. Thomas, however, soon met a person who taught the deaf, Roche Amboise Sicard, who was on tour demonstrating how he taught. Sicard used a method of signing. When Gallaudet came back he created the Hartford School now known as the American School of the Deaf. Sign language at that point was the main way of teaching.

Deaf schools began to spread due to the number of students becoming deaf teachers. Then in 1864 The National Deaf Mute College was established by Congress. This is now Gallaudet University. The Conference of Milan occurred shortly after the college was established bringing into question which method of communicating was most appropriate in teaching the deaf. Most countries except the United States used all oral methods leading to a conclusion that the oral method was better.

Day schools gained popularity later in the nineteenth century. However, since most American cities did not have enough students with severe hearing impairments to fill day schools, and because people assumed that living and learning with others with the same impairment was best for this group of people, residential schools remained the common type of school available for these students. Even today, most states in America have a residential school for students with severe hearing impairments.

4.14 Education of the Deaf

Most deaf children in the world are born to hearing parents. Deaf children not only face communication difficulties with people in their local communities, but they may also encounter these problems with parents and other family members. Both deaf children themselves and professionals who try to help them go to great lengths to overcome problems; also there are various technical aids. Still, deaf children find it difficult to produce and comprehend oral language in its spoken modality. However, waiting several years for deaf children to reach a satisfying linguistic level that eventually might not even be attained at all, and in the meantime delaying the children's access to a language that meets their immediate needs, such as sign language, is obviously not a good way: it means essentially risking children's linguistic, cognitive, social and personal development.

In order to avoid development delays among deaf children, a bilingual approach in deaf education is important. It gives deaf children a chance to use the sign language used by the deaf community and, at the same time, learn the oral language used by the hearing majority of people.

Techniques for teaching deaf preschoolers are constantly evolving, due to the introduction of new technologies and schools of thought. In the past, deaf education yielded disappointing results, as there was little known about the best teaching methods and there was a heavy emphasis on teaching speech. Now, studies have shown that a firm basis in language by age 5 is crucial, which has encouraged the use of American Sign Language with children.

There are many different educational approaches today. Each approach gives children access to language. The choices parents make as to which

method their child will use is very important. Deafness can be confirmed at 2 1/2 years of age, but most children aren't tested until much later which causes problems. When parents are informed later they are told that they need to make decisions right away about their child's education, but a lot of the time these decisions are very hard to make because the parents minds are still stuck on the fact that they have a deaf child. There are many conflicting views as to which are the best method to use in educating the deaf. All have positives and negatives.

Bilingual Bicultural:

In this educational approach the student develops American Sign Language as their primary language with English as a secondary language. ASL is usually taught first with English being the child's second language. This mostly has to do with the reading/ writing parts of class. This approach however is not available in many places. Most bilingual bicultural programs are only offered in residential schools. Some parents pair ASL with cued speech instead.

Auditory Oral:

These programs teach children to listen and to talk by using their residual hearing or remaining hearing. They combine hearing technology with intensive early intervention. A great emphasis in this approach is on speech and speech reading. The overall goal of the program is to eventual mainstream the children. Early intervention is very important if a parent decides on this educational approach. Good training is also very important. Approximately 30% of the programs in the USA are oral, yet there are only 3 residential schools. A lot of schools have a mixture of oral programs with other programs, hardly any have purely oral programs. Parents must be really involved for this

method to work because they are the main teacher, enforcing language use all day long. Challenges of this program are that very little improvement is shown in the first few years and it is a lot of hard work for all involved including teachers, students, and parents. Cost is also a problem along with quality. Oral programs have not been recommended for the profoundly deaf.

Auditory Verbal:

These programs promote growing up and living in regular classrooms and environments. This program only trains the students to use their residual hearing. The goal is to mainstream the children making them more independent. Children are given hearing aids very early and also trained to speech read. Speech reading is hard to learn due to the percentage of English sounds visible on the lips along with words which look like something else. Students learn to use context and situation to guess at words. The great benefit of this approach is the ability to communicate with the English speaking world.

Total Communication:

This program uses any means of communication necessary to fit the child. This includes sign language, oral communication, writing, gestures, mime, and pictures. Speech and listening skills are stressed in this approach. The benefit of this approach is that if a child is having problems with an oral method, then they still have sign as a backup. A disadvantage however is that it tends to limit the quality each child has with a language. They are never proficient in ASL or English and never grasp the complex topics in each.

Cued Speech:

This is a visual communication system that children can use. They use their hands to make shapes while making mouth movements in order to see the

sounds of spoken language and differentiate between them. Dr. Orin Cornett invented it in 1966 at Gallaudet University. (17) In the American version there are 8 hand shapes and 4 locations around the mouth to make those shapes in. The goal by using these is to eliminate any speech reading ambiguity. The benefits of this approach are that it can be learned very quickly. People can usually learn it in a weekend. This can be used while parents are learning ASL. Cued speech is also a way to keep parents from oversimplifying what they say to their kids. Many times parents leave out adjectives and such because they don't know how to sign them. This does not help the children to learn language.

American Sign Language (ASL):

This is a language designed for the hearing impaired because it is completely visual. The advantages are that it provides a great language base for children and is also quick and easy so that communicating with others isn't a chore. The disadvantages however, is that there is no written form. This means that people using this language will never be able to read their history. The only way to transcribe their history would be to take videos of it. If speaking is not an option it is also important to be able to write especially in a mainly English speaking country. Seeking employment will be easier this way.

Manual Codes for English:

The purpose of manual codes is to visually show spoken English. Literacy in English is the goal. These codes use speaking and signing simultaneously. These systems are easier for parents and teachers to learn, however, the signs take a long time making sentences extremely long. Different kinds of manual codes include;

Signing Exact English—this code parallels the number of signs with the number of morphemes. This is a literal way of communicating, but often the children miss concepts. Signed English is also a code system in which people speak and sign at the same time. English words remain in the same order as if they were spoken. The youngest children usually begin with this approach.

Contact Sign—this is a way to communicate with a person who speaks a different language. It is a natural way to communicate like when asking for food pointing to one's mouth and pretending to eat. This type isn't taught. The only purpose is to understand one another.

Use of Developed Technological Means

Advances in technology have led to a great improvement in hearing function of children with hearing impairments. By making use of these technological advances we can help hearing impaired children develop their ability to learn, integrate within the mainstream classrooms and become an able and active member of society. Some of the technological advances in this field are listed below:

- 1) Cochlear implantation has helped hearing impaired children on many levels in achieving success in learning. Implantation is suitable for children who suffer from sensorineural hearing loss in both ears. An electronic device is implanted in the cochlea of a hearing impaired child through surgery. It stimulates the healthy cochlear nerves thus resulting in hearing.
- 2) Another technology used these days to help children with hearing difficulties to study in the regular classroom is the "Assistive Listening System." This system has a microphone clipped to the collar of the teacher to speak and transmit information to the hearing impaired child.

This device makes the voice of the teacher clear for easy audible understanding to the affected child.

- 3) Computer technology has opened many new fields for easy learning of hearing impaired children. Different software programs are available for the education of children with hearing needs in the classroom. Various websites on education specially designed for children with hearing issues have helped them in proper guidance and adoption of suitable career goals and higher education goals.
- 4) To assist students, speech-to-text-systems have also been developed. In these systems, spoken language is converted into written language. Thus written transcripts can enrich the academic knowledge of hearing impaired children.
- 5) Telecommunication devices are also an important means of communication for hearing impaired children. In this system hearing impaired child can make use of mobile phone for sending and receiving text messages. With the help of this system children with hearing difficulties can share important information with their normal peers by sending notes through emails.

Technological advances have made communication more effective and efficient for children with hearing loss. By using the available technological means we can foster enrichment and promote the success in education of children with hearing impairments along with their normal hearing peers.

Assistive Technology for Deaf Students

Deaf children can use special devices to hear their teacher in class.

For deaf students, following along in class is nearly impossible without the use of some assistive technology. These devices are necessary for allowing

deaf students to learn in a classroom along with students with normal hearing abilities. In fact, there are laws in place to protect a student's right to assistive technology in the case of deafness.

Devices

An assortment of devices is available for deaf students to increase their ability to participate and learn in school. Teachers have used communication boards to make sure students can follow along in class. At younger ages, pictures, objects and photographs are also helpful in teaching deaf students. Once a student is able to read, they can use one of the programs that have been developed to translate speech into real-time text on a computer.

Human Aids

In some cases, a trained professional is assigned to a deaf student to take notes so that the student can focus on the teacher during their lessons in school. The person taking notes can be situated near the student, allowing them to review the notes as necessary throughout the lesson. Certain aids may have a program that allows the notes they type to appear on a computer in front of the student.

Authorization

Your child may need to see the school district's certified audiologist in order to determine their need for a certain type of assistive technology in school. In a case of complete deafness, students may be able to submit paperwork from a doctor rather than an in-person evaluation.

Teachers

In some cases, a teacher may need to make special accommodations for a deaf student's assistive technology. This may involve wearing a special

microphone for a computer text translator, or simply seating the student in a place where they are able to see what their note-taker has written.

Laws

Three laws protect the rights of children to have assistive technology in schools when needed: the Americans with Disabilities Act, Section 504 of the Rehabilitation Act and the Individuals with Disabilities Education Act (IDEA). Each of these laws has provisions for every child to have access to instruction, which for a deaf student would mean the assistive technology necessary for them to learn at the same pace as the rest of the class.

4.15 Let Us Sum Up

- Visual impairment is the consequence of a functional loss of vision, rather than the eye disorder itself. Eye disorders which can lead to visual impairments can include retinal degeneration, albinism, cataracts, glaucoma, muscular problems that result in visual disturbances, corneal disorders, diabetic retinopathy, congenital disorders, and infection.
- In defining visual impairment, three aspects of vision namely visual acuity, field of vision and visual functioning are considered simultaneously. In a broad sense, visual defects result into loss of clear vision, central vision or peripheral vision. All these losses are considered by measuring visual acuity, field of vision and level of visual functioning.
- The classification of visual impairment varies worldwide. The WHO classifies levels of visual impairment based on visual acuity and/or visual field limitation, and defines blindness as profound impairment (this can refer to blindness of one eye or blindness of the individual).

The World Health Organization International Classification of Impairment, Disabilities, and Handicaps (ICIDH) system is used to classify disorders, impairments, disabilities, and handicaps.

- The incidence of visual impairment increases with age; more than two thirds of persons with low vision are over the age of 65. Statistical data regarding the prevalence of visually impaired school-age children and younger adults 46 is lacking, however this remains an important population in need of vision rehabilitation care and services. Moreover, there are some factors that place a patient at risk for visual impairment are numerous and are related not only to ocular diseases and abnormalities but also to trauma and systemic health conditions. The most common causes of visual impairment in the adult population are: Age-related macular degeneration, Cataract, Glaucoma, Diabetic retinopathy. The incidence of these conditions increases with the average age.
- The causes of visual impairment are numerous, including not only congenital and acquired ocular conditions, but systemic diseases with ocular complications and neurological insult and trauma. There are various causes of visual impairment. Some of the most common are Errors of refraction, Glaucoma, Cataracts, Diabetes Retinopathy, Prenatal causes, Improper muscle functioning.
- The process of hearing is quite remarkable; our ears in general, play a major role as a hearing sense organ in gathering sound (acoustical energy) from the environment and to transform that energy in the form of neural energy. The hearing sensation in the form of neural energy is

then sent to auditory department of our brain (central nervous system) for its interpretation and as a result we have perception of what we hear.

- Sense of hearing constitutes not only one of the five senses that are designated a gateway of knowledge and a natural means for becoming aware of one's environment but also works as a potent tool for helping child in the task of language and speech acquisition. One who cannot hear thus may be subjected to a number of disadvantages in terms of his adequate adjustment, progress and education-oriented society of ours.
- The long-term educational effects of a hearing loss can depend to a great extent on the age at which the loss occurred. Children with hearing and those with hearing losses (of normal or above average intelligence) follow the same pattern of cognitive development, including initial phases of language development such as babbling and the production of other sounds. Further development may, however, proceed at a different rate in children with hearing loss. Between the ages of one and three, the average child's vocabulary jumps from 200 words to 900 words.
- Research indicates that children with unilateral hearing loss (in one ear) are ten times as likely to be held back at least one grade compared to children with normal hearing. Similar academic achievement lags have been reported for children with even slight hearing loss. Children with mild hearing loss miss 25-50% of speech in the classroom and may be inappropriately labelled as having a behaviour problem.
- Communication is the cornerstone of today's society. The focus of early intervention as it pertains to communication is to identify and intervene in instances where there is a barrier to language acquisition. There is a

major improvement in the communication skills of hearing-impaired children identified prior to six months of age as opposed to hearing-impaired children identified later. It is often the case that the primary care physician is the first individual contacted when a problem is suspected. An audiologist can perform formal hearing testing on a child of any age. There is never a time that is considered to be "too early". Whenever there is a concern with the speech, language, or hearing abilities of a child of any age, formal hearing testing can easily rule out or confirm a problem in that area and provide an opportunity to begin the appropriate services for that child.

- Experts who work with children who have disabilities have long believed that early intervention services improve educational and social outcomes. The early years of life are important, particularly for communication and language development. Numerous studies have shown that infants who receive early identification and intervention for hearing loss in the first few months of life achieve significantly greater language skills than those who are identified later.
- Regarding educational placement of the hearing impaired children there may lie many options ranging from least restricted to most restricted. For this purpose as far as possible, attempts should be made to provide education to the hearing impaired in the inclusive settings, i.e. in the normal schools along with the non-disabled peers. However, for the severe and profoundly impaired children like deaf, there must be a separate special provision in the shape of residential school, special day school or special classes equipped with all necessary support materials.

- Use of developmental technological means may prove quite fruitful in the adequate adjustment and educational progress of the hearing impaired children. As example of the use of such aids we may name the use of hearing aids, cochlear implants, assistive listening devices, alerting devices, television and film captioning, text telephone, and computer technology, etc.
- Deaf children can use special devices to hear their teacher in class. These devices are necessary for allowing deaf students to learn in a classroom along with students with normal hearing abilities. In fact, there are laws in place to protect a student's right to assistive technology in the case of deafness.
- Three laws protect the rights of children to have assistive technology in schools when needed: the Americans with Disabilities Act, Section 504 of the Rehabilitation Act and the Individuals with Disabilities Education Act (IDEA). Each of these laws has provisions for every child to have access to instruction, which for a deaf student would mean the assistive technology necessary for them to learn at the same pace as the rest of the class.

4.16 Check Your Progress

1. Give the brief historical background of visual impairment?
2. Discuss the nature of visual impairment?
3. Discuss the levels of visual impairment?
4. Discuss the incidence of visual impairment?
5. Explain the causes of visual impairment?

6. Discuss the importance of hearing sense?
7. Explain the effect of hearing impairment on educational process?
8. Discuss the incidence of hearing impairment?
9. Explain the causes of hearing impairment?
10. Give the historical description of education for the deaf?
11. Discuss the different approaches of education of the deaf?

4.17 Suggested Readings

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DDEKU

LESSON NO 5:

MENTAL RETARDATION

Lesson Structure

- 5.1 Introduction**
- 5.2 Objectives**
- 5.3 History of the Field**
- 5.4 Concept of Mental Retardation**
- 5.5 Characteristics of Mental Retardation**
- 5.6 Levels and Categories**
- 5.7 Needs and problems of Mentally Retarded Children**
- 5.8 Education of Mentally Retarded Children**
- 5.9 Let Us Sum Up**
- 5.10 Check Your Progress**
- 5.11 Suggested Readings**

5.1 Introduction

Individuals with mental retardation are ordinary children and adults who happen to have a seriously impaired intellectual ability that affects their learning. It is important to remember they are members of family, they have relationships with friends and neighbours, and they have personalities shaped by their innate characteristics as well as by their life experiences. Youngsters

with mental retardation go to school, plan for the future, hope for a job, wonder whom they will marry and anticipate adulthood. Their mental retardation is only one of many attributes that make up who they are. They experience joy, sadness, disappointment, pride, love, and all the other emotions that are a part of living.

Each person with mental retardation is an individual. We should never rely on stereotypes about them or suggest that they are all alike. But intellectual impairment often is related to certain characteristics of people with the disability. It is useful to summarize some of the effects of intellectual impairment on an individual's functioning. Your teaching will be more effective if you are aware of the possibility of some of these behaviours and characteristics.

Observational data may register a number of typical behavioural, psychological and personality characteristics of the mentally retarded children showing marked deviations for distinguishing them from their age mates in their environment. The severity of the characteristics of mental retardation can vary from person to person. To understand more about this condition let us look at some mental retardation characteristics. Mental retardation characteristics can be classified into three categories: physical, intellectual and behavioural. In this lesson, we shall discuss the characteristics and problems of Mentally Retarded Children.

But mental retardation is a serious disability. The person with this disability must make special efforts to learn and needs the special assistance of teachers and others. The impaired ability to learn creates obstacles in the lives of people who have mental retardation. Frequently these obstacles are

aggravated by society's prejudice and discrimination. But through persistence and courage, and with support from their families, friends, teachers and others, people with mental retardation can overcome some of these obstacles.

Knowledge of the sequence of development traversed by normal children has proved useful in early behavioral interventions with mentally retarded children. Studies of programs serving retarded children below age five have shown that particular types of cognitive and social stimulation are able to increase levels of functioning. The ever-expanding ability to diagnose and screen for retardation in infancy, along with the early identification of children "at risk" for mental retardation, makes it increasingly possible for intervention to reach a greater proportion of retarded children at early ages. Research on older retarded children has shown that motivational factors play the major role in determining how productive and independent retarded children ultimately become. However, as retarded children face an increased number of failure experiences compared to normal children, they may develop traits that work against their becoming independent. They often become overly wary of adults and develop a lower expectancy of success (that is, they do not expect to succeed at challenging tasks). At the same time, retarded children are more likely to become dependent on adult approval and to accept adult (as opposed to their own) solutions to difficult problems. The net effect is that retarded individuals frequently perform below the level of their intellectual abilities on a variety of experimental and real-life tasks.

Globally in the various countries of the world including India, provisions:

Educational programmes for the Educable Mentally Retarded (EMR). The Educable Mentally Retarded (EMR) are considered educable in the sense that if

the instructions and the atmosphere for learning are appropriate, they can be expected to acquire the basic academic skills of reading, writing and arithmetic. However, their maximum academic achievement expected can be equal to that of the average eight to twelve-year old child.

Educational programmes for the Trainable Mentally Retarded (TMR); The TMR children cannot be educated like the EMR. However, they can be trained to acquire certain basic skills so that they can lead their future dependent or semi-independent lives. In this lesson, we shall discuss how education is provided to mentally retarded children.

5.2 Objectives

After going through this lesson, you should be able to:

- Explain concept of mental retardation.
- Discuss Historical Background.
- Different definitions on mental retardation
- Explain the different characteristics of mental retardation.
- Explain levels and categories of mental retardation.
- Discuss the needs and problems of mentally retarded.
- Discuss the education for mentally retarded children.
- Discuss the education of educable mentally retarded and
- Discuss the education of trainable mentally retarded.

5.3 History of the Field

Although mental retardation has always been a part of human history, it was only in the late 1700s that it became the focus of sustained study by

professionals. **Jean Marc Gaspard Itard** (April 24, 1774 - July 5, 1838) was a French physician, regarded as being the founder of oto-rhyno-laryngology, also known as Otolaryngology. He is also credited with describing the first case of Tourette's syndrome and inventing the Eustachian catheter (also known the "Itard's catheter"). Itard is noted for his work with deaf-mutes, and was one of the first to attempt the education of mentally retarded children in a systematic fashion. He is especially famous for his work with Victor, the "Wild boy of Aveyron," a feral child. Itard developed a special program, the first attempt at special education, to try to teach him language and empathy, which he considered the key attributes that separated human beings from animals. Although his work with Victor was not entirely successful, it was useful in advancing our knowledge of the importance of early exposure to language as a form of communication in the development of spoken linguistic skills. While language itself, nor even emotion and empathy, may not be what separates us from animals, Itard's work also contributed to that debate and to the conviction that there are essentially human qualities that are possessed even by those raised without contact with other human beings during their childhood.

Itard is thus regarded as the founder of special education. A student of Itard's, Edouard Seguin, immigrated to the United States in 1848, and became known as the teacher of "idiotic" children. Seguin's student was Maria Montessori, who became one of the greatest educators of the twentieth century.

Edouard Seguin (1812 - 1880) worked with mentally handicapped children in France and the United States. He was the student of Jean Marc Gaspard Itard, the educator of Victor, the "The Wild Child of Aveyron." Seguin pioneered modern educational methods for teaching the severely retarded. Seguin's approach was influenced by utopian ideas, such as those of Saint

Simon, and he regarded efforts to help the mentally challenged as a step toward a more perfect society. His work can be considered the forerunner of special education. Seguin's belief that all people, despite serious handicaps due to congenital defects, are nonetheless capable of learning. By 1837, Seguin began to treat his first mentally challenged child at the Salpêtrière asylum in Paris. His class gradually grew bigger, and in 1839, he created the first school dedicated to the education of the mentally challenged.

While working in the Salpêtrière asylum, Seguin noticed certain benefits of a physiological method in treating mental retardation. In 1844, the commission from the Paris Academy of Science recognized Seguin's methods, praising them for their effectiveness. The commission's report concluded that Seguin had finally solved the problem of "idiot education."

