Special Education

DEDU506

Edited by:
Dr. Dinesh Kumar
SPECIAL EDUCATION

Edited By
Dr. Dinesh Kumar
## SYLLABUS

### Special Education

**Objectives:**

To enable the learners to:

1. To acquaint the learner with the historical perspective of special education
2. To promote in the learner an extensive purview of the knowledge about all exceptionalities and comprehend their inter-relatedness
3. To enable the learner to understand the policies and legislation in special Education in India.

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Unit 1: Special Education: Concept and Nature

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Objectives
The objectives of this unit can be summarized as below:
• to describe about adaptations and modifications.
• to know the concept of special education.
• to explain about nature of special education.
• to analyse special education of India.

Introduction
Education is the process of learning and changing as a result of schooling and other experiences. Special education is instruction designed for students with disabilities or gifts and talents who also have special learning needs. Some of these students have difficulty in learning in regular classrooms; they need special education to function in school. Others generally do well in regular classrooms, but they need special education to help them master certain skills to reach their full potential in school.

Students are considered exceptional when they (1) meet the criteria for being classified as exceptional and (2) require a modification of school practices, or special educational services, to develop to maximum capacity. A disability results from a medical, social, or learning difficulty that interferes significantly with the student's normal growth and development, such as the ability to profit from schooling experiences or the ability to participate successfully in work activities. Special education is evidence of society's willingness to recognize and respond to the individual needs of students and the limits of regular school programs to accommodate those needs.

1.1 Concept of Special Education
Special education is instruction that is specially designed to meet the unique needs of a child with a disability. This means education that is individually developed to address a specific child's needs that result from his or her disability. Since each child is unique, it is difficult to give an overall example of special education. It is individualized for each child. A disability results from a medical, social, or learning difficulty that interferes significantly with the student's normal growth and development, such as the ability to profit.
Some students may be working at the pre-kindergarten grade level, others at the first, second, or third grade level. There may be students whose special education focuses primarily on speech and language development, cognitive development, or needs related to a physical or learning disability. Special education for any student can consist of:

- an individualized curriculum that is different from that of same-age, nondisabled peers (for example, teaching a blind student to read and write using Braille);
- the same (general) curriculum as that for nondisabled peers, with adaptations or modifications made for the student (for example, teaching 3rd grade math but including the use of counting tools and assistive technology for the student); and
- a combination of these elements.

Self Assessment

1. Fill in the blanks:
   
   (i) ....................... is instruction that is specially designed to meet the unique needs of a child with a disability.
   
   (ii) Each child is ..................., it is difficult to give an overall example of special education.
   
   (iii) A ......................... results from a medical social of or learning in difficulty that interferes significantly with normal growth and analysis.

1.2 Adaptations and Modifications

The individualization of instruction is an important part of special education. Instruction and schoolwork are tailored to the needs of the child. Sometimes a student may need to have changes made in class work or routines because of his or her disability. Modifications can be made to:

- what a child is taught, and/or
- how a child works at school.

Sometimes people get confused about what it means to have a modification and what it means to have an accommodation. Usually a modification means a change in what is being taught to or expected from the student. Making an assignment easier so the student is not doing the same level of work as other students is an example of a modification. Allowing a student who has trouble writing to give his answers orally is an example of an accommodation. This student is still expected to know the same material and answer the same questions as fully as the other students, but he doesn't have to write his answers to show that he knows the information.

What is most important to know about modifications and accommodations is that both are meant to help a child to learn. For example:

Sonu is an 8th grade student who has learning disabilities in reading and writing. He is in a regular 8th grade class that is team-taught by a general education teacher and a special education teacher. Modifications and accommodations provided for Sonu's daily school routine (and when he takes state or district-wide tests) include the following:

1. Sonu will have shorter reading and writing assignments.
2. Sonu's textbooks will be based upon the 8th grade curriculum but at his independent reading level (4th grade).
3. Sonu will have test questions read/explained to him, when he asks.

Modifications or accommodations are most often made in the following areas:

**Scheduling. For example:**

- giving the student extra time to complete assignments or tests
- breaking up testing over several days

**Materials. For example:**

- providing audiotaped lectures or books
- giving copies of teacher's lecture notes
- using large print books, Braille, or books on CD (digital text)
Instruction. For example:
- reducing the difficulty of assignments
- reducing the reading level
- using a student/peer tutor

Student Response. For example:
- allowing answers to be given orally or dictated
- using a word processor for written work
- using sign language, a communication device, Braille, or native language if it is not English.

An accommodation is a change that helps a student overcome or work around the disability.

1.3 Nature of Special Education

By the beginning of the twentieth century, public educational programs therefore began to offer two primary choices: Students were taught in a lock-step graded class or in an ungraded special class. Administrators of that era believed that special education classes were clearing houses for students who would otherwise be going to institutions for physically, mentally, or morally “deviant” members of society. Once assigned to special classes, students often remained in those classes for their entire school careers. Moreover, students were often placed in special classes on the recommendation of one teacher or on the basis of their performance on one test. This system produced special class enrollments in which minority students were heavily overrepresented. In addition, there were problems with the programs themselves. Some institutions and special schools were substituting harsh discipline for the educational services exceptional students needed.

The basic either/or structure—either regular graded classes or separate, usually ungraded special education—continued for over half a century. With very rare exceptions, today’s adults with disabilities who recall segregated facilities or separate classes cannot say enough about the inadequacies of their academic training. When comparing their education with that of siblings or neighbors who were not disabled, they speak only of the gaps. For example, they mention subjects, such as science, that they never studied, maps they never saw, field trips they never took, books that were never available, assignments that were often too easy, expectations of their capacity (by nearly all teachers) that were too low.

By the 1960s parents and professionals had mounted strong challenges to the old system, and special education began a period of rapid change that continues today. That system entitles exceptional students to a free, appropriate public education. Federal laws now make it illegal to discriminate against people because they are disabled. This means that people cannot be denied an education or a job because of a disabling condition. It also means that records are kept of the types and number of students receiving special education in this country. Federal law does not require states to provide special education to gifted and talented students, so the numbers of those students receiving special education services does not appear in annual reports to Congress. Several states, however, have passed laws mandating special services for this group of exceptional students.

The current special education system in the United States has its roots in the methods used to treat disabled people in Europe and Scandinavia more than one hundred years ago.
Notes

Self Assessment

2. Multiple Choice Questions: Choose the correct option:

(i) The individualization of ......................... is an important part of special education.
(a) instruction (b) education (c) grade (d) adaptations

(ii) A ......................... means a change in what is being taught to or expected from the student.
(a) assignment (b) modifications (c) disability (d) student

(iii) By the ......... parents and professionals had mounted strong challenges to the old system,
and special education began a period of rapid change that continues today.
(a) 1970 (b) 1980 (c) 1960 (d) 1990

(iv) Some institutions and ............... were substituting harsh discipling for the educational services
exceptional students needed.
(a) special schools (b) special education
(c) developing country (d) discipline

1.4 Special Education in India

In pre-independence India, the country had a few special schools for children with intellectual
impairment run by non-Government organizations, a few mentally retarded persons admitted to
mental hospitals and many stayed at home. India has come a long way since Independence in the
area of disability rehabilitation. There has been a shift in the lifestyle of people with disabilities from
charity to right. It is no more the wish and choice of the giver to provide education, vocational
training and rehabilitation, but the RIGHT of the person with disability to receive the support.
The Government of India has set up four national level institutes to effectively implement government
schemes for persons with disabilities, to develop human resources to deal with disabilities, to develop
service models, to conduct research and to document and disseminate information. These are:
National Institute of the Visually Handicapped, National institute for Hearing Handicapped, National
Institute for orthopaedically handicapped and National Institute for the Mentally Handicapped.
The Institute for Physically Handicapped and National Institute of Rehabilitation, Training and
Research are two more national level institutes of rehabilitation. In addition, the District Rehabilitation
Centre (DRC) scheme has been initiated in 10 States aiming at preventive measures and
comprehensive rehabilitation. To train manpower for DRCs, four Regional Rehabilitation Training
Centres have been established.
An important turning point has been the National Policy on Education (1986). This policy for the
first time included a section on disabilities. Briefly, the points made in this section include;
• Education of children with mild disabilities will be in regular schools.
• Children with severe disabilities will be in special schools with hostel facilities in district
headquarters.
• Vocationalization of education will be initiated.
• Teachers training programmes will be reoriented to include education of disabled children;
• All voluntary efforts will be encouraged.
Today there are about 37 diploma programmes in the field of special education and about 3 offering
the B.Ed. degree. The Rehabilitation Council of India (RCI), a statutory body under the Ministry of
Social Justice and Empowerment, regulates these courses for the education, training and management
of persons with disabilities.
The District Primary Education Programme (DPEP) is another major step towards universalization
of primary education wherein children with special needs are also included. A number of districts
are implementing the programme. Inclusive education being the concept world over, the DPEP aims at including the children at primary level (up to Class V) with suitable teacher preparation, infrastructure facilities and aids and appliances. In addition, there are over 1,100 special schools run by NGOs with Government support.

**Self Assessment**

3. State whether the following statements are 'True' or 'False':

   (i) In pre-independence India, the country had a few special schools for children with intellectual impairment run by non-Government organizations.

   (ii) The District Primary education programme is a major step towards universalizations of primary education.

   (iii) Today there are 40 diploma programmes in the field of special education and about 3 offering the B.Ed degree.

   (iv) There are over 1,500 special schools run by NGOs with Government support for disabled children.

**1.5 Summary**

- Special education is a process or method of instruction used for exceptional and disabled children.
- It is used in different ways as according to the type of and level of disability.
- Modification is very important in special education, it is a change in what is being taught to or expected from the student.
- Scheduling, materials, instruction and student responses are the areas in which modification works.
- The unit covers the nature of special education. From the pre-independence period of India, a special emphasis was given on special education.
- For the coordination of special education at national level four apex bodies are working in well coordination manner.
  
  (i) National Institute of visually handicapped works for visual disabled people.
  
  (ii) National Institute for hearing impairment for hearing impaired children in country.
  
  (iii) National Institute for orthopedically handicapped work for orthopedically handicapped.
  
  (iv) National Institute for the mentally handicapped works for mentally handicapped children and people.
- Except then District Rehabilitation Centre (DRC) scheme has been initiated in 10 states.
- Under National Policy on education there is section included on disability.
- Mild disable children education in regular schools, special schools with hostel facility, vocationalization, teachers training programmes etc. are some of the main points of above section.
- There are 37 diploma programmes and about 3 offering the B.Ed. degree.
- The District Primary Education Programme (DPEP) is a major step towards universalization of primary education and children with special needs are also included. In addition 1,000 special schools run by NGOs with government support.
Notes

### 1.6 Keywords
- **Adaptations**: The process of changing something for example your behaviour.
- **Modifications**: The act or process of changing something in order to improve it more acceptable.
- **Special Education**: The education of children who have physical or learning problems.

### 1.7 Review Questions
1. Explain the concept of special education.
2. Describe the nature of special education.
3. How many institutes have set up by Government of India for disabled persons?
4. Give the points on section on disability under National Policy of education.
5. How many special schools run by NGOs with Government support.

**Answers: Self Assessment**

1. (i) Special education  (ii) unique  (iii) disability
2. (i) (a) (ii) (b) (iii) (c) (iv) (a)
3. (i) True  (ii) True  (iii) False  (iv) False

### 1.8 Further Readings

1. Special Education: *Daniel P. Hallahan, James M. Kauffman, Paige C. Pullen; Pearson Education, Inc.*
2. Special Education: *Laura Rothstein; Scott F. Johnson; Sage Publisher, Inc.*
3. Special Education: *Linda Wilmshurst, Ph.D., ABPP, Alan W. Brue, Ph.D., NCSP*
Unit 2: Special Education: Objectives and Need

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2.5 Disability as a Category of Special Educational Needs
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2.9 Further Readings

Objectives

The objectives of this unit can be summarized as below:

• to discuss about the objectives of special education.
• to explain about the individualized education program.
• to know about special educational needs and disability.
• to assess disability as a category of special educational needs.

Introduction

Goals and objectives are the areas that child will work on throughout the year in the classroom, with a special education teacher, a counselor or in some other way. Monitoring can be through completion of tasks, teacher observation, etc. The measurement can be through grades, standardized tests or mastery of a task. Each goal and subsequent objectives has a page dedicated to it. Goals can be related to academics, self-help skills, behavior, counseling, etc.

Today's special education takes account of the fact that different students have different special needs. Some need help dealing with the social and psychological problems they face as a result of their exceptionality. Many students who are gifted, for example, feel isolated from their classmates. Special education programs not only challenge special children intellectually, but also help special children deal with special children's feelings of alienation. Other exceptional students need special services because of what they are not able to do, because some disabling condition limits their ability to learn in the typical educational program. Students who are blind, for example, may need to be taught to read in braille or by means of large-print books. Students who cannot hear need instruction in a manual sign language or some other special communication system. These student also face social and psychological challenges. They have to learn to cope with not only the challenge of their handicapping condition, but also other people's re-actions to their conditions. For many students whose special needs mean learning in separate education setting, there's the added knowledge that their educational experiences are not like those of other people.

By dealing with these diverse needs, special education has become a sophisticated series of educational alternatives that is considered the right of every student with disabilities. Educators must make choices about who receives special education services, and the choice usually depends on ideas of "normality" and "abnormality."
2.1 Objectives of Special Education

1. The team including yourself (the parent) will talk about child’s strengths and weaknesses. Goals/objectives will reflect areas that a child needs assistance in.
2. Any classes taken with a special education teacher will have their own set of goals/objectives.
3. Behavior goals are generally for mild behavior problems. Students with serious behavior issues generally have a behavior intervention plan made up separately from an Individualized Education Plan.
4. Other goals may be added as necessary in terms of community participation, general education participation, self-help skills, etc.
5. Children with Occupational, Speech or Physical Therapy needs will have goals related to these areas as well.

Depending on the age of your child, he or she may need transition goals from one school to the next.

2.2 Individualized Education Programs

An Individualized Education Program (IEP) is a written statement about the educational program for a child with a disability. It serves as a management tool used to ensure that the child receives the needed special education and related services. It also serves as an evaluation device when used to determine the extent of the child’s progress toward accomplishing projected goals.

Each IEP must include the following:

• a statement of the child's present levels of educational performance;
• a statement of annual goals, including short-term instructional objectives;
• a statement of the specific special education and related services to be provided;
• the extent that the child will be able to participate in regular educational programs;
• the projected dates for initiation of services and the anticipated duration of the services; and
• appropriate objective criteria and evaluation procedures and schedules for determining, on at least an annual basis, whether the objectives are being achieved.

The IEP for each student, beginning no later than age 16 (and younger if appropriate) must include a statement of needed transition services.

A meeting to develop an IEP must be held within 30 calendar days of the date eligibility for services is determined.

An IEP must be in effect before special education and related services are provided to a child. The appropriate placement cannot be determined until after determination of the child’s needs and the type of services to be provided. Since these determinations are made at an IEP meeting, the IEP must be developed before placement decisions are made.

Self Assessment

1. Fill in the blanks:
   
   (i) Behaviour goals are generally for mild ................ problems.
   (ii) An IEP for each student beginning no later than age ............... must include a statement of needed transition services.
   (iii) An individualized education programme is a written ............... about the educational programme for a child with disability.
   (iv) IEP is .................... to ensure the child receives the need special education and related services.
2.3 Special Educational Needs (SEN)

A child has special educational needs (SEN) if he or she has learning difficulties or disabilities that make it harder for him or her to learn than most other children of about the same age.

Many children will have special educational needs of some kind during their education. Schools and other organisations can help most children overcome the barriers their difficulties present quickly and easily. A few children will need extra help for some or all of their time in school.

So special educational needs could mean that a child has:

- learning difficulties - in acquiring basic skills in school
- emotional and behavioural difficulties - making friends or relating to adults or behaving properly in school
- specific learning difficulty - with reading, writing, number work or understanding information
- sensory or physical needs - such as hearing or visual impairment, which might affect them in school
- communication problems - in expressing themselves or understanding what others are saying
- medical or health conditions - which may slow down a child’s progress and/or involves treatment that affects his or her education.

Children make progress at different rates and have different ways in which they learn best. Teachers take account of this in the way they organise their lessons and teach. Children making slower progress or having particular difficulties in one area may be given extra help or different lessons to help them succeed.

Did you know?
The primary special educational need was behavioural, emotional or social difficulty. Fewer than 8% of pupils in total had low incidence disabilities, such as physical or sensory disabilities, recorded as their primary need.

2.4 Special Educational Needs and Disability Act (SENDA)

When examining the literature around populations at risk of exclusion it becomes clear that much of the emphasis in research and policy texts remains rooted in concepts of special educational need. This dominance of special educational needs as a descriptor is reinforced by the prevailing special educational needs legislative framework. Although the Special Educational Needs and Disability Act attempted to bring together two potentially competing frameworks, policymakers failed and in the event created a rather muddled and unworkable piece of legislation which did little to alter the prevailing culture of individualisation.

The rising number of children with autism, social and emotional or behavioural difficulties (SEBD) - this is causing high levels of frustration to parents, teachers or children.’

Disability as defined by the disability rights agenda is framed within notions of structural changes in society in a move towards greater equality for disabled people. This approach is ‘based on an understanding that the poverty, disadvantage and social exclusion experienced by disabled people is not an inevitable result of their impairments or medical conditions but rather stems from environmental barriers.’

By extending the DDA to include education settings through the SENDA, it was hoped that this more transactional view of disability would provide an alternative model. In this model the emphasis shifts from viewing the individual within a paradigm of remediation to one of a social construct where disability is a product of the external, environmental factors that present barriers to education and learning.

Under the DDA arm of SENDA, such provision would be a legal right for disabled pupils. Growing from this interactive model of disability was a growing interest in principles of universal design.
Universal design seeks to foster access to learning and the environment by recognising learner diversity throughout the whole process of design rather than trying to adapt existing and often unsuitable approaches and environments. When applied to education, this could mean more inclusive (universal) approaches to the design of the curriculum and to teaching methods.

The Disability Discrimination Act (DDA), emphasised the ‘social model’ of disability.

Self Assessment
2. State whether the following statements are ‘True’ or ‘False’:
   (i) An IEP must be in effect before special education and related services are provided to a child.
   (ii) The disability discrimination act emphasized the social model of disability.
   (iii) Children make progress at same rate and same ways in which they learn.

2.5 Disability as a Category of Special Educational Needs

Although special educational needs and disability act (SENDA) can be seen to represent two different ideological perspectives it is clear that one model dominates. Disability is portrayed as one aspect of special educational needs. Familiarity may play a large part in the use of terms. The special educational needs framework seems to offer a certainty which schools and policy makers could use as an intellectual ‘comfort zone’. What ever the reason, this mindset is hard to change and at present there is no indication that the SENDA has had a lasting impact.

The perception of many of the students in Pearson’s study that special educational needs are associated with behavioural difficulties and with learning difficulties does have some basis in fact.

Yet the evidence that we have reviewed indicates that within the category of special educational needs there are distinct sub-groups of children and young people with different needs, different educational experiences and different outcomes.

A possible consequence of grouping children with disabilities under the overarching special educational needs label is that the needs of those with low incidence disabilities in particular become subsumed as policies are driven by the needs of the majority, that is, children with moderate learning difficulties and those with behavioural, emotional and social difficulties. It is notable for example, that the DfES report on 14-19 Curriculum and Qualifications Reform makes no mention of disabled students, only those with special educational needs (and they are not featured in any of the 11 case studies in the report). Where there is reference to students with special educational needs they appear to be equated with those working below Level 3 of the National Curriculum, whose needs will be met by the proposed Entry Level diploma. This emphasis on learning difficulties is carried on into the government White Paper on 14-19 education and skills. With reference to young people who are ‘not in education, employment or training’ (NEET), the White Paper initially makes a distinction between pupils with special educational needs and those ‘at risk of disengagement’ or ‘with significant barriers to learning’. However, several references are subsequently made to young people with ‘learning difficulties and disabilities’ and to young people with special educational needs, suggesting a lack of clarity about definitions.

While we would like to make clear that we fully support initiatives to improve the educational experiences and life chances of young people with learning difficulties or disabilities and with behavioural, emotional and social difficulties, the main thrust of our argument is that these young people comprise only a portion of pupils currently defined as having special educational needs. Policies that are appropriate for these young people may not always be relevant to other disability groups. Indeed the label of behavioural, emotional and social difficulties is probably one of the most approximate and catch-all labels used to describe special educational needs.
Self Assessment

3. Multiple Choice Questions

Choose the correct option:

(i) Disability is portrayed as one aspect of ................ needs.
   (a) special educational  (b) framework  (c) provision  (d) disability

(ii) Moderate learning difficulty was given as the primary special educational need for .......... of children.
   (a) 30%  (b) 21.5%  (c) 29%  (d) 8%

(iii) ............... of young people with sensory and physical impairments were in school or college.
   (a) 80%  (b) 90%  (c) 79%  (d) 59%

(iv) Some institutions and ............ were substituting harsh discipline for the educational services exceptional students needed.
   (a) special schools  (b) special education  (c) developing country  (d) discipline

2.6 Summary

• In this unit we have discussed about objectives of special education.
• The goals or objectives have been set by teacher for the disable pupil for watching the improvement in child behaviour and study.
• We have discussed about Individualized Education Programme (IEP), Special Educational Needs (SEN), Special Education Needs and Disability Act (SEnda).
• Individualized Education Programme (IEP) is a written statement about the educational programme for a child with a disability.
• A meeting to develop an IEP must be held within 30 calendar days of the date eligibility for services.
• Many children will have special educational needs of some kind during their education. The need of special education is for the child who has learning difficulties, emotional and behavioural difficulties, specific learning difficulty, sensory or physical needs, and communication problems.
• Special educational needs and disability act provides a framework for disabled children with disability discrimination act.
• The rising number of children with autism, social and emotional or behavioural difficulties (SEBD) – this is causing high levels of frustration to parents, teachers or children.
• Disability as defined by the disability rights agenda is framed within notions of structural changes in society in a move towards greater equality for disabled people.
• Disability and special educational need are not two different things but is portrayed is on disability aspect of special educational needs.

2.7 Keywords

• Disability : A physical or mental condition that means you cannot use a part of your body completely or easily.
• Breakdown : A failure of a relationship, discussion or system.
Notes

• Consequence : As a result of something that has happened.
• Initiative : A new plan for dealing with a particular problem

2.8 Review Questions

1. What are the difficulties in special educational children?
2. What is DDA? Explain.
3. What is SEN?
4. Give a short note on special educational needs and disability.
5. What is disability? Define.

Answers: Self Assessment
1. (i) behaviour  (ii) 16  (iii) statement  (iv) management tool
2. (i) True  (ii) True  (iii) False
3. (i) (a)  (ii) (c)  (iii) (c)  (iv) (a)

2.9 Further Readings

1. Special Education: Daniel P. Hallahan, James M. Kauffman, Paige C. Pullen; Pearson Education, Inc.

2. ERIC Clearinghouse on Handicapped and Gifted Children Reston VA: Visually handicapped: Requires special educational provisions because of ... as lighting, use of optical aids and devices, tasks, and personal characteristics.
Unit 3: Special Education: Scope and Types

CONTENTS
Objectives
Introduction
3.1 Special Education in India
3.2 Special Education in Different Countries
3.3 Types of Special Education
3.4 Summary
3.5 Keywords
3.6 Review Questions
3.7 Further Readings

Objectives
The objectives of this unit can be summarized as below:
• to know about scope of special education in India and other countries.
• to explain about the types of special education.