Influenced by Seguin's ideas in the beginning of the 20th century, Maria Montessori (1870-1952) in Italy and Ovide Decroly (1871-1932) in Belgium, both psychiatrists, opened new educational avenues to the mentally retarded by advocating the Seguin's ideas that mental retardation was an educational not a medical problem.

In USA the efforts for the mentally retarded children were actually initiated by the famous educationists Dr. Seguin an immigrant from France in 1848. With such initiation in 1848, Dr. Samuel Howe established his experimental school for the feeble minded in Massachusetts. After that in 1850 the Massachusetts school of idiotic and feeble minded children was permanently established by the state legislature and in 1854, New York state funded the state's first school of mentally retarded children.

In the later 19th century in USA, one important institution in the name of New Jersey training school for feeble minded for boys and girls was

established. In this way, in this era of providing education for disabled children through the establishment of separate schools, the only mentionable attention was paid on the education and care of the most pronounced categories of disabled namely deaf and dumb, blind and mentally retarded. The disabled or other kind of exceptional belonging to other categories remained almost unnoticed and unattached simply on the grounds that they were less problematic to themselves and others or they were thought to be looked after well in home and regular schools.

5.4 Concept of Mental Retardation

Over the years mental retardation has been defined in many different ways. The definitions have had many similarities, however. Most referred in some way to intelligence and the limited ability to learn. Some also referred to limitations in the everyday behaviours necessary to function independently. Still others stressed a certain age by which the mental retardation must have begun, or perhaps even a requirement that the disability be incurable. Some definitions required some physical proof of disability or a physical origin for the mental retardation.

Doll's definition: In 1941, Edgar Doll proposed a definition of mental retardation that was widely accepted for many years. According to him "Mental deficiency is a state of social incompetence obtaining at maturity, or likely to obtain at maturity, resulting from developmental mental arrest of constitutional (hereditary or acquired) origin; the condition is essentially incurable through treatment and irremediable through training except as treatment and training instill habits which superficially or temporarily

compensate for the limitations of the person so affected while under favourable circumstances and for more or less limited periods of time.”

Professionals have substantially reworked Doll’s ideas. Today, most people believe that an individual might have mental retardation even if there is no “constitutional” or bodily basis for the retardation, for example through prenatal surgery (such as correction fetal hydrocephaly, repairing an organ, or moving the umbilical cord), and to prevent many more cases, for example through early intervention programmes, so that Doll’s requirement that mental retardation be “essentially incurable” is no longer true.

The AAMR definition: The definition of mental retardation now generally accepted comes from the American Association on Mental Retardation (AAMR). Its manual, classification in mental retardation (Grossman, 1983), states: “Mental retardation refers to significantly sub-average general intellectual functioning existing concurrently with deficits in adaptive behaviour, and manifested during the developmental period”.

Let us examine this definition more closely. The three major themes are intellectual functioning, adaptive behaviour, and developmental period.

Intellectual functioning: AAMR defines “significantly sub-average general intellectual functioning” as an IQ score below approximately 70-75 on an individually administered intelligence test. The two most frequently used tests to assess students IQ are the Wechsler Intelligence Scale for Children-Revised (WISC-R) (Wechsler, 1974) and the Stanford-Binet Intelligence Scale (Thorndike, Hagen, and Sattler, 1985).

Adaptive behaviour: Adaptive behaviour is defined by AAMR as “the effectiveness or degree with which individuals meet the standards of personal independence and social responsibility excepted for age and cultural group”.

Standardised tests have been developed to help assess an individual's adaptive behaviour. It is important to understand that assessing an individual's adaptive behaviour, even using commercially available adaptive behaviour scales, remains imprecise.

According to this definition the impaired intellectual functioning and the deficits in adaptive behaviour must exist at the same time. If the individual has a sub-average IQ but functions well in adaptive behaviour, mental retardation is not present under this definition. Or, if the individual has a normal IQ but has deficits in adaptive behaviour, mental retardation is not considered present.

Developmental period: The third requirement in the definition is that the impairments in intelligence and adaptive behaviour must be "manifested during the developmental period." This means that the disability must have arisen sometime between conception and adulthood, officially the person's eighteenth birthday. For individuals who acquire their disability after their eighteenth birthday, in an automobile accident for example, the label mental retardation is not applied. Such individuals are usually referred to as having brain injury, dementia or sometimes a developmental disability.

Sociological Definition

Although the AAMR definition is widely used in the field, it is not universally accepted. Many sociologists and others believe it is too clinical and does not reflect the significant influence of unique social systems in which each person with mental retardation is identified. Jane Mercer (1973) has written that mental retardation has to be understood as a social role, assigned by a particular social system and assumed by the individual. From a social system perspective, "mental retardate" is an achieved social status and mental

retardation is the role associated with that status. A mental retardate is one who occupies the status of mental retardate and plays the role of the mental retardate in one or more of the social systems in which he participates.

Mercer suggests that irrespective of a person's IQ score, what is important is whether the individual is assigned the role of being mentally retarded in the particular social system. Under the sociological definition, "normal" means that individual is achieving role expectations in a satisfactory manner.

5.5 Characteristics of Mental Retardation

Physical Characteristics

Children with mental retardation have a slower rate of physical development, however, do not have any specific physical attributes that differentiate them from the rest of the population. They may exhibit conditions like hyponocity, abnormalities of the orofacial parts and unsteady gait. In terms of behavioural characteristics of mental retardation, these children exhibit characteristics such as limited self-control, aggressiveness or self injury. In fact, some people with severe mental retardation characteristics are even found to exhibit obsessive compulsive disorder. However, mentally retarded children may be found to exhibit following symptoms and characteristics regarding their physical features, somatic development, motor abilities etc.

- The circumference of their head is comparatively less than the normal children.
- Many of them may have thick fingers or club fingers and toes, short and stout in stature and may usually have moon-shaped eyes, short nose, open mouth and fissures in the tongue etc.

- A few children diagnosed as suffering from hydrocephalus, may have large head filled with liquid.
- Many of them may show marked physical abnormalities such as lips fairly apart with tongue visible in between the teeth and saliva coming out or having vacant looks and clumsy gait, etc.
- Many of them have unusual voice distinguished as hoarse voice or broken voice.

Intellectual Characteristics

If we consider the intellectual characteristics, we will find quite a bit of difference between the cognitive and adaptive behaviour of mentally retarded children and the rest of the population. To understand both cognitive and adaptive behavioural patterns properly, let's have a look at them individually.

Cognitive Ability: One may not even detect that a child suffers from mental retardation until the child enters second or third grade, wherein school work demands greater cognitive functioning. These children will be slower when it comes to learning new things. What a typical child will take 5-10 days to learn, a mentally retarded child will take 50-100 days to learn. It's not that mentally retarded children cannot learn, it's just that they take a far longer time to do so. So competing at school or keeping up with classmates becomes arduous.

Moreover, these children are unable to retain information absorbed. The extent of inability to remember things will depend on the severity of the condition. Since they have low short-term memory capacity, they find it difficult to take up jobs and work independently. However, people exhibiting mild mental retardation characteristics can retain quite a bit of information, enough to handle a job. These children also feature low attention spans and find it difficult to concentrate on a particular task to complete it.

Adaptive Ability: Adaptive functioning refers to the application of skills learned so as to live life independently. As an infant grows older he or she gradually shifts from complete dependency on parents and other people. The baby begins to walk, eat on his own, etc. and stops depending on the parents for locomotion, feeding, etc. The extent of dependence will again depend on the severity of the condition. People with profound mental retardation characteristics may generally depend on others throughout their lives. However, children with mental retardation are unable to take care of themselves using daily living skills when other children do. They are not able to feed, bathe or dress themselves. Moreover, their communication skills are also very poor. They find it very difficult to listen, understand and respond in conversations.

Behavioural Characteristics

Mentally retarded children display certain unique personality characteristics. Some of them are briefly discussed below.

Social and emotional inadequacy

Mentally retarded children evince social and emotional problems; they experience in making friends, and have poor self-concepts. There are two reasons why they are so. First, some of their behaviour may 'turn off' their peers. For example, mentally retarded children engage in higher rates of inattention and disruptive behaviour than their non-retarded classmates. Second, their non-retarded classmates may despise them, as they do not want to have any association with individuals who are retarded. As a result, the mentally retarded children confront problems in social interaction with others.

Lack of motivation

In addition to social and emotional problems, mentally retarded children exhibit motivation problems. These children tend to lack confidence in their own abilities. They believe that they have little control over what happens to them. They also think that they are primarily controlled by other people or events. As such, they have a tendency to give up easily when faced with challenging tasks.

Limited individual differences

It is known fact that no two individuals in this world have the same personality. But in case of mentally retarded children, there appear to be less prominent individual differences. These children do not exhibit such marked individual differences as non-retarded children do. Among the retardants, it is rare to find individuals who may be described as dynamic, charming, forceful, vicious, obnoxious or outstanding. Many mentally retarded children are colourless and tractable.

Organismic inferiority

Mentally retarded children suffer from general structural and functional inferiority of the entire organism. These children learn to talk and walk at a much later stage. Defective speech and shuffling gait are two very prominent characteristics of these children. When compared with their non-retarded peers, their sensory discrimination is less acute. The retardates are relatively insensitive to pain and their auditory and visual defects are common. It is very rare to find normal performance among mentally retarded, who fall short of normal performance on tests of mechanical ability.

Adjustment Problem: Mentally retarded children experience mild depression, feelings of worthlessness and helplessness. As these children grow older, they

become lonely and unable to adjust in society. Research evidence indicates that frustration of psychological and social needs predisposes some retarded children to feel angry and rebellious very often, the parents of mentally retarded children develop a guilt complex. Parental overprotection is a good example for this. Often they do not encourage self-help; rather they continue to dress and feel the child up to an advanced age. Consequently, this type of behaviour fosters a dependent style of interaction in the retardates. Thus overprotection and denial of the parents result in adjustment difficulties of such type of children.

5.6 Levels and Categories

Mentally retarded children are classified in three different ways: medical, psychological and educational. The medical classification is based on the levels of severity of retardation. It was originally recommended by the American Association of Mental Deficiency. The psychological classification is now used in special schools in India. The educational classification was originally recommended by American educators. It is based on educability of retarded children. This classification has been recommended by National Council of Educational Research and Training (NCERT), New Delhi for use in IED units in regular schools.

In terms of levels of severity mentally retarded children are classified into mild, moderate, severe, and profound.

In other words, there are four levels of retardation: Mild Level, Moderate Level, Severe Level and Profound Level depending on the IQ ranges.

Levels of Retardation	IQ Ranges
Mild Retardation	IQ 55 to 70

Moderate Retardation	IQ 40 to 54
Severe Retardation	IQ 25 to 39
Profound Retardation	IQ below 25

Mild Retardation

Those individuals who possess IQs between 50-70 are diagnosed as having mild mental retardation. About 90% of mentally retarded people belong to this category. The persons in this group are educable. They evince an organic assistance and special training, they can be taught to be self-supporting.

Moderate Retardation

Those individuals who possess IQs between 40-54 are diagnosed as having moderate mental retardation. About 6% of the mentally retarded people belong to this category. These individuals are trainable retardates. Their rate of learning is very slow. Physically they appear clumsy and lack motor coordination. Though some of them may require institutionalization, they can manage to live safely under the protection of their family members.

Severe Retardation

Those individuals who possess IQs between 25-39 are diagnosed as having moderate mental retardation. About 3% of the mentally retarded people belong to this category. These individuals are considered dependent retarded. These persons suffer from severe retardation in motor and speech development. Majority of them are permanently institutionalized and require constant care and attention. They can perform simple occupational tasks under supervision.

Profound Retardation : Those individuals who possess IQs below 25 are diagnosed as having moderate mental retardation. About 1% of the mentally

retarded people belong to this category. They are considered “life support” mental retardates. These persons are severely deficient in adaptive behaviour and unable to do simple tasks. Retarded growth, pathology of central nervous system, autism, deafness and convulsive seizures are common symptoms of these people. They are unable to look after themselves. They can not attend to their basic physical needs. They need life long support.

The National Institute of Mentally Handicapped (Govt. Of India) fixes the IQ ranges as follows:

Mild Level	IQ 50-70
Moderate Level	IQ 35-49
Severe Level	IQ 20-34
Profound IQ	IQ below 20

In terms of educability, mental retarded children are classified as Educable, Trainable and Custodial. The IQ ranges of these three types of mentally retarded children are as.

Types of Mental Retardation	IQ Ranges
Educable Mentally Retardation (EMR)	IQ 50 to 75
Trainable Mentally Retardation (TMR)	IQ 25 to 50
Custodial Mentally Retardation (CMR)	IQ below 25

The educable mentally retarded children are those who can be taught the basic academic subjects. The trainable mentally retarded are those children who can be taught functional academics with emphasis on self-help and vocational skills. The custodial mentally retarded are those children who require constant and special care especially in a residential institution.

5.7 Needs and Problems of Mental Retarded Children

Children who have intellectual disabilities, otherwise known as children who are mentally retarded, may have "considerable problems in everyday functioning," says the American Academy of Pediatric and Adolescent Psychiatry. Some children with intellectual disabilities are able to attend school and participate in social activities, while others may require around-the-clock supervision and specialized mental health and occupational therapy. To help parents with children who have intellectual disabilities, begin by talking to them about their child's specific condition and needs.

Learn about the nature of intellectual disabilities. Children with intellectual disabilities may become frustrated easily, have difficulty following directions and be unable to communicate their feelings and needs verbally. Read about the common issues surrounding children with intellectual disabilities and talk to special education teachers, counselors and parents to learn about the ways that the condition can manifest itself. The more you know about the child's condition, the better you will be able to help the parents.

Offer to care for the child to give the parents some non-caregiving time. Caring for an intellectually disabled child can be time-consuming, leaving little time for parents to address their own needs and interests. The Help Guide website suggests that parents of children with intellectual disabilities delegate some of the day-to-day care of their child to others. Once you understand the needs of mentally retarded children, offer childcare services to the parents.

Help the parents find the resources they need to care for their child. With occupational therapy, mental health counselling and one-on-one tutoring, children with intellectual disabilities can achieve a greater level of

independence. To help parents with children who are mentally retarded, help them research these services.

Advocate for people with intellectual disabilities. In addition to working directly with parents of children who are mentally retarded, contact mental health and disability advocacy groups in your community. These groups often work to dispel myths about intellectual disabilities, promote legislation and research to help children with mental retardation, and fund schools and clinics that provide families with affordable services. Volunteering with these groups can help you make a difference in the lives of many parents and their children.

Provision of public education: Efforts should be made to arouse the public to adapt preventive measures for controlling mental retardation. For example, by giving the right information about the correlation of the mother's age and mongolism, public opinion may be built up in favour of avoiding children after 40. Similarly, retardation caused by toxic agents may be prevented by providing information and education to the people so that they may be saved from their adverse effects. In the field of environmental modification and pollution control, programmes of public education may yield effective results which, in turn, may prevent and control mental retardation. public education can also help in educating the masses about the need and importance of a nutritious and balanced diet, control of infectious diseases and the adoption of measures for the welfare of the mothers and infants. The hazards of accident may also be reduced if people are made aware of the relevant safety measures.

Providing special education: Mentally retarded children, by their characteristics, needs and specialties, need the provision of special education and training for meeting their special needs related to their development and adaptability to their environment. This provision in the shape of a structured

educational programme, should essentially be chalked out by making necessary alteration and adaptation in the educational programmes available to the normal children.

Parental Concerns

Children with disabilities and their parents have certain legal rights, most importantly, the right to challenge any recommendation made by a school and its staff. Parents who disagree with the school's educational program can hire legal representation, request formal and informal hearings (due process), and obtain additional evaluation from an independent consultant. Children with emotional disturbances and related behavioral disorders have historically been unrecognized as being eligible for special education services. However, emotional problems can in fact act as a barrier to education. For children with emotional disturbances to qualify for special education, evidence from psychological testing and observation (by teachers or therapists) must demonstrate that the emotional issues significantly affect educational performance. Most public schools do not have the staff and resources to handle children with emotional disturbances, in addition to other children with disabilities. Many alternative schools exist for children with emotional disturbances and behavioral disorders who have average and above-average academic abilities. If the public school cannot adequately provide FAPE for such students, parents can seek legal representation to obtain funding from the public school for their child to attend an appropriate alternative school. Students with emotional disturbances and behavioral disorders should have mental health support services integrated with their IEP.

According to parents, 14 percent of students with disabilities in elementary and middle school had been expelled or suspended at some point

in their school careers. And special needs children have a high drop-out rate – approximately 25 percent drop out of school and another 20 percent leave for other reasons. Emotionally disturbed students have the highest drop-out rate (35%), according to Department of Education statistics, while deaf-blind students have the lowest rate (4%). Graduation and employment rates for students with disabilities rose through the two decades that followed the passage of EHCA and IDEA and other disability legislation such as the Americans with Disabilities Act. Depending on the disability, as many as 45 to 70 percent of disabled adults may remain unemployed. However, some special needs students are quite successful. Students with learning disabilities and speech disorders have the lowest rates of unemployment, usually because they have participated in vocational education programs with a comprehensive vocational assessment, including assessment of independent living skills.

5.8 Education of Mentally Retarded Children

A brief description of the major features of educational programmes for educable mentally retarded, trainable mentally retarded and severely and profoundly retarded children is presented below.

Education of Educable Mentally Retarded

Researchers are of the opinion that educable mentally retarded children tend to fail in an ordinary school. Nevertheless, they are capable of making progress in normal schools. The schools should provide them with such curriculum, a methodology of teaching that will enable them to surmount their difficulties easily. It should be the first priority of the teacher to help the mentally retarded children to become self-sufficient and an accepted adult

member of the community in which he lives. The special methods adapted in teaching the educable mentally retarded are as follows:

- i) **Individualisation:** Individualisation of education is obviously the dominant theme that comes to mind when we think of special methods of instructing the educable mentally retarded children. This education does not mean that children receive individual instructions with small classes, but it implies that each child is allowed to proceed at his own pace of learning according to his own unique growth pattern. At the same time, these children must be provided with opportunities for group participation so that the correct social attitudes can be developed in them.
- ii) **Learning by Doing:** The implication of the principle of learning by doing cannot be underestimated in teaching the educable mentally retarded children. The basic principle of special education has always been that the children should learn by doing. Teachers should give top priority to activity methods that lay emphasis on learning through experience. Generally the deficiency of mentally retarded children lies in the area of relational and abstract thought. So these children encounter problems in learning where the mode of communication is largely verbal. It has been posited that these children learn better through such materials that appeal most to their senses.
- iii) **Need for Learning Readiness:** While introducing work to mentally retarded children, teachers should give due importance to the concept of maturation and readiness to learn. These children have the potential to learn to read, but they should be prepared through

appropriate readiness programmes. It is always rewarding to wait until the children are intellectually and psychologically ready to accept the challenging task.

- iv) **Graded Curriculum:** It is true that these children learn more slowly than average children. So that necessity of careful gradation of these subjects becomes a must. Here the teachers face difficulties for gradation of students and for preparing the study materials for slow learners. No doubt it is a task for teachers, still, not impossible to accomplish.
- v) **Repetition:** Mentally handicapped children are known for poor memory. For them, teaching method must provide for a considerable amount of repetition so that they can retain the learned material in their memory. The children should have clear understanding of the materials before facing any retention test. The memory span of these retarded children can be enhanced by imbuing interest and motivation in them. Research studies have posited that the memory spans of retarded children, increases, if the learning materials have meaningful associations.
- vi) **Periods of Short Duration:** Mentally retarded children have limited power of concentration. For this reason, formal teaching periods should be kept fairly short. It is of importance to note as to how long a child can concentrate when the subject is stimulating.
- vii) **Concrete Problems.** There is no doubt that mentally retarded children lack imagination and foresight. As a result, they experience considerable difficulty in transferring the learning experience of one situation to another situation that is similar but new. To overcome

this problem, they need concrete presentation of instruction. Real life problems should be introduced whenever possible so that the teachers can ensure immediate application of learning experiences.

- viii) **Projects:** 'Introduction of projects' or 'Centres of interest' is a significant approach for teaching mentally retarded children. Researchers are trying to establish how this can be done without serious disruption of the basic subject programme. It is not the teachers who should introduce the topics around which centres interest grow and develop but it is the topic that should arise spontaneously out of the classroom situation where the manifestation of further information is clear. The point of origin may be a short story, a poem, a song, a film or a picture in a magazine or newspaper. It is not necessary to give under importance to the source, but it requires expertise on the part of the teacher to present it through careful planning and guidance.

Education of Trainable Mentally Retarded

The trainable mentally retarded children have I.Q in the range of 25-50. These children are much more retarded than educable mentally retarded children. So it is important to frame a different educational structure and curriculum for these children. The main objective of education for these children is to enable them to take care of themselves and to do simple occupational jobs. These children have prominent physical anomalies such as seizures, lack of control over elimination etc. it makes regular schooling difficult for these children. So primary objective should be to train these retarded children how to do their daily work without the help of others. These

daily works include working, dressing themselves, eating properly, doing simple jobs and toilet training etc.

In the education of trainable mentally retarded children less importance is given to teaching of academic subjects and more time is devoted to the development of sensor motor, self-care and daily living skills. As these children become tired very soon, more definite timetable is necessary with short periods of activity. Therefore the curriculum for the trainable mentally retarded children should include the following.