Introduction
The education of disabled children never received such amount of consideration and special efforts by government and non-government agencies in past as in present days. The attitude of the community in general and the attitude of parents in particular towards the education of the disabled have undergone change with the development of society and civilisation.

In the first phase, disabled children were treated with hostility and were neglected. They were considered as 'Curve of God' and a burden for the parents. They were often killed by their parents.

In the second phase the disabled children were kept in protection. Mankind was subjected to a Math that "the disabled are useless, incapable of doing anything on their own, a species to be pitied and looked after as long as they are alive." Thus, no attempt was made for their education, training, habilitation, and rehabilitation.

In the next phase, an attempt was made for their education. But disabled children were considered distinct from their peers. They were considered to be incapable of receiving education in general schools. Thus, for the first time, special schools and institutions were established in different countries schools being separated from their parents and their non-disabled peers.

In the second half of the twentieth century, new thinking and new realization have opened new direction for education of disabled children. It is now realised that a disabled child is not a different kind of person. He is a child with special needs. Like all other members of the society, the disabled must have the same rights to education, work and full participation in the society. It is also recognised that the disabled, particularly those with mild to moderate degree of disability and the orthopedically handicapped, can be educated along with their non-disabled peers in general schools with provision for extra help. Moreover, education of disabled children in common with non-disabled children in general schools have been found to be an economical system in terms of expenses and coverage.

These realizations, recognition and thinking on the part of educationists, planners and teachers have led to the conceptualization of integrated education for the disabled children.
3.1 Special Education in India

Educational services are extended to this group of children on mass scale, the universalisation of elementary enrolment of the handicapped children in relation to total children at the elementary stage is 0.07 percent. This figure of enrolment has gone up to one percent as per review of NPE (1992). This low percentage of enrolment speaks volumes for the serious neglect and denial of educational opportunity for millions of disabled children in the India even though the constitution of the country prescribes compulsory education for all children upto primary level. Most of the special groups of children are either not enrolled at all or drop out due to one reason or the other after stagnation. The slow progress towards bringing the disabled within the education network has been due to liner provision in special schools despite the fact that about 90 percent of them can be catered to in regular schools.

How do blind people learn reading and writing?

3.2 Special Education in Different Countries

There have always been exceptional children, but there have not always been special educational services to meet their needs. The historical roots of special education are found in Europe and America primarily in the 19th century. In ancient civilization handicapped children were either killed or subject to abuse and neglect. Prior to the 19th century there were isolated instances of acceptance, kindly care, and education of disabled children.

Systematic efforts to provide special education to handicapped children started in the 19th century in Europe and America. But the Americans who were initially concerned with the care and training of the handicapped kept themselves informed about the development that took place in Europe. Even some Americans used to visit Europe to get first-hand knowledge about the education of handicapped children. It is a fact the European physicians were initially concerned about the education of mentally retarded children. Similarly much of the initial work in the field of special education in America entered around deaf children and blind children.

The history of special education does not indicate "Europe, good-America bad". It is true that important ideas in special education found their way for Europe to America. Many European and American physicians and educators contributed greatly to the development of special education, most prominent among them were:

(1) J.M.G. Itard, Physician
(2) Samuel Gridley Howe,
(3) E. Seguin, Teacher of MR
(4) T.H. Gallaudet,
(5) Sigmund Freud,
(6) Philipe Pinel,
(7) Ann Sullivan

Most of the originators of special education were European physicians.

3.2.1 Special Education in Europe

J.M.G. Itard's contribution: Itard, a French physician, is the personal to whom most historians trace the beginning of special education. In the beginning years of 19th century, Itard set about to educate a wild boy of 11 of 12, named Victor. The boy was apparently abandoned in a forest in Southern France at the age of 3 or 4. He managed to survive until his capture. At the time of capture he was animal like in appearance and behaviour. He was naked, dirty, scarred, and unable to speak, and he
selected food by smell. Itard could not make him normal, but he did dramatically improve his behaviour through patient and systematic educative procedure.

**Seguin's Contribution:** Seguin is known as the greatest teacher of the mentally deficient. Being influenced by the achievements of Itard he established the first public school for the feeble-minded in Paris in 1837. In 1846 he published his classic textbook Idiocy and Its Treatment by the Physiological Method. His concept of education was the promotion of the harmonious physical, intellectual, and moral developments of the child. His techniques and materials later become the basis for the so-called Montessori Method. Seguin migrated to America and worked in collaboration with Samuel Howe for the education of mentally retarded.

The sensational discoveries and revolutionary ideas of Itard, Seguin and their successors during the 19th century which have formed the foundation for present day special education are as follows:

1. Individualised instruction for the mentally retarded children.
2. A carefully sequenced series of educational tasks for the MR.
3. Emphasis on stimulation.
4. Meticulous arrangement of the child's environment.
5. Immediate reward for correct performance.
6. Tutoring in functional skills.
7. A belief that everyone should be educated to the greatest extent possible.
8. An assumption that every child can improve to some degree.

---

**Did you know?**

Itard was the originator of instructional devices, the inventor of behaviour modification techniques, the first speech specialist, creator of oral education of the deaf, and father special education for the mentally retarded and the physically handicapped.

### 3.2.2 Special Education in America

It is true that much of the initial work in the development of special education took place in Europe. But there were many Americans who contributed greatly during those early years.

**Louis Braille's Contributions:** Louis Braille was the most important figure in the history of education of the blind. Braille, who became blind due to an accident during his early childhood, developed a revolutionary system of reading and writing for the blind. The Braille method is still recognised as the most appropriate method of reading and writing for the blind.

**Howe's Contribution:** Sullivan was a student of Howe. She was greatly influenced by her teacher's training methods. Although she was visually handicapped, she served as Helen Keller's tutor. Helen Keller was deaf-blind-mute. Sullivan's dedicated efforts could bring astonishing results. Helen quickly learned the names of objects and events in her environment. By the age of ten, she learned to say aloud "I—am—not—dumb—now". Later she became a graduate and wrote a number of books.

**Gallaudet's Contribution:** Thomas Hopkins Gallaudet had keen interest in the education of the deaf. He established the first American residential school for the deaf in 1817 in Hartford. The Gallaudet College in Washington D.C., which is the only college for the deaf was named in his honour.

### Self Assessment

1. Fill in the blanks:

   (i) .......................... is known as the greatest teacher of the mentally deficient.

   (ii) .........................., who became blind due to an accident during his early childhood, developed a revolutionary system of reading and writing for the blind.

   (iii) .......................... established the first American residential school for the deaf in 1817 in Hartford.
3.3 Types of Special Education

Today, special education is a complex system for meeting the special learning needs of exceptional students. Three types of assistance are generally available: direct services, indirect or consultative services, and related services.

Direct services are provided by working with students themselves to correct or compensate for the conditions that have caused them to fall behind in school or to enrich or accelerate the progress they are making in school. Teaching a student who is deaf to use sign language, a student with a learning disability to read using a special method of instruction, or a gifted fourth-grader to do algebra are examples of direct services provided by teachers.

Indirect or consultative services are provided to classroom teachers and others who work with exceptional students over a period of time to help meet the needs of the students. Helping a teacher identify the best method for teaching a student with learning disabilities to read, or showing a teacher how to reposition a student with a physical disability, are examples of indirect services provided by teachers and other professionals.

Related services are provided by specially trained personnel directly to students or indirectly to those who work with exceptional students. Related services include psychological testing and counseling, school social work, educational/occupational therapy, adapted physical education, school health services, and transportation. Related services may also include assistive technology, which means equipment designed to improve or maintain the functional abilities of students with disabilities. For instance, the provision of electronic communication aids is often considered a related service.

The types of service students receive as part of their special education program vary according to the level of their learning needs. Placements may also differ for different conditions. Sometimes the children are taken out of regular education classes to other settings to serve them. Sometimes services are taken to the student. Resource rooms are settings used to provide special education outside the regular education classroom for 21% to 60% of the school day. Special classes are settings in which students receive special education and related services outside the regular classroom for more than 60% of the school day. Students may be placed in special classrooms with part-time instruction in regular classes or placed in special classes full time on a regular school campus.

Even when students require full-time special services, there are different degrees of "restrictiveness." Some students spend all their time in special education classrooms. Others, because of illness or other medical problems, are educated in hospitals or at home. Still others are taught in residential (institutional) settings, in classes run and staffed by personnel from local school districts. In the most restrictive setting, students live in a residential school or institution and are taught by staff members of that school or institution. We show the continuum of settings in which students receive special education, and report the most recent figures on the numbers or proportions of students with disabilities who are educated in each setting.

### Table Percentage of Students who receive special education services in six main educational environments

<table>
<thead>
<tr>
<th>Environment</th>
<th>Students (%)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular Class</td>
<td>337</td>
<td>Students receive a majority of their education in a regular classroom and receive special education and related service outside the regular classroom for less than 21% of the school day. This option includes children placed in a regular class and receiving special education within the regular class as well as children placed in a regular class and receiving special education outside the regular class.</td>
</tr>
</tbody>
</table>

\(iv\) to provide special education to handicapped children started in 19th century in Europe and America.

\(v\) The historical roots of special education are found in ...............
Unit 3: Special Education: Scope and Types

<table>
<thead>
<tr>
<th>Resource Room</th>
<th>34.6</th>
<th>Students receive special education and related services outside the regular classroom for 21 to 60 percent of the school day. This includes students placed in resource rooms with part-time instruction in a regular class.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special Class</td>
<td>25.2</td>
<td>Students receive special education and related services outside the regular classroom for more than 60 percent of the school day. They may also receive part-time instruction in regular classes.</td>
</tr>
<tr>
<td>Separate School Facility</td>
<td>4.9</td>
<td>Students receive special education and related services in separate day schools for students with disabilities for greater than 50 percent of the school day.</td>
</tr>
<tr>
<td>Residential Facility</td>
<td>0.8</td>
<td>Students receive education in a public or private residential facility, at public expense, for greater than 50 percent of the school day.</td>
</tr>
<tr>
<td>Homebound/ Hospital Environment</td>
<td>0.7</td>
<td>Students placed in and receiving special education in hospital or homebound programs.</td>
</tr>
</tbody>
</table>

**Self Assessment**

2. State whether the following statements are 'True' or 'False':

(i) Special education is a complex system for meeting the special learning needs of exceptional students.

(ii) Teaching a student who is deaf to use sign language is an example of indirect services.

(iii) Related services are provided by specially trained personnel directly to students or directly to those who work with exceptional students.

(iv) Related services may not include assistive technology.

(v) Resource rooms are setting used to provide special education, outside the regular education classroom for 21 to 60 percent of the school day.

**3.4 Summary**

- Educational services are extended to disable group of children on mass scale, the universalisation of elementary enrolment of the handicapped children in relation to total children at the elementary stage is 0.07 percent. This figure of enrolment has gone up to one percent as per review of NPE (1992).

- The slow progress towards bringing the disabled within the education network has been due to liner provision in special schools despite the fact that about 90 percent of then can be catered to in regular schools.

- The historical roots of special education are found in Europe and America primarily in the 19th century. In ancient civilization handicapped children were either killed or subject to abuse and neglect. Prior to the 19th century there were isolated instances of acceptance, kindly care, and education of disabled children.

- some Americans used to visit Europe to get first-hand knowledge about the education of handicapped children.

- It is true that important ideas in special education found their way for Europe to America.

- **J.M.G. Itard's contribution:** Itard, a French physician, is the person to whom most historians trace the beginning of special education.

- Seguin is known as the greatest teacher of the mentally deficient. Being influenced by the achievements of Itard he established the first public school for the feeble-minded in Paris.
1837. In 1846 he published his classic textbook Idiocy and Its Treatment by the Physiological Method.

- Louis Braille was the most important figure in the history of education of the blind. Braille, who became blind due to an accident during his early childhood, developed a revolutionary system of reading and writing for the blind.

- Sullivan was a student of Howe. She was greatly influenced by her teacher's training methods. Although she was visually handicapped, she served as Helen Keller's tutor. Helen Keller was deaf-blind-mute.

- Today, special education is a complex system for meeting the special learning needs of exceptional students. Three types of assistance are generally available: direct services, indirect or consultative services, and related services.

- Direct services are provided by working with students themselves to correct or compensate for the conditions that have caused them to fall behind in school or to enrich or accelerate the progress they are making in school.

- Indirect or consultative services are provided to classroom teachers and others who work with exceptional students over a period of time to help meet the needs of the students. Helping a teacher identify the best method for teaching a student with learning disabilities to read.

- Related services are provided by specially trained personnel directly to students or indirectly to those who work with exceptional students. Related services include psychological testing and counseling, school social work, educational/occupational therapy, adapted physical education, school health services, and transportation.

- Even when students require full-time special services, there are different degrees of "restrictiveness." Some students spend all their time in special education classrooms. Others, because of illness or other medical problems, are educated in hospitals or at home. Still others are taught in residential (institutional) settings, in classes run and staffed by personnel from local school districts. In the most restrictive setting, students live in a residential school or institution and are taught by staff members of that school or institution.

3.5 Keywords

- Origin : The point from which something starts.
- Specialist : A person who is an expert in a particular area of work or study.
- Contributions : An action or a service that helps to cause.
- Therapy : The treatment of a physical problem or an illness.

3.6 Review Questions

1. Give the names of any two American contributors and their contributions in special education.
2. What is indirect or consultative services?
3. What is the position of special education in India?
4. Give the segments contribution in special education?

Answers: Self Assessment

1. (i) Seguin (ii) Braille
   (iii) Thomas Hopkins (iv) Systematic efforts
   (v) Europe

2. (i) True (ii) False (iii) True (iv) False
   (v) True
3.7 Further Readings

1. Special Education: Daniel P. Hallahan, James M. Kauffman, Paige C. Pullen; Pearson Education, Inc.
2. Special Education: Linda Wilmshurst, Ph.D., ABPP, Alan W. Brue, Ph.D., NCSP
3. Special Education: Laura Rothstein; Scott F. Johnson; Sage Publisher, Inc.
Unit 4: Physically Challenged: Definition, Types, Characteristics

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Objectives
Introduction
4.1 Definition
4.2 Types of Physical Disabilities
4.3 Characteristics of Physically Handicapped Children
4.4 Summary
4.5 Keywords
4.6 Review Questions
4.7 Further Readings

Objectives

The objectives of this unit can be summarized as below:
- to define the physically challenged children.
- to explain the types of physical disabilities.
- to describe the characteristics of physically handicapped children.

Introduction

A challenge (disability) consists of the objectively defined impairment of structure and function. For example, the loss of vision in one eye is challenge (disability). The visual field of a one-eyed man is, no doubt, constricted. Again, the detection of the direction of a sound by a child who is deaf in one ear may be diminished. But these cannot be regarded as "handicap". The 'handicap' arises from the cumulative effects of the disability and the personal and social consequences which have a detrimental effect on the person's functional level. So the distinction between 'challenge' and 'handicap' is pertinent here. Again, all medically defined disabilities do not operate as handicaps. The disabilities of a blind man operate as a 'handicap' only when he competes with the normal sighted in activities involving sight.

The different studies have shown that the extent to which any disability handicaps its possessor always depends upon circumstances. Some disabilities are there which do not operate really as a handicap. For example, colour blindness is a handicap for a navigating officer or a driver, but not for all. Similarly, a stammered can be successful scientist, but he may not be a good orator. By providing hearing and for hard-of-hearing and self-propelled chairs for paraplegics, some disabilities can be mitigated. Here we will discuss about all types of physically challenged children. It includes all types of physical impairment visual, haring speech and orthopedic impairment.

4.1 Definition

Physically Challenged individuals are those who have non-sensory physical limitations i.e. limitation not because of sense organs like eyes or ears, but because of other organs like limbs, bones, joints or muscles.

The physical challenge is a relatively visible challenge and it becomes more so by the societies prejudices for a disfigured body. The person who doesn’t appear normal is an applied label, which
makes his adjustment difficult. Though the society has modernized enough to accept the disability and work out ways to face these challenges, yet these facilities have not reached everywhere.

School is one of the mechanisms of adjustment for the physically challenged, because they usually have normal functioning brains. It is only in their physical stature that problems are there and there are various and devices to aid their adjustment to environment. The teachers training curriculum too prepares the teachers for teaching special children in regular classrooms.

Notes

The school may be regarded as a social invention to serve society for the specialized teaching of young”.

4.2 Types of Physical Disabilities

There are following types of physical disabilities:

(i) **Impairment in mobility** is a category of disability that includes people with varying types of physical disabilities. This type of disability includes upper limb disability, manual dexterity and disability in co-ordination with different organs of the body. Disability in mobility can either be a congenital or acquired with age problem. This problem could also be the consequence of some disease. People who have a broken skeletal structure also fall into this category of disability.

(ii) **Spinal cord disability** is another consequence of spinal cord injuries which can sometimes lead even to lifelong disabilities. This kind of skeletal injury mostly occurs due to severe accidents. The spinal injury can be complete or incomplete. In an incomplete type of spinal injury, the messages conveyed by the spinal cord are not completely lost; whereas a complete injury results in a total malfunctioning of the sensory organs. In rarest of cases spinal cord impairment can be a birth defect though.

(iii) **Brain Disability** is a disability that occurs in the brain due to a brain injury. The degree of the brain injury can range from mild, moderate and severe. There are broadly two types of brain injuries; Acquired Brain Injury (ABI) and Traumatic Brain Injury (TBI). Acquired Brain Injury is not a hereditary type of disability but is the degeneration that occurs after birth. The causes of such disabled cases of injury are many and are mainly because of external forces applied to the body parts. Traumatic Brain Injury results in emotional malfunctioning and certain behavioral disturbance.

(iv) **Vision Disability** is another type of physical impairment. There are hundreds of thousands of people that greatly suffer from minor to various serious vision injuries or impairments. These types of injuries can also result into some severe problems or diseases like blindness and ocular trauma, to name a few. Some of the common types of vision impairment includes scratched cornea, scratches on the sclera, diabetes related eye conditions, dry eyes and corneal graft.

(v) **Hearing disability** is the category of physical impairment that includes people that are completely or partially deaf. People who are partly dumb can use hearing-aid to do away with the hearing problem. But this type of situation is worse if the deafness is complete.

(vi) **Cognitive disability** is a kind of physical impairment present in people who are suffering from dyslexia and various other learning difficulties. People having dyslexia problem face difficulties in reading, writing and speaking.

Did you know?

People must also know that physical disability is not always a condition where a certain organ stops functioning. Continuous pain may also reduce or negate the ability of a person to perform.
Notes

Self Assessment

1. Multiple Choice Questions: Choose the correct option:

   (i) ................................ injury mostly occurs due to severe accidents.
       (a) Spinal cord  (b) Skeletal  (c) Muscle  (d) Nerve

   (ii) ......................... is a common type of vision impairment.
       (a) ocular trauma  (b) throat infection  (c) scurvy  (d) filariasis

   (iii) ....................... is a kind of physical impairment present in people who are suffering from
dyslexia and various other learning difficulties.
       (a) Visual disability  (b) Cognitive disability
       (c) Hearing disability  (d) Brain disability

   (iv) ....................... results in emotional malfunctioning and certain behavioural disturbance.
       (a) Acquired brain injury  (b) Colour blindness
       (c) Traumatic brain injury  (d) Spinal cord disability

4.3 Characteristics of Physically Handicapped Children

There are many children who are born with physical disabilities. However, the disabilities do not
have to limit their life or natural talents if they are supported and encouraged correctly. Although
physically handicapped children do have to endure certain challenges, they are capable of fulfilling
their dreams by learning how to adapt and adjust to certain situations instead of giving up.

4.3.1 Physical Characteristics

Physically handicapped children are all challenged with physical limitations to some degree. Many
physically handicapped children suffer from a lack of coordination, weak muscles, stiff muscles, or
no muscle strength at all. Rehabilitation and physical therapy can greatly assist physically handicap
children in lessening and even resolving the handicap over time. All of the necessary equipment and
safety measures should be taken in order to allow the child to be as mobile and independent as
possible.

4.3.2 Emotional Characteristics

It is important for parents, family members, friends, and teachers to monitor a physically disabled
child's emotional state. At times, physical Characteristics can lead to frustration, anger and sadness.
The emotional outlook of the child is often directly impacted by the level of support and encouragement
that is received from the people around him. It is important for physically disabled children to have
people that they can talk to openly in order to discuss, understand, and resolve emotional issues. In
some cases, it is beneficial for the child to see a therapist or enroll in a therapy program with animals or
physical activities that increase his confidence.

4.3.3 Learning Characteristics

Although some children with physical disabilities also have mental disabilities many children are
mentally strong and just as capable as any other child. It is important that parents and teachers
encourage physically handicapped children to excel in school and discover their individual talents
and strengths. With the correct support and encouragement physically handicapped children can
succeed in school and even surpass other classmates. Parents and teachers must recognize the gifts
of the child and not limit them mentally because of a physical disabilities.

Task

It is important for parents to monitor a baby or child's development in order to recognize
a physical handicap as soon as possible and find treatment options.
Self Assessment

2. Fill in the blanks:
   (i) ...................... can greatly assist physically handicap children in lessoning and even resolving the handicap overtime.
   (ii) .............. and .............. should encourage physically handicapped children to excel in school and discover their individual talents and strengths.
   (iii) In some cases, it is beneficial for the child to see a ................. or enroll in a therapy program with animals or physical activities that increase his confidence.

4.4 Summary

- Physically Challenged individuals are those who have non-sensory physical limitations i.e. limitation not because of sense organs like eyes or ears, but because of other organs like limbs, bones, joints or muscles.
- Impairment in mobility is a category of disability that includes people with varying types of physical disabilities. This type of disability includes upper limb disability, manual dexterity and disability in co-ordination with different organs of the body.
- Spinal cord disability is another consequence of spinal cord injuries which can sometimes lead even to lifelong disabilities. This kind of skeletal injury mostly occurs due to severe accidents.
- Brain Disability is a disability that occurs in the brain due to a brain injury. The degree of the brain injury can range from mild, moderate and severe. There are broadly two types of brain injuries; Acquired Brain Injury (ABI) and Traumatic Brain Injury (TBI).
- Visual disability these types of injuries can also result into some severe problems or diseases like blindness and ocular trauma. Some of the common types of vision impairment includes scratched cornea, scratches on the sclera, diabetes related eye conditions, dry eyes and corneal graft.
- Hearing disability is the category of physical impairment that includes people that are completely or partially deaf.
- Cognitive disability (Speech and Language Impairment) is a kind of physical impairment present in people who are suffering from dyslexia and various other learning difficulties.
- Many physically handicapped children suffer from a lack of coordination, weak muscles, stiff muscles, or no muscle strength at all.
- At times, physical Characteristics can lead to frustration, anger and sadness. The emotional outlook of the child is often directly impacted by the level of support and encouragement.
- It is important that parents and teachers encourage physically handicapped children to excel in school and discover their individual talents and strengths.

4.5 Keywords

- Cumulative : having result that increases in strength.
- Handicap : A permanent physical or mental condition that makes it difficult to use a particular part of body or mind.
- Emotional : Connected with people's feelings.
- Physically : In a way that is connected with a person's body rather than their mind.
Notes

4.6 Review Questions
1. What is dyslexia?
2. What are the common types of vision impairment?
3. Explain the term disability with proper example.
4. What is the cause of traumatic brain injury?

Answers: Self Assessment
1. (i) (a) (ii) (c) (iii) (b) (iv) (c)
2. (i) Rehabilitation (ii) Parents, teacher (iv) therapist

4.7 Further Readings

1. Special Education: Laura Rothstein; Scott F. Johnson; Sage Publisher, Inc.
2. Special Education: Daniel P. Hallahan, James M. Kauffman, Paige C. Pullen; Pearson Education, Inc.
3. Special Education: Linda Wilmshurst, Ph.D., ABPP, Alan W. Brue, Ph.D., NCSP
Unit 5: Identification, Causes, Problems of Physically Challenged

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Objectives

The objectives of this unit can be summarized as below:

• to explain visual impairment.
• to discuss hearing impairment.
• to describe speech impairment.
• to explain orthopedic disability.

Introduction

A significant portion of our population (over thirty million in the U.S.) has impairments which reduce their ability to effectively or safely use standard consumer products. These impairments may be acquired at birth or through accident or disease. Although there is a tremendous variety of specific causes, as well as combinations and severity of disabilities, we can most easily relate their basic impact to the use of consumer products by looking at major categories of impairment.

• Following categories of impairment
• Visual Impairments
• Hearing Impairments
• Cognitive/Language Impairments
• Physical Impairments

5.1 Visual Impairment

5.1.1 Identification

Identification of Visually Impaired Children: They have difficulty in comprehending space. Not able to see distance, blind individuals are at a distinct disadvantage in appreciating spatial concepts. Blind people apparently learn spatial concepts by the use of other senses than vision. The blind sometimes develops an appreciation of space by nothing the time it takes to walk various distances and through touch and kinesthesia. Audition provides clues to the direction distance of objects which make sound, but it gives no idea of the objects as such. Tactual and kinesthetic experiences require direct contact with or movement around objects. Thus, distant objects such as the heavenly bodies,
clouds and the horizon, as well as very large objects such as mountains and other geographical units or microscopic objects such as bacteria, cannot be perceived and must be conceived only by analogy and extrapolation from objects actually experienced.

The tactual sense is the primary way in which a variety of concepts are acquired by the blind child. There are two different kinds of tactual perception, synthetic touch and analytic touch. Synthetic touch refers to a person's tactual exploration of small objects which are small enough to be enveloped by one or both hands. Unfortunately most physical objects are too large for synthetic touch to be useful. For these physical objects analytic touch has to be used. Analytic touch involves the touching of various parts of an objects and then mentally constructing these separate parts. Whereas the sighted person is able to perceive different objects or the parts of one object simultaneously, the blind person must perceive thinks successively. This necessity for perception in a successive manner restricts the blind child's ability to gain a conceptual understanding of his world.

They are very good at listening tasks. They score high on measures of creativity. Thus, even though the are greatly disadvantaged in terms to cognitive development they are able to compensate in many ways.

The visually impaired people develop an increased ability in attention because their reliance on other senses must be greater.

5.1.2 Causes

Cause of visual handicap can be both genetic and environmental. Visual impairment may be due to accommodation or convergence problems. The major accommodation problems are myopia, hyperopia, and astigmatism. In myopia, or nearsightedness, the individual can see visual stimuli at close range but has trouble in seeing things at a distance. Among partially sighted children myopia is common. Hyperopia is just the opposite of myopia. In astigmatism the individual faces focusing problems. Hence, there is blurred or distorted vision.

5.1.3 Problems of Visually Impaired

The visually handicapped children have many problems like behavior problems, problems of learning, problems of their placement in society or problems of social adjustment. Some problems are discussed below:

(1) Poor Intelligence: Research analyses reveal that visually impaired children have a poor I.Q. Since they have impairments in the exploration of their environments, they have impairments also in concept formation resulting in their poor performance in intelligence tests. Some intelligences test are measured by degrees of information, knowledge or experience. But for blind child, this pattern of scoring is reduced to a very low level.

(2) Academic Retardation: These children have poor academic achievements even if they use large types of Braille. They are noted to be retarded by at least one to two years and are found to be underachiever Visual impairment is the main factor for slower acquisition of information but observation. These children have a slower reading rate and lack concretene in instructional procedures.

(3) Slower Speech Development: Totally blind children cannot learn the art of speech by imitation. They can only learn through what they hear from occasional touch observation. Through research it has been discovered that acquisition of words may get hampered by blindness also.

(4) Personality Disorder: We known that personality develop includes both hereditary and environmental factors. It is a psychophysi organization of the individual modified by his life experiences. For congenit blind children, life experiences go in their own ways which are totally different from normal children.
5.2 Hearing Impairment

Hearing impairment means any degree and type of auditory disorder, while deafness means an extreme inability to discriminate conversational speech through the ear. Deaf people, then, are those who cannot use their hearing for communication. People with a lesser degree of hearing impairment are called hard of hearing.

5.2.1 Identification

Identification of Hearing Impairment: Recently, due to the advancement in technology, the identification of hearing impairment has become easier. The following are some important techniques for identifying impaired children:

(1) Development Scale: Development status may be taken into consideration to identify hearing impaired children. It is conducive for establishing the child’s current status with regard to sensorimotor development. "Bayley Scales of Infant Development" is very helpful for this purpose. This scale provides a basis for early diagnosis and corrective action in case of retarded development.

(2) Neuropsychological Tests: Another important test is the assessment of neurological functions. Owning to cerebral dysfunction and brain damage, a good number of hearing impaired children have additional percepto-motor deficiencies. An expert clinician may be able to find certain signs in such children.

(3) Medical Examination of the Children: By this technique, a physician takes the general medical history of a child he investigates the functioning and dysfunctioning of various organs related to audition. The relationship between the auditory deformities and personality disorder is also sought.

(4) Case Study of the Child: The case history is generally taken by a psychiatrist. The psychiatrist may collect the data from the child directly or from a close relative of the child. While collecting the data, the following points may be taken into account:

   (1) Identification of the child, i.e., name and address etc.
   (2) Statements of the present problem (symptoms etc.).
   (3) Health history (illness, serious disease, surgical operation etc.).
   (4) Development history and
   (5) Family history.

(5) Systematic Observation of the Child Behaviour: This method is highly conducive and extremely useful for assessing the hearing impaired. The salient observable points of behavior displayed by children who are to be indentified are as follows:

   (1) Frequent ear eggs are observable;
   (2) Hey turn heads on one side to hear better;
   (3) These children are unable to follow directions;
   (4) In the classroom, the always request to repeat instruction question etc.

Main Symptoms for Identification of Hearing Impaired

The following questions can be put to the children for identification:

1. Does the child ask for repetition of instruction?
2. Does the child display restlessness and inattention?
3. Does the child have an observable deformity of the ear?
4. Does the child have a discharge from the ear?
5. Does the child complain of pain in the ear frequently?
6. Does the child turn his head frequently in order to hear better?
7. Is the child unable to follow your instruction?
8. Does the child scratch his ear frequently?
9. Does the child focus on the speaker's face while listing to understand speech?
If answers to four or five questions are marked 'yes' the teacher can suspect hearing impairment in the child. Such a child should be referred to the audiologist and ENT specialist for systematic investigation and assessment. If the assessment report indicates mild or moderate degree of hearing impairment the child can be integrated in the regular school without much difficulty. If the assessment report indicates severe or profound hearing loss the child should be placed in a special schools for the deaf.

How would one identify the hearing impaired children? Obviously there are some behavioural indicators and some measurements tools including audiometer. But before the child is referred to an audiomeric clinic, certain signs are visible. These are called behavioural clues. The child displays one or more of the following.

1. Frequent ear aches.
2. Fluid discharge from ear.
3. Cold and sore throats occurring frequently.
4. Lack of equilibrium.
5. Inconsistency in following directions.
6. Always asking "what"-"what".
7. Observing the lip movement.
8. Speech defects.
10. Has trouble in paying attention.

**Did you know?** Usually, a person is considered deaf when sound must reach at least 90 decibels (5 to 10 times louder than normal speech) to be heard, and even amplified speech cannot be understood.

### 5.2.2 Causes

All the causes of hearing impairment can be categorized under four headings: (a) Hereditary and Non-hereditary (b) Congenital and Acquired (c) Pre-natal, Perinatal and Postnatal, and (d) Physiological and Psychological. Sometimes hearing impairment is predetermined by the genetic structure of the individual. It may be present at birth or develop latter in life. Some of these defects are acquired through disease, trauma or accident. There is a hereditary type of degenerative disability. Again there is a hereditary type of degenerative nerve deafness which may be present at birth or develop latter in life. So mothers are restricted to take these drugs during pregnancy. Maternal malnutrition and unhealthy living conditions during pregnancy are some important causes also. Brain fever, the improper growth of brain or auditory system and brain tumour and some of the neurological causes of hearing impairment. The perinatal causes include full time delivery followed by anoxia problems, use of forceps in delivery, instrumental delivery, premature delivery followed immediately by jaundice and use of anaesthetic agents in delivery, Whooping cough, typhoid fever, encephalitis and mumps are significant post-natal causes of hearing impairment. Besides all these factors, accidents, severe burns, toxic drugs, emotional depression and traumas also cause hearing defects. Abnormalities in the inner ear or the auditory nerve result in loss of hearing which is rarely amenable to surgery. Sometimes psychogenic deafness is confused with malingering in which the individual pretends to be unable to hear. But Malingering can be detected by special audiological tests.

1. **Causes Before Birth of H.I.:** There are certain causes which occur before birth
   
   (a) Hereditary
   
   (b) Rubella
Unit 5: Identification, Causes, Problems of Physically Challenged

2. Causes During Birth of Hearing Impaired: During birth there are certain factors which affect hearing loss. Lack of oxygen use of forceps in delivery, instrumental delivery, premature delivery followed immediately by jaundice, use of anaesthetic agents in delivery do cause hearing problems.

3. Causes After birth of Hearing Impaired: The causes which affect hearing loss after birth in children are measles, mumps, whooping cough, meningitis, typhoid fever, encephalitis, infections in nasal cavities, Eustachian tube, middle ear infection, ear discharge etc. All these lead to hearing loss. Ear discharge is more prominent among the causes.

Adequate awareness on the part of parents can prevent the hearing handicap, Early follow-up services for checking expectant mother's health and health of the new born can prevent hearing impairment and associated problems.

4. Causes of Hearing Impaired: Hearing loss may not necessarily be due to organic factors but to psychological and psychiatric reasons. There has been differential focus. The psychological and psychiatric reasons. There has been differential focus. The otologist looks for medical and surgical intervention, and audiologist suggests amplification and therapeutic management but for an educator or resource teacher emphasis on language development is crucial remedial step.

5. Neurological of Hearing Impaired: Besides organic causes which are responsible for hearing loss. The sensorineural hearing loss is associated with actual neurological transmission of sound. Such hearing loss results from damage to the sensory walls within cochlea or the auditory nerve both because of genetic and/or environmental factors.

Caution
Overdose of strong drugs like streptomycin, quinine and L.S.D. are associated with hearing impairment. So mothers are restricted to take these drugs to avoid baby from hearing impairment.

5.2.3 Problems of Hearing Impaired Children

Hearing impairments can be viewed from an educational perspective but also from the large perspective of their effects on the child's overall adjustment. The problems and special needs of hearing impaired children have been summarized in a tabular form.
The speech and hearing problems of deaf children needing special care varies according to category of hearing impairments.

### Problems of Hearing Impaired Children

<table>
<thead>
<tr>
<th>Level</th>
<th>Speech and Hearing Problems</th>
<th>Special Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Hearing threshold 26 to 40 dB. Mild hearing loss.</td>
<td>Exhibits difficulty in hearing faint speech, speech at distance of speech with background noise. Speech and language developments are within normal limits. May exhibit occasional auditory perception problems some educational retardation likely.</td>
<td>Will benefit from special seating in the class. Hearing aid is beneficial. Parents and teachers should be educated on the Child’s problems in understanding due to hearing loss.</td>
</tr>
<tr>
<td>3. 41 to 55 dB moderate hearing-loss</td>
<td>Language development and speech are mildly affected. Difficulty with rarely used words, minor differences in meaning of words and idioms, defective articulation but still intelligible speech loss quality and inflection almost normal. Reading and writing are delayed.</td>
<td>They should well to hearing aids and amplification, early speech and language training and parent counselling indicated speech and language development to be monitored. Special seating, supportive teaching will….</td>
</tr>
</tbody>
</table>

### Self Assessment

1. Fill in the blanks:
   
   (i) There are two different kinds of tactual perception ....................... and ..................... .
   (ii) .......................... may be due to accommodation or convergence problems.
   (iii) In ................. the individual faces focusing problems. Hence there is blurred or distorted vision.
   (iv) .......................... of parents can prevent the hearing impairment.
   (v) Abnormalities in the inner ear or auditory nerve results in loss of hearing which is rarely amenable to ............... .

### 5.3 Speech Impairment

The type of cognitive impairment can widely, from severe retardation to inability to remember, to the absence or impairment of specific cognitive functions (most particularly, language). Therefore, the type of functional limitations which can result also vary widely.

Cognitive impairments are varied, but may be categorized as memory, perception, problem-solving, and conceptualizing disabilities. Memory problems include difficulty getting information from short-term storage, long term and remote memory. This includes difficulty recognizing and retrieving information. Perception problems include difficulty taking in, attending to, and discriminating sensory information. Difficulties in problem solving include recognizing the problem identifying, choosing and implementing solutions, and evaluation of outcome. Conceptual difficulties can include problems in sequencing, generalizing previously.

#### 5.3.1 Identification

**Identification of Speech Impairment**: Various techniques are used but one such technique is to know the behavioural clues to detect speech defects.

1. Faulty articulation or pronunciation-substitution (Cree for tree) omission (ate for gate); distortions (ship for sip).
2. Unpleasant voice quality-nasality, (too much sound through nose hoarseness, harshness (irritation), breathiness.
3. Defective voice-too high or too low; too loud or too soft; monotonous voice.
4. Stuttering, cluttering.
5. Difficulty in understanding meaning of spoken words/sentences.
6. Difficulty in formatting oral sentence.

Speech is defective when it deviates so from the speech of other people that it calls attention to itself, interferes with communication, or causes the possessor to be maladjusted. Language problems should be considered significant if they interfere with communication if they cause the speaker to maladjusted or if they cause problems for the listener "Gearhart and Weigharn.

5.3.2 Causes

(1) Organic Causes: The organic causes of speech defects include palatal anomalies, dental irregularities, paralysis and tumours of the anomalies, dental etc. In some cases, deformation of jaw and lips also result in lisping. The articulatory and vocal difficulties of the child with a cleft-palate can be attributed directly to this type and severity of the cleft.

(2) Functional causes: It is observed that many children, with normal speech mechanisms, have defects in articulation and/or voice. Studies report that in some cases, imitation of an older sibling, a playmate or an adult may be the sole cause for this anomaly. It is true that children learn to articulate, vocalize and use language "by ear". They learn to speak in a fallacious manner, if they hear faulty vocabularies. Generally, speech faults are based on imitation of adult’s behavior.

(3) Psychogenic Causes: Recent studies of speech defect reveal that many defects of speech are psychogenic. When the causes of speech defects are not organic or functional, they can be attributed to children’s reactions to the environment, particularly to their parents. In this study, Wood reported that functional articulatory defects of children are definitely and significantly associated with maladjustment and undesirable traits on the part of the parents.

(4) Psychological Causes: Speech defects also have emotional and psychological origin. Speech does not depend only on the efficacy of the speech organs but also on the personal maturity of the child, his attitude to himself, his relationship with others and the degree to which the home has stimulated and encouraged speech. Some psychologists are of the opinion that these defects are the outcome of disturbed feeling or emotions, faulty language habits arising from social pressures.

(5) Loss of Hearing: Development of speech reception requires normal auditory system. If the child’s hearing is impaired, the auditory input is distorted. Then speech reception skills may have some deviations or delay in development. Due to this faulty feedback system, this may affect speech production. Reports say that the degree of hearing loss has a direct bearing on the production of speech and languages.

(6) Social Influences: Language is a means of communication. This also develops in social context. In an impoverished environment, children lack stimulation. They do not get the chance to learn new words. For the language achievement of children, stimulating homes, schools and play pivotal roles. Children from higher professional groups show early speech development.

(7) Cerebral Palsy: Children who are the victims of cerebral palsy often lack stimulation to speak and hence need to be highly motivated, for speech therapy, spastics, athetoid and ataxic children often have a good number of speech defects, Observation can easily reveal that a spastic child would show articulatory deviation and the athetoid child would show slurring in rhythm and constant change in pitch and infection.

5.3.3 Problems of Speech Impaired Children

Speech impaired children face many problems in daily life. Some of the important problems are being discussed below:
(1) For these children, maladjustment is very common. These children show aggressive tendencies, anxieties and fears. They usually perceive their parents as authoritarian figures.

(2) Speech impaired children are inferior to normal children so far as reading is concerned. They are underachievers in the school. Generally they do not conform to the general behavior standard.

(3) Sometimes other children attempt to make fun of their defective speech and consequently the child withdraws himself from the social situation. By that, the socialization process is also hampered. These children cannot become leaders in their concerned peer groups.

(4) Depending on the severity of the anomaly, the children can be more or less separated from the sole means of mental growth.

(5) Very often, children become conscious of their defects. They find difficulty in communicating with others. So they cannot take active part in games and groups activities.

(6) A poor articulator is often poor in auditory discrimination. Pronunciation difficulties interfere with work recognition and spelling.

5.4 Physically Disability (Orthopedic)

Children with Orthopedic Handicaps: Some children have orthopedic handicap or locomotor handicap. Locomotor handicap refers to the problems with the functioning of bones, joints and muscles. In some cases their crippling conditions. In other cases they need wheelchair or crutches. They need removal of architectural barriers and some environmental modifications in the schools. Usually mildly orthopedically handicapped children do not have learning problems. They can be integrated in the regular school without much difficulty.

5.4.1 Identification

Identifications of Orthopaedic Impaired Children: Identification of orthopaedically children is very easy in comparison with other disabilities like partial sightedness and hearing impairment etc. There are some children who have problems of a mild degree which may be overlooked. For these cases, identification can be made with the help of the following checklist on behavioural manifestations.

The orthopaedic impaired children can be identified by putting the following questions:
1. Poor motor control or coordination. The child is unable to coordinate two or more muscle groups for performing any task.
2. Walks awkwardly or with a limp.
3. Shows signs of pain during physical exercise.
4. Difficulty in picking holding and putting in some place.
5. Move in a shaky fashion.
6. Falls frequently.
7. These children have poor motor control and coordination.
8. These children show signs of pain during physical exercise.
9. Deformity in fingers, legs, hands, spine, neck.
10. Frequent pain in joints.
12. Amputated limbs and

Causes of Orthopaedic Impairement

The causes of physically disabled are many and varied. Brain damage, brain fever, and brain anoxia lead to physical disability. RH-incompatibility, intoxication, viral infection for the expectant mother also cause physical disability. Similarly, prolonged labour, lead poisoning, accidents may cause
damage to the brain learning to neurological disorders. Polio, Burns and injuries are significant causes as per NSSO, 1991 of Indian society.

The causative factors of handicaps are many. But a thorough knowledge of some main causative factors is necessary for planning a programme for them. The sole factors are as follows:

**Hereditary Cause:** This anomaly passes down from generation to generation because of some sort of disturbance in the working of inherent gene mechanism. However, may be noted that a particular condition may be hereditary and yet it may not manifest itself at birth or might not have appeared before the individual's immediate family.

**Congenital Causes:** Congenital defects are those that are present at birth. Common congenital defects include club foot, dislocation of hip, missing bones, bow leg, webbed fingers etc. These defects are possible due to infection, nutritional deficiency, x-rays, glandular disorder of the mother, maternal malnourishment etc.

**Acquired Causes:** Acquired defects include birth injury, accident, nutrition deficiency, defective bones or joints, viral infection, etc.

**Loss of Limbs or Digits (Amputation or Congenital):** This may be due to trauma (e.g., explosions, mangling in a machine, severance, burns) or surgery (due to cancer, peripheral arterial disease, diabetes).

**Parkinson's Disease:** This is a progressive disease of older adults characterized by muscle rigidity, slowness of movements, and a unique type of tremor. There is no actual paralysis. The usual age of onset is 50 to 70, and the disease is relatively common-187 cases per 10,00,000.

**Multiple Sclerosis (MS):** Multiple sclerosis is defined as a progressive disease of the central nervous system characterized by the destruction of the insulating material covering never fibers. The problems these individuals experience include poor muscle control, weakness and fatigue, difficulty in walking, talking, seeing, sensing or grasping objects, and intolerance of heat.

**ALS (Lou Gehrig's Disease):** ALS (Amyotrophic Lateral Sclerosis) is a fatal degenerative disease of the central nervous system characterized by slowly progressive paralysis of the voluntary muscles. The major symptom is progressive muscle weakness involving the limbs, trunk, breathing muscles, throat and tongue, leading to partial paralysis and severe speech difficulties.

**Muscular Dystrophy (MD):** Muscular dystrophy is a group of hereditary diseases causing progressive muscular weakness, loss of muscular control, contractions and difficulty in walking, breathing, reaching, and use of hands involving strength.

Skeletal impairments include joint movement limitations (either mechanical or due to pain), small limbs, missing limbs, or abnormal trunk size.

Some minor causes of these impairments are:

**Arthritis:** Arthritis is defined as pain in joints, usually reducing range of motion and causing weakness. Rheumatoid arthritis is a chronic syndrome. Osteoarthritis is degenerative joint diseases.

**Cerebral Palsy (CP):** Cerebral palsy is defined as damage to the motor areas of the brain prior to brain maturity (most cases of CP occur before, during or shortly following birth). Some causes of cerebral palsy are high temperature, lack of oxygen, and injury to the head. The most common types are:

1. **Spastic,** where the individual moves stiffly and with difficulty,
2. **Ataxic,** characterized by a disturbed sense of balance and depth perception, and
3. **Athetoid,** characterized by involuntary, uncontrolled motion. Most cases are combinations of the three types.

**Spinal Cord Injury:** Spinal cord injury can result in paralysis or paresis (weakening). The extent of paralysis/paresis and the parts of the body affected are determined by how high or low on the spine the damage occurs and the type of damage to the cord. Quadriplegia involves all four limbs and is
caused by injury to the cervical (upper) region of the spine; paraplegia involves only the lower extremities and occurs where injury was below the level of the first thoracic vertebra (mid-lower back).

**Head Injury (cerebral trauma):** The term "head injury" is used to describe a wide array of injuries, including concussion, brain stem injury, closed head injury, cerebral hemorrhage, depressed skull fracture, foreign object (e.g., bullet), anoxia, and post-operative infections. Like spinal cord injuries, head injury and also stroke often results in paralysis and paresis, but there can be a variety of other effects as well.

**Stroke (cerebral vascular accident; CVA):** The three main causes of stroke are: thrombosis (blood clot in a blood vessel block blood flow past that point), hemorrhage (resulting in bleeding into the brain tissue; associated with high blood pressure or rupture of an aneurysm).

5.4.3 Problems

Problems faced by individuals with physical impairments include poor muscle control, weakness and fatigue, difficulty in walking, talking, seeing, speaking, sensing or grasping (due to pain or weakness), difficulty reaching things, and difficulty doing complex or compound manipulations (push, and turn). Individuals with spinal cord injuries may be unable to use their limbs and may use "mouthsticks" for most manipulations. Twisting motions may be difficult or impossible for people with many types of physical disabilities (including cerebral palsy, spinal cord injury, arthritis, multiple sclerosis, muscular dystrophy, etc.).