- i) **Self-Care:** The curriculum should focus on a programme of simple habit training. This will enable those children to develop skills of self-help with regard to their daily practical needs. Teachers should adapt such methods for this purpose that relate to the real life experiences and everyday needs of the children.
- ii) **Social Training:** Teachers of these children should priority to group activities such as games, simple dramatic work, and story telling etc. This will enable them to interact with others, which is essential for socialisation. This will also increase gregariousness and affiliation. The children become generally active and cooperative. This provides training in adjustment also.
- iii) **Sensory Training:** Teachers should lay much emphasis on such instructions that will enable the retarded children to make the fullest use of their senses. This is very required to make them self-reliant and more sociable. Proper sensory training will contribute to the development of social skills in these retarded children.
- iv) **Language Development:** Teachers should provide them with such aids that will ensure better speech development in them.

The degree of their socialisation depends on the degree of their language development. They should be able to follow directions and interact with peers in group situation. These children should be taught reading in order to enable them to function independently.

- v) **Craft Work and Music:** For developing a sense of self-confidence in trainable mentally retarded, the curriculum should include simple crafts training programmes like weaving, rug making, basketing etc. This will enable these children to attain economic self-sufficiency in adulthood. Research evidence has brought to light that music is sometimes found as a means of releasing their energy and provides a form of expression, which the mentally retarded children enjoy. So music should be given appropriate importance in the curriculum.

Education for Severely and Profoundly Retarded Children

Most authorities agree that the following features should characterize the educational programmes for severely and profoundly retarded children

- i) **Age-Appropriate Curriculum and Materials:** In the past there was a tendency to “baby” even older severely and profoundly retarded persons because of their intellectual limitations. Authorities are of the opinion now that this is not only demeaning but also educationally harmful. Using infantile materials works against the goal of fostering as much independent behaviour as possible. So the curriculum and the instructional material must be appropriate to the age of the students.

- ii) **Functional Activities:** Educational Programmes for severely and profoundly retarded children focuses on preparing them to live as independently as possible so much, that activities should be practical. Learning to dress oneself by practising on a doll, for example, it is not as effective as practising with one's own dress. Some severely and profoundly retarded children may be able to learn some academic skills. Teaching these children basic reading and math is very time consuming. It is therefore, very important to teach them only what they need and what they can learn.
- iii) **Community Based Instruction:** In keeping with the notion of functional skills, educational programmes for severely and profoundly retarded children need to take place in the community as much as possible. Because many of the skills they learn are for use in settings outside the classroom, such as public transportation, or the grocery store, instruction in such activities has proved more effective when done in those settings. The teacher may wish to use simulated experiences in the classroom, by creating a "mini-grocery" store with a couple of aisles of products and a cash register, for example, to prepare students before they go to a real store. But such simulations themselves will not be of much use for severely and profoundly retarded children who very much need the actual experience of going into those settings in which they will need to use the skills they are learning.
- iv) **Integrated Therapy:** Many severely and profoundly retarded children have multiple disabilities that necessitate the services of

a variety of professionals, such as speech, physical and occupational therapists. Many authorities are of the opinion that these professionals should rather integrate what they do with students into the overall educational programme than doing their job alone in a therapy room. For example, they point out that it would be better to teach retarded children how to walk up and down the actual stairs in the school they actually attend instead of using the specially made stairs placed in therapy rooms for this purpose.

- v) **Interaction with Non-Retarded Peers:** Most authorities concur that it is beneficial for both severely and profoundly retarded children and their non-retarded peers to interact. One method used by some schools is to engage non-disabled students to act as tutors or classroom helpers in classes for severely and profoundly retarded students. This interaction facilitates normalisation or socialisation of retarded students.
- vi) **Family Involvement:** Research findings point out that family involvement is very essential for the success of educational programmes for disabled students of all types and severity levels. It is particularly very important for severely and profoundly retarded students. It is because of the skills they are taught in the classroom will be used in their homes. The involvement can range from merely informing parents about the progress of their children to having them out as classroom aids.

5.9 Let Us Sum Up

People with mental retardation have significantly impaired intellectual abilities and deficits in adaptive behavior. The disability must have been manifested during the developmental period, from birth to age eighteen. But people with mental retardation are people first, with all of the emotions, motivations, and complexities of any human being. All attempts to provide education and habilitation to students with mental retardation must be based on the realization of the fundamental similarities of all people.

Mentally retarded children may be found to exhibit marked deviant and deficiency characteristics related to their physical, mental and personality makeup over the age mates in their physical appearance, less capability and proficiency in fine motor activities in comparison to gross motor activities; lagging behind in almost all types of intellectual functioning and academic excellence, deficiency in terms of emotional and social maturity, poor self-concept and lack of self-confidence, unusual and unwanted disruptive behavior in terms of range of interests, aptitude and choices.

After getting some clues about the sub-normality of the mentally retarded from the observable physical, mental, and behavioral characteristics, the low IQ and deficient adaptive behavior both, should be used as a criteria for detecting mental retardation. In addition to the use of testing measures like intelligence tests and adaptive behavior scales, attempts should also be made for giving weightage to the conclusions derived from the observation data of teachers, parents and other persons quite familiar with the day to day functioning and behavior of the mentally retarded children.

Mental retardation varies in intensity along a continuum: most individuals have the disability at a mild level, some at moderate level, and a few have it at a severe or profound level. The measurement of the disability for these subcategories differs.

In addition to this, as per latest norms of AAMR (1992) mentally retarded children may also be classified as those who are in need of intermitted, limited, extensive and pervasive support (on the basis of the degree of the intensity of support needed for their proper functioning and development). However, such labeling of mentally retarded children, if analyzed objectively, can eventually reconcile or merge with the existing categories or levels of mental retardation popularly known as mild, moderate, severe and profound.

Mentally retarded children may have "considerable problems in everyday functioning," according to the American Academy of Pediatric and Adolescent Psychiatry. Some children with intellectual disabilities are able to attend school and participate in social activities, while others may require around-the-clock supervision and specialized mental health and occupational therapy. To help parents with children who have intellectual disabilities, begin by talking to them about their child's specific condition and needs.

Educable mentally retarded children tend to fail in an ordinary school. Nevertheless, they are capable of making progress in normal schools. The schools should provide them with such curriculum, a methodology of teaching that will enable them to surmount their difficulties easily. It should be the first priority of the teacher to help the mentally retarded children to become self-sufficient and an accepted adult member of the community in which he lives.

The trainable mentally retarded children have I.Q in the range of 25-50. These children are much more retarded than educable mentally retarded children. So it is important to frame a different educational structure and curriculum for these children. The main objective of education for these children is to enable them to take care of themselves and to do simple occupational jobs. These children have prominent physical anomalies such as seizures, lack of control over elimination etc. it makes regular schooling difficult for these children. So primary objective should be to train these retarded children how to do their daily work without the help of others.

Children with severely and profoundly retarded the curriculum and the instructional material must be appropriate to the age of the students. These children also need to take place in the community as much as possible. Because many of the skills they learn are for use in settings outside the classroom, such as public transportation, or the grocery store, instruction in such activities has proved more effective when done in those settings.

Research findings point out that family involvement is very essential for the success of educational programmes for disabled students of all types and severity levels.

5.10 Check Your Progress

1. Give the historical background of mental retardation?
2. Explain the Concept of mental retardation?
3. Discuss the characteristics of mental retardation?
4. Discuss the levels of mental retardation?
5. Explain the Custodial Mentally Retarded?

6. Explain the Trainable Mentally Retarded?
7. Discuss how education is provided to the Mentally Retarded Children?
8. Discuss the needs and problems of exceptional children?

5.11 Suggested Readings

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LESSON NO 6: GIFTEDNESS

Lesson Structure

- 6.1 Introduction**
- 6.2 Objectives**
- 6.3 Historical background**
- 6.4 Concept of Giftedness**
- 6.5 Causes of Giftedness**
- 6.6 Characteristics of Gifted Children**
- 6.7 Educational Measures for Gifted Children**
- 6.8 Let Us Sum Up**
- 6.9 Check Your Progress**
- 6.10 Suggested Readings**

6.1 Introduction

Exceptional children are those that deviate too much from the normal population of the children, likewise exceptional children lie on both the negative and the positive extremes in the continuum of the physical, mental, social, emotional, academic and other abilities so much so that they warrant special care, attention and education for meeting out their special needs aroused on account of their such exceptionality and deviation. In this chapter we will be discussing a group of such exceptional children who lie on the

positive end of the continuum of academic, artistic, social and scientific ability. Named as gifted, these children enjoy an established superiority over the rest of their peer population in so many ways and means. They represent the cream and strength of a society or nation.

6.2 Objectives

After going through this lesson, you should be able to:

- Explain the Concept of Giftedness.
 - Different causes of Giftedness.
 - Explain the characteristics of gifted children.
 - Discuss the educational measures for gifted children.
-

6.3 Historical Background

A concentration of particular abilities and outstanding achievement can be observed during other segments of history as well. During the height of the Roman civilization, the number of great orators far surpassed the numbers found in many other periods of history. Another example of a culture advanced for its time is Teotihuacan in Mexico. Between 300 and 750 A.D, this civilization had developed a sophisticated craft industry that produced figurines, pottery and tools for export throughout the region. Pressey (1964) believed that such periods of brilliance resulted from a combination of excellent early opportunities, early and continuing guidance and instruction for the individual. This must be coupled with the major interest of society in that particular ability, opportunities provided by society to continually practice and progress, close association and interchange with others with similar abilities and strong success experiences.

The shape and form as we know of giftedness nowadays may be traced to have its beginning in the later part of the 19th century after the publication of the well acknowledged works namely, "Hereditary Genius" by Sir Francis Galton in 1869 and "The Man of Genius" by Cesare Lombroso in 1891. It was through these publications the nature and the traits of the gifted or genius begin to be used in their definition and identification. In the later years, a new impetus was given to the definition and identification of the giftedness with the advent of the concept of I.Q and its measurement through the intelligence tests. The first one to have credit for the advent of intelligence testing in 1905 was Simon Binet and his testing device soon became quite popular and by the time when the Stanford Binet Intelligence scale was published in 1916, a significant number of schools in USA begin to adopt intelligence testing as a standard and primary means of identifying gifted children. Lewis Terman, another contemporary psychologist provided further support for the use of intelligence testing in the identification and labeling of gifted and genius. He carried out a longitudinal study by tracking 1500 individuals whose I.Q's were above 140 (his criteria of labeling a person having 140 I.Q and above as genius). He got the result of his studies published in the name of "Genetic Studies of Genius."

During these years, the concept of intelligence and the use of I.Q for identifying giftedness got challenged by J.P Guilford through his dimensional model of intellect providing an appropriate analysis and categorization of mental process. He emphasized through his finding to look beyond the traditional concept of intelligence and see I.Q score as a small sample of mental abilities

6.4 Concept of Giftedness

The term giftedness and gifted children as specified above in its historical evolution, have a quit comprehensive and wide meaning instead of merely confined to the measurement of IQ or achievement in academic subject. Some well acknowledged definitions of the term gifted children are as follows:

Witty's definition (1940): The term gifted or talented stands for those whose performance is consistently remarkable in some potentially valuable activity.

Havinghurst's definition (1958): the talented and gifted child is one who shows consistent remarkable performance in any worthwhile line of Endeavour.

Marland's definition (1972): Gifted and talented children are those identified by professionally qualified persons who by virtue of outstanding abilities are capable of high performance. These are children who required differentiated educational programmes and services beyond those normally provided by the regular school programme in order to realize their contribution to self and society. Children capable of high performance include those with demonstrated achievement and/ or potential ability in any of the following areas signally or in combination: 1. General intellectual aptitude, 2. Specific academic aptitude, 3. Creative or productive thinking and 4. Leadership ability, visual and performing arts.

Telford and Sawrey (1977): The intellectually gifted can be defined in terms of test scores or demonstrated performance, or as the upper 1 or 2 % of the general population as measured by some designated intelligence and/ or achievement test.

Renzulli's definition (1978): Renzulli suggests that those who have three clusters of characteristics- above average intelligence, high creativity and substantial task commitment- should be considered gifted.

An analysis of the above definition may help us to conclude following things about the nature and concept of gifted children.

1. All the gifted children as a matter of definition and their exceptionality or deviations from normal population have a big claim for being included in the category of exceptional or special children.

2. In comparison to children of their age or age group, gifted children have some uniqueness and superiority over them in terms of some ability or group of abilities.

3. Gifted children are found to be more goals oriented in terms of seeking realization of their giftedness and talent. They remain almost committed to see a project through its conclusion by getting inner motivation from their talent and giftedness.

4. Gifted children being exceptional and special have their own special needs, problems and goals. As a matter of their exceptionality and specialty they required special care, attention and provision of special education for the proper actualization of their gifted potentialities and talents.

6.5 CAUSES OF GIFTEDNESS

In the 1920's Terman, the leader in the field, also reflected the view that genetic factors are responsible for giftedness. It is not surprising that brilliant parents are more likely to have gifted children than the parents of average or retarded intelligence. It is a known fact that an impoverished environment is

less likely to produce gifted children. However, today, researchers recognize the important role the environment plays in the development of the intellect (Lalcock 1979).

Genetic and biological factors

Our brain, nervous system and in fact the entire body is constructed according to information received from genes that we inherit from our parents. It would seem reasonable that superior genes would provide a child with superior intelligence capacity. Researchers have discovered that parents with high I.Q tend to have children with high I.Q, while parents with low I.Q tend to have children with low I.Q.

Biological factors that are not genetic may also contribute to the determination of intelligence. For example, nutritional and neurologic factors may to some extent, determine how intellectually competent a child becomes. Severe malnutrition in infancy or childhood as well as neurological damage at any age can result in mental retardation. At the same time, it is wrong to assume that superior nutrition and neurological status early in life alone can contribute to superior intelligence.

Thus it may be concluded that individual does not inherit an IQ or talent. What is inherited is a collection of genes that along with experiences determine the limits of intelligence and other abilities.

Environmental Factors

Research has shown that factors such as the values and expectations of the culture, the socio-economic level of the family, one's birth position in the family, one's school, one's community and the number of children in the family exert a profound influence on the development of children's abilities. So, too, does environmental stimulation correlate to the probability of excelling and

developing gifted or creative abilities? Families contribute to the development of gifted children in the following manner:

- Someone in the family, usually one of the parents, had a personal interest in the child's talent and provided great support and encouragement for its development.
- There was specific parental encouragement for the child to explore, to participate in home activities related to the area of developing talent, and to join the family in related activities. Small signs of interest and capability by the child were rewarded.
- The family interacted with tutor and received information to guide the child's practice.

Environmental factors can also diminish giftedness. For example, children whose early experiences are not rich or diverse often do not develop outstanding cognitive skills, and children who are not challenged in schools do not develop their potential.

Thus it may be concluded that children who realize their potential for accomplishment will have families that are stimulating, directive, supportive and rewarding of their abilities. Also, the ways in which the schools identify giftedness, group children for instruction, design curriculum and reward performance have profound effect on what the most able children achieve. Thus superior abilities are generally recognized as resulting from the interrelationship between heredity and environment. Neither environment nor genetics can be entirely responsible for the performance of gifted or retarded individuals. It is the genetic factors that apparently determine the range within which a person will function, and it is the environmental factors that determine

whether the individual will function in the lower or the upper reaches of the range.

6.5 Characteristics of Giftedness

Gifted children consist of a widely diversified and scattered group of complex human nature. Each one of them possessing a unique combination of abilities and traits. Giftedness is not limited to the able bodied, intellectually superior and academically progressive students. It can be equally noticed in many of the disability groups like deaf and dumb, blind, orthopedic and movement impaired, communication and language disordered etc. researchers and authors have worked out the following general characteristics in the behaviour and personality of the gifted and talented individuals (**Gallagher and Gallaher, 1994, Silverman, 1995, Clark, 1997, Pirto, 1999**).

1. Gifted children learn rapidly and easily. They retain what they have heard or read without much more drill and capable of making use of the learned things.
2. They have a good reasoning power, think clearly, recognize relationship, comprehend meaning and possess the ability of making some judgments and generalizations.
3. They demonstrate superiority in terms of language vocabulary development like (i) having a large vocabulary and getting it used easily and accurately (ii) reading books that are one or two years advance of the rest of the class.
4. They possess the ability to perceive the operation of large system of knowledge that may not be recognized by every person.
5. They feel difficulty in confirming to the ideas and thinking of others.
6. They are found quite motivated, hardworking and persistent in pursuing the activities and goals related to areas of their giftedness.

7. They demonstrate the ability of logical memory, higher aspiration level, intensive interest and focus on the activities of their choice.

Rezulli 1973 endorses the commission of tests views of human abilities and suggested the following characteristics of gifted children that should be kept in mind while constructing Scholastic Aptitude Test (SAT):

1. Gifted students adapt new learning situations.
2. They solve problems in situations that require varied reasoning and thinking skills.
3. They demonstrate abilities to search out, analyze and synthesize information.
4. They comprehend the meaning of information gathered in different ways (experiencing, listening, looking as well as reading).
5. They are able to express themselves in different ways (artistically, orally, non-verbally, graphically, as well as in ranking).

Paul witty in his book, *Gifted Children among Great Resources* (1955), has summarized the following areas in which the accelerated development of gifted children may be identified by parents or family, friends before the child enters the school.

1. Good vocabulary.
2. Language proficiency, the use of entire sentences and ability to produce a story at an early stage.
3. Keen observation.
4. Interest in and liking for books.
5. Early interest in calendars, in telling terms and in clocks.
6. Ability to concentrate or to attend for a longer period than is unusual for the child of same age group.

7. Demonstration of proficiency in drawing, music or other art forms.
8. Interest in exploration and discovery of cause- effect relationship.
9. Early development of ability to read.

James.M. Dunlop has stated positive and negative characteristics of Gifted children. These are as follows:

A) *Positive characteristics:*

1. Learn rapidly and easily.
2. Retain what they learn without much drill.
3. Show much curiosity in questioning.
4. Rich vocabulary marked by originality.
5. Enjoy reading.
6. Show interest in words and ideas.
7. Reason things out.
8. Greater ability to generalize.
9. Know and appreciate things of which normal children are unaware.
10. Be interest in the nature of man and universe at early stage.
11. Seek older companions.
12. Posses a good sense of humor.
13. Have a desire to excel.

B) *Negative characteristics:*

1. Restless, disturbing and inattentive.
2. Careless in handwriting.
3. Indifferent to class work.
4. Outspokenly critical.

6.7 Educational Measures

At the present juncture students all over the world appear to be in revolt. They have been feeling that life is without any ideal or objectives to strive for. It is also an alarming fact that the leaders of these angry youths are found to be the most brilliant and the gifted. This makes one wonder what is wrong with the present system of education. Why are stream of valuable human energy and the talents of such gifted individuals flowing in a negative direction?

Surely, there is an urgent need for a well thought out programme or scheme of special education for the gifted children. The following plans have been put forward by different thinkers for this:

1. Separate schools.
2. Ability grouping or separate classes.
3. Acceleration or double promotion.
4. Enrichment programmes.
5. Combination of Enrichment and acceleration.

1. Separate schools

It is often suggested that we must have separate schools for the gifted children and adequate facilities should be provided in these schools so that gifted children may be helped in developing their special abilities and potentialities. Such segregation is often criticized and labeled as undemocratic. The products of public schools, where we have the provision for selected special education, also justify our fears and doubts. The students educated from these schools develop an aristocratic and conceited attitude.

2. Ability grouping or separate classes.

Segregation of gifted children into a separate section within the same school also involves the same danger. This plan is known as ability grouping. Here, a

given grade is divided into different sections on the basis of ability, the range of ability within each section being relatively narrow. The non- feasibility of both these plans involving segregation is obvious in the Indian context. We can neither afford such segregation as it involves huge expenditure nor can it yield very fruitful results. The gifted child is gifted or talented in his area of giftedness only. He may or may not possess superior general intelligence and children who possess talents in a particular area may be a few or as one or less percent of the total population of their class. It is, therefore, impractical to think of having a separate section consisting of these few children. What is more, segregation on the basis of I.Q is no guarantee to the maintenance of homogeneity in the grouping.

3. Acceleration or Double promotion

Through acceleration, this comes in many different forms, students move through several years of school in a shorter period of time. An accelerated student might complete three years of school in two years. It could mean skipping a grade or taking advancement placement courses. A student could also move through academic material more quickly, for example completing a traditional sixth grade mathematics book in one semester instead of two. Researchers see many positive aspects of acceleration for students who are gifted (Kulik and Kulik, 1984). First, these students are able to handle the academic challenges of acceleration. Second, when grouped with students of comparable abilities, they make greater achievement gains. Third, they develop better self concepts and more positive attitudes about course content and school in general. Also, the acceleration approach is cost effective, saving parents money in college tuitions. Another option, ability grouping, has gained considerable support from educators of the gifted. In this approach, youngsters

are grouped together form specific activities of courses where they excel. These are easily arranged in middle and high schools, where most students class to class. Gifted students can attend more advanced classes. For example, a ninth grader might attend sophomore or junior level mathematics classes: A high school senior might take several classes at a local college. Many high schools provide honours sections of the academic courses as a form of ability grouping. The criterion for entrance in these classes is outstanding academic achievement in specific subject matter. The requirements for inclusion are not based on the score from an intelligence test, but rather on achievement. Ability grouping and honours sections are approaches that allow students to attend classes with other students, not all of whom are gifted.

Renzulli, Reis and Smith (1981) believed that ability grouping can be too rigid. They recommend instead flexible ability grouping, allowing a student to participate when that individual shows specific creative or productive performance in a particular area. Ability grouping can be used in elementary, middle and high schools. It has many advantages, for it allows children who have demonstrated exceptional capabilities to excel in some areas, yet remain with their regular education classmates, in areas where they are closer to grade level. This allows for acceleration part of the school day and integration with their age peers for part of school day as well. Although it is used today in many schools as one option available to gifted students, Tannanbaum (1983) reminds us that ability tracking was struck down in a decision by the D.C. District Court in 1967. Ability tracking was deemed discriminatory and a form of racial segregation because so few students from minority groups were included in those programmes (Hobsun V. Hansen, 1967).

4. Enrichment Programmes

Enrichment can include the addition of curricular topics or the development of skills not usually included in the traditional curriculum. It represents another significant proposal other than acceleration, for providing education to the gifted children in an inclusive set-up of the existing school system. In contrast to acceleration (calling for the placement of the students ahead of their age peers), enrichment caters to the varying needs of the gifted children by providing them additional enriched experiences without placing them in higher grades/ classes. A proposal infact, stands for seeking full inclusion and integration of the gifted children in the main stream, without needing much environmental or instrumental alterations in the regular setting of the classroom or school activities schedules. It stands for enriching the curriculum experiences for getting the gifted children richer in terms of gaining more knowledge and skills, satisfying their diversified interests and acquiring necessary attitude, ways of thinking and problem solving. In this way enrichment programme for the gifted is aimed by all means, to the nourishment of their giftedness or talent much in the same way as the grown plants are enriched or nourished through fertilizers in its all logic, every plant in our garden needs nourishment or enrichment, therefore, the enrichment of educational experiences should be considered a natural need of all the children. But in the case of gifted children it will definitely imply an urgent need of giving them a greater variety of experiences (Curricular and Extra-curricular) probing or studying a subject at a greater depth, doing task at a more advanced level than would occur in the regular classroom.

To better understand the enrichment process, let us look at an example from a History lesson. This lesson involves interdisciplinary Instruction, allowing for the further development of traditional subjects by encouraging students to a

study subject using different perspectives. Students studying the king Richard III through an inquiry method would study the king both as a historical figure and as the central character in Shakespeare' play, "the life and death of King Richard III". The students are encouraged to question the guilt or innocence of Richard. Did he murder his young nephews or not? To arrive at their conclusions, students study the historical background, analyze conflicting sources of information, assess the believability of their sources, synthesize conflicting information, develop hypothesis and defend their hypothesis and defend their positions. Throughout this process, students learn to be "historical detectives". They advance their knowledge of a particular historical period while sharpening their critical thinking skills. This integrative approach to learning can be applied to many to different topics of instruction.

Another option in some schools is independent study (Sisk, 1987). As with the enrichment option, independent study is usually used within a traditional course. It allows a student to study a topic in more depth to enrich the traditional curriculum or explore a topic not part of regular programme. Independent study does not mean working alone, but rather learning to be self directed to work on problems in which an individual has an interest and can assume ownership (Treffinger 1988, 1986 b).

5. Combination of Enrichment and Acceleration

Other approach to the education of the students who are gifted are broader. One example is the Purdue Secondary Model for Gifted and Talented Youth (Feldhusin and Robinson, 1986). This comprehensive programme, intended to meet all the educational needs of high school youngsters who are gifted, has many components. This programme combines enrichment as well as accelerated features into students' educational programmes, and includes

counseling services. Feldhusin and Robinson believe that counseling is critical to students who are gifted. Because of their superior abilities, some of these youngsters are too challenging to their teachers and class mates; others exhibit adjustment problems because they are bored with school. The school districts that have adopted this approach have found that counseling helps these students cope with the often difficult situations adolescents face at school, and also guides students towards particular areas of study and careers, develops self awareness and promotes self-acceptance of their abilities, interests and needs. Another unique feature of the Purdue Model is the use of seminars to allow for expansion of discussions and topics studied in other classes or the development of library and research skills.

6.8 Let Us Sum Up

Gifted children are those children who are quite above average in terms of their intellectual growth and development. They consistently demonstrate outstanding, praise worthy and remarkable performance in any worthwhile field of human endeavor. Causes of giftedness include Genetic and other Biological factors and Environmental factors. Major characteristic of gifted children include higher intellectual abilities, superior academic performance, creativity and achievement motivation, emotional stability and good moral behaviour. An educational programme devised for the benefit of gifted children should include the following characteristics: (1) a curriculum designed to accommodate the students' advanced cognitive skills, (2) instructional strategies consistent with the learning styles of gifted students in the particular content areas, and (3) administrative arrangements. Generally the plan should provide for enrichment, acceleration and grouping in special classes. To teach

gifted children effectively in general education classrooms, teacher can follow useful techniques such as curriculum compacting, providing enrichment learning centre, promoting independent study and making contracts.

6.10 Check Your Progress

1. Discuss the concept of Giftedness.
 2. Discuss the causes of giftedness.
 3. Explain the characteristics of gifted children.
 4. Explain the educational measures for gifted children.
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6.11 Suggested Readings

1. Chauhan, S.S (1988), *Advanced educational psychology*, Vikas publishing house Pvt Ltd, New-Delhi 110014.
2. Dash, M (2003), *Education of exceptional children*, Atlantic publishers and distributors, New Delhi-27. ISBN 81-7156-870-X.
3. Lokhanda, R.G, Ramar, R, Kusuma, A (2000), *Education of Children with Special Needs*, Discovery publishing house, New Delhi- 110002. ISBN 81-7141-539-3.
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5. Mangal S.K. (2007), *Educating Exceptional Children: An Introduction to Special Education*, PHI Learning Private Learning, New Delhi.
6. Smith, Deborah Deutsch (1992), *Introduction to special education: teaching in an age of challenge*, Allyn and Bacon, A Division of Simon and Schuster, inc. 160 Gould street Needham Heights, MA 02194. ISBN 0-205-13315-0.

LESSON NO 7:**INCLUSIVE EDUCATION****Lesson Structure**

- 7.1 Introduction**
- 7.2 Objectives**
- 7.3 Historical Background**
- 7.4 Meaning of Inclusive Education**
- 7.5 Principles of Inclusive Education**
- 7.6 Necessary Resources**
- 7.7 Let Us Sum Up**
- 7.8 Suggested Readings**

7.1 Introduction

Inclusive education (IE) is a new approach towards educating the children with disability and learning difficulties with that of normal ones within the same roof. It seeks to address the learning needs of all children with a specific focus on those who are vulnerable to marginalization and exclusion. It implies all learners - with or without disabilities being able to learn together through access to common pre-school provisions, schools and community educational setting with an appropriate network of support services. This is possible only in flexible education system that assimilates the needs of diverse range of learners and adapts itself to meet these needs. Inclusion is not an

experiment to be tested but a value to be followed. All the children whether they are disabled or not have the right to education as they are the future citizens of the country. In the prevailing Indian situation resources are insufficient even to provide quality mainstream schools for common children, it is unethical and impracticable to put children with special needs to test or to prove anything in a research study to live and learn in the mainstream of school and community (Dash, 2006). The principle of inclusive education was adopted at the “World Conference on Special Needs Education: Access and Quality” (Salamanca, Spain 1994) and was restated at the World Education Forum (Dakar, Senegal 2000). The idea of inclusion is further supported by the United Nation’s Standard Rules 1 Sanjeev and Kumar: Inclusive Education in India Published by CORE Scholar, 2007 on Equalization of Opportunities for Person with Disability Proclaiming Participation and equality for all. Of late, a consensus has emerged among Indian intellectuals and pedagogues for adopting inclusive education in mainstream schools.

7.2 Objectives

After going through this lesson, you should be able to:

- Know the historical development of inclusive education
- Explain the meaning of Inclusive education
- Highlight the various principles of inclusive education
- Discuss the necessary resources of inclusive education.

7.3 Historical Development of Inclusive Education in India-

Documentation of efforts for or against special education in India remains sparse before India's independence from Britain. Archaeologists discovered evidence of inclusion of people with disabilities in India from 2000 or more years ago in the form of adapted toys made accessible for children with disabilities. These small pieces of evidence are part of the "Gurukul" system of education that existed in India for centuries before British rule. This system was sensitive to the unique cultural, social, and economic needs of the students and their families and imparted life skills education recognizing the potential within each student. Although there is not much documentation about students with disabilities in this system, the structure is seemingly inclusive. India was colonized by Great Britain until 1947, and the Gurukul system ended after India was colonized by the British. As a result of British rule, much of the education system in India was, and still is, "British style"-very cut and dry, based on rote memorization, with few inclusive education services due to its inflexible nature. Pre and post-independence, the Government of India on paper supported various versions of inclusive education in policy. During this time period, the majority of children with disabilities were not in school. The earliest document regarding British-style education in India dates back to 1835. Written as the "Minute on Education, and later nicknamed the "Minute of Macaulay," this particular debate marked the change from traditional, "Gurukul," Indian education to British style education. It documents the British Government's mission to create a "class of Indians... 'English in taste, in opinion, in morals and in intellect.' Written by Thomas Macaulay, a British politician who later became a member of the

governor-general's council, the document deliberately belittles the Indian education system. The document quotes, "the entire native literature of India and Arabia" was not worth "a single shelf of a good European library." This document did not include information regarding people with disabilities. This is because people with disabilities often were not educated during this time period, but also, people with disabilities were not considered good enough to be modeled into British-style Indians. Before pre-independence, the limited services for people with disabilities arose largely out of the private sector or from nongovernmental organizations, which were often religious.

The first special school for people with disabilities in India was a school for the blind, which was opened in 1869 by Jane Leupot, with support of the Church Missionary Society. Fourteen years later, in 1883, a school for the deaf was opened in Bombay. 1887 marked the year Christian missionaries opened a school for the blind in Amritsar. During the 18th century all of the special inclusive schools for people with disabilities accommodated people with physical disabilities; it was not until 1918 that the first school for people with intellectual disabilities was established. All of these schools exemplify the type of inclusive education services offered during the 18th and 19th century specialized and segregated. By 1900, special schools were springing up throughout the country. Until the 1970s, these schools were the primary method of service delivery for children with disabilities. Most were for children who were blind or visually impaired, and the majority was funded by nongovernmental organizations or private funders. The first half of the 20th century in India was spent by the Indian people fighting for independence. The political figurehead and leader of the Satyagraha movement, Mohandas Gandhi attempted to reverse British influence over Indian education by

introducing what he named “basic education.” Gandhi’s idea of education catered to marginalized populations because it focused on handicrafts, which favored the lower castes and people with disabilities, many of whom were used to working with their hands and hadn’t previously done much academic work. Gandhi introduced this plan in 1937. Although his plan influenced governmental policy for over 30 years, it ultimately failed. (1909) remarks the first piece of attempted legislation regarding inclusion and education in India. Gopal Krishna Gokhale, “professor of English literature, mathematics, and political economy, served, for example, on the Poona Municipal Council, the Bombay Legislative Council, and finally, the Imperial Legislative Council,” “introduced a bill under the Indian council act of 1909 to make primary education compulsory.” This bill, if it passed, would have provided funding for compulsory education for all. However, it was voted down. The policies and actions by the government of India regarding inclusive special education in the 1940s contradicted each other entirely. The Sargent Report by the Central Advisory Board of Education in (1944) suggested children with disabilities should be entirely mainstreamed. Rather than debating the validity of inclusion, the Sargent Report stated that it was the only way to provide an education. Yet both the action and lack of action by the government of India in the 1940s completely contradicted this suggestion. Throughout the 1940s, the government of India began setting up segregated workshops and trade schools separate from those for students without disabilities to teach children with disabilities skills to enter the workforce. In addition, this decade was marked by a large increase in the amount of money given to voluntary organizations to establish special schools. Most of these segregated schools were expensive and

located in urban areas, further marginalizing people with disabilities in rural areas.

India gained independence from Britain in the year 1947, and inclusive education is written into India's constitution as a fundamental right for all citizens. It is important to differentiate between constitutional rights and state policies and their legal implications. Rights are listed in the constitution; they are absolute and completely enforceable. State policies are completely subjective on a state by state basis. Part IX, Article 45 of the Constitution states, The state shall endeavor to provide, within a period of ten years from the commencement of this constitution, for free and compulsory education for all children until they complete the age of fourteen years. The significance of Article 45 was reaffirmed in (1993) with the Supreme Court's Unnikrishnan judgment, also known as the case "Unnikrishnan vs. the state of Andhra Pradesh." In this case, the court ruled that Article 45 must be read in conjunction with Article 21 of the constitution, which states that "No person shall be deprived of his life or personal liberty except according to procedure established by law." By requiring these two articles to be read in conjunction, elementary education is now considered imperative for life and personal liberty in India. A clause was added to India's constitution to this affect; however, it was not added until December 2002. The 86th amendment to the constitution, section 21A reads, "The State shall provide free and compulsory education to all children of the age of six to fourteen years in such manner as the State may, by law, determine." Although many viewed this amendment as positive, others criticized the age restrictions. In addition, many thought that the type of education (inclusive, segregated, or other) should be specified within the law. The 1960s marked an important change in how inclusive

education was organized and funded in India. The Ministry of Education split, and a new branch called the Ministry of Social Welfare was created. The Ministry of Social Welfare was given the responsibility for the “weak and vulnerable” sections of society. They largely focused on rehabilitation, and not as much on education. Instead of supporting the current education system, the Ministry of Social Welfare began giving out grants to nonprofits that provided education for children with disabilities, inadvertently preventing inclusion of these children within the public or mainstream sector. The split of these two ministries has never been reversed, and is still this way at present.

7.4 Meaning of Inclusive Education

Inclusive education is based on the principle that schools should provide for all children regardless of any perceived difference, disability or other social, cultural and linguistic difference. The diverse needs of these learners and the quest to make schools more learning friendly requires regular and special education teachers to consult and collaborate with one another as well as with family and community in order to develop effective strategies, teaching and learning (Jelas, 2010) within inclusive setups. With the right training, strategies and support nearly all children with SEN and disabilities can be included successfully in mainstream education. According to Barton (1997), “Inclusive education is not merely about providing access into mainstream school for pupils who have previously been excluded. It is not about closing down an unacceptable system of segregated provision and dumping those pupils in an unchanged mainstream system. Existing school systems in terms of physical factors, curriculum aspects, teaching expectations and styles,

leadership roles will have to change. This is because inclusive education is about the participation of ALL children and young people and the removal of all forms of exclusionary practice". The 'Index for Inclusion' (Booth and Ainscow, 2011, 3rd edition) summarizes some of the ideas which make up the view of inclusion within the Index as follows (CSIE, 2014): Inclusion in education involves:

- Putting inclusive values into action
- Viewing every life and every death as of equal worth.
- Supporting everyone to feel that they belong.
- Increasing participation for children and adults in learning and teaching activities,
- Relationships and communities of local schools.
- Reducing exclusion, discrimination, barriers to learning and participation.
- Restructuring cultures, policies and practices to respond to diversity in ways that value.
- Everyone equally, linking education to local and global realities.
- Learning from the reduction of barriers for some children to benefit children more widely.
- Viewing differences between children and between adults as resources for learning.
- Acknowledging the right of children to an education of high quality in their locality.

- Improving schools for staff and parents/careers as well as children.
- Emphasizing the development of school communities and values, as well as achievements.
- Fostering mutually sustaining relationships between schools and surrounding communities.
- Recognising that inclusion in education is one aspect of inclusion in society.
- Segregating children into 'special needs' and 'mainstream' schools prevents equal access to social and curricular opportunities and labels children (United Nations Convention on the Rights of the Child, 2008; UNESCO, 1994).

Parents of children with disabilities are usually more in favour of inclusive education and have a deeper understanding, wider knowledge of terminology and specific legislation. However, many of the parents of children without disabilities are often reluctant to have children with disabilities in the same class as their own child.

7.5 Principles of Inclusive Education

Following are the Seven Principles for Inclusive Education

Teaching All Students.

Students learn in different ways. It is, therefore, important to develop the skills to teach in different ways. For example, some students learn better when introduced to information visually, while others learn best through hearing information, working in groups or activity-based projects. By using

several different approaches to the same material within the same lesson or activity, information can become more interesting and tangible to a greater number of students. Some ways to accomplish this are:

Think of three different ways to teach a lesson. You could teach a new concept or definition by:

- (1) Having students create a web map on newsprint to represent a concept or a definition (visual),
- (2) Giving a brief lecture about the concept or definition (auditory), or
- (3) Having students act on the concept or definition using various clues (kinesthetic).

Of course, there are other strategies as well, such as doing a group brainstorm on chart paper to evoke students' prior knowledge about what they already know about the topic, reading a story aloud that illustrates the concept or inviting students to draw an illustration of what they guess the concept might mean. There are many modes to uncover student knowledge and expand new ideas. By incorporating at least three different approaches in your instruction, you will have increased your student's learning outcomes. Ask other teachers how they have taught or would teach a lesson. Try out new approaches, even if you may not have used that approach before. Share with your colleagues a lesson that you created and ask if they see evidence of the three learning styles being addressed or have any other ideas or suggestions. Learn from each other. Listen carefully to student's questions and comments. Learning is a dialogue between students and teachers, with both asking questions and seeking answers from each other. Allow and encourage students to feel comfortable enough to ask for more information, or to seek clarification

of information that has already been given. Draw upon the prior knowledge and life experience that students bring to the classroom. Integrate their comments and questions authentically into discussion. Expect student's backgrounds and abilities to be different. Try to be considerate of these differences and help the students reflect on their individuality and to cultivate a sense of belonging in your learning community.

2. Exploring Multiple Identities

Building confidence and affirming identity for students supports their learning. Students who are excited about themselves and other people, and who are inquisitive about the world around them will more easily learn to be compassionate and understanding of people who are different from them. They are less likely to hold negative feelings about others, if they are comfortable with themselves and also with those who are different. Here are some ways to affirm and encourage student's identities:

- Create activities that help students talk about, and feel pride in, themselves and their unique experiences.
- Engage students in projects where they can talk about their experiences as it relates to the academic content, so that their experiences gain status by becoming part of academic knowledge.
- Encourage all aspects of each student's individuality. Let them know it is okay to be themselves.
- Create an environment where it is safe to wonder and investigate about self and others. Others help students to see that none of us is a "final

product!” Rather, we are all in a constant state of developing as learners and as members of our communities.

- Discuss all areas in which a student may find opportunities for success – academic, artistic, athletic, physical, emotional and personal.

- Help students understand the ways in which their identities and their experiences may be linked to their gender and sexual identity, their ethnicity and racial identity, or their religious beliefs and religious identity.

- Maintain a respectful environment Maintain a respectful environment among the students. Help them to use respectful language and behaviors with all their classmates and peers. Work with students so that they learn to disagree respectfully. Students should not shy away from conflicting ideas but learn how to use divergent points of view as an opportunity to deepen their understanding of themselves and others. Cultivate a classroom community where questions are welcomed and expected.

Preventing Prejudice: All of us are influenced by the legacy of institutionalized inequalities that permeate history as well as the stereotyped ideas and images we encounter every day. The best way for an educator to address preconceived stereotypes and to prevent them from escalating into feelings of prejudice and bias is to create awareness. This can be done by discussing students’ stereotypes in both large and small groups. This topic may bring up some challenges and sensitivities from the class and the teacher, as well. Here are some ways to discuss the topic of prejudice. It is important to talk about all topics the students bring up. These are a number of suggestions about how to create student awareness of stereotyped beliefs and inequality:

- Teach explicitly about histories of unfairness, or institutionalized inequality. Guide students in understanding that institutionalized inequality is not everybody's fault, but that it is everybody's responsibility to become aware, and to create fair and equitable learning communities.

- Talk about all of the student's feelings and attitudes. Do not ignore prejudicial behaviors or feelings. They will not go away on their own. Cultivate a productive atmosphere of trust, examination and responsibility rather than one of guilt.

- Set clear boundaries and rules about behaviors that are based on prejudices, such as teasing, bullying or excluding. Set goals for an anti-racist, anti-sexist, anti-biased classroom or learning community. Work explicitly with students to create ways to recognize and interrupt discriminatory or biased language and acts. Be clear with students that you and they will benefit from an inclusive learning community.

- Introduce key words to students that can alert them to the presence of a stereotype. "All women..." "They always..." "My people would never..." and "Those people..." are a good start.

- Help students to identify prejudicial behavior (as opposed to making generalizations). We all put people, places and things into categories so that we can contextualize them in relationship to ourselves. But when we place a value on people that is less than the value we place on ourselves, we are prone to treat those people in an unfair manner.

- Don't be afraid to talk about stereotypes. If you do not feel you have been able to get a point across, you can always come back to it at a later time, or consult with another educator for assistance.