Some individuals with severe physical disabilities may not be able to operate even well-designed products directly. These individuals usually must rely on assistive devices which take advantage of their specific abilities and on their ability to use these assistive devices with standard products. Commonly used assistive devices include mobility aids (e.g., crutches, wheelchairs), manipulation aids (e.g., prosthetics, orthotics, reaches) communication aids (e.g., single switch-based artificial voice), and computer/device interface aids (e.g., eye-gaze operated keyboard).

**Self Assessment**

2. Multiple Choice Questions

*Choose the correct option:*

(i) It is true that children learn to articulate, vocalize and use language by...............
   
   (a) threat         (b) ear         (c) mouth         (d) vocals

(ii) Children who are the victims of cerebral palsy often lack stimulation to ................. .
   
   (a) speak         (b) hear         (c) see           (d) touch

(iii) The cognitive impairment is also called as.............
   
   (a) hearing impairment   (b) visual impairment
   (c) speech impairment    (d) orthopedic impairment

(iv) ..................... is not related to locomotors handicap.
   
   (a) bones         (b) joints         (c) muscles         (d) brain

(v) Older adults characterized by muscle rigidity, slowness of movements and a unique type of tremor are suffered by....................... .
   
   (a) Parkinson's disease     (b) Multiple sclerosis
   (c) Lou Gehrig's disease     (d) Muscular dystrophy
5.5 Summary

- We have discussed identification, causes and problems of physically challenged. Let's recapitulate the important points.

- Visual Impairment:
  Identification:
  (i) Tactual sense is the primary way in which a variety of concepts are acquired by the blind child. There are two types of tactual perception (a) synthetic touch (b) analytic touch.
  (ii) Blind people good are very good at listening tasks. They scare high on measures of creativity. The blind person must perceive thinks successively.
  (iii) Poor eye-hand coordination is also a sign of identification of visual impairment.
  Causes: Cases of visual handicap can be both genetic and environment. It is due to accommodation or can mergence problem. Major accommodation problems are myopia, hyperopic, and astigmatism.
  Problems: Poor intelligence, academic retardation slower speech development, personality disorder are some of the major problems of visually impaired children.

- Hearing Impairment
  Identification: Identification of hearing impaired child is done by some tests like development scale psychological test medical examination, case study of child, and systematic observation of child behavior.
  Causes: There are four kinds of causes of hearing impairment (a) Hereditary (b) Congenital and acquired (c) Pre-natal, prenatal and postnatal (d) Physiological and psychological.
  Hereditary, Rubella, infectious disease, drugs and malnutrition are the causes before birth, lack of oxygen use of forceps in delivery, instrumental delivery are causes during birth and measles, mumps, whooping caught, meningitis, typhoid fever are the causes after birth.
  Problems: Difficulty in hearing faint speech, speech at distance of speech with background, occasionally auditory perception problems are some major problems of hearing in paired children. Delayed speech, depression and isolation are some other problems.

- Speech Impaired Children
  Identification: Faulty articulation or pronunciation, unpleasant voice quality-nasality, defective voice too high or too low stuttering, cluttering are some signs of speech impairment.
  Causes: The organic causes includes palatal anomalies, dental irregularities, the functional causes are defects in articulation voice, psychogenic causes means defects due to environment causes, loss of hearing. Social in child fluency psychological are other causes.
  Problems: Speech impaired children are inferior to normal children. They show aggressive tendencies, anxieties and fears. They feel depress and isolated from society.

- Physical Disability (Orthopedic)
  Identification: Identification of orthopedically children is very easy in comparison with other disabilities. They have poor motor control or co-ordination; walk awkwardly with a limp, falls frequently.
  Causes: There are different kinds of physical disability orthopedic. All have different causes.
  Parkinson's disease is by muscle rigidity, multiple sclerosis is due to destruction of the insulating material.
  ALS (Amyotrophic lateral sclerosis is due to slowly progressive paralysis of voluntary mussels.
  Muscular dystrophy is due to muscular weakness.
  Arthritis is caused by pain in joints.
  Cerebral palsy is due to motor areas of the brain prior to brain maturity. Spinal cord and head injury are very severe. It can result in paralysis of all the four links.
Problems: Poor muscle control, weakness and fatigue, difficulty in walking, talking, seeing, speaking or grasping due to weakness. People do sympathy with then, but they feel ashamed and along. They need full chances to get ahead.

5.6 Keywords

- **Impairment**: The state of having a physical or mental condition which means that the part of body or brain does not work correctly.
- **Neurological**: Relating to nerves or to science of neurology.
- **Cognitive**: Connected with mental process of understanding.
- **Orthopedics**: The branch of medicine connected with injuries and diseases of bones.
- **Locomotion**: Movement or the ability to move.

5.7 Review Questions

1. What is myopia?
2. Discuss the causes of hearing impairment before birth.
3. What is the effect of strong drugs on pregnant woman?
4. What is "cerebral palsy"?
5. Write about Muscular Dystrophy, and multiple sclerosis.

**Answer: Self Assement**

1. (i) Synthetic touch, analytic touch (ii) Visual impairment
   (iii) Astigmatism (iv) awareness
   (v) Surgery

2. (i) (b) (ii) (a) (iii) (c) (iv) (d)
   (v) (a)

5.8 Further Readings

1. ERIC Clearinghouse on Handicapped and Gifted Children Reston VA: *Visually handicapped*: Requires special educational provisions because of ... as lighting, use of optical aids and devices, tasks, and personal characteristics.
2. Special Education: Laura Rothstein; Scott F. Johnson; Sage Publisher, Inc.
3. Special Education: Daniel P. Hallahan, James M. Kauffman, Paige C. Pullen; Pearson Education, Inc.
Unit 6: Physically Challenged: Preventions, Teaching Strategies

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Objectives
The objectives of this unit can be summarized as below:
• to explain about the prevention and teaching strategies of visual impairment.
• to describe about the prevention and teaching strategies for students of hearing impairment.
• to discuss the prevention and teaching strategies of speech and language impairment.
• to explain the prevention and teaching strategies of orthopedic impaired children.

Introduction
A student that exhibits articulation difficulties and or impairments that can be a direct result of neurological, physical or psychological factors may have a speech disorder. Voice fluency is usually missing. Sometimes a child will have both language and speech delays. Note: language delays include lack of understanding, and the ability to relay thoughts.

The physical disability is of four types. Each disability has different preventive measures and teaching strategies. Visual impairment, hearing impairment and speech impairment need more and peculiar type of teaching, but physical handicapped or orthopedic disabled children can get education with normal children. Prevention in all types of disability is almost same like protection from diseases, victimization, avoid from accidents. In this unit we will discuss prevention and teaching strategies of different disabilities.

6.1 Prevention of Visual Impairment
Eyes are the most precious gift of God. We do every work by seeing anything. Without eyes, there is blank and dark world in front of us. We should good are of eyes. Here we are discussing some preventive measures to avoid the eye problems. If the parents are aware of these measures and
follow them. Children can avoid the various eye problems and blindness. Some of the preventive measures are as follows:

- Breast-feed vitamin A rich colostrum (the first breastmilk) to the new born baby.
- Breast-feed infants for at least one year.
- Start at 3-6 months to feed infants locally available leafy green vegetables rich in vitamin A, wellcooked finely chopped, and mixed with other food,if possible, to make them more acceptable.
- Include dark green leafy vegetables or fruits in the feeding of pre-school children every day.
- Include yellow-orange fruits rich in Vitamin A (i.e. papaya and mango) in the child’s diet.
- Include fat in the child’s diet, with dark green leafy vegetables, fruit and other sources of vegetables.
- Pregnant and lactating women should eat food rich in vitamin A every day.
- Administer vitamin A 200,000 IU in oil by mouth to mothers after the birth of the child or within one month after birth.
- Educate families that night blindness is an early warning sign of xerophthalmia and can be treated by feeding vitamin A in oil by mouth.
- Teach school children to detect and report night blindness in younger children.
- Take a good and nourishing diet rich in protein and vitamin, such as milk, papaya, mango, carrot, spinach, egg and fish.
- Protect the eyes from excessive exposure to sun rays, intensive heat, X-rays and injuries.
- Treat diseases like diabetes and syphilis effectively.
- Can not be cured by application of any medicine to the eye or by taking any medicine orally.
- In the beginning eye-sight can be improved with glasses.
- Obtain suitable glasses after getting the eyes tested.
- Power of glasses changes with the progress of cataract.
- After maturity of cataract, surgery is needed to restore vision.
- Create public awareness using pamphlets in the local language and other suitable means e.g. beating of drums, puppet shows etc.
- Organize eye check up camps with the involvement of the local eye hospital or the local Ophthalmic Surgeons.
- Provide treatment, medicines, eye drops to the patients not requiring eye surgeries.
- Organize eye camp in the central village with the involvement of the village Panchayat, youth club or any other local organization.
- Arrange the follow up of the cases who have been operated in the camp.
- Arrange for the eye check up of all these cases and provide suitable glasses or eye drops etc.

### 6.2 Teaching Strategies for Visual Impairment

- Speak to the class upon entering and leaving the room or site.
- Call the student with a visual impairment by name if you want his/her attention.
- Seat the student away from glaring lights (e.g. by the window) and preferably in front of the class.
- Use descriptive words such as straight, forward, left, etc. in relation to the student’s body orientation. Be specific in directions and avoid the use of vague terms with unusable information, such as “over there”, "here", "this", etc.
- Describe, in detail, pertinent visual occurrences of the learning activities.
• Describe and tactually familiarize the student to the classroom, laboratory, equipment, supplies, materials, field sites, etc.

• Give verbal notice of room changes, special meetings, or assignments.

• Offer to read written information for a person with a visual impairment, when appropriate.

• Order the appropriate text books for the students in their preferred medium.

• Identify yourself by name; don't assume that the student who is visually impaired will recognize you by your voice even though you have met before.

• If you are asked to guide a student with a visual impairment, identify yourself, offer your services and, if accepted, offer your arm to the student's hand. Tell them if they have to step up or step down, let them know if the door is to their left or right, and warn them of possible hazards.

• Orally, let the student know if you need to move or leave or need to end a conversation.

• If a student with a visual impairment is in class, routinely check the instructional environment to be sure it is adequate and ready for use.

• When communicating with a student who has a visual impairment, always identify yourself and others who are present.

• Do not pet or touch a guide dog. Guide dogs are working animals. It can be hazardous for the visually impaired person if the dog is distracted.

• Be understanding of the slight noise made by a portable translator.

• Also use an auditory or tactile signal where a visual signal is normally used.

• It is not necessary to speak loudly to people with visual impairments.

• Always notify changes of class schedule in advance.

6.2.1 Teacher Presentation
• By verbally spelling out a new or technical word, you will be helping the student with a visual impairment, as well as for other students.

• An enlarged activity script, directions, or readings of a detailed lesson can be used for a low vision person and for use in describing tactile 3D models.

• Use an overhead projector to show step-by-step instructions. Mask all the instructions except the one(s) that you want to present.

• Use an opaque projector whenever possible to enlarge a text or manual.

• All colored objects used for identification related to a lesson, experiment, or other directions should be labeled with a Braille label maker or otherwise tacitly coded for most students with vision impairments.

• Describe, in detail, visual occurrences, visual media, and directions including all pertinent aspects that involve sight.

• Use a sighted narrator or descriptive video (preferably the latter) to describe aspects of videos or laser disks.

• Describe, in detail, all pertinent visual occurrences or chalkboard writing.

• Where needed, have lesson or direction materials Brailed, use an enlarged activity script, or recorded ahead of time, for class handouts.

• Have tactile 3D models, raised line drawings, or thermoforms available to supplement drawings or graphics in a tactile format when needed.

• Whenever possible, use actual objects for three dimensional representations.

• Modify instructions for auditory/tactile presentation.

• Use raised line drawings for temporary tactile presentations.
• Use an overhead projector, chalkboard, graphs, or slides as you would normally, but provide more detailed oral descriptions, possibly supplemented with thermoforms where appropriate.
• Allow student to use a tape recorder for recording classroom presentations or the text.
• Make all handouts and assignments available in an appropriate form: e.g., regular print, large print, Braille, or on a cassette, depending on the student's optimal mode of communication.
• Use a monocular or a private eye (electronic miniature television) or similar devices for long range observations of chalk board or demonstration table presentations.

6.2.2 Text Reading Systems
• Paid or volunteer readers or writers can assist a student with a visual impairment with texts, materials, and library readings.
• Offer to read, or arrange to have read, written information for a person with a visual impairment, when appropriate.
• Arrange, ahead of time, for audio book acquisition of the text or other reading materials through the Talking Book Service, Recordings for the Blind and Dyslexic, text reading systems, or audio output devices.
• Various Braille devices can be used to assist vision impaired students when reading.

6.2.3 Testing
• Make arrangements for tactile examinations, if touch is not normally permitted (say, in a museum) then contact the curator for tactile access to a museum display items or say, in a zoo for access to a plant/animal species and/or collection).
• Place the student being tested close to the activity if tactile examination is necessary.
• Present examinations in a form that will be unbiased to visually impaired students. Ask the student for the approach he/she finds to be most accessible.
• One possible accessible method is to record test questions on tape and have the students record their answers on tape in an area which has minimal disturbance for other students.
• Use an enlarged activity script, directions, or readings to go along with the testing material.
• Allow more time.
• Allow calculators to be used during the test.
• Make use of larger print (e.g. 14 pt; 20 pt sized or as needed).
• Make use of visual magnification (magnifier or magnifying machine), audiocassette, Braille/Braille graphs/Braille device for written responses, large block answer sheet.

Self Assessment
1. Fill in the blanks:
   (i) ................. is essential for new born baby for avoiding eye blindness and xerophthalmia.
   (ii) Parents should protect children from exposure of sun rays, intensive heat and ............... for avoiding the eye-problems.
   (iii) If ................ increase in the eyes the power of glass should .................
   (iv) The ............... has become very popular for the prevention of visual impairment and cure of contract, glaucoma etc.
   (v) Teacher should use an ...................... where a visual signal is normally used.

6.3 Prevention of Hearing Impairment

Preventing noise-related hearing loss: Being exposed to loud noise over and over is one of the most common causes of permanent hearing loss. It usually develops slowly and without pain or other symptoms, and you may not notice that you have hearing loss until it is severe.
Understanding Tinnitus -- Symptoms: The symptoms of tinnitus include: A noise in the ears, such as ringing, roaring, buzzing, hissing, or whistling; the noise may be intermittent or continuous. Most of the time, only the person who has tinnitus can hear it (subjective tinnitus). However, there are some types that the doctor can hear if a stethoscope is put in the ear (objective tinnitus).

Be sure your child has regular hearing exams and follows the suggestions below to prevent hearing loss. Steps you can take to lower your risk of noise-induced hearing loss include the following:

• Be aware of and avoid harmful noise. You can be exposed to harmful noise at work, at home, and in many other settings. Know what kinds of situations can cause harmful noise levels.

• Use hearing protectors. If you know you are going to be around harmful noise, wear hearing protectors, such as earplugs or earmuffs.

• Control the volume when you can. Reduce the noise in your life by turning down the volume on the stereo, TV, or car radio, and especially on personal listening devices with earphones or ear buds.

• Don't wait to protect yourself. After noise-related damage to the ear is done, it cannot be reversed. But if you already have some noise-related hearing loss, it is not too late to prevent further damage and preserve the hearing that you still have.

Preventing other causes of hearing loss: To lower your risk of other types of hearing loss:

• Never stick a cotton swab, hairpin, or other object in your ear to try to remove earwax or to scratch your ear. The best way to prevent earwax problems is to leave earwax alone. For information on how to remove hardened wax, see the topic Earwax.

• Always blow your nose gently and through both nostrils.

• During air travel, swallow and yawn frequently when the plane is landing. If you have an upper respiratory problem (such as a cold, the flu, or a sinus infection), take a decongestant a few hours before landing or use a decongestant spray just before landing.

• Stop smoking. You are more likely to have hearing loss if you smoke.

6.4 Teaching Strategies for Students with Hearing Impairments

Accommodations are intended to "level the playing field". They in no way guarantee success nor should they compromise the integrity of the course. Please remember that the following are only suggestions. Faculty/Staff are not required or expected to provide all of these accommodations.

• Students with hearing impairments will benefit from front row seating. An unobstructed line of vision is necessary for students who use interpreters and for those who rely on lip-reading and visual cues. If an interpreter is used, the student's view should include the interpreter and the lecturer. Do not speak facing the blackboard

• Whenever possible, utilize circular seating arrangements as they offer Deaf or hard-of-hearing student the best opportunity to see all class participants

• Be aware of the fact that hands, books or microphones in front of your face can add to the difficulties of lip readers

• Keep your face within view of the student and speak in a natural tone

• When an interpreter is being used, speak directly to the student, not to the interpreter

• Recognize the brief amount of extra processing time that it takes for the interpreter to translate a message form its original language into another language, because this will cause a delay in the student's receiving information, asking questions and/or offering comments

• Repeat the questions or remarks of others in the room-Acknowledge who has made the comment so that the hard of hearing student can focus on the speaker

• Use visual aids to reinforce spoken presentations whenever possible

• Whenever possible, provide the student with class outlines, lecture notes, lists of new technical terms and printed transcripts of audio and audio-visual materials
Notes

• Do not hesitate to communicate with the student in writing when conveying important information such as assignments, scheduling and deadlines
• Whenever possible, try not to speak when the person is writing.
• Do not shout!!
• Be amenable to wearing a microphone transmitter for use with an assisted listening device if asked
• If there is a break in the class, be sure to get the hard-of-hearing student's attention before resuming the lecture
• Be flexible: allow a Deaf student to work with audio-visual material independently and for a longer period of time
• Allow the student the same anonymity as other students (i.e. avoid pointing out the student or their accommodations to the rest of the class

Self Assessment

2. State whether the following statements are ‘True’ or ‘False’:
   (i) We should never use a hairpin or other sharp object in ear to try to remove earwax or to scratch ear.
   (ii) Students with hearing impairment should sit in last raw of classroom.
   (iii) Teacher should use visual aids to reinforce spoken presentations whenever possible.
   (iv) Teacher should not allow the deaf student to work with audio visual material independently and for a longer period of time.
   (v) Teacher should force on speech disable child to hard and difficult words.

6.5 Prevention of Speech and Language Impairment

The World Health Organisation defined medical prevention in 3 stages. (a) Primary Prevention; (b) Secondary Prevention; (c) Tertiary Prevention.

(a) **Primary Prevention**: relates to all activities aimed at “reducing the incidence of a disease within a population and therefore reducing, whenever possible, the risks of new cases”. Applied to speech and language this means mainly information and health education, as well as training of all those professionals dealing with a specific population.

(b) **Secondary Prevention**: relates to all activities aimed at "reducing the prevalence of disease and therefore reducing the time of evolution". Applied to Speech and Language, this means mainly screening and early detection of delays or disorders. Early detection and treatment may lead to the elimination of the disorder or to the reduction of the disorder's progress.

(c) **Tertiary Prevention**: aims at "reducing the prevalence of chronic disabilities or recurrence of a disease, thus reducing the functional modalities due to the disease". In Speech and Language disabilities it relates to management of the problem including various techniques of rehabilitation and intervention aiming at preventing further problems arising as a result of a disorder.

Speech and language therapists/ logopedists have, in their history, most commonly provided tertiary prevention. In recent years practice of primary and secondary prevention has become an increasing part of the work of the profession, as has multidisciplinary teamworking. Examples of what this practice can be are given here.

A necessary step to optimise prevention is to include strategies of prevention in all initial SLT's/logopedists' education programmes and to give legal competence in it to these professionals as it already is in many European countries.
Many measures can be taken to prevent speech or language impairments. Many preventive measures have a medical basis and are implemented prior to the birth of a baby. For example, polio and rubella can have devastating effects on an unborn baby; proper immunization protects adults and children from these and other diseases. Proper prenatal care is important to the health of babies. Good nutrition influences the strength and early development of very young children.

The link between poverty and disabilities is clear (CDF, 2004). Those who are poor are less likely to have access to information and medical programs, which puts them at risk for diseases that result in disabilities (Utley & Obiakor, 2001). The availability of proper medical care before and after birth is crucial. Access to health care during childhood is important so that diseases in early childhood, such as measles and otitis media, can be avoided or treated early. Better public education programs available to the entire population inform people of the necessity of good prenatal care, nutrition, and medical care. Innovative approaches to the dissemination of information about the importance of protecting children from disease can make real differences in reducing the numbers of individuals who have language problems because they did not receive immunizations or early treatment for illness. For example, TV or radio advertisements may reach some families; different approaches might be more effective when informing other families. Health fairs sponsored by churches, sororities, fraternities, and other community organizations may prove to be more effective than traditional means in communicating important information to the African American community (CDF, 2004).

A nutritional supplement of folic acid during pregnancy can reduce the risk of cleft palates and lips by 25 to 50 percent (March, 1995).

6.6 Teaching Strategies for Speech and Language Disorders

Language: A student with a learning disability whereby he/she has difficulties with comprehension and/or verbal/oral or written communication may have a language disorder. It may or may not be a direct result of something neurological, physical or psychological in nature.

A student that exhibits articulation difficulties and or impairments that can be a direct result of neurological, physical or psychological factors may have a speech disorder.

Speech: Both disorders can have significant impact on the child’s ability to learn. Typically in most jurisdictions, speech/language pathologists will do an assessment which helps to determine the extent of the disorder. A speech and language pathologist will also and provide recommendations for for the Individual Education Program (IEP) along with suggestions for support at home. Once again, early intervention is crucial.

- Teachers will want to reduce unnecessary classroom noise as much as possible. This helps the child focus without contending with the extraneous noises which assists understanding and comprehension.
- Be sure to be near the student when giving vocal instructions and ask the student to repeat the instructions and prompt when necessary. Provide verbal clues often.
- Provide a quiet spot for the student to work whenever possible.
- Speak slowly and deliberately.
- Provide visual cues - on the blackboard or chart paper.
- Focus the student frequently and provide step by step directions - repeating when necessary.
- Use gestures that support understanding.
- Avoid correcting speech difficulties - this will lead to a weaker self esteem, it’s much more important to model correct speech patterns.
- Touch base with the speech/language pathologist to ensure the correct accommodations are in place.
Notes

- The learning environment needs to be positive.
- Capitalize on the student's strengths as much as possible.
- Be patient when the child is speaking, rushing a child with difficulties magnifies the frustration level.

6.7 Prevention of Orthopedic Impairment

To prevent orthopedic impairments that result from preventable diseases, it is important to focus on health education, nutrition and immunization. This includes relatively simple procedures such as raising awareness of the importance of cleanliness, medical care, and nutrition for the development of strong bones; monitoring births to avoid conditions resulting from complicated births; and administering polio vaccinations to prevent polio and post-polio syndrome. There should be great care of children at the time of playing and fun at the wrong and dangerous places to avoid accidents. We should avoid rugh and careless driving.

6.8 Teaching Strategies of Orthopedic Impairment

As with most students with disabilities, the classroom accommodations for students with orthopedic impairments will vary dependent on the individual needs of the student. Since many students with orthopedic impairments have no cognitive impairments, the general educator and special educator should collaborate to include the student in the general curriculum as much as possible.

In order for the student to access the general curriculum the student may require these accommodations:

- Special seating arrangements to develop useful posture and movements.
- Instruction focused on development of gross and fine motor skills.
- Securing suitable augmentative communication and other assistive devices.
- Awareness of medical condition and its affect on the student (such as getting tired quickly).

Because of the multi-faceted nature of orthopedic impairments, other specialists may be involved in developing and implementing an appropriate educational program for the student. These specialists can include:

- Physical Therapists who work on gross motor skills (focusing on the legs, back, neck and torso).
- Occupational Therapists who work on fine motor sills (focusing on the arms and hands as well as daily living activities such as dressing and bathing).
- Speech-Language Pathologists who work with the student on problems with speech and language.
- Adapted Physical Education Teachers, who are specially trained PE teachers who work along with the OT and PT to develop an exercise program to help student with disabilities.
- Other Therapists (Massage Therapists, Music Therapists, etc.).

6.9 Teaching and Orthopedic Impairment Children

Children with orthopedic impairment can easily study in a regular school. This article describes some ideas that teachers can use while teaching in a classroom with orthopedic impairment students. Children with orthopedic impairment have a right to be in school and study with other children. However, this requires a little adaptation and preparation. Children with orthopedic impairments face many challenges on a daily basis. Part one of this series elaborates on these. This article focuses
on teaching and orthopedic impairment. It describes various adaptations teachers can do in the
classroom to help a child with an orthopedic impairment to learn and participate in the class.

**Accessibility and Classroom Layout:** When you are expecting to have a child with orthopedic
impairment in the class, consider the accessibility of the classroom. If the child is in a wheelchair, the
class should be accessible by wheelchair. Check if the flooring is adequate for the child’s needs. Also
check door width, stairs or thresholds and the door knobs. Toilet accessibility is another important
issue that needs to be considered. If your classroom is not suitable, you will need to consider renovation
or shifting to a different room.

**Special Furniture:** A child in a wheelchair, or a child with a spinal problem, may require some
special chair or table. Discuss these issues with the parents. If the child is finding it difficult to sit on
the regular classroom chair, it will be worth considering getting a special chair for him for the
classroom. The child will be spending a lot of his time everyday in the classroom. Moreover, if a child
is not seated comfortably, learning and writing can be very difficult.

**Modified Writing aids:** Children with orthopedic impairment in their upper limb may benefit from
writing aids. Writing aids include writing boards, special paper, pencil grips, and special pencil
holders. Children with coordination problems may also benefit from a weighted vest. As a teacher
you can help by emphasizing on learning the concept and giving the child a little extra time to write.

**Modified Lesson Plans and Classroom Activities:** Having a child with an orthopedic impairment in
your classroom will require some modification in the lesson plans. Plan activities in such a way that
all children, including the child with the orthopedic impairment can participate. This can be done by
adapting the materials you provide, assigning a helper, or allotting a task that they will be able to do
independently. For detailed ideas about teaching and orthopedic impairment read this.

**Inclusive Classroom:** A classroom is made up of students more than anything else. The greatest
barrier to inclusion is usually not architectural. It’s often teasing and exclusion by peers. So prepare
your class to receive and include a child with an orthopedic impairment. Talk about how they need
to care for and treat the child. Talk about how that child is just like them and thinks and feels just like
them. Assign responsibilities for one child to help him go to the toilet, one child to sit with him in
class, another child to accompany him during lunch break. The responsibilities will give the children
opportunities to get to know the child better. In class, focus on the child’s abilities. Focus on the fact
that we are all different, and need to accept each other.

Children with orthopedic impairment have normal intelligence and don't need a special curriculum.
What they need from you is acceptance, and a little adjustment. They’ll contribute more to your
classroom than what you could ever contribute to them.

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**Task**

What is "modified" writing aids"

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**Self Assessment**

3. Multiple Choice Questions

*Choose the correct option:*

(i) ................. is not necessary for development of strong bones.
   (a) Cleanliness       (b) Medical care       (c) Nutrition       (d) Fighting

(ii) .......... who work on fine motor skills as well as daily living activities such as dressing, bathing?
    (a) Occupational Therapists  (b) Physical Therapist
    (c) Speech language Pathologist  (d) Physical educator

(iii) .............. is mostly used by orthopedic disabled (specially for limb defected) child in class.
    (a) Table  (b) Wheelchair  (c) Writing board  (d) Special pen
6.10 Summary

- **Prevention of Visual Impairment**: Proper nourishment of child at the time of prebirth and postbirth, is essential breast feed vitamin A rich colostrum green leafy vegetables, yellow-orange fruits (papaya, mango) are major sources to avoid visual impairments.
- Awareness of parents towards eye problems and care for children are very important to the child.
- Eye camps for the treatment and prevention of ye problems is very popular in public organized by government.
- **Teaching strategies for Visual Impairment**: There are many teaching strategies for visual impairment.
- Enlarged activity script, directions, or reading, use of overhead projector, Braille label marker, and raised line drawing are some of the visual impairment techniques.
- **Prevention for Hearing Impairment**: Use of hearing protector, avoid high noise place, are some preventive measures.
- We should not use hairpin or other object in our ear to remove earwax.
- **Teaching Strategies**: Teacher should set the circular seating arrangement for hearing impaired child.
- Report of question or remarks, flexible in teaching to deaf students, to give visual clippings for student.
- Use of audio visual aid is some of the main teaching strategies for hearing impaired children.
- **Prevention for Speech impaired Children**: Protection from early childhood diseases like measles, mumps. The availability of proper medical care before and after birth is crucial.
- TV or radio advertisements may reach some families, different approaches might be more effective when informing other families are very effective for awareness about these diseases.
- **Teaching strategies for Speech impaired children**: Teacher should reduce unnecessary classroom noise, give vocal instructions and verbal clues, use gestures that support understanding, be patient when child is speaking and provide a quiet spot for the student to work whenever possible.
- **Prevention for Physical Disability Orthopedic Impairment**: It is important to focus on health education, nutrition and immunization.
- It is also necessary to raise awareness of the importance of cleanliness, medical care and nutrition for the development strong bones, Vulcanization to prevent polio and post-polio syndrome.
- **Teaching Strategies**: Special seating arrangement for physical disabled children, securing suitable augmentative communication, awareness of medical condition is some of the teaching strategies.
- Use of special furniture, modified writing aids, lesson plans and activities and inclusive classroom is very popular.

6.11 Keywords

- Prevention : The act of stopping something bad from happening.
- Vaccine : A substance that is put into the blood and that protects the body from disease.
- Approach : A way of doing or thinking about something such as a problems or task.
- Portable : That is easy to carry or to move.
6.12 Review Questions

1. Write some "text reading" teaching strategies for the visually impaired children.
2. What is the testing method of visual impaired children?
3. What are preventive measures should be used for hearing and speech impaired children?
4. Give some teaching strategies for hearing and speech impairment.
5. What are the preventive measures and teaching methods for physically handicapped (orthopedic) children?

Answers: Self Assessment

1. (i) Breast feed vitamin A rich colostrum   (ii) X-rays
   (iii) Cataract   (iv) camp approach
   (v) auditory or tactile signal

2. (i) True   (ii) False   (iii) True   (iv) False
   (v) False

3. (i) (d)   (ii) (a)   (iii) (b)

6.13 Further Readings

Unit 7: Visually Impaired: Definition, Types and Characteristics

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7.3 Refractive Errors
7.4 Common Eye Conditions
7.5 Characteristics of a Visually Impaired Child
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Objectives
The objectives of this unit can be summarized as below:
• to define the visual impairment.
• to discuss the common types of visual impairment, refractive errors and common eye conditions.
• to explain the characteristic of visually impaired children.

Introduction
Many people have some type of visual problem at some point in their lives. Some can no longer see objects far away. Others have problems reading small print. These types of conditions are often easily treated with eyeglasses or contact lenses.

But when one or more parts of the eye or brain that are needed to process images become diseased or damaged, severe or total loss of vision can occur. In these cases, vision can't be fully restored with medical treatment, surgery, or corrective lenses like glasses or contacts.

Some people are completely blind, but many others have what's called legal blindness. They haven't lost their sight completely but have lost enough vision that they'd have to stand 20 feet from an object to see it as well as someone with perfect vision could from 200 feet away.

7.1 Definition
In India, the broad definition of visual impairment 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:

7.1.1 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.

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 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 labelled blind.

### Table 7.1

<table>
<thead>
<tr>
<th>Category</th>
<th>Corrected VA-better eye</th>
<th>WHO Definition Standard</th>
<th>Working</th>
<th>Indian Definition</th>
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<tr>
<td>0</td>
<td>6/6-6/18</td>
<td>Normal</td>
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<td>1</td>
<td>&lt;6/18-6/60</td>
<td>Visual Impairment</td>
<td>Low Vision</td>
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</tr>
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<td>&lt;6/60-3/60</td>
<td>Severe Visual Impairment</td>
<td>Low Vision</td>
<td>Blind</td>
</tr>
<tr>
<td>3</td>
<td>&lt;3/60-1/60</td>
<td>Blind</td>
<td>Low Vision</td>
<td>Blind</td>
</tr>
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<td>4</td>
<td>&lt;1/60-PL</td>
<td>Blind</td>
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<td></td>
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<td></td>
<td>Blindness</td>
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</tr>
</tbody>
</table>

7.1.2 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

7.1.3 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.
Notes

Special Education

Fig. 7.1: Finger count test

Fig. 7.2: Normal eye test

Self Assessment

2. Multiple Choice Questions: Choose the correct option:

(i) 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 .............. to light perception.
   (a) 7/18  (b) 6/18  (c) 9/18  (d) 1/18

(ii) Generally, the impairment of .............. or more is considered a handicap.
    (a) 15%  (b) 10%  (c) 40%  (d) 90%

(iii) ......................... 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.
    (a) blindness  (b) impairment  (c) deaf blindness  (d) deaf

(iv) A visual acuity means that the person examined cannot see, at a distance of .............. meters the object which a person with normal eyesight would be able to see at 60 meters.
    (a) 9  (b) 6  (c) 10  (d) 20

(v) The simplest method of testing visual acuity is to see whether the person count .............. at distance of six meters.
    (a) fingers  (b) balls  (c) sticks  (d) birds

7.2 Common Types of Visual Impairments

Students with non-correctable vision problems have visual impairments. Depending on the severity of the condition, the following terms may be used in the special education or regular education school environment. To qualify as a visually impaired student, certain criteria must be met, like low visual acuity, visual field limitation, progressive eye disease, or cortical visual impairment.
(i) **Partially Sighted**: A visual impairment that adversely affects a student's educational performance even when corrected to the extent possible.

(ii) **Low Vision**: If someone's vision is between 20/70-20/160 and cannot be corrected, the student has moderate to low vision.

(iii) **Legally Blind**: From 20/200-20/400 is legally blind with severe low vision. From 20/400-20/1000 is profound visual impairment, and is very close to total blindness.

(iv) **Totally Blind**: The lack of light perception is known as total blindness or total visual impairment.

### 7.3 Refractive Errors

The most common types of visual impairments are simple refractive errors. These include nearsightedness, farsightedness, and astigmatism. In nearsightedness images are focused in front of the retina, making far away images appear blurry. Farsightedness results from an image being focused behind the retina, which means the child will have trouble focusing on objects that are close up. Astigmatism results from curvature of the cornea, which keeps light rays from focusing properly in one area of the retina. This condition results in the inability to focus on objects far or near. Fortunately, refractive errors are correctable.

Many children use glasses and enjoy clear vision. These students will have no need for special services unless the refractive error is not correctable for some reason.

### Self Assessment

2. Fill in the blanks:

   (i) ....................... is a visual impairment that adversely affects a student's educational performance even when corrected to the extent possible.

   (ii) From 20/200-20/400 is legally blind with severe low vision from ......................... is profound visual impairment, and is very close to total blindness.

   (iii) The lack of light perception is known as ....................... .

   (iv) The most common types of visual impairments are ....................... .

   (v) ....................... results from curvature of the cornea, which keeps light rays from focusing properly in one area of the retina.

### 7.4 Common Eye Conditions

(i) **Amblyopia**: Amblyopia is also known as lazy eye. Children with a lazy eye may or may not be perceptible. Sometimes a lazy eye visibly turns in or out, but sometimes there is no outward sign. Amblyopia causes the eye to have reduced acuity due to the poor positioning of the eye and weak muscles. The treatment is commonly a patch over the normal eye that makes the lazy eye work harder. Surgical corrections are also common.

(ii) **Retinitis Pigmentosa**: This is a degenerative condition that is inherited. Retinitis pigmentosa results in a loss of peripheral vision, and eventually the student is left with a severe visual impairment.

(iii) **Retinopathy of Prematurity**: This condition is common in children who were premature babies that required high concentrations of oxygen at birth. Scarring and detachment of the retina can result from this condition.

(iv) **Strabismus**: In this condition, both eyes are unable to gaze at an object at the same time. Strabismus is caused by a muscle imbalance.
Cortical Visual Impairment: Cortical visual impairment is not a problem with the eye itself, but with the visual cortex area of the brain. These children may also have other developmental delays or cerebral palsy. Vision may change throughout the day, depending on the health, mood of the child, or his environment.

7.5 Characteristics of a Visually Impaired Child

It is not always easy to recognize that a child might be visually impaired. Although even very young children can show some physical signs of having trouble with vision, many times problems with a child’s eyesight are not detected until after he goes to school. The American Optometric Association points out that because 80 percent of a child’s learning relies on his vision acuity, early detection and treatment are needed. Main characteristics are follows:

(i) Physical Signs: Crossed eyes, eyes that turn out, eyes that flutter from side to side or up and down, or eyes that do not seem to focus are physical signs that a child has vision problems. Other problems are less obvious.

(ii) Clumsiness: A child might have a vision problem if he appears to be overly clumsy. Poor vision might be the cause when a child is constantly running into things or falling down. He might have trouble realizing how close or far away objects really are. The eyes provide the information about surroundings and spatial position that is transmitted to the brain. Consequently, clumsiness can occur when the eyes misjudge a distance. Sometimes young children who do not walk well actually have problems with their vision.

(iii) Behavior: Some children who have vision problems appear to have a short attention span. Other children might blink frequently or squint whenever they read or watch television. Often children are sensitive to bright light or might sit close to the television or hold books that they are reading close to their face. Likewise, younger children with visual impairments might hold toys very close to their face.

(iv) Poor Eye-Hand Coordination: Poor eye and hand coordination can be another sign that a child has a vision problem, therefore parents should observe a young child as he plays. Older children who go to school might have difficulty with sporting activities or certain projects in class. Signs of poor eye-hand coordination might include difficulty throwing or catching a ball, tying shoes or copying schoolwork from the blackboard. Poor handwriting is often another sign of poor eye-hand coordination. Children who suffer from lazy eyes, crossed or wandering eyes can have problems with coordination, balance and depth perception, primarily because they learn to use only one eye at a time.

(v) Poor Academic Performance: Children who have trouble seeing often perform poorly at school. Frequently, problems with learning are actually related to poor vision and not to a learning disability. A child might not read well, or might use her finger to follow along when she is reading so that she doesn’t lose her place. Some children also have trouble remembering what they read. Children with vision problems can find it difficult to write as well or might have problems with math and other subjects. Schoolwork can be a challenge for a child who cannot keep a clear focus, deals with double vision or blurred print on pages. Unfortunately, not all vision problems are easily detectable. For children who have had vision problems from the start, their vision seems perfectly normal to them, so they don’t usually complain.
The American Academy of Pediatrics recommends that children have their eyes checked during regular well-baby visits throughout their first years. A child should have a routine eye exam every year beginning at age 5.

Self Assessment
3. State whether the following statements are "True or False":
   (i) Amblyopia is also known as lazy eye.
   (ii) Retinopathy of prematurity is not common in children who were premature babies that required high concentrations of oxygen at birth.
   (iii) In strabismus, both eyes are unable to gaze at an object at the same time.
   (iv) The American Optometric Association points out that because 60% of a child's learning relies on his vision acuity.
   (v) A child might have a vision problem if he appears to be overly clumsy.

7.6 Summary
- In this unit we have discussed about define, types and characteristics of visual impairment in broad manner.
- A person with low vision is one who has impairment of visual functioning after treatment or standard reflective correction and has visual acuity of less than 6/18 to light perception or visual field of less than 10 degrees from point of fixation is a physical disability.
- The definition of blindness adopted in India exclude people with impairment only in one eye from the purview of blindness.
- 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.
- Deaf blindness is a condition presenting other difficulties than those caused by deafness and blindness.
- Visual acuity is the ability to see details. Visual acuity for distance is measured as the maximum distance at which a person with normal eyesight can see the same object. Finger count method and normal eye test are used for this.
- **There are some common types of visual impairment:**
  (i) Partially sighted (ii) low vision (iii) legally blind (iv) totally blind
- Simple refractive errors include near slightness, farsightedness.
- Amblyopic, Retinitis pigments, retinopathy of prematurity, Strabismus, Cortical visual impaired children are as follows:
- **Physical signs:** Crossed eyes, eyes that turn out, eyes that flutter from side to side or up or down are some of the physical characteristics, clumsiness, short attention span blink eye frequently, poor eye-hand co-ordination are other behavioural characteristics of visually impaired children.
- Children with vision problems are poor in academic performance like reading, writing and other activities.

7.7 Keywords
- Academic : Connected with education especially studying in schools and universities.
- Frequent : Happening often.
Notes

- Visual: Connected with seeing or sight.
- Impaired: Damaged or not functioning normally.

7.8 Review Questions

1. Give a note on refractive errors.
2. Write five common eye conditions.
3. What are the characteristics of visually impaired children?
4. What is visual acuity?
5. Write the notes on the following terms.
   (a) Low vision (b) Totally blind

Answers: Self Assessment

1. (i) (b) (ii) (c) (iii) (c) (iv) (a)
2. (i) Partially sighted (ii) 20/400-20/1000 (iii) total blindness
   (iv) simple refractive errors (v) astigmatism
3. (i) True (ii) False (iii) True (iv) False
   (v) True

7.9 Further Readings

1. ERIC Clearinghouse on Handicapped and Gifted Children Reston VA: Visually handicapped: Requires special educational provisions because of ... as lighting, use of optical aids and devices, tasks, and personal characteristics.
2. Special Education: Laura Rothstein; Scott F. Johnson; Sage Publisher, Inc.
Unit 8: Identification, Causes, Problems of Visually Impaired

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Objectives
The objectives of this unit can be summarized as below:
• to be able to identify students with visual impairment.
• to describe the causes of blindness, impaired low vision, vision loss legally blind, loss of vision.
• to explain about problems facing by visually impaired child.

Introduction
The term ‘visual impairment’ is used to describe any kind of vision loss, ranging from someone having no sight at all to someone who has partial vision loss. People who are legally blind have some vision, but have lost enough sight that it requires them to stand 20 feet from an object to see it as well as someone with perfect vision who could see it 200 feet away. Children who are visually impaired since birth have congenital blindness, which can have several causes. This type of blindness can be inherited or caused by an infection transmitted from the mother to the fetus during pregnancy.

Conditions that can cause vision loss after birth include amblyopia, or reduced vision in an eye caused by lack of use of it in the first few years of life. Strabismus, or misalignment/crossing of the eyes, is a common cause of amblyopia. The condition happens when the brain begins ignoring messages sent by one of the misaligned eyes. Lazy eye also occurs when the brain may suppress images from the weaker eye and the vision in that eye stops developing normally.

8.1 Identifying Students with Visual Impairment
Students with visual impairment may look like typical children, but early signs can indicate a problem. These signs are important because identification of visual impaired students leads to early intervention. Early identification of students with visual impairment is extremely important because early intervention will be most effective. Sometimes it is unclear whether a child has a vision problem or not. Physical signs of vision problems include eyelids drooping over one or both eyes, or eyelids that do not completely cover the eyes when the child closes them. If a child has a clear squint, has jerky eye movements, or has eyes that do not move together, parents should see a pediatric ophthalmologist. Other signs that are indicative of problems are using the eyes unusually, such as:
• not looking at others in the eyes
• reaching in front of or beyond what the child wants
• holding objects very close or very far to see them
• turning or tilting his head when he uses his eyes
• continuously pushing or poking his eyes
• looking above, below or off to one side of an object, rather than directly at it
• bumping into objects and having a lot or trouble seeing at night
• feeling for objects on the ground instead of looking with her eyes after the identification of visually impaired students under three, parents should begin working with an early childhood interventionist. Young children who are visually impaired are eligible for early intervention services, which can help a family through the child’s first few years of life. Early intervention for students with visual impairment is vital in enhancing social, physical, and intellectual development.

Parents should contact their school district’s special education office to locate services for their child. A child with visual impairment may qualify for services from teachers of students with visual impairment, an orientation and mobility specialist, a physical therapist, a speech therapist, or a psychologist, depending on individual needs. Children with visual impairment should also be provided with modifications and accommodations in an inclusive classroom.

• Educational implications for students with visual impairments in the classroom
• The impact of hearing impairment and reading performance
• Special needs of students with a visual impairment
• Preparing visually impaired children for independent life
• Looking through their eyes: Teaching suggestions for visually impaired students
• Dyslexia
• How to Make an inexpensive visual schedule for your Special Needs Student
• Socialization of Blind and visually impaired students
• Methods of Inclusion of deaf students
• Understanding when Kids can't process language
• Teaching hearing Impaired children
• Special needs of students with a visual impairment
• Inclusion: visually impaired students in the regular education classroom
• Deaf-Blind Education: Tips for Teaching the Deaf-Blind
• Visual Perception in Children - when an eye test is not enough

Did you know? When a child who is over three, he will qualify for special education services if the visual impairment impacts his education.

Self Assessment

1. Fill in the blanks:
   
   (i) Students with .................. may look like typical children but early signs can indicate a problem.
   (ii) Early identification of students with visual impairment is extremely important because early will be ......................... .
   (iii) Physical signs of vision problems include ................ drooping over one or both eyes, or cyclids that do not completely cover when the child closes them.
   (iv) Children with visual impairment should also be provided with modifications and accommodations in ..................... classroom.
Early intervention for students with visual impairment is crucial in enhancing social, physical and intellectual development.

8.2 Causes of Blindness, Impaired, Low Vision, Vision Loss, Legally Blind, Loss of Vision

Blindness is frankly lack of vision. Only those who experience no light perception are considered totally blind. And few are totally without some glimmer. Legally blind refers to vision less than 20/200 or peripheral (side) vision is 20 degrees or below.

(i) Visually impaired refers to a loss of vision that is uncorrectable or not correctable to a normal level. Vision impairment may be caused by:
- loss of visual acuity ~ objects unclear
- incorrect eye shape ~ harder to focus on stuff
- brain doesn't process visual information correctly
- damage to the eye ~ affects ability to receive or process visual information
- loss of visual field ~ cannot see wide area without moving eyes or turning head

(ii) Typical causes for blindness or loss of vision globally include:
- lazy eye
- stroke or TIAs
- endophthalmitis
- blocked blood vessels
- cataracts ~ eye lens cloding
- retinoblastoma ~ form of eye cancer
- optic neuritis ~ optic nerve inflammation
- diabetic retinopathy ~ complication of diabetes
- retinitis pigmentosa ~ progressive retinal damage

(iii) A couple of these losses cause only temporary blindness.

What is recent position of blind children in India?
Special Education

Self Assessment

2. Multiple Choice Questions

Choose the correct option:

(i) Legally blind refers to vision less than ....................