- Train students to discern fact from fiction, especially when it comes to stereotypes. If a student makes a statement or uses words that are prejudiced or are based on a stereotype, the teacher should address the situation by asking questions about the information source, asking whether there are other points of view on the stereotype; provide concrete information that will enable students to rethink their stereotypes based on new information. For example, if a student says that women are not good at sports, ask the student, "What makes you say that?" or "Does anyone know of women who have excelled in sports?" Try to help students gain an understanding of their own source(s) of misinformation. Then, engage in activities and dialogue that illustrate the many professional and amateur female athletes, who have defined sports throughout the ages (such as Wilma Rudolph, Kerri Strug, Lisa Leslie, Dara Torres, Mia Hamm, Serena Williams, Venus Williams and more).

- Develop dialogue and reflection. Help the students ask themselves, Why do I feel this way? Where did I learn this misinformation? How can I incorporate and act upon this new information?

Promoting Social Justice: Young people are good judges of what is or is not fair. Talk to students about issues of fairness, and of justice or injustice in terms of equality for all. Here are some ways to promote social justice in your classroom:

- Make comparisons. Help students compare situations of injustice in their own lives to larger social issues. For some students, their experiences of injustice are directly linked to larger social issues, such as access to equitable education, immigration rights and civic neglect of urban environments. For

other students, these larger social issues will be “new” ideas with which to grapple. These dialogues help students develop empathy and awareness of their personal context within the broader community.

- Develop a worldview. Encourage students to explore their perspective on issues within and outside their immediate communities and their relationship to the larger world. For example, if the air or water in their community is polluted, what are the sources of pollution?

- Engage in critical thinking. Ask students to explore why they think what they think and examine where they got their opinions. Have they taken other people’s perspectives into account? Assist students in activities to gain accurate information or to see other perspectives.

- Explore power dynamics. Ask students if every view has been represented in a given situation. Ask students to explore how they define “power,” which has power, which doesn’t, and examine issues of access to power. Use students’ own experiences to explore power dynamics. Who has greater or lesser power on sports teams? In math or spelling or beauty competitions? In the classroom? In the school?

- Encourage students to develop a sense of civic responsibility. Use academic learning to encourage students to understand their unique roles in society and the contributions that they can make. Provide role models by teaching about students and communities who have created social change.

- Bring these discussions into all subject areas. Don't limit your discussions to one day, week, month, or year. Fully integrate a social justice perspective into all content areas. These topics can be addressed continuously and in many different contexts. For example, you can draw attention to a

character's behavior in a book or in a math problem that compares the resources of one city with another.

- Service learning and action planning. Get students involved in taking social justice issues into their own hands. Service opportunities can help students feel empowered to address issues of inequity in their own communities. Help students develop concrete projects that are achievable and relevant in their own communities. Guide students in critically examining the misguided assumptions of taking on the role of “rescuer” in humanitarian aid/“charity work.” Engage the voices and viewpoints of the communities with which the service learning is taking place

Choosing Appropriate Materials: It is important to choose books and materials that reflect accurate images of diverse people. Books, magazines, movies, web-based media and handouts can be guides for behavior and ideas, but they also have the potential to perpetuate some stereotypes. Read over all materials you are planning to use with students and decide if they promote a positive and appropriate image of people and themes. The following are a number of things to keep in mind when choosing what you present to the students:

- Be diverse. Have multiple pictures, sources, or readings by and about different groups and people.
- Let groups speak for themselves. Use sources from within the contexts you are studying. For example: when studying about women, make sure you use women authors to describe situations, not just men writing about women.

- Experts are everywhere. Go outside the traditional people, organizations and resources to find sources that relate to your studies. These will offer a unique perspective that can round out more traditional sources. Draw from the richness of democratic media such as YouTube, blogs and other interactive sources.

- Use of primary and Secondary sources are useful – but are used best to accompany primary sources and not as a stand in for them.
- Show past and present images of different group images of different groups. Societies and cultures are constantly changing and people often appear very different now from how they may have appeared in the past. It is important for students to recognize the ways in which culture and people change over time. For example, ceremonial dress is for ceremonies. Make sure that students don't confuse the actions and dress celebrating an important day for a cultural or religious group, with the usual daily actions and dress of that same group.

Teaching and Learning about Cultures and Religions: It is important that students learn about other cultures and religions in a positive and comfortable manner. This includes learning about the cultural and religious differences among their peers – as well as other cultures and religions that are more remote from their experiences. Some are the following ways to do this:

- Teach students the value of asking questions. As a teacher, model ways of asking respectful questions in the classroom or learning community. Encourage them to think about how to ask respectful questions of each other and to practice doing so.

- Discuss appropriate ways to ask questions about identity, religion, culture and race. Help the students use positive terms to gain information about others.

- Provide anonymous ways for students to ask questions such as an anonymous “question box” in a prominent place in the classroom. This is essential for a learning community that hopes to open dialogue. When students realize they may ask previously silenced questions, they can become more eager participants in their learning.

- Emphasize that culture is not a fixed or permanent condition. Society and culture are constantly changing. Languages, religions, rituals, traditions and ways of knowing change over time. People often appear very different now from how they may have appeared in the past. It is important for students to recognize the evolving nature of, and the inaccuracies of, previously assumed images.

- Allow opportunities for students to learn about the ever changing cultures of the world. Complicate this goal through a range of subjects - not just social studies. For example, an abacus can be a tool to teach both math and the similarities between Chinese, Japanese, and Russian cultures. Yet, the use of the abacus has changed drastically in the past fifty years, especially the past ten years - the lifetime of many of our students - so these kinds of examples should be approached with a contemporary framework. Furthermore, avoid making sweeping statements about “Chinese, Japanese, and Russian cultures” or other cultural groups. There is vast diversity within every cultural group. It may be more helpful for students to grasp the notion of diversity within groups and

geographic regions than to try to oversimplify the experiences of a certain people, nation or region.

- Help students see a range of nuanced views and make connections within and between cultures. For example, a generalization such as “Muslim women cover their hair” is not only false, but it does not address the range of beliefs among Muslims about modesty in dress and what that entails. A more helpful discussion may guide students in seeing connections between Islam and other religions where people may cover their hair in different instances due to religious requirements and preferences (for example: Amish women, Jewish women, Greek Orthodox women, Sikh men and women, Catholic women, etc.) These discussions require constant attention to nuance and acknowledging the spectrum of practices that spring from the range of ways people interpret their religious teachings and beliefs.

Adapting and Integrating Lessons Appropriately: It is important that educators be flexible in the adaptation of all the lessons in our curriculum as well as prescribed curriculum in general. Sometimes, the most teachable moments are unplanned and unscripted. Often pre-designed lessons are a good starting point for dialogues or critical thinking. Some ways to do this include:

- Be mindful of who is in your classroom, so that the lessons can be more culturally- lessons can be more culturally relevant. When utilizing a lesson that shows representations of a particular place, first ask students if they have ever been to the place in question. The students who have been there, or have family from there, may be able to participate in the activity in a leadership role. Also, be cognizant that stereotypes or ignorance on the part of students or educators can make some students hesitant to share their connection or

personal stories. It is also presumptuous to assume that the student from the place in question is an expert or wants a leadership role. Caution should be taken to be certain that the student is comfortable sharing..

- Do not assume that you can tell where students are from or how they identify just by looking at them, by the sound of their names or articles of dress.

7.6 Necessary Resources

Although once hailed, usually by its opponents, as a way to increase achievement while decreasing costs, full inclusion does not save money, but is more cost-beneficial and cost-effective. It is not designed to reduce students' needs, and its first priority may not even be to improve academic outcomes; in most cases, it merely moves the special education professionals (now dual certified for all students in some states) out of "their own special education" classrooms and into a corner of the general classroom or as otherwise designed by the "teacher-in-charge" and "administrator-in-charge". To avoid harm to the academic education of students with disabilities, full panoply of services and resources is required (of education for itself), including:

- Adequate supports and services for the student
- Well-designed individualized education programs
- Professional development for all teachers involved, general and special educators alike
- Time for teachers to plan, meet, create, and evaluate the students together

- Reduced class size based on the severity of the student needs
- Professional skill development in the areas of cooperative learning, peer tutoring, adaptive curriculum
- Collaboration between parents or guardians, teachers or para educators, specialists, administration, and outside agencies.
- Sufficient funding so that schools will be able to develop programs for students based on student need instead of the availability of funding.

7.7 Let Us Sum Up

Indeed, the students with special needs do receive funds from the government, by law originally the Educational for All Handicapped Children Act of 1974 to the present day, Individuals with Disabilities Education Improvement Act, which requires its use in the most integrated setting. In principle, several factors can determine the success of inclusive classrooms:

- Family-school partnerships
- Collaboration between general and special educators
- Well-constructed plans that identify specific accommodations, modifications, and goals for each student
- Coordinated planning and communication between "general" and "special needs" staff
- Integrated service delivery
- Ongoing training and staff development
- Leadership of teachers and administrators

By the mid-1980s, school integration leaders in the university sector already had detailed schemas (e.g., curriculum, student days, students with severe disabilities in classrooms) with later developments primarily in assistive technology and communication, school reform and transformation, personal assistance of user-directed aides, and increasing emphasis on social relationships and cooperative learning. In 2015, most important are evaluations of the populations still in special schools, including those who may be deaf-blind, and the leadership by inclusion educators, who often do not yet go by that name, in the education and community systems.

7.8 Check Your Progress

1. Give the brief historical background of Inclusive education in India?
 2. Discuss the various principles of inclusive education?
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7.9 Suggested Readings

1. Nancy Hunt and Kathleen Marshal (1992), *Exceptional Children and Youth*, Boston: Houghton Mifflin Company.
2. Scott E.P., (1982), *Your Visually Impaired Student: A Guide for Teachers*, Baltimore: M.D. University Park, Press.
3. Torres, I. and A.L. Corn (1990), *When You Have a Visually Impaired Student in Your Classroom: Suggestions for Teachers (2nd ed.)*, New York: American Foundation for the Blind.

LESSON NO 8: INCLUSION AND INTEGRATION

Lesson Structure

- 8.1 Introduction**
- 8.2 Objectives**
- 8.3 Inclusion and integration difference**
- 8.4 Fully Inclusive Schools and General/Special Education Policies**
- 8.5 Classification of Students and Educational Practices**
- 8.6 Alternatives to Inclusion Programs: School Procedures and Community Development**
- 8.7 Legal Issues: Education Law and Disability Laws**
- 8.8 Inclusion Rates in the World: "Frequency of Use"**
- 8.9 Common Practices in Inclusive Classrooms**
- 8.10 Selection of Students for Inclusion Programs in Schools**
- 8.11 Positive Effects of Inclusion in Regular Classrooms**
- 8.12 Criticisms of Inclusion Programs of School Districts**
- 8.13 Broader Approach: Social and Cultural Inclusion**
- 8.14 Let Us Sum Up**

8.1 Introduction

There seems to be a lot of confusion and misinformation about what inclusion actually means. Inclusive education involves the full inclusion of all children. No children are segregated. Supports for inclusion are embedded within everyday practices. If assistants are employed they circulate around the classroom, or spend time assisting the teacher and making adaptations to materials, rather than being off in a corner with one particular child. There are no separate areas or curricula for children who experience disability. All children are supported to be involved in all aspects of learning. No separate areas or curricula exist for children who experience disability. That each child has individual differences is not ignored. It is embraced and valued as what makes each person unique. The goal is not to make any child “normal”, but rather to grow and learn together. The child who experiences disability could be sitting in the same classroom, separate to his peers, with an aide who may or may not be using sign language. However, this would not be inclusion – this would be exclusion.

8.2 Objectives

After reading this lesson, you should be able to:

- Differentiate Inclusion and integration.
- Discuss Classification of Students and Educational Practices
- Know Alternatives to Inclusion Programs: School Procedures and Community Development.
- Know Legal Issues: Education Law and Disability Laws

- Know Inclusion Rates in the World: "Frequency of Use"
- Know Common Practices in Inclusive Classrooms.
- Know Selection of Students for Inclusion Programs in Schools
- Know Positive Effects of Inclusion in Regular Classrooms.

8.3 Inclusion and integration difference

Integrated education is similar to inclusive education, but without any ideological commitment to equity. Integration places students in a mainstream classroom with “some adaptations and resources.” However, students are expected to “fit in with pre-existing structures, attitudes and an unaltered environment.” Integration is often mistaken for inclusion because students are placed in a mainstream classroom, which is a step towards inclusion. However, if there has not been a paradigm shift within the school and these students are not perceived as equals, if curriculum is not taught for the understanding of all instead of some, then the students are integrated, but not included in the school. The concept of inclusion is based on the idea that students with disabilities should not be segregated, but should be included in a classroom with their typically developing peers. A student in an inclusion classroom usually needs only to show that she is not losing out from being included in the classroom, even if she is not necessarily making any significant gains. This blanket statement does not apply to all inclusion settings, but proponents of inclusion tend to put more of an emphasis on life preparation and social skills than on the acquisition of level-appropriate academic skills.

8.4 Fully Inclusive Schools and General/ Special Education Polices

Fully inclusive schools, which are rare, no longer distinguish between "general education" and "special education" programs which refer to the debates and federal initiatives of the 1980s, such as the Community Integration Project and the debates on home schools and special education-regular education classrooms; instead, the school is restructured so that all students learn together. All approaches to inclusive schooling require administrative and managerial changes to move from the traditional approaches to elementary and high school education.

Inclusion remains in 2015 as part of school (e.g., Powell & Lyle, 1997, now to the most integrated setting from LRE) and educational reform initiatives in the US and other parts of the world. Inclusion is an effort to improve quality in education in the fields of disability, is a common theme in educational reform for decades, and is supported by the UN Convention on the Rights of Persons with Disabilities (UN, 2006).

8.5 Classification of Students and Educational Practices

Classification of students by disability is standard in educational systems which use diagnostic, educational and psychological testing, among others. However, inclusion has been associated with its own planning, including MAPS which Jack Pear point leads with still leads in 2015 and person-centered planning with John O'Brien and Connie Lyle O'Brien who view inclusion as a force for school renewal.

Inclusion has two sub-types: the first is sometimes called regular inclusion or partial inclusion, and the other is full inclusion.

"Inclusive practice" is not always inclusive but is a form of integration. For example, students with special needs are educated in regular classes for nearly all of the day, or at least for more than half of the day. Whenever possible, the students receive any additional help or special instruction in the general classroom, and the student is treated like a full member of the class. However, most specialized services are provided outside a regular classroom, particularly if these services require special equipment or might be disruptive to the rest of the class (such as speech therapy), and students are pulled out of the regular classroom for these services. In this case, the student occasionally leaves the regular classroom to attend smaller, more intensive instructional sessions in a resource room, or to receive other related services, such as speech and language therapy, occupational and/or physical therapy, psychological services, and social work. This approach can be very similar to many mainstreaming practices, and may differ in little more than the educational ideals behind it.

In the "full inclusion" setting, the students with special needs are always educated alongside students without special needs, as the first and desired option while maintaining appropriate supports and services. Some educators say this might be more effective for the students with special needs. At the extreme, full inclusion is the integration of all students, even those that require the most substantial educational and behavioral supports and services to be successful in regular classes and the elimination of special, segregated special education classes. Special education is considered a service, not a place and those services are integrated into the daily routines and classroom structure,

environment, curriculum and strategies and brought to the student, instead of removing the student to meet his or her individual needs. However, this approach to full inclusion is somewhat controversial, and it is not widely understood or applied to date.

Much more commonly, local educational agencies have the responsibility to organize services for children with disabilities. They may provide a variety of settings, from special classrooms to mainstreaming to inclusion, and assign, as teachers and administrators often do, students to the system that seems most likely to help the student achieve his or her individual educational goals. Students with mild or moderate disabilities, as well as disabilities that do not affect academic achievement, such as using power wheelchair, scooter or other mobility device, are most likely to be fully included; indeed, children with polio or with leg injuries have grown to be leaders and teachers in government and universities; self-advocates travel across the country and to different parts of the world. However, students with all types of disabilities from all the different disability categories have been successfully included in general education classes, working and achieving their individual educational goals in regular school environments and activities.

8.6 Alternatives to Inclusion Programs: School Procedures and Community Development

Students with disabilities who are not included are typically either mainstreamed or segregated. A mainstreamed student attends some general education classes, typically for less than half the day, and often for less academically rigorous, or if you will, more interesting and career-oriented classes. For example, a young student with significant intellectual disabilities might be mainstreamed for physical education classes, art classes

and storybook time, but spend reading and mathematics classes with other students that have similar disabilities ("needs for the same level of academic instruction"). They may have access to a resource room for remediation or enhancement of course content, or for a variety of group and individual meetings and consultations.

A segregated student attends no classes with non-disabled students with disability a tested category determined before or at school entrance. He or she might attend a special school termed residential schools that only enrolls other students with disabilities, or might be placed in a dedicated, self-contained classroom in a school that also enrolls general education students. The latter model of integration, like the 1970s Jowonio School in Syracuse, is often highly valued when combined with teaching such as Montessori education techniques. Home schooling was also a popular alternative among highly educated parents with children with significant disabilities.

Residential schools have been criticized for decades, and the government has been asked repeatedly to keep funds and services in the local districts, including for family support services for parents who may be currently single and raising a child with significant challenges on their own. Children with special needs may already be involved with early childhood education which can have a family support component emphasizing the strengths of the child and family.

Some students may be confined to a hospital due to a medical condition (e.g., cancer treatments) and are thus eligible for tutoring services provided by a school district. Less common alternatives include home schooling and, particularly in developing countries, exclusion from education.

8.7 Legal Issues: Education Law and Disability Laws

The new anti-discriminatory climate has provided the basis for much change in policy and statute, nationally and internationally. Inclusion has been enshrined at the same time that segregation and discrimination have been rejected. Articulations of the new developments in ways of thinking, in policy and in law include:

- The UN Convention on the Rights of the Child (1989) which sets out children's rights in respect of freedom from discrimination and in respect of the representation of their wishes and views.
- The Convention against Discrimination in Education of UNESCO prohibits any discrimination, exclusion or segregation in education.
- The UNESCO Salamanca Statement (1994) which calls on all governments to give the highest priority to inclusive education.
- The UN Convention on the Rights of Persons with Disabilities (2006) which calls on all States Parties to ensure an inclusive education system at all levels.
- From the Least Restrictive to the Most Integrated Setting

For schools in the United States, the federal requirement that students be educated in the historic least restrictive environment that is reasonable encourages the implementation of inclusion of students previously excluded by the school system. However, a critical critique of the LRE principle, commonly used to guide US schools, indicates that it often places restrictions and segregation on the individuals with the most severe disabilities. By the late 1980s, individuals with significant disabilities and their families and caregivers were already living quality lives in homes and local

communities. Luckily, the US Supreme Court has now ruled in the Olmstead Decision (1999) that the new principle is that of the "most integrated setting", as described by the national Consortium of Citizens with Disabilities, which should result in better achievement of national integration and inclusion goals in the 21st Century.

8.8 Inclusion Rates in the World: "Frequency of Use"

The proportion of students with disabilities who are included varies by place and by type of disability, but it is relatively common for students with milder disabilities and less common with certain kinds of severe disabilities. In Denmark, 99% of students with learning disabilities like 'dyslexia' are placed in general education classrooms. In the United States, three out of five students with learning disabilities spend the majority of their time in the general education classroom.

Post Secondary statistics (after high school) are kept by universities and government on the success rates of students entering college, and most are eligible for either disability services (e.g., accommodations and aides) or programs on college campuses, such as supported education in psychiatric disabilities or College for Living. The former are fully integrated college degree programs with college and vocational rehabilitation services (e.g., payments for textbooks, readers or translators), and the latter courses developed similar to retirement institutes (e.g., banking for retirees).

Differing Views of Inclusion/Integration

However, early integrationists community integration would still recommend greater emphasis on programs related to sciences, the arts (e.g., exposure), curriculum integrated field trips, and literature as opposed to the

sole emphasis on community referenced curriculum. For example, a global citizen studying the environment might be involved with planting a tree ("independent mobility"), or going to an arboretum ("social and relational skills"), developing a science project with a group ("contributing ideas and planning"), and having two core modules in the curriculum.

However, students will need to either continue to secondary school (meet academic testing standards), make arrangements for employment, supported education, or home/day services (transition services), and thus, develop the skills for future life (e.g., academic math skills and calculators; planning and using recipes or leisure skills) in the educational classrooms. Inclusion often involved individuals who otherwise might be at an institution or residential facility.

Today, longitudinal studies follow the outcomes of students with disabilities in classrooms, which include college graduations and quality of life outcomes. To be avoided are negative outcomes that include forms of institutionalization.

8.9 Common Practices in Inclusive Classrooms

Students in an inclusive classroom are generally placed with their chronological age-mates, regardless of whether the students are working above or below the typical academic level for their age. Also, to encourage a sense of belonging, emphasis is placed on the value of friendships. Teachers often nurture a relationship between a student with special needs and a same-age student without a special educational need. Another common practice is the assignment of a buddy to accompany a student with special needs at all times (for example in the cafeteria, on the playground, on the bus and so on). This is

used to show students that a diverse group of people make up a community, that no one type of student is better than another, and to remove any barriers to a friendship that may occur if a student is viewed as "helpless." Such practices reduce the chance for elitism among students in later grades and encourage cooperation among groups.

Teachers use a number of techniques to help build classroom communities:

- Using games designed to build community
- Involving students in solving problems
- Sharing songs and books that teach community
- Openly dealing with individual differences by discussion
- Assigning classroom jobs that build community
- Teaching students to look for ways to help each other
- Utilizing physical therapy equipment such as standing frames, so students who typically use wheelchairs can stand when the other students are standing and more actively participate in activities
- Encouraging students to take the role of teacher and deliver instruction (e.g. read a portion of a book to a student with severe disabilities)
- Focusing on the strength of a student with special needs
- Create classroom checklists
- Take breaks when necessary
- Create an area for children to calm down
- Organize student desk in groups
- Create a self and welcoming environment
- Set ground rules and stick with them

- Help establish short-term goals
- Design a multi-faced curriculum
- Communicate regularly with parents and/or caregivers
- Seek support from other special education teachers

Inclusionary practices are commonly utilized by using the following team-teaching models:

- **One teach, one Support:**

In this model, the content teacher will deliver the lesson and the special education teacher will assist students' individual needs and enforce classroom management as needed.

- **One teach, one Observe:**

In this model, the teacher with the most experience in the content will deliver the lesson and the other teacher will float or observe. This model is commonly used for data retrieval during IEP (Individualized Education programme) observations or Functional Behavior Analysis.

- **Station Teaching (Rotational Teaching):**

In this model, the room is divided into stations in which the students will visit with their small groups. Generally, the content teacher will deliver the lesson in his/her group, and the special education teacher will complete a review or adapted version of the lesson with the students.

- **Parallel Teaching:**

In this model, one half of the class is taught by the content teacher and one half is taught by the special education teacher. Both groups are being taught the same lesson, just in a smaller group.

- **Alternative Teaching:**

In this method, the content teacher will teach the lesson to the class, while the special education teacher will teach a small group of students an alternative lesson.

- **Team teaching (content/support shared 50/50):**

Both teachers share the planning, teaching, and supporting equally. This is the traditional method, and often the most successful co-teaching model.

8.10 Selection of Students for Inclusion Programs in Schools

Educators generally say that some students with special needs are not good candidates for inclusion. Many schools expect a fully included student to be working at or near grade, but more fundamental requirements exist: First, being included requires that the student is able to attend school. Students that are entirely excluded from school (for example, due to long-term hospitalization), or who are educated outside of schools (for example, due to enrollment in a distance education program) cannot attempt inclusion.

Additionally, some students with special needs are poor candidates for inclusion because of their effect on other students. For example, students with severe behavioral problems, such that they represent a serious physical danger to others, are poor candidates for inclusion, because the school has a duty to provide a safe environment to all students and staff.

Finally, some students are not good candidates for inclusion because the normal activities in a general education classroom will prevent them from learning. For example, a student with severe attention difficulties or extreme sensory processing disorders might be highly distracted or distressed by the presence of other students working at their desks. Inclusion needs to be appropriate to the child's unique needs.

Most students with special needs do not fall into these extreme categories, as most students do attend school, are not violent, do not have severe sensory processing disorders, etc.

The students that are most commonly included are those with physical disabilities that have no or little effect on their academic work (diabetes mellitus, epilepsy, allergies, and paralysis), students with all types of mild disabilities, and students whose disabilities require relatively few specialized services.

Bowe says that regular inclusion, but not full inclusion, is a reasonable approach for a significant majority of students with special needs. He also says that for some students, notably those with severe autism spectrum disorders or mental retardation, as well as many who are deaf or have multiple disabilities, even regular inclusion may not offer an appropriate education. Teachers of students with autism spectrum disorders sometimes use antecedent procedures, delayed contingencies, self-management strategies, peer-mediated interventions, pivotal response training and naturalistic teaching strategies.

8.11 Positive Effects of Inclusion in Regular Classrooms

There are many positive effects of inclusions where both the students with special needs along with the other students in the classroom both benefit. Research has shown positive effects for children with disabilities in areas such as reaching individualized education program (IEP) goal, improving communication and social skills, increasing positive peer interactions, many educational outcomes, and post school adjustments. Positive effects on children without disabilities include the development of positive attitudes and perceptions of persons with disabilities and the enhancement of social status

with nondisabled peers. Several studies have been done on the effects of inclusion of children with disabilities in general education classrooms. A study on inclusion compared integrated and segregated (special education only) preschool students. The study determined that children in the integrated sites progressed in social skills development while the segregated children actually regressed. Another study shows the effect on inclusion in grades 2 to 5. The study determined that students with specific learning disabilities made some academic and affective gains at a pace comparable to that of normal achieving students. Specific learning disabilities students also showed an improvement in self-esteem and in some cases improved motivation.

A third study shows how the support of peers in an inclusive classroom can lead to positive effects for children with autism. The study observed typical inclusion classrooms, ages ranging from 7 years old to 11 years old. The peers were trained on an intervention technique to help their fellow autistic classmates stay on task and focused. The study showed that using peers to intervene instead of classroom teachers helped students with autism reduce off-task behaviors significantly. It also showed that the typical students accepted the student with autism both before and after the intervention techniques were introduced.

8.12 Criticisms of Inclusion programs of Schools Districts

Critics of full and partial inclusion include educators, administrators and parents. Full and partial inclusion approaches neglect to acknowledge the fact most students with significant special needs require individualized instruction or highly controlled environments. Thus, general education classroom teachers often are teaching a curriculum while the special education

teacher is remediating instruction at the same time. Similarly, a child with serious inattention problems may be unable to focus in a classroom that contains twenty or more active children. Although with the increase of incidence of disabilities in the student population, this is a circumstance all teachers must contend with, and is not a direct result of inclusion as a concept.

Full inclusion may in fact be a way for schools to placate parents and the general public, using the word as a phrase to garner attention for what are in fact illusive efforts to educate students with special needs in the general education environment.

At least one study examined the lack of individualized services provided for students with IEPs when placed in an inclusive rather than mainstreamed environment.

Some researchers have maintained school districts neglect to prepare general education staff for students with special needs, thus preventing any achievement. Moreover, school districts often expound an inclusive philosophy for political reasons, and do away with any valuable pull-out services, all on behalf of the students who have no say in the matter.

Inclusion is viewed by some as a practice philosophically attractive yet impractical. Studies have not corroborated the proposed advantages of full or partial inclusion. Moreover, "push in" servicing does not allow students with moderate to severe disabilities individualized instruction in a resource room, from which many show considerable benefit in both learning and emotional development.

Parents of disabled students may be cautious about placing their children in an inclusion program because of fears that the children will be

ridiculed by other students, or be unable to develop regular life skills in an academic classroom.

Some argue that inclusive schools are not a cost-effective response when compared to cheaper or more effective interventions, such as special education. They argue that special education helps "fix" the special needs students by providing individualized and personalized instruction to meet their unique needs. This is to help students with special needs adjust as quickly as possible to the mainstream of the school and community. Proponents counter that students with special needs are not fully into the mainstream of student life because they are secluded to special education. Some argue that isolating students with special needs may lower their self-esteem and may reduce their ability to deal with other people. In keeping these students in separate classrooms they aren't going to see the struggles and achievements that they can make together. However, at least one study indicated mainstreaming in education has long-term benefits for students as indicated by increased test scores, where the benefit of inclusion has not yet been proved.

8.13 Broader Approach : Social and Cultural Inclusion

As used by UNESCO, inclusion refers to far more than students with special educational needs. It is centered on the inclusion of marginalized groups, such as religious, racial, ethnic, and linguistic minorities, immigrants, girls, the poor, and students with disabilities, HIV/AIDS patients, remote populations, and more. In some places, these people are not actively included in education and learning processes. In the U.S. this broader definition is also known as "culturally responsive" education, which differs from the 1980s-1990s cultural diversity and cultural competency approaches and is promoted

among the ten equity assistance centers of the U.S. Department of Education, for example in Region IX (AZ, CA, NV), by the Equity Alliance at ASU. Billings points out that teachers who are culturally responsive know how to base learning experiences on the cultural realities of the child (e.g. home life, community experiences, language background, belief systems). Proponents argue that culturally responsive pedagogy is good for all students because it builds a caring community where everyone's experiences and abilities are valued.

Proponents want to maximize the participation of all learners in the community schools of their choice and to rethink and restructure policies, curricula, cultures and practices in schools and learning environments so that diverse learning needs can be met whatever the origin or nature of those needs. They say that all students can learn and benefit from education, and that schools should adapt to the physical, social, and cultural needs of students, rather than students adapting to the needs of the school. Proponents believe that individual differences between students are a source of richness and diversity, which should be supported through a wide and flexible range of responses. The challenge of rethinking and restructuring schools to become more culturally responsive calls for a complex systems view of the educational system (e.g. see Michael Patton, where one can extend the idea of strength through diversity to all participants in the educational system (e.g. parents, teachers, community members, staff).

8.14 Let Us Sum Up

Although inclusion is generally associated with elementary and secondary education, it is also applicable in post secondary education.

According to UNESCO, inclusion "is increasingly understood more broadly as a reform that supports and welcomes diversity amongst all learners." Under this broader definition of inclusion, steps should also be taken to eliminate discrimination and provide accommodations for all students who are at a disadvantage because of some reason other than disability.

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LESSON NO 9:**MAINSTREAMING****Lesson Structure**

- 9.1 Introduction**
- 9.2 Objectives**
- 9.3 Benefits to students with disabilities**
- 9.4 Benefits to non-disabled students**
- 9.5 Disadvantages**
- 9.6 Special consequences for Deaf Students**
- 9.7 Alternatives: What Mainstreaming is Not**
- 9.8 Mainstream Education for Disabled Children**
- 9.9 Let's Us Sum Up**

9.1 Introduction

The context of education, is the practice of educating students with special needs in regular classes during specific time periods based on their skills. This means regular education classes are combined with special education classes. Schools that practice mainstreaming believe that students with special needs who cannot function in a regular classroom to a certain extent "belong" to the special education environment. Access to a special education classroom, often called a "self-contained classroom or resource room", is valuable to the student with a disability. Students have the ability to work one-on-one with special education teachers, addressing any need for remediation during the school

day. Many researchers, educators and parents have advocated the importance of these classrooms amongst political environments that favor their elimination. Proponents of philosophy of educational inclusion assert that educating children with disabilities alongside their non-disabled peers fosters understanding and tolerance, better preparing students of all abilities to function in the world beyond school. Children with special needs may face social stigma as a result of being mainstreamed, but also may help them socially develop.

9.1 Objectives

After reading this lesson, you should be able to:

- Define Benefits to students with disabilities
- Define Benefits to non-disabled students
- Discuss the Disadvantages of mainstreaming
- Highlight the Special consequences for deaf students
- Suggest Alternatives: what mainstreaming is not
- Explain the Mainstream Education for Disabled Children

9.2 Benefits to students with Disabilities

It is believed that educating children with disabilities alongside their non-disabled peers facilitates access to the general curriculum for children with disabilities. Studies show that students with disabilities who are mainstreamed have:

- **Higher Academic Achievement:** Mainstreaming has shown to be more academically effective than exclusion practices. For instance, The National Research Center on Learning Disabilities found that graduation rates of all students with disabilities in the U.S. increased by 14% from 1984 to 1997, although this report

does not differentiate between students enrolled in mainstreaming, inclusive, or segregated programs. Access to a resource room for direct instruction has shown to be effective in increasing student's academic skills and thus increasing the abilities applied by students in a general education setting. Compared to full-time placement in a special education class or special school, both part-time and full-time placement in the regular classroom have been shown to improve academic achievement in students with mild academic disabilities, as well as to improve their long-term behavior.

- **Higher Self-esteem:** By being included in a regular-paced education setting, students with disabilities have shown to be more confident and display qualities of raised self-efficacy. All students in California who went to a different school prior to attending a mainstreaming program were asked to fill out an assessment of their old school as compared to inclusion program. The assessments showed that out of all students with disabilities 96% felt they were more confident, 3% thought they had the same experience as an excluded student, and 1% felt they had less self-esteem. Overall, students felt that they were equal to their peers and felt that they should not be treated any differently.
- **Better Social Skills:** Any kind of inclusion practice, including mainstreaming, allows students with disabilities to learn social skills through observation, gain a better understanding of the world around them, and become a part of the "regular" community. Mainstreaming is particularly beneficial for children with autism and ADHD. By interacting with same-aged non-disabled children, children with autism were observed to be six times more likely to engage in social relations outside of the classroom. Because children with autism spectrum disorders have severely restricted interests and abnormalities in communication and social interaction, the increased interaction with typical children may be beneficial to them. The same 1999 study showed

that students with Down's syndrome were three times more likely to communicate with other people.

- **Mainstreaming also benefits other children.** It opens the lines of communication between those students with disabilities and their peers. If they are included into classroom activities, all students become more sensitive to the fact that these students may need extra assistance.

9.3 Benefits to Non-Disabled Students.

Many people believe that educating non-disabled students and students with disabilities together creates an atmosphere of understanding and tolerance that better prepares students of all abilities to function in the world beyond school. Students without disabilities who are engaged in an inclusive physical education program reported increase in self-concept, tolerance, self-worth, and a better understanding of other people. The students also reported that the inclusion program was important because it prepared them to deal with disability in their own lives. Positive aspects that come from inclusion are often attributed to contact theory. Contact theory asserts that frequent, meaningful, and pleasant interactions between people with differences tend to produce changes in attitude.

9.4 Disadvantages

Although mainstreaming in education has been shown to provide benefits, there are also disadvantages to the system.

- **Tradeoff with non-disabled students' academic education-**One potentially serious disadvantage to mainstreaming is that a mainstreamed student may require much more attention from the

teacher than non-disabled students in a general class. Time and attention may thus be taken away from the rest of the class to meet the needs of a single student with special needs. The effect that a mainstreamed student has on the whole class depends strongly on the particular disabilities in question and the resources available for support. In many cases, this problem can be mitigated by placing an aide in the classroom to assist the student with special needs, although this raises the costs associated with educating this child.

- **Harm to academic education of students with disabilities**-Parents fear that general education teachers do not have the training and skills to accommodate special needs students in a general education classroom setting. However, professional training and supportive services can usually address these concerns. Some research has suggested teachers who are not aware of—and later may choose not to adopt—modifications needed for students with special needs are also more resistant to having these students in class. This can lead to regression of the students with disabilities as well as overall decreased classroom productivity.
- **Social issues**-Compared to fully included students with disabilities, those who are mainstreamed for only certain classes or certain times may feel conspicuous or socially rejected by their classmates. They may become targets for bullying. Mainstreamed students may feel embarrassed by the additional services they receive in a regular classroom, such as an aide to help with written work or to help the student manage behaviors. Some students with disabilities may feel more comfortable in an environment where most students are working at the same level or with the same supports. In the United States, students with autism spectrum disorders are more frequently the target of bullying than non-autistic students, especially when their educational program brings them into regular contact with non-autistic students.

- **Costs**-Schools are required to provide special education services but may not be given additional financial resources. The per-student cost of special education is high. The U.S.'s 2005 Special Education Expenditures Program (SEEP) indicates that the cost per student in special education ranges from a low of \$10,558 for students with learning disabilities to a high of \$20,095 for students with multiple disabilities. The average cost per pupil for a regular education with no special education services is \$6,556. Therefore, the average expenditure for students with learning disabilities is 1.6 times that of a general education student.

Careful attention must be given as well to combinations of students with disabilities in a mainstreamed classroom. For example, a student with conduct disorder may not combine well with a student with autism, while putting many children with dyslexia in the same class may prove to be particularly efficient.

9.5 Special Consequences for Deaf Students.

Deafness is a low-incidence disability, which means that a deaf child will often be the only student in the classroom with hearing loss. This leads to a special set of issues in the mainstream classroom. While students with other disabilities may experience isolation and bullying by their non-disabled peers, they often share a common language. This is not the case for deaf students. Very few people in the mainstream academic setting know sign language, which means the communication barrier is large and can have negative effects on both academic achievement and social development.

- *Social skills* are key to a child's healthy development and later success as an adult. Although many studies find good academic results for deaf children placed in a mainstream classroom, research also shows that mainstreamed deaf children experience higher degrees of isolation and psychological problems in comparison to deaf students who associate with other deaf peers. In order for friendships to form, communication is a

necessity. For deaf children unable to use effective communication methods with the people around them, the difficulty in acquiring new friendships typically leads to isolation and a decrease in self-esteem. A study of preschool children showed that hearing preschoolers did not appear to adjust how they communicated with deaf children. Instead, they continued to use simple speech, which was effective with hearing, but not deaf, partners. This shows the isolation of the deaf child, and discredits the idea that the hearing and deaf child's communication skills will be enhanced by interaction with one another. In many cases, hearing children do not understand what it means when another child is deaf. This leads to frustration when a deaf child's speech is not clear or when the deaf child asks for continuous repetition. Communication strategies that are culturally acceptable to the deaf child, such as banging on a table or physically touching another person, can also cause the deaf child to be rejected by his or her peers because such behaviors are not always considered acceptable in mainstreaming hearing culture. Research has suggested that the placement of a deaf child in special schools or classes may be more desirable for deaf students than for those with other disabilities. This is primarily because of the greater social benefits for the students.

- The *residual knowledge* that hearing children can access is often lost on deaf children. A hearing child can listen in on adult conversations, TV, radio and the news to learn things that are not specifically taught or told to them. This is not the case with the deaf child, who, in a hearing environment, can only learn what is directly communicated to them. This often leads to gaps in general knowledge, which can be both harmful to academic success and social interactions.
- The *Effect of Mainstreaming on Deaf Culture* is also a key issue for Deaf culture advocates. The rate of children enrolled in residential schools for the deaf is declining, as many hearing parents send their child to a mainstream school in hopes of preparing their child for life in the hearing world. In the past, Deaf schools and clubs served as the center for Deaf culture. Traditions, stories, and values developed and were fostered in

these settings, but because of the low incidence of deafness, this same environment cannot be duplicated in the mainstream setting. Aside from the decreased socialization of a deaf child in a hearing school, Deaf community advocates also worry that the disappearance of residential Deaf schools will lead to a weakening of Deaf culture and of the community.

9.6 Alternatives: What Mainstreaming is Not ?

The alternatives to mainstreaming for special needs students are separation, inclusion, and excluding the student from school. Normally, the student's individual needs are the driving force behind selecting mainstreaming or another style of education.

- Mainstreaming does not involve putting a child full-time in a special school-Mainstreaming does not involve placing a child full-time in a regular classroom. A student who spends the entire day in a regular classroom with non-disabled peers is considered fully included. Most students with mild levels of disabilities such as dyslexia or attention deficit disorder, or with non-cognitive disabilities such as diabetes are fully included.
- Mainstreaming does not involve teaching the child outside of school- A student who is taught in an institution (such as a hospital) or at home (such as while recovering from a serious illness) is excluded. Such a student may receive one-on-one instruction or may attend small group instruction. A student who is excluded from school may or may not have been expelled from the school.

9.8 Mainstream Education for Disabled Children

For over a century the majority of disabled children have been educated in special schools, excluded from their non-disabled peers. It is only in the last 30 years that this has started to change as more disabled children have been increasingly given the right to a mainstream education as this form of

apartheid is slowly exposed and removed. Strongly believe in mainstream education because of the right of non-disabled and disabled children to be educated together. I can quickly tell those disabled adults who have attended mainstream schools, as opposed to special schools, simply by their posture. Mainstream schools provide disabled children with the same expectations to succeed as their peers, the social skills needed to compete in a non-disabled world which special schools fail to do, and toughens disabled children up for the real world, not to say anyone deserves to be bullied.

My belief in mainstream education does not mean I do not believe in special education because I do strongly believe that everyone should get the specific education they need. I believe the criticisms against mainstream education by parents and others are because many children are integrated into their schools rather than included. Integration is when the child is required to simply fit in with the school and no consideration of their needs is taken into account. This is not proper inclusion, where the school reasonably adapts its policies, practices and teaching methods to accommodate the specific needs of the child. There is always going to be some middle ground where the child must learn how to adapt to the school in the same way they will need to adapt to other situations throughout their life to succeed.

My concern with the government is that they have turned the issue into a matter of parental choice, where parents of disabled children should have the right to choose a special or mainstream school, arguing they wish to end the 'bias towards inclusion'. This standpoint assumes in this instance as opposed to any other, parents are suitably experienced to make decisions that would determine whether or not their child will have any opportunity to be properly included into society.

It is my belief that currently the special schools 'market' is dominated by third sector providers where the aim of the school is to simply prepare children for adult day services that are also dominated by the third sector. If a child is inappropriately labeled as having learning difficulties at an early age and then denied a proper education because of that label, they will become adults where

it will be hard to determine whether they have learning difficulties because of an impairment or from the fact they have not received a proper education. Special schools are 'sold' to parents based on promises and exploiting the parents' fears of how their disabled child will cope in the real world.

9.10 Let us sum up

Like everything, special education has been ruled by fashion and trends over the years, rather than anything else. The policy of free schools, allowing parents and others to set up their own special schools on any ideology they choose, is a further step into this consumerism 'fad' culture where the parent's want come before the needs of the child. The segregation of disabled children from mainstream education for over a century has caused immense damage to the fabric of society that can only be mended when all disabled children are fully included into mainstream education as standard policy, not just as a right but as a norm. At the same time, the education system must be responsive of the individual needs of children, disabled or not. Proper inclusion into mainstream schools must be the only 'choice' desired by everyone, for the benefit of everyone.