(a) 20
(b) 100
(c) ....................
(d) ....................

(ii) Visually impaired refers to a loss of vision that is uncorrectable to a ............... level.

(a) visual
(b) impairment
(c) normal
(d) children

(iii) ....................... is the major cause of blindness.

(a) vitamin A deficiency
(b) loss of visual acuity
(c) incorrect eye shape
(d) loss of visual field

(iv) ....................... is not a cause of temporary blindness.

(a) diabetic retinopathy
(b) hypertensive retinopathy
(c) tumor
(d) stroke

8.3 Problems Facing by Visually Impaired Child

(i) Coordination: According to Family Connect, physical balance and coordination can be a challenge for visually impaired children, as they can't always see the objects around them—they rely instead on sound and familiarity with their environment. Family can help by always putting toys away in a designated area. Avoid rearranging furniture as well. Other things that family and friends can do to aid with coordination is to walk with the child through unfamiliar areas and install ramps as opposed to stairs when possible.

(ii) Engaging with the World and Developing Interests: Since visually impaired children can't see everything around them, they don't know to investigate things further and ask questions. Encourage people should child to move about their environment and to ask questions when she can't understand something, and prompt discussion with your child about different subjects. Also, engage her with objects of varying textures and weights, as well as items that make unique sounds.

(iii) Emotional Stress: American Foundation for the Blind says that even in cases where the impairment comes on gradually or they've had a visual impairment since birth, visually impaired children will feel stress in new or unfamiliar situations, particularly when they feel isolated from peers. Starting at a new school or entering a new class can be particularly stressful. Visually impaired children also may occasionally feel sad or frustrated. Friends and family can help by listening to the child's concerns and encouraging the child to share his feelings. Teachers can help by fostering understanding and open discussion about visual impairment within the class, while also keeping expectations of the visually impaired children high.

(iv) Learning Challenges: According to the National Federation of the Blind, there are a few learning problems that visually impaired children may experience in any learning setting, and particularly in a traditional classroom. If educators use a board to draw out graphs, charts, or other examples, visually impaired children can't always see it or benefit from it. The same concept applies to physical exercises and group activities, which are very visual. Educators can help teach visually impaired children by including specific verbal explanations and tangible objects that children can touch and feel.

(v) Organization: Because they can't always see what objects are around them or specifies in terms of what papers are labeled, visually impaired children may have difficulty with organization, including homework management. The National Federation of the Blind recommends developing a storage system with bins, folders, and braille labels to help the
child organize his or her schoolwork. For children who have some sight, the American Foundation for the Blinds also recommends labeling things in colors that the child can identify. Children who are color blind may also benefit from large icons to label each subject.

According to Growing Strong, visually impaired babies and children may not naturally develop an interest in objects or activities like other children, since they can't interact with their environment the same way. Blind children rely entirely on sound and feeling.

Self Assessment

3. State whether the following statements are True or False:

(i) Family can help by always putting toys away in a designated area for visually impaired children.

(ii) We should not encourage our child to move about their environment and to ask questions.

(iii) If educators use a board to draw out graphs, charts, or other examples visually impaired children can't always see it or benefit from it.

8.4 Summary

• We have discussed about identification, causes and problems of visually impaired children.

• Early identification of students with visual impairment is extremely important. Physical signs of vision problems include eyelids drooping over one or eyes or eyelids that do not completely cover the eyes when the child closes them.

• Other identification signs are not looking at others in the eyes, holding objects very close, turning or tilting his hand, pushing or poking eyes.

• Typical causes of blindness or loss of vision are stroke or TIAS, sports injury, blocked blood vessels, cataracts, vitamin A deficiency, glaucoma, trachoma, retinoblastoma, Exophthalmia.

• Visual impairment is caused by loss of visual activity incorrect eye shape, damage to the eye, loss of visual field.

• Eye hand coordination, emotional stress difficulty in learning, organization cares some of the common problems of visually impaired children.

8.5 Keywords

• Organization : A group of people who forms a business, school, institution, club etc.

• Unfamiliar : That you do not know or recognize.

• Vision : The ability to see, the area that you can see from a particular position.

• Impact : The powerful effect that something has on somebody.

8.6 Review Questions

1. What are the early signs of identifying students with visual impairment?

2. What are the causes of blindness, impaired, low vision?

3. Give the problems facing by visually impaired child.

4. What are the learning challenges for visually impaired children?
### Answers: Self Assessment

1. (i) visually impairment (ii) most effective
   (iii) eyelids (iv) inclusive
   (v) vital

2. (i) (b) (ii) (c) (iii) (a) (iv) (d)

3. (i) True (ii) False (iii) True

### 8.7 Further Readings

1. Special Education: Daniel P. Hallahan, James M. Kauffman, Paige C. Pullen; Pearson Education, Inc.

2. ERIC Clearinghouse on Handicapped and Gifted Children Reston VA: Visually handicapped: Requires special educational provisions because of ... as lighting, use of optical aids and devices, tasks, and personal characteristics.

3. Special Education: Linda Wilmshurst, Ph.D., ABPP, Alan W. Brue, Ph.D., NCSP
Objectives

The objectives of this unit can be summarized as below:

• to explain about prevention of visually impaired children.
• to describe the teaching strategies for visually impaired children.

Introduction

Despite the availability of much WHO information on the magnitude and causes of blindness and strategies for their prevention, policy-makers and health providers in many countries are evidently not fully aware of available eye-care interventions, their cost-effectiveness and their potential to prevent or treat the 80% of global blindness that is avoidable.

Students who are classified as visually impaired will fall into one of two classes. The first, and less severe, class of visual impairments is low vision. Students who are classified as low vision use sight to learn, but their disability interferes with functioning. The second class of visual impairments is blindness, and students who are blind use their touch and hearing to function each day. For any of these students, routines and specific accommodations are very important in the classroom. We shall prevention and teaching strategies of visual impairment.

9.1 Prevention of Visually Impairment

There are following prevention methods of visual impairment:

• Protect the eyes from excessive exposure to sun rays, intensive heat, X-rays and injuries.
• Educate families that night blindness is an early warning sign of xerophthalmia and can be treated by feeding vitamin A in oil by mouth.
• Take a good and nourishing diet rich in protein and vitamin, such as milk, papaya, mango, carrot, spinach, egg and fish.
• Obtain suitable glasses after getting the eyes tested.
• Power of glasses changes with the progress of cataract.
• Organize eye check up camps with the involvement of the local eye hospital or the local Ophthalmic Surgeons.
• Arrange for the eye check up of all these cases and provide suitable glasses or eye drops etc.
Country cooperation strategies reflect the agreed joint agenda between health ministries and WHO. So far, the inclusion of blindness prevention in such documents has been minimal, despite seven resolutions of the Health Assembly relating to prevention of avoidable blindness and visual impairment, the existence of WHO’s major, long-standing international partnerships on prevention of blindness, and major successes in reducing avoidable blindness, such as WHO’s Onchocerciasis Control Programme. Lack of adequate resources for preventing blindness at the country level is a major impediment. Additionally, faced with increasingly limited resources, donor and recipient countries often give higher priority to mortality related disease control programmes than to those dealing with problems of disability. Also, experienced staff to coordinate blindness-prevention activities at the regional and country levels are in short supply.

Greater priority should be given to preventing blindness in health development plans and country cooperation strategies. Action is also needed to strengthen technical support and enhance the provision of expert advice to Member States where blindness and visual impairment are a major health problem.

(i) National eye health and prevention of blindness committees: It is important to establish national committees and programmes for eye health and blindness prevention. Their role is to liaise with all key domestic and international partners, to share information and to coordinate such activities as implementing the national eye health and blindness-prevention plan. A functional national committee is a prerequisite for developing the national blindness prevention plan and its implementation, monitoring and periodic assessment. Some countries, particularly those with decentralized or federated management structures, have similar committees at subnational level.

However, not all national committees are functional and, unfortunately, in many cases such committees have not successfully initiated effective action. In some instances, selected individuals, often dedicated eye-care professionals, are relied on to provide leadership and serve as the driving force for blindness-prevention plans and programmes. The committees’ membership is often not uniform, ranging from the ideal scenario, in which all key partners are represented (including the national health-care authorities), to a minimal group of dedicated eye-care professionals.

(ii) National eye health and prevention of blindness plans: Experience has shown that, in low- and middle-income countries, a comprehensive national plan containing targets and indicators that are clearly specified, time-linked and measurable leads to substantially improved provision of eye-health care services.

Most low- and middle-income countries (104 Member States by October 2008) have reported the development of national eye health and blindness-prevention plans, but reporting on and assessment of their implementation and impact have been insufficient. Some national plans do not include measurable targets, an implementation timeline and adequate tools for monitoring and evaluation. In some countries, the plans have only been partially implemented. In addition, because of lack of resources and leadership, some countries have made only slow or fragmented progress and their plans for eye health and national prevention of blindness have not yielded tangible improvements in the provision of eye-care services. It is necessary to ensure that the implementation phase of national plans is well managed, and a standardized approach to monitoring and evaluation of national and subnational eye health and blindness-prevention plans must be taken.

(iii) WHO’s strategies for prevention of blindness and visual impairment and provision of technical support: WHO’s strategy for the prevention of avoidable blindness and visual impairment is based on three core elements: disease control, human resource development, and infrastructure and technology. This approach has been promoted since 1999 by the global initiative “VISION 2020: the Right to Sight”, which was established as a partnership between WHO and the International Agency for the Prevention of Blindness. The past decade has seen major progress in the development and implementation of WHO’s approaches to controlling communicable causes of blindness and visual impairment. Achievements in controlling onchocerciasis and trachoma were based on implementation of WHO’s strategies of community-
directed treatment with ivermectin and the SAFE strategy for trachoma control, and their adoption by Member States and international partners. This unified approach facilitated preventive efforts aimed at millions of individuals at risk of visual loss, and convinced major donors that long-term commitment is required.

Subsequently, major shifts in the pattern of causes of blindness have been documented, with a declining trend for the communicable causes and a progressive increase in age-related chronic eye conditions. Public health interventions for some of the major conditions such as cataract and diabetic retinopathy have been systematically reviewed and respective WHO recommendations have been formulated. Strategies are needed to control other conditions such as glaucoma.

By October 2008, 150 Member States have held national or subnational VISION 2020 workshops to introduce WHO’s strategies for eye health. These workshops were the platform for sharing expertise about community eye health and facilitated the process of needs assessment and subsequent formulation of national and subnational blindness-prevention plans.

(iv) Prevention of avoidable blindness and visual impairment as a global health issue: Reliable epidemiological data and the availability of cost-effective interventions for the control of most of the major causes of avoidable blindness have demonstrated the importance of strengthening national initiatives in preserving eye health. In resolutions WHA56.26 and WHA59.25, the Health Assembly recommended a unified approach to blindness-prevention activities, urging Member States to establish national committees, to set up national blindness-prevention plans, and to devise strong monitoring and evaluation mechanisms for their implementation. In addition, it has been recognized that advocacy for preventing visual loss needs to reach a wider audience, and that the importance of preserving eye health needs to be further promoted in the public health domain and the community.

In some countries the impact of Health Assembly resolutions on allocation of new resources for development and implementation of blindness-prevention plans has fallen short of expectations. In most countries action is slow and progress in implementing adequate blindness-prevention activities is limited.

Plans and programmes on blindness prevention exist at global level and in some cases at regional level, but action is now required to provide support to Member States in applying international experience and scientific evidence in order to develop and implement their own blindness-prevention measures. Further action is required to integrate the eye-health agenda and its impact on poverty alleviation in the overall development agenda.

(v) International partnerships: Over the past decade, major international partnerships have been forged to assist WHO in providing support to Member States in their efforts to prevent blindness, such as “VISION 2020: the Right to Sight”. The partnerships have made substantial progress, mostly in combating infectious causes of blindness. They have also encouraged and supported long-term resource mobilization, including donation programmes (e.g. the Merck donation programme for ivermectin to control onchocerciasis, and distribution of azithromycin under a donation programme by Pfizer to control trachoma). Global partnerships have united and substantially strengthened the key international stakeholders in their action to prevent blindness, using WHO disease control strategies.

Coordination and timely evaluation of work undertaken by international partners is required so that their approaches are aligned with other activities in the area of blindness prevention. Despite some notable improvements in collecting data on blindness-prevention activities at the country and subnational levels, consolidated reporting remains limited. One reason is the weakness of many countries’ monitoring systems, another being the limited information sharing and exchange between countries and their international partners.

The action now required is to improve coordination and information exchange between all stakeholders.
Notes

(vi) **Human resources and infrastructure:** Despite efforts to strengthen human resources for eye health, a crucial shortage of eye-care personnel persists in many low-income countries. Many countries in the African Region, for instance, have less than one ophthalmologist per million inhabitants. In addition, the existing human resources are often concentrated in larger urban agglomerations, leaving the rural areas with a poor or nonexistent service. Furthermore, well-trained personnel leave low-paid positions in many of the public and university health-care establishments, seeking work in the domestic private health-care sector or even work opportunities abroad. It is thus the poorest areas of low-income countries that are most seriously disadvantaged by a suboptimal workforce beset by shortages, low productivity and uneven distribution.

Although recent technological developments in eye care have resulted in advanced methods of diagnostics and treatment, the cost of properly equipping a secondary and/or tertiary eye-care centre is prohibitive for many low-income countries.

Urgent action is required within countries to train more eye-health personnel and redress the distribution of the available workforce between urban and rural areas.

> By October 2008, 118 Member States had reported the establishment of a national committee.

# Self Assessment

1. Fill in the blanks:

   (i) Country co-operation strategies reflect the agreed joint agenda between health ministries and ..............................

   (ii) Lack of adequate resources for preventing .............................. at the country level is a major impediment.

   (iii) A functional ...................... is a prerequisite for developing the national blind prevention plan.

   (iv) WHO's strategy for the prevention of avoidable blindness and visual impairment is based on ...................... core elements.

   (v) It is necessary to establish national committees and programmes for eye health and blindness ......................

   (vi) By October 2008, ...................... member states have held national or sub-national vision 2020 workshops to introduce WHO's strategies for eye health.

   (vii) ...................... have united and substantially strengthened the key international stakeholders.

# 9.2 Teaching Strategies for Visually Impaired Children

The use of explicit rules is very important for managing a classroom where visually impaired students are present. When presenting students with rules for the first time, make sure that they are clearly established and students are given a chance to discuss the rules and ask any questions that they may have. It is also imperative to describe the classroom to visually impaired students so that they are well aware of where objects such as desks, computers, and work collection bins are located. It might also be necessary to periodically review the rules and also reward students with such things as praise or free homework passes when they are observed adhering to them.

(i) **Teaching by Personal Interaction:** Personal interactions are important for effective teaching of visually impaired students because it allows you as the teacher to learn the specific habits and capabilities of each student. The first step in creating meaningful personal interactions is to create a routine. Make students aware of the best times for talking and participating in group or individual discussions.
It is also important to encourage visually impaired students to focus on things that they find interesting. This way, they will be excited to talk and interact with other students and adults. Create as many opportunities as you can to give students the chance to discuss projects they are working on that they find interesting.

No matter what you are teaching or discussing in the classroom, make sure that you are including signs and nonverbal signals to strengthen any communication that you are having with your visually impaired students.

(ii) **Modifying the Learning Environment:** Classroom modification for students with visual impairments is vital for their success. When making modifications, try to remember that some students may need more intense modifications than other students. Whether the students are visually impaired or not, some modifications can be beneficial to all.

First and foremost, make your classroom safe. Make sure that you leave doors fully open or fully closed and eliminate any unnecessary clutter that could create dangerous obstacles. Do not leave boxes or trash cans in walking aisles or close to desks. Finally, do not leave the classroom without telling your students.

It is also important to supplement verbal instruction with large-print texts and handouts. By creating and giving students large-print handouts, you are giving them access to instructions and readings that they can clearly and easily see. Writing in large print on a chalkboard or overhead can be helpful to some students, but not everyone, so make sure to evaluate the individual students in your room.

(iii) **Building a Strong Partnership With Parents:** It is equally as important to build a strong relationship with parents of visually impaired students as it is to build strong relationships with the students. Family members are some of the best allies that you can have as a teacher when situations, good or bad, arise with students. As with all students, relationships among teachers, parents and themselves are very important to success and having clearly defined learning and behavioral goals.

It is important to speak with students and parents to make sure that students are aware of their disabilities and the strengths and weaknesses that come with being visually impaired. If parents and students do not fully understand the disability, it will be hard for you as the teacher to effectively work with and instruct those students.

As a teacher, fostering a good relationship with the parents of a visually impaired student is imperative to student learning and communication. Parents can offer strategies for you to use and vice versa, so keep the lines of communication open.

(iv) **Teaching by Play and the Child with Visual Impairment**

- Make every attempt to keep the environment the way your child is used to having it. Toys and equipment should be kept out of the walking space and brought forward as your child is ready to play with them.
- Allow your child ample time to hold and manipulate materials. He or she may want to explore the entire toy before beginning to play.
- Use as many toys with auditory cues, vibrations and noises as possible.
- Do not hesitate to use the words "look" and "see."
- Enrich your child’s world by using words to describe what he or she is doing, what is happening, and the smells and sounds around you.
- Introduce new ideas by talking about the ideas your child already knows and understands, for instance, clouds look like cotton feels.
- Feel comfortable touching your child and allowing your child to touch you.
- Encourage your child to explore and move around. Help your child to take part in large movement activities to give him a sense of his body in space.
What are the preventive measures for visually impaired children?

The following lists of toys was compiled based on the experiences of professionals and parents, or were found in various publications. This list is by no means complete. Your child’s developmental age and the extent of visual impairment should be considered.

- **Musical and Noise Making Toys:** Rattles, See ‘n Say, push-pull toys (boats, trucks, cars), music boxes, toy instruments (drums, tambourine, harmonica, etc.) tape recorder, record player
- **Toys With Feeling:** Mobiles, busy boxes, squeeze toys with sound and color, floating water toys, cuddly toys, balls of all kinds, figures like Stretch Armstrong that can be pulled and twisted but will return to its original shape, Slinky
- **Fine Motor Toys:** Stacking disks, peg boards, beads to string, puzzles, form boards, shape sorting boards, busy gyms
- **Riding and Outdoor Toys:** Wagon, tricycle, rocking horse, slide and swing set, swimming pool,
  - sand box
- **Imaginative and Creative Play Toys:** Cook sets, telephone, tool sets, dolls and puppets, activity sets, flannel board with shapes, numbers and letters, magnetic sets
- **Books:** Many books are now available that feature textures and/or moving parts such as the classic *Pat the Bunny* by Dorothy Kunhardt. Talking story books have strings to pull or buttons to push so the child can listen to each page.

Adapted from articles by Kelly Marts, LEEP Network News, January 1993 and Libby McAleb, Children’s Specialist with the Office for the Blind and Visually Impaired in Arkansas.

- **Bubble blowing:** Pop the bubbles with a pointed finger or by clapping hands. Add a few drops of glycerin to the mixture to make the bubbles stronger and more colorful.
- **Ball games:** For the young baby, roll the ball. Drawing faces on balls or balloons with a felt tip pen adds to the fun. For the older baby, place a ball in the foot of a pair of tights and hang up for the child to bat.
- **Shine a flashlight on a wall in the dark and get someone else to catch your beam in theirs.**
- **Riding a tricycle:** Include horns, bells, or anything that will make the tricycle more exciting and fun. Make a riding trail with brightly colored tape.
- **Clear plastic tubing (found in hardware stores) can be used as a marble course.**
- **Visit the airport to watch the planes taking off and landing.**
- **Go to see a fireworks display or make shapes in the air with sparklers.**
- **Go to the park and feed the ducks. Fly a kite.**
- **Play with puppets. Play peek-a-boo. Watch a friend swing. Watch fish in a bowl.**
- **Line up toy cars and race them along the hallway.**
- **Use bright, bold colors in your child’s world.**
- **Adapt toys and games by enhancing pictures and words with thick markers.**

*Audio recordings of readings and lectures can also be helpful when studying a lengthy text.*
Self Assessment

2. State whether the following statements are 'True' or 'False':

(i) Personal interactions are important for effective teaching of visually impaired students.

(ii) Classroom modification for students with visual impairments is not vital for their success.

(iii) Writing in large print on a chalk board or overhead can be helpful to some visually impaired students.

(iv) It is not important to supplement verbal instruction with large print texts and handouts.

(v) As a teacher, fostering a good relationship with the parents of a visually impaired student is imperative to student learning and communication.

9.3 Summary

- In the unit we have discussed about prevention and teaching strategies of visually impaired children.
- First prevention of visual impairment is to take vitamin A rich diet, pre birth and post birth of child is very critical in case of visual impairment.
- Great care for child from early childhood diseases, burns, and other accidents should be done by parents.
- Government also made policies for the prevention of visual impairment.
- National eye health and prevention of blindness committees plans whose strategies for prevention of blindness and visual impairment are implied for the prevention of avoidable blindness and visual impairment.
- Teaching of visual impaired children is very complicated.
- Teaching by personal Interaction - personal interaction are important for effective teaching. The first step in this type of teaching is to create routine.
- Modifying the learning environment-some modifications are complication of visual impairment to be sued according to classroom should be safe leave doors fully open or fully closed for unnecessary clutter.
- There should be a strong relationship between teacher and parent, so that teacher could be able to know about every activity of impaired child after school.
- Playing with toys (specially auditory clues, vibrations) is important strategies, musical and noise making toys (Rattles seen say, push pull toys) (boats, trucks, cars) are also should use for visually impaired children.
- Toys with feelings, five motor toys, books, bubble blowing ball games are also good options for teach the visual impaired children efficiently.

9.4 Keywords

- Prevention: The act of stopping something bad from happening.
- Adequate: Enough in quantity, or good enough in quality for a particular purpose or need.
- Blind: Not able to see.
- Comprehensive: Including all, or almost all the items, details, facts information etc. that may be concerned.
9.5 Review Questions

1. What are the preventive measures of visually impaired children?
2. What are the WHO's strategies for prevention of blindness?
3. What are the teaching strategies for visually impaired children?
4. Give points of teaching by play and the child with visual impairment.

Answers: Self Assessment

1. (i) WHO  (ii) blindness  (iii) national committee  (iv) three  
   (v) prevention  (vi) 150  (vii) Global partnership
2. (i) True  (ii) False  (iii) True  (iv) False  
   (v) True

9.6 Further Readings

1. Special Education: Laura Rothstein; Scott F. Johnson; Sage Publisher, Inc.
2. Special Education: Linda Wilmshurst, Ph.D., ABPP, Alan W. Brue, Ph.D., NCSP
3. ERIC Clearinghouse on Handicapped and Gifted Children Reston VA: Visually handicapped: Requires special educational provisions because of ... as lighting, use of optical aids and devices, tasks, and personal characteristics.
Unit 10: Speech and Hearing Impaired: Definition, Types, Characteristics

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Objectives
The objectives of this unit can be summarized as below:
• to define the speech impairment.
• to discuss the types of speech impairment.
• to describe the characteristics of impaired children.
• to define the hearing impairment.
• to describe the different types of hearing impairment.
• to explain the characteristics of hearing impaired children.

Introduction
Despite the availability of much WHO information on the magnitude and causes of blindness and strategies for their prevention, policy-makers and health providers in many countries are evidently not fully aware of available eye-care interventions, their cost-effectiveness and their potential to prevent or treat the 80% of global blindness that is avoidable.