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LESSON NO 10: INTEGRATED EDUCATION

Lesson Structure

10.1 Introduction

10.2 Objectives

10.3 Integration and assimilation

10.4 Teacher training programme

10.5 Breaking the barrier

10.6 The road ahead

10.7 Difference: Inclusive, Integrated and Segregated Education

10.8 Let Us Sum Up

10.1 Introduction

Poverty and disability have a cause and effect relationship with each other, one thing leading to another. Poverty-disability combination results in a condition of "simultaneous deprivation". So unless and until the people with special needs are provided with education, they would not be able to gain financial independence and the real kind of rehabilitation would not take place. Keeping in view this challenge, a large number of less developed and developing countries have started framing and executing policies to promote the educational facilities for the physically and mentally challenged students.

But the right kind of path to be followed in this respect should be of providing "Inclusive kind of Education". It means that the students with some or the other kinds of handicap are served in the general settings rather than being educated in the segregated settings or "Special Schools". Students with disabilities (mild to moderate) should be provided with facilities to attend regular schools under the responsibilities of regular teachers.

10.2 Objectives

After reading this lesson, you should be able to:

- Explain Integration and assimilation.
- Know the Teacher training programmes of integrated education
- Discuss Breaking the barrier
- Know The road ahead of integrated education
- Differentiate : Inclusive, Integrated and Segregated Education.

10.3 Integration and Assimilation

With this objective of " Education for All", and with a purpose of integrating the physically and mentally challenged people in the society as equal members, the government of India has brought about a scheme known as Integrated Education for Disabled Children(IEDC). The overall aim of the program is to enable such people to face life courageously and develop a level of self-confidence thus bringing them into mainstream of the society. IEDC is a centrally sponsored scheme which aims to provide Educational Opportunities to the "not so abled" children. It has been regarded as one of the major

initiatives from the Government of India to promote "integrated education". This program was initiated in 1974 by the Ministry of Welfare, Central Government. Under this program children were to be provided with financial support for books, stationery, school uniforms, transportation, special equipment and aids. The state governments were provided with 50 percent of the financial assistance to implement this program in regular schools. But due to certain limitations and shortcomings like non-availability of trained and experienced teachers, lack of awareness of the problems of disabled children and their educational needs, and non-availability of equipment and educational materials, the program met with little success. Moreover there was a lack of coordination among the various departments for its proper implementation. The IEDC program was revised in 1992. In the revised program 100 percent assistance was available to schools involved in the "integration" of students with disabilities. Various NGO's are also now fully funded to implement the program. IEDC is being implemented in almost all the States and Union Territories

10.4 Teacher Training Programmes

Teacher Training Program

This involves a three-level training approach:

- A five day orientation course for all the teachers in the regular schools.
- six-week intensive training course for 10 % of the teachers.
- one-year multi-category training program for eight to ten regular school teachers.

Now improved program planning and better management skills are available to teachers. The capacity of various states to implement integration programs

has been enhanced. Both regular school teachers and students have become more receptive toward students with disabilities which seem quite encouraging.

Expenses and allowance: A disabled child may be given the following kinds of facilities at the rates prevalent in the State/UT concerned:

- Actual expenses on books and stationery up to RS 400 per annum.
- Actual expenses on uniform up to RS 200 per annum.
- Transport allowance up to RS 50 per month. If a disabled child admitted under the scheme resides in the school hostel within the school premises, no transportation charges would be admissible.
- Reader allowance of RS 50 per month in case of blind children after Class V.
- Sports allowance for severely handicapped with lower extremity disability at the rate of RS 75 per month.
- Actual cost of equipment subject to a maximum of RS 2000 per student for a period of five years.
- In the case of severely orthopedically handicapped children, one attendant should be there for 10 children, who may be given the standard scale of pay prescribed for Class IV employees in the State/UT concerned.
- Disabled children residing in school hostels within the same institution where they are studying may also be paid boarding and lodging charges. The disabled children whose parental income does not exceed RS 5000 per month may be paid actual boarding and lodging charges subject to a maximum of RS 200 per month. However, unless the

required educational facilities are not available disabled children should generally not be placed in hostels.

- Orthopedically handicapped children residing in school hostels may need the assistance of a helper or an "ayah". A special pay of RS 50 per month is admissible to any employee of the hostel willing to extend such help to children in addition to his/her duties.

10.5 Breaking the Barrier

Breaking the Barrier: It is mandatory to remove all the architectural barriers or to modify existing architectural facilities, so that orthopedically disabled children are provided with an easy access to the school premises. Schools taking initiative in this respect would also be provided grants. State Government/UT Administrations/other implementing agencies are also instructed to offer relaxation of rules relating to admissions, minimum or maximum age limit for admissions, promotions, examination procedures, etc. for improving access of the disabled children to education. Provision for admission of disabled children older than the normal eligibility (up to 8-9 years instead of 6 years) was proposed.

10.6 The Road Ahead

The road ahead: If fully implemented, this scheme has capability to change the educational status of more than 30 million children with disabilities who currently do not have access to any form of education. However, all this involves quite a large number of challenges both at micro as well as macro

levels for the implementing authorities and the society as a whole. Such challenges and hurdles involve the problem of providing training to the key stakeholders, inadequate resources, innovative training programs, co-operation and collaboration among different ministries, coordination between schools and universities etc. All these efforts are just a few steps that have been taken in providing the required educational facilities to the disabled children. Still a lot needs to be done and accomplished. But this can't be done till the attitudes and thinking of the non-disabled get revised. "The more severe and visible the deformity is, the greater is the fear of contagion, hence the attitudes of aversion and segregation towards the crippled". Some of the religious institutions inculcate dogmatic ideas which lead to the obstacles attempting to prevent inclusion of students with disabilities into regular schools. So it is imperative that prejudices and irrational myths concerning disability get alleviated before the actual task of inclusion begins.

10.7 Legal Difference: Inclusive, Integrated and Segregated Education

Globally, children with disabilities count for one-third of all children out-of-school. In developing countries, the numbers are even more staggering, with 90% of all children with disabilities out-of-school. Although it is imperative that children with disabilities receive an education, it is also being recognized by bodies around the world that the type of education that children with disabilities receive is just as important.

There are three basic types of Special Education, although many different models of classroom organization and teaching are available within each type.

Segregated education occurs when students with disabilities learn completely separate from their peers. Often, especially in “developing” countries, segregated education takes place in the form of special schools created specifically for the education of students with disabilities, or in completely separate classrooms for students with disabilities. Segregated education pinpoints the child as the problem in the system, the impediment to learning, and as a result, these students will often receive a completely different curriculum and different methods of testing, rather than being taught the same curriculum as their peers. This separation in school often creates separation within other areas of life as well.

Integrated education is similar to inclusive education, but without any ideological commitment to equity. Integration places students in a mainstream classroom with “some adaptations and resources.” However, students are expected to “fit in with pre-existing structures, attitudes and an unaltered environment.” Integration is often mistaken for inclusion because students are placed in a mainstream classroom, which is a step towards inclusion. However, if there has not been a paradigm shift within the school and these students are not perceived as equals, if curriculum is not taught for the understanding of all instead of some, then the students are integrated, but not included in the school.

10.8 Let Us Sum Up

Inclusive education “is a process of strengthening the capacity of the education system to reach out to all learners.” “It involves restructuring the culture, policies and practices in schools so that they can respond to the diversity of

students in their locality.” For a school to be inclusive, the attitudes of everyone in the school, including administrators, teachers, and other students, are positive towards students with disabilities. Inclusive education means that all children, regardless of their ability level, are included in a mainstream classroom, or in the most appropriate or least restrictive environment (LRE), that students of all ability levels are taught as equals, and that teachers must adjust their curriculum and teaching methodologies so that all students benefit. This also avoids wasting resources, and “shattered hopes,” which often occurs in classrooms that follow “one size fits all” approach. Studies have shown that systems that are truly inclusive reduce drop-out rates and repetition of grades, and have higher average levels of achievement, compared to systems that are not inclusive. People who believe in inclusive education believe that the education system is the impediment to learning for a child, and that every child is capable of learning! It is important to note that within government documents and scholarly publications in India, the three different terms-segregation, integration and inclusion-are often used interchangeably, or with different definitions than those attached to the three words in the United States. This could stem from a variety of reasons, although a lack of education on the original meanings connected to the words seems to be the most logical explanation.

LESSON NO 11: REHABILITATION COUNCIL OF INDIA (1992)

Lesson Structure

11.1 Introduction

11.2 Objectives

11.3 Constitution and Incorporation of Rehabilitation Council of India

11.4 Term of office of Chairperson and Members

11.5 Functions of Council

11.6 Objectives of Council

11.7 Let Us Sum Up

11.1 Introduction

The Rehabilitation Council of India(RCI) was set up as a registered society in 1986.On September,1992 the RCI Act was enacted by Parliament and it became a Statutory Body on 22 June 1993.The Act was amended by Parliament in 2000 to make it more broad based. The mandate given to RCI is to regulate and monitor services given to persons with disability, to standardize syllabi and 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.

11.2 Objectives

After reading this lesson, you should be able to know:

- Constitution and incorporation of Rehabilitation Council of India
- Term of office of Chairperson and Members.
- Functions of Rehabilitation council of India.
- Objectives of Rehabilitation council of India.

11.3 Constitution and incorporation of RCI

With effect from such date as the Central Government may, by notification, appoint in this behalf, there shall be constituted for the purposes of this Act a Council to be called the Rehabilitation Council of India. The Council shall be a body corporate by the name aforesaid, having perpetual succession and a common seal, with power, subject to the provisions of this Act, to acquire, hold and dispose of property both movable and immovable and to contract and shall by the said name sue and be sued. The Council shall consist of the following members, namely:-

1. A Chairperson, from amongst the persons having experience in social work or rehabilitation, to be appointed by the Central Govt.;

2. Three members to be appointed by the Central Government to represent respectively the Ministers of the Central Government dealing with - Welfare, Health and Finance
3. One member to be appointed by the Central Government to represent the University Grants Commission;
4. One member to be appointed by the Central Government to represent the Directors General of Indian Council of Medical Research;
5. 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.
6. Such number of members not exceeding six as many be appointed by the Central Government from amongst the rehabilitation professionals representatives working in voluntary organization;
7. Such number of members not exceeding six as many 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.
8. Three members of Parliament of whom two shall be elected by the house of the People and one by the Council of States; 1. 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;
2. **The Members-Secretary ex-officio.**
9. The office of member of the board all not disqualifies its holder for being chosen as, or for being a Member of either House of Parliament.

11.4 Terms of Office of Chairperson and Members

Term of office of Chairperson and Members The Chairperson or a member shall hold an office for a term of two years from the date of his appointment or until his successor shall have been duly appointed whichever is longer A casual vacancy in the Council shall be filled in accordance with the provisions of sections 3 and the person so appointed shall hold office only for the remainder of the term for which the member in whose place he was appointed would have held that office The Council shall meet at least once in each year at such time and place as may be appointed by the Council and shall observe such rules of procedure in the transaction of business at a meeting as may be presented The Chairperson or, if for any reason, he is unable to attend the meeting of the council, any member elected by the members present from amongst themselves at the meeting shall preside at the meeting.

Disqualification All questions which come up before any meeting of the Council shall be decided by a majority of votes of the members present and voting and in the event of an equality of votes, the Chairperson, or in his absence, the person presiding shall have a second or casting vote No. Person shall be a member if he-

1. Is, or becomes unsound mind or is so declared by a competent court; or
2. Is, or has been, convicted of any offence which, in the opinion of the Central Government, involves moral turpitude; or
3. Is, or at any time has been adjudicated as insolvent

11.5 Functions of Council

1. Recognition of qualifications granted by University etc., in India for Rehabilitation Professionals- The qualification granted by any University or other institution in India which are included in the Schedule shall be recognized qualifications for rehabilitation professional Any University or other institution which grants qualification for the rehabilitation professional 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 qualifications only when granted after a specified date.

2. Recognition of qualification by Institutions outside India- The Council may enter into negotiation with the authority in any country outside India for settling of a scheme or reciprocity for the recognition of qualifications, and the 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.

3. Rights of persons possessing qualifications included in the schedule to

be enrolled- Subject to the other provisions contained in this Act, any

qualification included in the Schedule shall be sufficient qualifications for enrolment on the Register. No person, other than the rehabilitation professional who processes a recognized rehabilitation qualification and is enrolled in the Register-

1. 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;
2. Shall practice as rehabilitation professional anywhere in India;
3. Shall be entitled to sign or authenticate any certificate required by any law to be signed or authenticated by rehabilitation professional
4. Shall be entitled to give any evidence in any court as an expert under section 45 of the Indian Evidence Act, 1872 in any matter relating to the handicapped: Provided that if a person possesses the recognized rehabilitation professional qualification 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 for six months, till such application is disposed of. Any person who acts in contravention of any provision of subsection (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.

4. Power to require information as to courses of study and examination- 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

5. Inspectors at examinations- The Council shall appoint such member of Inspector as it may deem requisite to inspect any University or Institution where education for practicing as rehabilitation professional 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. 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. The Council shall forward a copy of the report of the Inspector under subsection (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.

6. Visitors Examination- The Council may appoint such number Visitors as it may deem requisite to inspect any University or institution wherein education for rehabilitation professional is given or attend any examination for the purpose of granting recognized rehabilitation qualifications. Any persons 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. 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. 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

7. Withdrawal of recognition- When upon report by the Inspector or the Visitor it appears to the Council:-

1. 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
2. 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 representation to that effect to the Central Government 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 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.

8. Minimum standards of education- The Council may prescribed the minimum standards of education required for granting recognized rehabilitation qualification by Universities or institutions in India.

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

10-Privileges of persons who are registered on Register- Subject to the condition and restriction laid down in this Act regarding engagement in the area of rehabilitation of the handicapped by person 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 is respect of medicaments or other appliances or any fees to which he may be entitled

11. Professional Conduct and removal of names from Register- The Council may prescribe standards of professional conduct and etiquette and a code of ethics for rehabilitation professionals. Regulations made by the Council under sub-section (1) may specify which violation 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. 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 –

1. That his name has been entered in the Register by error or on account of misrepresentation or suppression of a material fact;
2. that he has convicted of any offence or has been guilty of any infamous conduct in any professional respect, or has violated the standard 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 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

12-Appeal against Order of removal from Register- 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 payment of a fee, as may be prescribed to the Central Government whose decision thereon shall be final. 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

period of thirty days if the appellant satisfies the Central Government that he had sufficient cause for not preferring the appeal within the period.

13. Register- It shall be the duty of the Member-Secretary to keep and maintain the Register in accordance with the provision 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. 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.

14. Information to be furnished by council and publication thereof- 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 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.

15. Cognizance of offenses- 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

16. Protection of action taken in good faith- 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.

17. Employees of Council to be public servants- The Chairperson members, Member-Secretary, officers and other employees of the Council

shall, while acting or purporting to act in pursuance 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.

18. Power to make rule-s The Central Government may, by notification, make rules to carry out the purposes of this Act.

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

1. The management of the property of the council;
2. The maintenance and audit of the account of the council;
3. The resignation of members of the council;
4. The powers and duties of the Chairperson;
5. The rules of procedure in the transaction business under sub-section (3) of section 4;
6. The function of the Executive Committee and other committee constituted under section 7;
7. The powers and duties of the Member-Secretary under sub-section (1) of the section 8;
8. The qualification, appointment powers and duties of, and procedure to be followed by Inspectors and Visitors;
9. The courses and period of study or of training to be undertaken the subject of examination and standards of proficiency therein to be obtained in any university or any institution for grant of recognized rehabilitation qualification:

10. The standards of staff, equipment, accommodation, training and other facilities for study or training of the rehabilitation professionals;
11. The conduct of examination, qualification of examiners, and the condition of the admission to such examinations;
12. The standards of professional conduct and etiquette and code of ethics to be observed by rehabilitation professional under sub-section (1) of section 21;
13. The particulars to be stated, and proof of qualification to be given, in application for registration under this Act;
14. The manner in which and the condition subject to which an appeal may be preferred under sub-section (1) of section 22;
15. the fees to be paid on application and appeals under this Act;
16. any other matter which is to be, or may be, prescribed.

20. Laying of rules and regulations before Parliament- Every rule and every regulation made under this Act shall be laid as soon as may be after it is made, before each House of Parliament, while it is in session for a total period of thirty days which may be comprised in one session or in two or more successive sessions and if, before the expiry of the session immediately following the session or the successive session aforesaid, both Houses agree in making any modification in the rule or regulation or both Houses agree that the rule or regulation should not be made, the rule or regulation shall thereafter have effect only in such modified form or be of no effect, as the case may be; so, however that any such modification or annulment shall be without prejudice to the validity of anything previously done under that rule or regulation.

11.6 Objectives of the Council

Following are the different objective of Rehabilitation council of India act 1992.

- To regulate the training policies and programmes in the field of rehabilitation of persons with disabilities
- To bring about standardization of training courses for professionals dealing with persons with disabilities
- To prescribe minimum standards of education and training of various categories of professionals/ personnel dealing with people with disabilities
- To regulate these standards in all training institutions uniformly throughout the country
- To recognize institutions/ organizations/ universities running master's degree/ bachelor's degree/ P.G. Diploma/ Diploma/ Certificate courses in the field of rehabilitation of persons with disabilities
- To recognize degree/diploma/certificate awarded by foreign universities/ institutions on reciprocal basis
- To promote research in Rehabilitation and Special Education
- To maintain Central Rehabilitation Register for registration of professionals/ personnel
- To collect information on a regular basis on education and training in the field of rehabilitation of people with disabilities from institutions in India and abroad
- To encourage continuing education in the field of rehabilitation and special education by way of collaboration with organizations working in the field of disability.

- To recognize Vocational Rehabilitation Centers as manpower development centers
- To register vocational instructors and other personnel working in the Vocational Rehabilitation Centers
- To recognize the national institutes and apex institutions on disability as manpower development centers.
- To register personnel working in national institutes and apex institutions on disability under the Ministry of Social Justice & Empowerment.

10.1 Let Us Sum Up

The Council shall be a body corporate by the name aforesaid, having perpetual succession and a common seal, with power, subject to the provisions of this Act, to acquire, hold and dispose of property both movable and immovable and to contract and shall by the said name sue and be sued.

**LESSON NO 12: SARVA SHIKSHA ABHIYAN
(SSA-2000)**

Lesson Structure

12.1 Introduction

12.2 Objectives

12.3 Components of SSA

12.4 SSA at different levels

12.5 Sarva Shiksha Abhiyan: “Education for All” for the children with disability

12.6 SSA and Education of children with special needs

12.7 Let Us Sum Up

12.1 Introduction

Sarva Shiksha Abhiyan (SSA) is the comprehensive and integrated flagship programme of Government of India, to attain Universal Elementary Education (UEE) in the country in a mission mode. Launched in partnership with the State Governments and Local Self-Governments, SSA aims to provide useful and relevant education to all children in the 6-14 age groups by 2010.

12.2 Objectives

After reading this lesson, you should be able to know:

- The various Components of SSA
- SSA at different levels
- Sarva Shiksha Abhiyan: “Education for All” for the children with disability
- SSA and Education of children with special needs

12.3 Components of SSA

SSA was launched in 2000-01 with the objectives of

- (a) all children in school, Education Guarantee Centre, Alternative School, ‘Back-to-School’ camp by 2003 (later amended to 2005);
- (b) All children complete five years of primary schooling by 2007;
- (c) All children complete eight years of elementary schooling by 2010;
- (d) Focus on elementary education of satisfactory quality with emphasis on education for life;
- (e) Bridge all gender and social category gaps at the primary and upper primary stage by 2007; and
- (f) Universal retention by 2010.

The components of SSA include: (a) preparatory activities for micro-planning, household surveys, studies, community mobilization, school-based activities, office equipment, training and orientation at all levels. (b) appointment of teachers, (c) opening of new primary and alternative schooling facility like

EGS/AIE centers, (d) opening of upper primary schools (e) constructing additional classrooms, schools and other facilities (f) free textbooks to all children, (g) maintenance and repair of school buildings (h) Teaching Learning Equipment for primary schools on up-gradation of EGS to regular schools or setting up of a new primary school and for new upper primary schools, (i) school grant, (j) teacher grant, (k) teachers' training, (l) opening of SIEMAT, (m) training of community leaders, (n) provision for children with special needs, (o) Research, Evaluation, Monitoring & Supervision, (p) management cost, (q) learning enhancement programme (LEP) (r) innovative activity for girl's education, early childhood care & education, interventions for children belonging to SC/ST, minority community, deprived children in urban areas and computer education specially for upper primary level (s) setting up of BRCs/CRCs, (t) interventions for out of school children.

The SSA programme covers a wide gamut of activities in all the States and Union Territories and a need has been felt to bring into focus at one place appropriate financial management systems and procurement procedures for the proper implementation and management of the programme. The responsibility for implementation of the programme is vested at the national level in the Department of School Education and Literacy (DSE&L), Ministry of Human Resource Development, Government of India. At the national level, there is a General Council, an Executive Committee and a Project Approval Board (PAB). The work relating to policy, appraisal of plans, release of funds to State Implementation Societies, overall review of the programme, technical support to States, research, evaluation, supervision, monitoring, etc; is undertaken by the Department of School Education and Literacy.

12.4 SSA at different levels

SSA at different levels

At the State level, the programme is implemented in a Mission mode by a State Implementation Society registered under the Societies Registration Act 1860 (21 of 1860) with a General Council and an Executive Committee.

At the district level, the District Project Office headed by the district Collector or Chief Executive Officer as the case may be, implements the programme. It interacts with the Panchayati Raj Institutions in the district, namely the Zilla Parishad, the Block Development Committee and the Village Panchayats.

At the village level, the critical unit is the Village Education Committee, which assists the basic education system in securing the cooperation and participation of the local community and at the same time oversees the implementation of SSA in the village. VECs are assisted by other grass root level structures like SDMC, MTA, PTA women's groups etc.

The Government of India has approved the "National Programme for Education of Girls at Elementary Level (NPEGEL)" as an additional component under SSA for education of girls at elementary level. The SSA State Implementing Society is the implementing agency of the NPEGEL at State level. In States where Mahila Samkhya (MS) programme is operational, the SSA Society will have NPEGEL implemented through the MS Society. The Kasturba Gandhi Balika Vidyalaya (KGBV) scheme was launched in July 2004 for setting up residential schools at upper primary level for girls belonging predominantly to the SC, ST, OBC and minority communities. The

scheme was implemented as a separate scheme for two years but from 1st April, 2007, has been merged with Sarva Shiksha Abhiyan as a separate component of the programme. The scheme is being implemented in educationally backward blocks of the country where the female rural literacy is below the national average (46.13%) and gender gap in literacy is above the national average (21.67%). Such residential schools will be set up only in those backward blocks that do not have residential schools at upper primary level for girls under any other scheme of Ministry of Social Justice & Empowerment, Ministry of Tribal Affairs or the State Government. Further, the scope of the Scheme is enlarged to cover the blocks that have rural female literacy below 30% and urban areas with female literacy below the national average (53.67%; Census 2001).

12.5 SSA

In 2002 the 86th amendment to the constitution was made, mandating free and compulsory education to all children ages 6-14.) Resulting from this change, the Millennium Development Goals (MDGs), the fairly new People with Disabilities Act, and the past 50 years of attempted legislation and projects, the Government of India, in conjunction with the World Bank, created the Sarva Shiksha Abhiyan (SSA), an initiative which translates to "Education for All." SSA is not a disability-specific program, but rather a disability-inclusive program, with specific aspects that benefit people with disabilities. The program seeks to open new schools in those habitations which do not have schooling facilities and strengthen existing school infrastructure through provision of additional class rooms, toilets, drinking water, maintenance grant

and school improvement grants. Existing schools with inadequate teacher strength are provided with additional teachers, while the capacity of existing teachers is being strengthened by extensive training, grants for developing teaching-learning materials and strengthening of the academic support structure at a cluster, block and district level.

The goal of SSA was to have Universal Education by 2010 for children between the ages of 6-14.) This goal was not reached, but the program still continues to run. There are three major parts of this program that benefit people with disabilities. The first is Rs1200 allocation per annum per child with a disability. This money is supposed to go towards assistive devices, materials in alternative learning formats, and anything else that would assist children with a disability in being included in a mainstream classroom. However, the money is funneled through the district or school level, and it is therefore impossible to ensure that it will be spent on the child with a disability. Under SSA, assistive devices are technically a “right” and can be obtained outside of the Rs1200 allocation. However, in reality, SSA often provides these devices through collaboration with outside programs, and many of these outside programs have their own restrictions on how often a child with a disability can obtain assistive devices, making these devices a privilege, rather than a right. For example, one of the programs that SSA collaborate with, such as ADIP (a program run by the Ministry of Social Justice and Empowerment), require that children with a disability have a doctor’s note, be in a particular economic bracket, and after the age of twelve can only receive one every three years. In addition, despite the stated importance of this population, less than 1%

of the total money allocated for SSA is being used for purposes of inclusion.

The second part of SSA that is designed to include students with a disability is the policy that each district will formulate its own plan for children with disabilities; and the final part is that key institutions will be encouraged to collaborate to further support these students with disabilities.

In addition, SSA has a “no rejection” policy, meaning that children between ages 6-14 cannot be turned away from schools for many reasons, including for having a disability. The “no rejection” policy is inclusive, but it directly contradicts the People with Disabilities Act, which calls for the most appropriate environment for the student. One positive aspect of SSA is the Government of India and World Bank’s attempts to accurately monitor the effectiveness and results stemming from the program. There are a wide variety of inclusive education indicators that are collected, from quarterly national IE workshops, use of NCERT monitoring tools on attendance and learning achievement of CSN, joint review missions under SSA, and regular visits by the SSA technical support staff. Although these attempts are seemingly thorough and good intentioned, there are still discrepancies between SSA data on inclusive education and data from other agencies, such as DISE, NSS and the Government of India census.

12.6 SSA and Education of Children with Special Needs.

SSA will ensure that every child with special needs (CWSN), irrespective of the kind, category and degree of disability, is provided education in an

appropriate environment. SSA will adopt 'zero rejection' policy so that no child is left out of the education system.

Approaches and Options: The thrust of SSA will be on providing integrated and inclusive education to all children with special needs in general schools. It will also support a wide range of approaches, options and strategies for education of children with special needs. This includes education through open learning system and open schools, non formal and alternative schooling, 27 distance education and learning, special schools, wherever necessary, home based education, itinerant teacher model, remedial teaching, part time classes, community based rehabilitations (CBR) and vocational education and cooperative programmes.

Components: The following activities could form components of the programme:

- (a) **Identification of children with special needs:** Identification of children with special needs should become an integral part of the micro-planning and household surveys. A concerted drive to identify children with special needs should be undertaken through PHCs, ICDS, ECCE centers and other school readiness programmes.
- (b) **Functional and formal assessment** of each identified child should be carried out. A team should be constituted at every block to carry out this assessment and recommend most appropriate placement for every child with special needs.
- (c) **Educational Placement:** As far as possible, every child with special needs should be placed in regular schools, with needed support services.
- (d) **Aids and appliances:** All children requiring assistive devices should be provided with aids and appliances, obtained as far as possible through

convergence with the Ministry of Social Justice and Empowerment, State Welfare Departments, National Institutions or NGOs.

(e) **Support services:** Support services like physical access, resource rooms in the existing BRC/ CRC, special equipment, reading material, special educational techniques, remedial teaching, curricular adaptation, adapted teaching strategies and other services like physiotherapy, occupational therapy, speech therapy could be provided

(f) **Teacher training:** Intensive teacher training should be undertaken to sensitise regular teachers on effective classroom management of children with special needs. This training should be recurrent at block/cluster levels and integrated with the on-going in-service teacher training schedules in SSA. All training modules at SCERT, DIET and BRC level should include a suitable component on education of children with special needs.

(g) **Resource support:** Resource support could be given by teachers working in special schools. Wherever necessary, specially trained resource teachers should be appointed, particularly for teaching special skills to children with special needs. Wherever this option is not feasible, long term training of regular teachers should be undertaken.

(h) **Individualized Educational Plan (IEP):** An IEP should be prepared by the teacher for every child with special needs in consultation with parents and experts. Its implementation should be monitored from time to time. The programme should test the effectiveness of various 28 strategies and models by measuring the learning achievement of children with special needs periodically, after developing indicators.

(i) Parental training and community mobilization: Parents of children with disabilities should receive counseling and training on how to bring them up and teach them basic survival skills. Strong advocacy and awareness programmes should form a part of strategy to educate every child with special needs. A component on disability should be included in all the modules for parents, VEC and community.

(j) Planning and management: Resource groups should be constituted at state, district levels to undertake effective planning and management of the programmes in collaboration with PRIs and NGOs. An apex level resource group at the national level to provide guidance, technical and academic support to children with special needs under SSA may be constituted.

(k) Strengthening of special schools: Wherever necessary, special schools may be strengthened to obtain their resource support, in convergence with departments and agencies working in that area.

(l) Removal of Architectural barriers: Architectural barriers in schools will be removed for easy access. Efforts will be taken to provide disable-friendly facilities in schools and educational institutions. Development of innovative designs for schools to provide an enabling environment for children with special needs should also be a part of the programme. All new school buildings should be constructed with barrier-free features.

(m) Research: SSA will encourage research in all areas of education of children with special needs including research for designing and developing new assistive devices, teaching aids special teaching material and other items necessary to give a child with disability equal opportunities in education.

(n) Monitoring and evaluation: On-going monitoring and evaluation should be carried out to refine the programme from time to time. For this, appropriate monitoring mechanisms should be devised at every level and field tested at regular intervals.

(o) Girls with disabilities: Special emphasis must be given to education of girls with disabilities. 35.4 Convergence: All activities, interventions and approaches in the area of education for children with special needs will be implemented in convergence with existing schemes like Assistance to Disabled Persons for purchase/fittings of Aids/Appliances (ADIP), and in coordination with the Ministry of Social Justice and Empowerment, State Department of Welfare, National Institutions and NGOs.

Expenditure up to Rs.1200 per disabled child could be incurred in a financial year to meet the special learning needs of such children. The ceiling on expenditure per disabled child will apply at the district level.

Rs. 1200/- per child is applicable to all disabled children identified during survey.

Any amount in cash shall not be given to the children with special needs. The district SSA authorities should spend the amount of Rs. 1200/- p.a. per child on providing special services to children with special needs in schools, EGS schools and AIE centers.

As far as possible, every child with special needs should be placed in regular schools, with needed support services. It will also support a wide range of approaches, options and strategies for education of children with special needs. This includes education through open learning system and open schools, non-formal and alternative schooling, distance education and learning, special schools, wherever necessary, home based education,

itinerant teacher model, remedial teaching, part time classes, community based rehabilitation and vocational education and cooperative programmes. All disabled children should be integrated in the existing main stream of education and as far as possible no separate schools for disabled children should be opened. However, those CWSN who cannot be integrated into regular schools on account of their disability may be referred to a special school.

Engagement of experts for IED is covered under management cost. All these components, their implementation mechanism along with related activities have been explained in detail in the Inclusive Education Manual entitled: Responding to Children with Special Needs - A Manual for Planning and Implementation of Inclusive Education in Sarva Shiksha Abhiyan. The data on the number of disabled children identified should be furnished.

10.1 Let Us Sum Up

Briefly speaking, Sarva Shiksha Abhiyan (SSA) is the comprehensive and integrated flagship programme of Government of India, to attain Universal Elementary Education (UEE) in the country in a mission mode. Launched in partnership with the State Governments and Local Self-Governments, SSA aims to provide useful and relevant education to all children in the 6-14 age groups by 2010.

**LESSON NO 13: National Curriculum Framework
(NCF-2005)**

Lesson Structure

- 13.1 Introduction**
- 13.2 Objectives**
- 13.3 Vision and perspective**
- 13.4 Guiding principles**
- 13.5 Focus on child as an active learner**
- 13.6 Curricular areas, school stages and Assessment**
- 13.7 School and Classroom environment**
- 13.8 Systematic reforms**
- 13.9 Examination reforms, highlights**
- 13.10 Teacher Education Reforms emphasize on preparation of teacher**
- 13.11 Guidelines for Syllabus Development**
- 13.12 Development of Support Material**
- 13.13 Aims of education**
- 13.14 Guidelines teaching of languages in schools by NCF-2005**
- 13.15 Let Us Sum Up**

13.1 Introduction

Introduction: NPE 1986 assigned a special role to NCERT in preparing and promoting NCF. Yash Pal Committee Report, 'Learning without Burden' (1993) observes that learning has become a source of burden and stress on children and their parents. Considering these observations, Executive Committee of NCERT decided at its meeting of July 14, 2004, to revise the National Curriculum Framework. The process of development of NCF was initiated in November, 2004 by setting up various structures like National Steering Committee Chaired by Prof. Yash Pal and twenty-one National Focus Groups on themes of curricular areas, systemic reforms and national concerns. Wide ranging deliberations and inputs from multiple sources involving different levels of stakeholders helped in shaping the draft of NCF. The draft NCF was translated into 22 languages listed in the VIII Schedule of the Constitution. The translated versions were widely disseminated and consultations with stakeholders at district and local level helped in developing the final draft. The NCF was approved by Central Advisory Board on Education in September, 2005.

13.2 Objectives

After reading this lesson, you should be able to know:

- Vision and perspective of NCF 2005.
- Guiding principles of NCF 2005.
- Focus on child as an active learner of NCF 2005.

- Curricular areas, school stages and Assessment of NCF 2005.
- School and Classroom environment of NCF 2005.
- Systematic reforms of NCF 2005.
- Teacher Education Reforms emphasize on preparation of teacher of NCF 2005.
- Guidelines for Syllabus Development of NCF 2005.
- Development of Support Material of NCF 2005.
- Aims of education of NCF 2005.
- Guidelines teaching of languages in schools by NCF-2005.

13.3 Policy Inclusion, Vision and Perspectives

A **policy of inclusion** needs to be implemented in all schools and throughout our education system. The participation of all children needs to be ensured in all spheres of their life in and outside the school. Schools need to become centers that prepare children for life and ensure that all children, especially the differently baled, children from marginalized sections, and children in difficult circumstances get the maximum benefit of this critical area of education. Opportunities to display talents and share these with peers are powerful tools in nurturing motivation and involvement among children. In our schools we tend to select some children over and over again. While this small group benefits from these opportunities, becoming more self - confident and visible in the school, other children experience repeated disappointment and progress

through school with a constant longing for recognition and peer approval. Excellence and ability may be singled out for appreciation, but at the same time opportunities need to be given to all children and their specific abilities need to be recognized and appreciated. This includes children with disabilities, who may need assistance or more time to complete their assigned tasks. It would be even better if, while planning for such activities, the teacher discusses them with all the children in the class, and ensures that each child is given an opportunity to contribute. When planning, therefore, teachers must pay special attention to ensuring the participation of all. This would become a marker of their effectiveness as teachers. Excessive emphasis on competitiveness and individual achievement is beginning to mark many of our schools, especially private schools catering to the urban middle classes. Very often, as soon as children join, houses are allocated to them. Thereafter, almost every activity in the school is counted for marks that go into house points, adding up to an end-of-the-year prize. Such 'house loyalties' seem to have the superficial effect of getting all children involved and excited about winning points for their houses, but also distorts educational aims, where excessive competitiveness promotes doing better than someone else as an aim, rather than excelling on one's own terms and for the satisfaction of doing something well. Often placed under the monitoring eye of other children, this system distorts social relations within schools, adversely affecting peer relations and undermining values such as cooperation and sensitivity to others. Teachers need to reflect on the extent to which they want the spirit of competition to enter into and permeate every aspect of school life performing more of a function in regulating and disciplining than in nurturing learning and interest. Schools also undermine the diverse capabilities and talents of children by categorizing them very early,

on narrow cognitive criteria. Instead of relating to each child as an individual, early in their lives children are placed on cognitive berths in the classroom: the 'stars', the average, the below - average, and the 'failures'. Most often they never have a chance to get off their berth by themselves. The demonizing effect of such labeling is devastating on children. Schools go to absurd lengths to make children internalize these labels, through verbal name calling such as 'dullard', segregating them in seating arrangements, and even creating markers that visually divide children into achievers and those who are unable to perform. The fear of not having the right answer keeps many children silent in the classroom, thus denying them an equal opportunity to participate and learn. Equally paralyzed by the fear of failure are the so called achievers, who lose their capacity to try out new things arising from the fear of failure, doing less well in examinations, and of losing their ranks. It is important to allow making errors and mistakes to remain an integral part of the learning process and remove the fear of not achieving 'full marks'. The school needs to send out a strong signal to the community, parents who pressurize children from an early age to be perfectionists. Instead of spending time in tuitions or at home learning the 'perfect answers', parents need to encourage their children to spend their time reading storybooks, playing and doing a reasonable amount of homework and revision. Instead of looking for courses on stress management for their pupils, school heads and school managements need to de-stress their curricula, and advise parents to de-stress children's life outside the school. Schools that emphasize intense competitiveness must not be treated as examples by others, including state-run schools. The ideal of common schooling advocated by the Kothari Commission four decades ago continues to be valid as it reflects the values enshrined in our Constitution. Schools will

succeed in inculcating these values only if they create an ethos in which every child feels happy and relaxed. This ideal is even more relevant now because education has become a fundamental right, which implies that millions of first-generation learners are being enrolled in schools. To retain them, the system – including its private sector – must recognize that there are many children that no single norm of capacity, personality or aspiration can serve in the emerging scenario. School Administrators and teachers should also realize that when boys and girls from different socio-economic and cultural backgrounds and different levels of ability study together, the classroom ethos is enriched and becomes more inspiring.

Vision and Perspective

- To uphold values enshrined in the Constitution of India
- To reduce of curriculum load
- To ensure quality education for all
- To initiate certain systemic changes

13.4 Guiding Principles

Guiding Principles

- Connecting knowledge to life outside the School
- Ensuring that learning is shifted away from rote methods
- Enriching curriculum so that it goes beyond Text Book
- Making Examination more flexible and non-threatening

- Discuss the aims of education.
- Building commitment to democratic values of equality, justice, secularism and freedom.

13.5 Focus on Child as an active Learner

Focus on child as an active learner

- Primacy to children's experience, their voices and participation
- Needs for adults to change their perception of children as passive receiver of knowledge
- Children can be active participants in the construction of knowledge and every child come to with pre-knowledge
- Children must be encouraged to relate the learning to their immediate environment
- Emphasizes that gender, class, creed should not be constraints for the child
- Highlights the value of Integration
- Designing more challenging activities.

13.6 Curricular Areas, School Stages and Assessment

SSA will ensure that every child with special needs (CWSN), irrespective of the kind, category and degree of disability, is provided education in an appropriate environment. SSA will adopt 'zero rejection' policy so that no child is left out of the education system.

Approaches and Options: The thrust of SSA will be on providing integrated and inclusive education to all children with special needs in general schools. It will also support a wide range of approaches, options and strategies for education of children with special needs. This includes education through open learning system and open schools, non-formal and alternative schooling, 27 distance education and learning, special schools, wherever necessary, home based education, itinerant teacher model, remedial teaching, part time classes, community based rehabilitations (CBR) and vocational education and cooperative programmes.

Components: The following activities could form components of the programme:

(a) **Identification of children with special needs:** Identification of children with special needs should become an integral part of the micro-planning and household surveys. A concerted drive to identify children with special needs should be undertaken through PHCs, ICDS, ECCE centers and other school readiness programmes.

(b) **Functional and formal assessment** of each identified child should be carried out. A team should be constituted at every block to carry out this

assessment and recommend most appropriate placement for every child with special needs.

(c) **Educational Placement:** As far as possible, every child with special needs should be placed in regular schools, with needed support services.

(d) **Aids and appliances:** All children requiring assistive devices should be provided with aids and appliances, obtained as far as possible through convergence with the Ministry of Social Justice and Empowerment, State Welfare Departments, National Institutions or NGOs.

(e) **Support services:** Support services like physical access, resource rooms in the existing BRC/ CRC, special equipment, reading material, special educational techniques, remedial teaching, curricular adaptation, adapted teaching strategies and other services like physiotherapy, occupational therapy, speech therapy could be provided

(f) **Teacher training:** Intensive teacher training should be undertaken to sensitise regular teachers on effective classroom management of children with special needs. This training should be recurrent at block/cluster levels and integrated with the on-going in-service teacher training schedules in SSA. All training modules at SCERT, DIET and BRC level should include a suitable component on education of children with special needs.

(g) **Resource support:** Resource support could be given by teachers working in special schools. Wherever necessary, specially trained resource teachers should be appointed, particularly for teaching special skills to children with special needs. Wherever this option is not feasible, long term training of regular teachers should be undertaken.

(h) **Individualized Educational Plan (IEP):** An IEP should be prepared by the teacher for every child with special needs in consultation with parents and experts. Its implementation should be monitored from time to time. The programme should test the effectiveness of various 28 strategies and models by measuring the learning achievement of children with special needs periodically, after developing indicators.

(i) **Parental training and community mobilization:** Parents of children with disabilities should receive counseling and training on how to bring them up and teach them basic survival skills. Strong advocacy and awareness programmes should form a part of strategy to educate every child with special needs. A component on disability should be included in all the modules for parents, VEC and community.

(j) **Planning and management:** Resource groups should be constituted at state, district levels to undertake effective planning and management of the programmes in collaboration with PRIs and NGOs. An apex level resource group at the national level to provide guidance, technical and academic support to children with special needs under SSA may be constituted.

(k) **Strengthening of special schools:** Wherever necessary, special schools may be strengthened to obtain their resource support, in convergence with departments and agencies working in that area.

(l) **Removal of Architectural barriers:** Architectural barriers in schools will be removed for easy access. Efforts will be taken to provide disable-friendly facilities in schools and educational institutions. Development of innovative designs for schools to provide an enabling environment for

children with special needs should also be a part of the programme. All new school buildings should be constructed with barrier-free features.

(m) Research: SSA will encourage research in all areas of education of children with special needs including research for designing and developing new assistive devices, teaching aids special teaching material and other items necessary to give a child with disability equal opportunities in education.

(n) Monitoring and evaluation: On-going monitoring and evaluation should be carried out to refine the programme from time to time. For this, appropriate monitoring mechanisms should be devised at every level and field tested at regular intervals.

(o) Girls with disabilities: Special emphasis must be given to education of girls with disabilities. 35.4 Convergence: All activities, interventions and approaches in the area of education for children with special needs will be implemented in convergence with existing schemes like Assistance to Disabled Persons for purchase/fittings of Aids/Appliances (ADIP), and in coordination with the Ministry of Social Justice and Empowerment, State Department of Welfare, National Institutions and NGOs.

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