Students who are classified as visually impaired will fall into one of two classes. The first, and less severe, class of visual impairments is low vision. Students who are classified as low vision use sight to learn, but their disability interferes with functioning. The second class of visual impairments is blindness, and students who are blind use their touch and hearing to function each day. For any of these students, routines and specific accommodations are very important in the classroom. We shall prevention and teaching strategies of visual impairment.

10.1 Definition: Speech Impairment
The impairment of speech articulation, voice, fluency, or the impairment language comprehension and/or expression or the impairment of the use of a spoken or other symbol system. Might be characterized by an interruption in the flow or rhythm of speech, such as stuttering, which is called dysfluency. Speech disorders may be problems with the way sounds are formed, called articulation...
or phonological disorders, or they may be difficulties with the pitch, volume or quality of the voice. There may be a combination of several problems. People with speech disorders have trouble using some speech sounds, which can also be a symptom of a delay. They may say see when they mean ski or they may have trouble using other sounds like l or r. Listeners may have trouble understanding what someone with a speech disorder is trying to say. People with voice disorders may have trouble with the way their voices sound.

10.2 Types of Speech Impairment

Speech disorders are those disorders that affect the manner of speaking of individuals. They are communication speech disorders. They may result from various physical and mental ailments. Read on to find out all about the different kinds of speech disorders.

Someone who has lost the ability to produce sound totally is considered mute. Speech disorders occur due to loss of the ability to use words in the relevant context.

Reasons for Speech Impairment: There are many reasons due to which speech disorders can occur. Many times, the cause remains unknown. Some of the known causes include:

- Mental illness
- Brain injury
- Neurological speech disorders
- Alcohol abuse or drug abuse
- Genetic disorders
- Vocal abuse/misuse
- Hearing loss
- Autism

Speech disorder or dysphonia is a condition where the individual has difficulty in sound production.

Different Speech Impairment: According to the American Speech-Language-Hearing Association (ASHA), following are the major types of speech impairment:

Spasmodic Dysphonia: This is the disorder where the muscles of the larynx or the voice box move involuntarily. It is basically of three types:

- **Adductor spasmodic dysphonia:** Here, the vocal cords close involuntarily, cutting off some words. This gives the impression of stammering.
- **Abductor spasmodic dysphonia:** Here, the vocal cords open involuntarily and result in a weak, whispery voice.
- **Mixed spasmodic dysphonia:** Here, the cords open and close involuntarily due to which the person appears to be stammering sometimes and speaking in a low airy voice at other times.

Aphasia: This occurs due to damage to the communication center in the brain. It is also called Dysphasia and affects each person differently. Problems arise in the use of language while talking, writing or listening. This is mostly a result of head injury, brain tumor, brain hemorrhage or stroke.

Stuttering: This is a disorder wherein the person repeats the first half of a word, or prolongs words and syllables (generally vowels) or gives involuntary pauses in between the words. It can be both developmental (that begins in childhood) or acquired (caused due to other disorders like Asperger's syndrome). Sometimes, the stuttering may also be related to anxiety, stress, low self-esteem or a childhood stigma.
Apraxia: Apraxia is also a result of an injury to the brain. The individuals affected by this disorder are unable to express themselves consistently and correctly. This speech impairment is of two types:

- **Developmental apraxia:** It occurs in children and is generally present from birth. The severity varies from one child to another.
- **Acquired apraxia:** It is present in adults and results from a physical injury to the brain. It depends on the age of the individual and the extent of the injury.

**Articulation Disorder:** This type of speech impairment occurs when the person is unable to produce a particular sound. Generally there is a problem in pronouncing ‘s’, ‘r’ and ‘i’. It occurs due to weak muscles or less control over the tongue. Sometimes, it may be very difficult to understand the speech of people with articulation disorder. This speech impairment is of two types:

- **Distortion:** Here, the individual is unable to produce a sound and ends up distorting it.
- **Addition:** In this case, the individual produces an extra sound.

**Speech Sound Impairment:** It is generally seen in children. Speech sound impairment may occur due to any developmental disorder like autism or Down syndrome and also due to physiological or neurological problems. It is of the following four types:

- **Omissions:** The child leaves a particular sound because he either cannot produce it at all, cannot produce it correctly or cannot use it properly.
- **Additions:** This occurs when an extra sound is added to a word.
- **Distortions:** Here, the actual sound of the syllable is distorted and an inexplicable sound is produced.
- **Substitution:** This occurs when the child consistently substitutes one sound with another.

**Cluttering:** Cluttering speech impairment affects the fluency of speech. It occurs because the person speaks very fast or repeats things many a time to make it comprehensible. There is no distinct cause for cluttering. It may occur due to drug abuse or prolonged illness.

**Dysarthria:** It is commonly known as slurred speech. The speech is slow or inaccurate. It is generally caused by stroke, multiple sclerosis or brain tumor. This leaves the muscles in the mouth or tongue weak or paralyzed and it becomes difficult to control them.

**Lisps:** It is also known as stigmatism. This occurs when the person is unable to produce a specific speech sound. It is of three types:

- **Interdental:** This occurs when the tongue comes in between the teeth at the time of speech.
- **Lateral:** A wet sound is produced because air escapes from the sides of the tongue.
- **Palatal:** This happens when the mid section of the tongue touches the soft palate.

**Dysprosody:** It is a rare speech impairment. Here, the rhythm, modulation, timing and intensity of speech is disrupted. Sometimes also referred to as foreign accent syndrome, its causes have not been fully understood. It may be a result of Parkinson’s disease, tumor or stroke that affects the brain.

**Expressive Language Impairment:** It is a language or communication speech impairment where the individual has difficulty in verbally expressing himself. Generally, comprehension of language is better than its expression in such cases. The person fumbles for using correct grammar, tenses, structure, vocabulary, etc., and the speech becomes hesitant. This speech impairment is of two types:

- **Developmental:** This is seen in children. There is no specific cause for this impairment and is believed to affect boys more than girls.
- **Acquired:** It is acquired by an individual post stroke or head injury in adulthood.

**Language Based Learning Disabilities:** The individuals face difficulty in the use of language while speaking, writing or reading. It affects different individuals differently. Some may find it difficult to communicate verbally and others may not be able to express themselves clearly. This generally involves difficulty in learning numbers or maths. Also, trouble in telling left from right or difficulty in telling time is seen in the affected individuals.
Notes

**Phonemic Impairment:** In this type of speech disorder, the individual is physically unable to produce certain sounds like ‘c’ or ‘t’ with the use of tongue, teeth, lips, palate or the facial muscles and nerves. They always produce an incorrect sound as a substitute.

**Treatment for Speech Impairment:** Most of these speech impairments can be cured by speech therapy. A speech and language pathologist should be contacted to find out the type of impairment that has affected an individual and its possible causes. Some individuals also benefit from their sessions with an audiologist. Regular sessions and practice is also very helpful. Those with physical impairment may be helped by surgery. Hearing and speech impairments are closely related. Unless an individual hears correctly, he can’t produce sounds. Some of these impairments are pragmatic speech impairments where the individual acquires the impairment due to bad practical experiences like verbal abuse, physical or mental trauma or any other shock that might lead to fear of speech.

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**10.3 Characteristics Speech Impaired Children**

A child’s communication is considered delayed when the child is noticeably behind his or her peers in the acquisition of speech and/or language skills.

Speech impairments refer to difficulties producing speech sounds or problems with voice quality. Characteristics may include:

- interruption in the flow or rhythm of speech such as stuttering (known as dysfluency);
- trouble forming sounds (called articulation or phonological impairment);
- difficulties with the pitch, volume, or quality of the voice;
- trouble using some speech sounds, such as saying "see" when they mean "ski."

A language impairment is an impairment in the ability to understand and/or use words in context, both verbally and nonverbally. Characteristics include:

- improper use of words and their meanings;
- inability to express ideas;
- inappropriate grammatical patterns;
- reduced vocabulary and inability to follow directions.

**Self Assessment**

1. State whether the following statements are ‘True’ or ‘False’:
   
   (i) Speech impairments may be problems with the way sounds are formed, called articulation or phonological impairments.
   
   (ii) Aphasia occurs due to damage to the posterior part in the brain.
   
   (iii) Cluttering speech impairment affects the fluency of speech.
   
   (iv) A language impairment is an impairment in the ability to see the words.
   
   (v) "Dysprosody" is a rare speech impairment in which rhythm modulation, timing and intensity of speech is disrupted.

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**10.4 Definition: Hearing Impairment**

Hearing impairment 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 4000 Hz. The term deaf is used to describe people with profound hearing loss.
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.

10.5 Different Types of Hearing Impairment

There are different types of hearing loss, depending on which part of the hearing pathway is affected. A specialist will always try to localize where in the hearing pathway the problem lies, so as to be able to classify the hearing loss as belonging to one of the following groups. This is most important in determining the appropriate treatment. There are following types of hearing impairment.

- Conductive hearing loss
- Sensorineural hearing loss
- Central hearing loss
- Functional hearing loss
- Mixed hearing loss

10.5.1 Conductive Hearing Loss

Conductive hearing loss is due to any condition that interferes with the transmission of sound through the outer and middle ear to the inner ear. This type of hearing loss can be successfully treated in most cases.

In cases of conductive hearing loss, sound waves are not transmitted effectively to the inner ear because of some interference in:

- The external ear canal
- The mobility of the eardrum (problems with the mobility of the eardrum are often caused by accumulation of fluid in the eustachian tube, the tube that connects the middle ear to the back of the throat)
- The three tiny bones inside the middle ear
- The middle-ear cavity
- The openings into the inner ear
- The eustachian tube

Modern techniques make it possible to cure or at least improve the vast majority of cases involving problems with the outer or middle ear. Even if people with conductive hearing loss are not improved medically or surgically, they stand to benefit greatly from a hearing aid, because what they need most is amplification.

10.5.2 Sensorineural Hearing Loss

In sensorineural hearing loss, the damage lies in the inner ear, the acoustic nerve, or both. Most physicians call this condition "nerve deafness."

The hair cells in the large end of the cochlea respond to very high-pitched sounds, and those in the small end (and throughout much of the rest of the cochlea) respond to low-pitched sounds. These hair cells, and the nerve that connects them to the brain, are susceptible to damage from a variety of causes.

- The term "sensory" hearing loss is applied when the damage is in the inner ear. Common synonyms are "cochlear" or "inner-ear" hearing loss.
- "Neural" hearing loss is the correct term to use when the damage is in the acoustic nerve, anywhere between its fibers at the base of the hair cells and the relay stations in the brain (the auditory nuclei). Other common names for this type of loss are "nerve deafness" and "retrocochlear" hearing loss.

Sensorineural hearing loss is one of the most challenging problems in medicine. A large variety of hearing impairments fall under this category. Although the chances for restoring a sensorineural hearing loss are slim, a small number of cases can be treated, and some people experience dramatic improvements as a result. However, a great need for further research in this area still exists.
10.5.3 Central Hearing Loss
In central hearing loss, the problem lies in the central nervous system, at some point within the brain. Interpreting speech is a complex task. Some people can hear perfectly well but have trouble interpreting or understanding what is being said. Although information about central hearing loss is accumulating, it remains somewhat a mystery in otology (the medical specialty of ear medicine and surgery).

A condition called central auditory processing impairment frequently leads people to think they have hearing loss when their hearing is actually normal. Despite the fact that this problem is extremely common and present in many highly successful people, it is actually classified as a learning disability. Basically, the problem involves a person's inability to filter out competing auditory signals. People with central auditory processing impairments have difficulties that include:

- Problems "hearing" when there are several conversations going on
- Inability to read or study with the radio or television on
- Problems reading if someone turns on a vacuum cleaner or air conditioner near them
- Generally missing the first sentence from people talking to them if they are involved in an auditory attention task (such as watching television)

Although such people (and their families and friends) frequently suspect that they have a hearing loss, the function of the ears is usually normal, and routine hearing tests are normal. Naturally, people with this condition may also develop hearing loss from other causes, and this can make it even more difficult for them to function under everyday circumstances.

There is no good treatment for central auditory processing impairments other than educating the person, family, and friends, and trying to control the environment. This is especially important for children, whose grades may go from F to A if they are provided with a silent place in which to do their homework.

10.5.4 Functional Hearing Loss
Functional hearing loss involves a psychological or emotional problem, rather than physical damage to the hearing pathway. Individuals with this type of hearing loss do not seem to hear or respond; yet, in reality, they have normal hearing.

The most important challenge for physicians is to classify this condition properly. It may be difficult to determine the specific emotional cause, but if the classification is made accurately, the proper therapy can begin.

Too often, a functional hearing loss is not recognized, and individuals receive useless treatments for prolonged periods. In turn, this process may aggravate the emotional element and cause the condition to become more resistant to treatment.

10.5.5 Mixed Hearing Loss
Frequently, a person experiences two or more types of hearing impairment, and this is called mixed hearing loss. This term is used only when both conductive and sensorineural hearing losses are
present in the same ear. However, the emphasis is on the conductive hearing loss, because available therapy is so much more effective for this impairment.

10.6 Characteristics of Hearing Impaired Children

Hearing impairment is a decrease in person's ability to hear. The most severe form of hearing impairment is deafness. The majority of these children have parents who can hear. Having a hearing disability does not only affect a person's hearing but it can have a lasting impact on person's social and language development, as well. Many people with hearing impairment suffer from social isolation and mental impairments, such as depression.

(i) Delayed Language Development: A child who can hear typically learns language from a person who speaks his native language. Hearing impaired children, on the other hand, typically have parents who can hear and who do not know sign language. Thus, children with hearing impairments are forced to learn sign language from people who usually do not know it well. Moreover, it may take some time before the hearing deficit is discovered. This means that a child's language acquisition begins later in life. Not surprisingly, children with hearing impairments often have delayed language development, says the Pennsylvania State University. For example, the vocabulary develops more slowly in children with hearing loss. They also have difficulty learning grammar. It typically takes longer for children with hearing impairments to learn to read and write, as well.

(ii) Social Isolation: According to Dr. G. K. Hebbar, hearing impaired children may suffer from social isolation. This might partly be due to their delayed language development. They also have difficulty picking up on auditory social cues. However, a child who feels like she is part of a deaf or hearing impaired culture is less likely to feel socially isolated. On the other hand, it is possible for a child who uses sign language as his almost exclusive method of communication to feel cut-off from his parents and other people who may not be very knowledgeable in using sign language.

(iii) Depression: According to the American Speech-Language-Hearing Association, hearing impairment does not necessarily mean that a child will develop psychological problems, but when it is combined with heredity and environmental factors, a child with a hearing deficit is at greater risk for developing, for example, depression. The American Psychiatric Association states that people with chronic illnesses have a 25 to 33 percent risk of becoming clinically depressed. Low self-esteem is also common among children with hearing impairments, according to the American Speech-Language-Hearing Association. Teenagers especially do not want to be different from their peers, which is why they often develop low self-esteem as a result of a hearing impairment.

Self Assessment

2. Fill in the blanks:

(i) ......................... is due to any condition that interferes with the transmission of sound through the outer and middle ear to the inner ear.

(ii) ......................... involves psychological emotional problem, rather than physical damage to the hearing pathway.

(iii) Children with hearing impairment often have delayed ......................... .
Notes

(iv) The most severe form of hearing impairment is ..................................
(v) ..................................... is common among children with hearing impairment.

10.7 Summary

- Hearing impairment is a generic term including deaf and hard of hearing which refers to persons with any type or degree of hearing loss.
- There are following types of hearing loss:
  (a) Conductive hearing loss : (i) is due to interference with transmission of sound through the outer and middle ear to the inner ear.
  (b) Sensor neural hearing loss : (ii) damage lies in inner ear, the acoustic nerve or both.
  (c) Central hearing loss : (iii) problem lies in central nervous system.
  (d) Functional hearing loss : (iv) involves psychological or emotion problem.
  (e) Mixed hearing loss : (v) having two or more types of hearing impairment.
- Delayed language development, social isolation, depression are some common characteristics of hearing impaired children.
- Speech impairment is that affect the manner of speaking of individuals.
- There are following types of speech impairments:
  (i) Spasmodic Dysphonic: Disorder where muscles of the larynx or voice box.
  (ii) Aphasia: occurs due to damage to the communication centre in the brain.
  (iii) Stuttering: impairment wherein the person repeats the first half of a word.
  (iv) Aparaxia: due to injury to the brain.
- interruption in the flow or rhythm of speech such as stuttering (known as dysfluency);
- trouble forming sounds (called articulation or phonological impairments);
- difficulties with the pitch, volume, or quality of the voice;
- trouble using some speech sounds, such as saying "see" when they mean "ski."
- improper use of words and their meanings;
- inability to express ideas;

10.8 Keywords

- Conductive : Able to conduct anything.
- Isolation : The state of being alone or lonely.
- Disorder : An illness that causes a part of the body to stop functioning correctly.
- Implication : A possible effectors result of an action or a decision.
- Characteristics : Typical features or quality that somebody or something has.

10.9 Review Questions

1. Define hearing and speech impairment.
2. What are the different types of hearing loss?
3. Write the characteristics of hearing impaired children.
4. Write notes on -
(i) Spasmodic Dysphonia
(ii) Aphasia
(iii) Articulation Disorder

5. Give some characteristics of speech impaired children.

**Answers: Self Assessment**

1. (i) True  (ii) False  (iii) True  (iv) False  (v) True
2. (i) Conductive hearing loss  (ii) Functional hearing loss  (iii) language development  (iv) deafness  (v) Low self esteem

**10.10 Further Readings**

1. Special Education: *Laura Rothstein; Scott F. Johnson; Sage Publisher, Inc.*
2. Special Education: *Linda Wilmshurst, Ph.D., ABPP, Alan W. Brue, Ph.D., NCSP*
3. ERIC Clearinghouse on Handicapped and Gifted Children Reston VA: *Visually handicapped: Requires special educational provisions because of ... as lighting, use of optical aids and devices, tasks, and personal characteristics.*
Unit 11: Identification, Causes, Problems of Speech and Hearing Impaired

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Objectives
The objectives of this unit can be summarized as below:

• to explain the identification, causes and problems of speech impairment.
• to describe the identification, causes and problems of hearing impairment.

Introduction
The type of cognitive impairment can vary widely, from severe retardation to inability to remember, to the absence or impairment of specific cognitive functions (most particularly, language). Therefore, the type of functional limitations which can result also vary widely.

Hearing impairment means any degree and type of auditory disorder, while deafness means an extreme inability to discriminate conversational speech through the ear. Deaf people, then, are those who cannot use their hearing for communication. People with a lesser degree of hearing impairment are called hard of hearing. Usually, a person is considered deaf when sound must reach at least 90 decibels (5 to 10 times louder than normal speech) to be heard, and even amplified speech cannot be understood.

11.1 Speech Impairment
The type of cognitive impairment can vary widely, from severe retardation to inability to remember, to the absence or impairment of specific cognitive functions (most particularly, speech). Therefore, the type of functional limitations which can result also vary widely.

Cognitive impairments are varied, but may be categorized as memory, perception, problem-solving, and conceptualizing disabilities. Memory problems include difficulty getting information from short-term storage, long-term and remote memory. This includes difficulty recognizing and retrieving information. Perception problems include difficulty taking in, attending to, and discriminating sensory information. Difficulties in problem solving include recognizing the problem identifying, choosing and implementing solutions, and evaluation of outcome. Conceptual difficulties can include problems in sequencing, generalizing previously.

11.1.1 Identification
Identification of Speech Impairment: Various techniques are used but one such technique is to know the behavioural clues to detect speech defects.
1. Faulty articulation or pronunciation—substitution (Cree for tree) omission (ate for gate); distortions (ship for sip).
2. Unpleasant voice quality—nasality, (too much sound through nose hoarseness, harshness (irritation), braeathiness (sexy voice).
3. Defective voice—too high or too low; too loud or too soft; monotonous voice.
4. Stuttering, cluttering.
5. Difficulty in understanding meaning of spoken words/sentences.
6. Difficulty in formatting oral sentence.

Speech is defective when it deviates so from the speech of other people that it calls attention to itself, interferes with communication, or causes the possessor to be maladjusted. Language problems should be considered significant if they interfere with communication if they cause the speaker to maladjusted or if they cause problems for the listener "Gearhart and Weigharn.

11.1.2 Causes

(1) Organic Causes: The organic causes of speech defects include palatal anomalies, dental irregularities, paralysis and tumours of the anomalies, dental etc. In some cases, deformation of jaw and lips also result in lisping. The articulatory and vocal difficulties of the child with a cleft-palate can be attributed directly to this type and severity of the cleft.

(2) Functional causes: It is observed that many children, with normal speech mechanisms, have defects in articulation and/or voice. Studies report that in some cases, imitation of an older sibling, a playmate or an adult may be the sole cause for this anomaly. They learn to speak in a fallacious manner, if they hear faulty vocabularies.

(3) Psychogenic Causes: Recent studies of speech defect reveal that many defects of speech are psychogenic. When the causes of speech defects are not organic or functional, they can be attributed to children's reactions to the environment, particularly to their parents. In this study, Wood reported that functional articulatory defects of children are definitely and significantly associated with maladjustment and undesirable traits on the part of the parents.

(4) Psychological Causes: Speech defects also have emotional and psychological origin. Speech does not depend only on the efficacy of the speech organs but also on the personal maturity of the child, his attitude to himself, his relationship with others and the degree to which the home has stimulated and encouraged speech. Some psychologists are of the opinion that these defects are the outcome of disturbed feeling or emotions, faulty language habits arising from social pressures.

(5) Loss of Hearing: Development of speech reception requires normal auditory system. If the child’s hearing is impaired, the auditory input is distorted. Then speech reception skills may have some deviations or delay in development. Due to this faulty feedback system, this may affect speech production. Reports say that the degree of hearing loss has a direct bearing on the production of speech and languages.

(6) Social Influences: Language is a means of communication. This also develops in social context. In an improved environment, children lack stimulation. They do not get the chance to learn new words. For the language achievement of children, stimulating homes, schools and play pivotal roles. Children from higher professional groups show early speech development.

(7) Cerebral Palsy: Children who are the victims of cerebral palsy often lack stimulation to speak and hence need to be highly motivated, for speech therapy, spastics, athetoid and ataxic children often have a good number of speech defects, Observation can easily reveal that a spastic child would show articulatory deviation and the athetoid child would show slurring in rhythm and constant change in pitch and infection.
11.1.3 Problems of Speech Impaired Children

Speech impaired children face many problems in daily life. Some of the important problems are being discussed below:

(1) For these children, maladjustment is very common. They usually perceive their parents as authoritarian figures.

(2) Speech impaired children are inferior to normal children so far as reading is concerned. They are underachievers in the school. Generally they do not conform to the general behavior standard.

(3) Sometimes other children attempt to make fun of their defective speech and consequently the child withdraws himself from the social situation. By that, the socialization process is also hampered. These children cannot become leaders in their concerned peer groups.

(4) Depending on the severity of the anomaly, the children can be more or less separated from the sole means of mental growth.

(5) Very often, children become conscious of their defects. They find difficulty in communicating with others. So they cannot take active part in games and group activities.

(6) A poor articulator is often poor in auditory discrimination. Pronunciation difficulties interfere with work recognition and spelling.

11.2 Hearing Impairment

11.2.1 Identification

Identification of Hearing Impairment: Recently, due to the advancement in technology, the identification of hearing impairment has become easier. The following are some important techniques for identifying impaired children:

(1) Development Scale: Development status may be taken into consideration to identify hearing impaired children. It is conducive for establishing the child's current status with regard to sensorimotor development. "Bayley Scales of Infant Development" is very helpful for this purpose. This scale provides a basis for early diagnosis and corrective action in case of retarded development.
(2) Neuropsychological Tests: Another important test is the assessment of neurological functions. Owning to cerebral dysfunction and brain damage, a good number of hearing impaired children have additional percepto-motor deficiencies. An expert clinician may be able to find certain signs in such children.

(3) Medical Examination of the Children: By this technique, a physician takes the general medical history of a child he investigates the functioning and dysfuctioning of various organs related to audition. The relationship between the auditory deformitie sand personality disorder is also sought.

(4) Case Study of the Child: The case history is generally taken by a psychiatrist. The psychiatrist may collect the data from the child directly or from a close relative of the child. While collecting the data, the following points may be taken in to account:
   (1) Indentification of the child, i.e., name and address etc.
   (2) Statements of the present problem (symptoms etc.).
   (3) Health history (illness, serious disease, surgical operation etc.).
   (4) Development history and
   (5) Family history.

(5) Systematic Observation of the Child Behaviour: This method is highly conducive and extremely useful for assessing the hearing impaired. The salient observable points of behavior displayed by children who are to be identified are as follows:
   (1) Frequent ear eggs are observable;
   (2) They turn heads on one side to hear better;
   (3) These children are unable to follow directions;
   (4) In the classroom, they always request to repeat instruction question etc.

Main Symptoms for Identification of Hearing Impaired
The following questions can be put to the children for identification:
1. Does the child ask for repetition of instruction?
2. Does the child display restlessness and inattention?
3. Does the child have an observable deformity of the ear?
4. Does the child have a discharge from the ear?
5. Does the child complain of pain in the ear frequently?
6. Does the child turn his head frequently in order to hear better?
7. Is the child unable to follow your instruction?
8. Does the child scratch his ear frequently?
9. Does the child focus on the speaker's face while listening to understand speech?

If answers to four or five questions are marked 'yes' the teacher can suspect hearing impairment in the child. Such a child should be referred to the audiologist and ENT specialist for systematic investigation and assessment. If the assessment report indicates mild or moderate degree of hearing impairment the child can be integrated in the regular school without much difficulty. If the assessment report indicates severe or profound hearing loss the child should be placed in a special schools for the deaf.

How would one identify the hearing impaired children? Obviously there are some behavioural indicators and some measurements tools including audiometer. But before the child is referred to an audiometric clinic, certain signs are visible. These are called behavioural clues. The child displays one or more of the following.
Notes
1. Frequent ear aches.
2. Fluid discharge from ear.
3. Cold and soar throats occurring frequently.
4. Lack of equilibrium.
5. Inconsistency in following directions.
6. Always asking "what"-"what"
7. Observing the lip movement.
8. Speech defects.
10. Has trouble in paying attention.

11.2.2 Causes
All the causes of hearing impairment can be categorized under four classes: (a) Hereditary and Non-hereditary (b) Congenital and Acquired (c) Pre-natal, Perinatal and Postnatal, and (d) Physiological and Psychological.

Sometimes hearing impairment is predetermined by the genetic structure of the individual. It may be present at birth or develop latter in life. Some of these defects are acquired through disease, trauma or accident. There is a hereditary they of degenerative disability. Again there is a hereditary type of degenerative disability. Again there is a hereditary type of degenerative nerve deafness which may be present at birth or develop latter in life. Overdose of strong drugs like streptomycin, quinine and L.S.D. are associated with hearing impairment. So mothers are restricted to take these drugs impairment. So mothers are restricted to take these drugs during pregnancy. Maternal malnutrition and unhealthy living conditions during pregnancy are some important causes also. Studies reveal that marriage among class blood relatives is another cause to produce hearing impaired children. Medical practitioners say that brain fever, the improper growth of brain or auditory system and brain tumour and some of the neurological causes of hearing impairment. The perinatal causes include full time delivery followed by anoxia problems, use of forceps in delivery, instrumental delivery, premature delivery followed immediately by jaundice and use of anaesthetic agents in delivery. Whooping cough, typhoid fever, encephalitis and mumps are significant post-natal causes of hearing impairment. Besides all these factors, accidents, severe burns, toxic drugs, emotional depression and traumas also cause hearing defects. Abnormalities in the inner ear or the auditory nerve result in loss of hearing which is rarely amenable to surgery. Sometimes psychogenic deafness is confused with malingering in which the individual pretends to be unable to hear. But Malingering can be detected by special audiological tests.

1. Causes Before Birth of H.I.: There are certain causes which ocure before birth
   (a) Hereditary
   (b) Rubella
   (c) Malnutrition.
   (a) Hereditary: 11 to 60 percent of sensory neural hearing impairments have a genetic cause (dominant gene-Alpert's syndrome) and recessive gene transmission-(Usher's syndrome) to the tune of 40% of deafness cases.
   (b) Rubella: Maternal rubella, a German measles virus that has its most devastating effect on an unborn child during first three months of pregnancy is most important cause, It accounts for 27% of all the known cause of hearing loss.
   (c) Infectious Disease: Early infectious diseases like mumps, influenza of the mother affects the infant’s hearing. Certain other diseases of the mother e.g., diabetes, kidney disease liver diseases affect the baby’s hearing capacity.
   (d) Drugs: Some research has shown that overdose of strong drugs like streptomycin, quinine, thalichloride and L.S.D. are associated with hearing impairment and therefore expectant mothers should remain away from these.
(e) **Malnutrition:** Malnutrition is another such cause. In addition RH-incompatibility, emotional trauma, brain fever, brain tumour and certain neurological factors do their part in affecting hearing capacity of the infant adversely.

2. **Causes During Birth of Hearing Impaired:** During birth there are certain factors which affect hearing loss. Lack of oxygen use of forceps in delivery, instrumental delivery, premature delivery followed immediately by jaundice, use of anaesthetic agents in delivery do cause hearing problems.

3. **Causes After birth of Hearing Impaired:** The causes which affect hearing loss after birth in children are measles, mumps, whooping cough, meningitis, typhoid fever, encephalitis, infections in nasal cavities, Eustachian tube, middle ear infection, ear discharge etc. All these lead to hearing loss. Ear discharge is more prominent among the causes.

   Adequate awareness on the part of parents can prevent the hearing handicap. Early follow-up services for checking expectant mother's health and health of the new born can prevent hearing impairment and associated problems.

4. **Causes of Hearing Impaired:** Hearing loss may not necessarily be due to organic factors but to psychological and psychiatric reasons. There has been differential focus. The psychological and psychiatric reasons. There has been differential focus. The otologist looks for medical and surgical intervention, and audiologist suggests amplification and therapeutic management but for an educator or resource teacher emphasis on language development is crucial remedial step.

5. **Neurological of Hearing Impaired:** Besides organic causes which are responsible for hearing loss. The sensorineural hearing loss is associated with actual neurological transmission of sound. Such hearing loss results from damage to the sensory walls within cochlea or the auditory nerve both because of genetic and/or environmental factors.

**11.2.3 Problems of Hearing Impaired Children**

Hearing impairments can be viewed from an educational perspective but also from the large perspective of their effects on the child's overall adjustment. The problems and special needs of hearing impaired children have been summarized in a tabular form.

The speech and hearing problems of deaf children needing special care varies according to category of hearing impairments.

<table>
<thead>
<tr>
<th>Level</th>
<th>Speech and Hearing Problems</th>
<th>Special Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Hearing threshold 26 to 40 dB. Mild hearing loss.</td>
<td>Exhibits difficulty in hearing faint speech, speech at distance of speech with background noise. Speech and language developments are within normal limits. May exhibit occasional auditory perception problems some educational retardation likely.</td>
<td>Will benefit from special seating in the class. Hearing aid is beneficial. Parents and teachers should be educated on the Child's problems in understanding due to hearing loss.</td>
</tr>
<tr>
<td>3. 41 to 55 dB moderate hearing-loss</td>
<td>Language development and speech are mildly affected. Difficulty with rarely used words, minor differences in meaning of words and idioms, defective articulation but still intelligible speech loss quality and inflection almost normal. Reading and witting are delayed.</td>
<td>They should well to hearing aids and amplification, early speech and language training and parent counselling indicated speech and language development to be monitored. Special seating, supportive.</td>
</tr>
</tbody>
</table>

*Sources: NCERT*
Notes

Self Assessment

2. State whether the following statements are True or False:

(i) Due to the advancement in technology, the identification of hearing impairment has become easier.

(ii) Development status may be taken into consideration to identify hearing impaired children.

(iii) The case history is generally taken by teacher.

(iv) The psychiatrist may not collect the data from the child directly or from a close relative of the child.

(v) Hearing impaired child should be referred to the audiologist and ENT specialist for systematic investigation and assessment.

(vi) Overdose of strong drugs like streptomycin, guanine and L.S.D are associated with hearing impairment.

11.3 Summary

- We have discussed about the identifications causes and problems of speech and hearing impairment.

- **Speech Impairment:** We can recognize the speech impaired child by some symptoms like faulty articulation or pronunciation-substitution omission, distortions, unpleasant voice quality, stuttering, cluttering and by difficulty in formation oral sentence.

- **Causes:** There are different causes of speech impairment like organic causes (tumuli’s of anomalies, dental, dental irregularities deformation of jaw and lips etc.), functional causes (children learn to speak in a fallacious manner, if they hear faulty vocabularies) Psycholognic causes (Children’s reaction ship with others), loss of hearing, social influence, cerebral palsy are also the causes of speech impairment.

- **Problems:** Speech impairment children are inferior to normal children in activities like, reading, coition etc. They have difficulties in pronunciation, and communication so they do not take part in group activities, social activities etc.

- **Hearing Impairment:** Identification: The deaf children can be identified by developmental scale. "Bayle scale of infant development is very helpful for this purpose.

- Neurological tests are used for assessment of neurological functions because hearing impaired children have additional percepts motor deficiencies.

- In medical examination physician takes general medical history of a child for investigating functioning and dysfunctioning of various organs case history and systematic observations are other identification test for hearing impaired child, frequent ear aches, fluid discharge from ear, leek of equilibrant, asking what-what, speech defects are some symptoms of hearing in paired child by which we can identified then.

- There are four types of causes of hearing impairment: (i) Hereditary and non hereditary (ii) congenital and acquired (ii) pre-natal, perinatal and postnatal (iv) physiological and psychological.

- Certain causes before birth are: (a) Hereditary (b) Rubella (c) Infectious Disease (d) Drugs (e) Malnutrition.

- There are many problems which hearing impaired child face in daily life like speech and language problems, occasional educational retardation difficulty with rarely used words, minor differences in meaning of words, and idioms, defective articulation etc. reading and writing are delayed.
11.4 Keywords

- Cognitive: Connected with mental processes of understanding.
- Recognize: To know who somebody is when you see or hear them, because you have seen or heard them before.
- Defective: Having a fault, not perfect.
- Psychological: Connected with a person's mind and the way it works.

11.5 Review Questions

1. Give some points for identification of speech impairment.
2. What are the causes of speech impairment?
3. What are the problems of speech impaired children?
4. Explain the causes and problems of hearing impairment.
5. Give the identification of hearing impairment.

Answer: Self Assessment

1. (i) speech, impaired (ii) articulator
   (iii) Dental irregularities (iv) By ear (v) Psychogenic
   (vi) Auditory system (vii) Communication (viii) Professional
2. (i) True (ii) True (iii) False (iv) False
   (v) True (vi) True

11.6 Further Readings

Books

1. Special Education: Laura Rothstein; Scott F. Johnson; Sage Publisher, Inc.
2. Special Education: Daniel P. Hallahan, James M. Kauffman, Paige C. Pullen; Pearson Education, Inc.
3. Special Education: Linda Wilmshurst, Ph.D., ABPP, Alan W. Brue, Ph.D., NCSP
Notes

Unit 12: Speech and Hearing Impaired: Preventions and Teaching Strategies

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Objectives
The objectives of this unit can be summarized as below:
• to know about the prevention of speech impairment.
• to explain about the classroom management and teaching strategies hearing impaired children.
• to know prevention of hearing impairment.
• to explain the role of teacher and teaching strategies for hearing impaired children.

Introduction
The speech impaired children need sympathy of classmates and teachers. They should be encouraged for participation the classroom. In the mainstreaming positive reinforcement should be given. The proper attention should be given to such education.

Providing education and training to the hearing impaired pupils a challenge not only to the regular classroom teacher but to special teachers as well. A consistent attempt, monitoring and feedback on the performance of hearing impaired children is needed. The parents and community have also great role to play in accepting such children. IED and the resource room teacher plan are positive steps in bringing hearing impaired to the mainstream.

Speech and language are fundamental process undergoing all cognitive functioning. In this chapter the discussion has centred around analysing speech defects, deficiency in linguistic structures and various techniques of teacher skills in the mainstreamed classroom. The role of teacher and speech therapist have also been highlighted along with provision for special schools.

12.1 Prevention of Speech Impairment

(i) Go for a hearing check up: Most of the problems related to the speech originate due to improper hearing abilities in children. Improper hearing ability in children can cause a delay in the speech and the communication of a kid. By making sure that the children do not have any hearing disorder one can prevent a person from developing any disorders in speech.
Check for nasal, mouth and palate abnormalities: Speech impairment can also result from improper muscular development in the regions of the tongue, mouth and palate. By checking whether these muscles are in proper condition can also ensure in prevention of the speech disorder.

Keep away from loud noises and music: The muscles and ligaments of an infant are really tender and sensitive. One has to prevent the damage that loud noises or sounds can cause on the ears of the infant. These loud noises can also cause deafening and hearing impairment in children.

Consult a speech therapist or a paediatrician if the child is facing difficulty in speech: In case the child is facing any difficulty during a speech it is better to consult with a speech therapist or a paediatrician as soon as possible. The earlier the treatment the better are the chances for correcting the disorders in speech.

It is very important for parents to check that their children are not getting into any situations related to verbal or mental abuse.

Self Assessment

1. Fill in the blanks:
   (i) The loud noise can cause .......... and ............... impairment in children.
   (ii) If the child is facing any difficulty during a speech it is better to consult with a ............... .
   (iii) Most of the problems related to speech originate due to improper ........... in children.
   (iv) .......... can also result from improper muscular development in the regions of the tongue, mouth and palate.
   (v) Speech impaired children can be very ......................, even a loud shout can send them into a state of shock.

12.2 Classroom Management for Speech Impaired Children

Whatever approach is used, the classroom teacher can use certain tips as follows:
1. Maintain a relaxed rather than authoritarian classroom atmosphere.
2. React objectively and unemotionally to the stuttering.
3. Emphasized a good listening attitude among the class members.
4. Allow the student to complete his or her speech attempts without interruption.
5. Provide opportunities that will serve to build up the stuttering child’s self-esteem.
6. Watch for situation in which the stutterer is more likely to be fluent and provide opportunity for those situations.
7. Avoid placing the stutterer in situation requiring rapid oral responses such as oral drills.
8. Avoid allowing the child to build expectancy fears of oral recitations are used. Do not processed down rows of children or in alphabetical order. Instead, call randomly on children for responses.
9. In calling on students for oral responses, try to select questions for which stuttering child has the answer.
10. If the child has just expanded a speech interruption, direct the child’s attention to something else other than speech, to reduce development of sound, word or situation linkage to stuttering.

More specifically the regular classroom teacher has to discharge certain responsibilities. He has to:
1. Refer the pupil to speech therapist.
2. Integrate speech and language activities throughout the school day with whatever subject is being taught.
Notes

3. Provide a good speech and language model.
4. To improve comprehension use short phrases, sentences and questions when speaking to pupils.
5. Use concrete experiences and role playing the meaning of words, sentences, and stories.
6. Provide visual clues such as pictures.
7. Give enough time to gather their thoughts before they speak out.
8. Give verbal directions, riddles, and display interesting picture and ask them to express or describe.
9. Read stories aloud and ask questions on the story.
10. Repeat words in sentences, use analogies (A dog is to cat as a tree is to).
11. Have pupils tell how these are alike or different.

12.3 Teaching Techniques for Speech Impaired Children

Techniques frequently utilised in training language behaviours include modelling, imitation, correction of errors, training self-correction, expansions, and extensions. These are used successfully by speech therapist, teacher, and parents in facilitating language development. Modelling and imitation are used in a significant number of language intervention procedure. Prompts are also used in modelling. Extensions are also used by the teacher. He/she instead of only expanding omitted incorrect features. How elaborates with addition to make the meaning more clear. Another modelling practice is self-correction.

Two approaches have been used to present stimuli and tasks. These are operant behavior management method and cognitive discovery model. (i) Operant training is structured and use repetitive presentation of a single word, process of concept in an individual training is structure and use repetitive presentation of a single word, process or concept in an individual training session. (ii) The cognitive discovery approach emphasizes creating an opportunity to experience the concept or target word. This is the natural way of learning by the non-language impaired child but language impaired children do not learn by this way to the same degree of efficiency.

The regular teacher serves as a model for appropriate production, a source of feedback, and a facilitator in the transfer generalisation process. He assists the language impaired child from the emotional trauma and ridicule that often accompanies speech and language in the regular classroom. Teacher should see that their (language impaired) self-concepts are not lowered.

Special School for Speech Impaired Children: Special school is effective if the teacher and speech therapists are on full-time establishments. Most pupils attending the special schools for language disabled children have achieved excellent results but with poor modelling.

Webster and McConnell (1987) advised teaching language in natural contexts than direct teaching of language. The children are encouraged through shared reading to understand the structure of the text, and then to develop the guesswork strategies using picture clues and story content to argument any decoding strategies they may have such as initial letter recognition. Later they may be taught that text can be used to analyses, argue, describe, expose, instruct and express. This will help them to learn the text and plan their own communicative exchanges both written and verbal.

12.4 Prevention of Hearing Impairment

Hearing is an important sense for communication. A major part of all learning takes place through hearing. Therefore, a reduction in a person's ability to hear can severely affect his/her life. Hearing loss can be caused by several factors- some which occur even prior to birth, and some which cause hearing loss to set in later. Hearing loss may even be hereditary. But in several cases, hearing loss can be prevented. Here are a few guidelines on how you can protect your hearing:

(i) **Do not use sharp objects to clean your ears:** Using pins, pencils, needles and other pointed objects to clean your ear can easily damage the wall of the ear canal, or even the ear drum. This would lead to hearing loss. Wax generally comes out of the ear naturally. If there is any impacted/hard wax or excessive wax secretion, get your ears cleaned by an ENT doctor.
Do not insert any objects into the ear canal: Children may insert seeds, grains, pebbles, soil, etc, into the ear canal during play. In case of adults, insects are the most commonly found foreign bodies. Get help from an ENT doctor immediately. Foreign bodies may block the ear drum or damage the ear drum, causing a mild to moderate hearing loss. Do not pour water into the ear, as it may cause infections.

Do not neglect earaches or ear discharge: Ear infections, if not treated, can cause hearing loss. Consult ENT doctor immediately if there is any of the following symptoms:

- Ear pain
- Fluid in the ear
- Itching sensation
- Ringing in the ear

Wear a helmet: Avoid injuries to your head and ears. Road Traffic Accidents may damage hearing. Wear a helmet to protect yourself from road traffic accidents.

Avoid noise: Be aware of sources of noise. Exposure to loud and excessive noise is one of the most common causes of hearing loss. Protect your ears from the sounds of gunfire, firecrackers, very loud music, etc. If your job requires you to work in a noisy situation (saw-mills, road construction, printing works, factories, etc.), make sure you wear hearing protective devices such as ear muffs or ear plugs, in order to protect your hearing. Your audiologist will be able to help you select an appropriate hearing protective device.

Do not take medicines indiscriminately: If you have to take any of these drugs for a prolonged duration, have your hearing evaluated periodically. If you think your hearing is being affected, talk to doctor. Check if the dosage can be lowered, can take an alternate medicine.

Discourage marriage between close relatives: Consanguineous marriages, or marriages among blood relatives, increase the chances of children being born with hearing loss.

Take good care of health during pregnancy: Infections such as measles, mumps, syphilis, and rubella during pregnancy may damage the unborn child's hearing. Exposure to radiation / X-rays, drug intake during pregnancy, falls and injuries can also affect the child's hearing. Pregnant women should meet their doctors regularly for advice on diet, general health and vaccines. This is needed to protect the unborn child from all health problems, including hearing loss. Rh-incompatibility can also affect the child's hearing. This condition occurs if the mother's blood group is -ve and the child's blood group is +ve(for example, if the mother's blood group is B – and the child's blood group is B+).

Prevent ear infection: At the time of feeding mother should, hold him/her in a slanting position. This can prevent the baby from having ear infections. Do not pour hot oil or any other liquids into the ear, as it may result in pain and ear discharge. If you swim or dive, use ear plugs to keep the water from entering your ears. Dirty water in the ear might cause infections, too. While blowing your nose, do so gently and from both nostrils. Otherwise, fluids from the nose may be forced into the middle part of the ear, Thus causing infections.

Get immunizations done on time: Diseases like mumps, measles, rubella, encephalitis, meningitis, typhoid, etc. may affect hearing. As far as possible, prevent these diseases and get children vaccinated on time. If you get these diseases, you must get advice from a qualified audiologist.

Get your hearing checked periodically: Keep in touch with your audiologist. Get your hearing checked immediately if you find it difficult to hear, or if you feel one ear is better than the other. Also consult the audiologist in case of

- any discomfort,
- ringing in the ear
- dizziness
- family history of hearing loss
If you come across the following signs and symptoms of hearing loss, consult an audiologist/ENT doctor immediately:

- Unclear speech and other sounds
- Difficulty understanding words, especially when there is background noise or in a crowd
- Asking others to speak more slowly, clearly and loudly
- High volume of the television or radio is required
- Not active in conversations
- Avoiding people
- Ringing sounds (tinnitus) in the ears

Even otherwise, get your hearing checked periodically, to ensure that your hearing sensitivity is normal.

**Did you know?** Certain antibiotics (like streptomycin, kanamycin, and gentamycin) and aspirin may cause hearing loss.

### Self Assessment

2. State whether the following statements are 'True' or 'False':

   (i) Hearing is not an important source of communication.
   (ii) Hearing loss may even be hereditary.
   (iii) Foreign bodies may block the ear drum causing a mild to moderate hearing loss.
   (iv) Exposure to loud and excessive noise is not one of the most common causes of hearing.
   (v) Ear infections, if not treated, can cause hearing loss.

### 12.5 Teaching Strategies for Hearing Impaired Children

Certain general teaching techniques are to be practiced by the teachers of hearing impaired children.

1. Combined visual presentation with oral materials.
2. Use handouts for these children.
3. Use multisensory approach when necessary.
4. Focus on pupil's attention.
5. Teach the major portion of the lesson.
7. Use transition sentences.
8. Use short and clear verbalisation.
9. Ask questions to check comprehension and
10. Explain things and repeat.

For accelerating language and oral communication skills among hearing impaired children language experience training should be incorporated as a regular feature in the school emphasizing all the aspects of language competence, comprehension and skills of communication role playing, action, illustration cards, pictures, drills, picture, word dictionaries, practice sheets, phonics, structural analysis are to be used. Several language training kits are available and can be profitable used.

Written comprehensions and expression can be enhanced by waiting simple sentences on a topic and presenting them in a scrambled order and asking the hearing impaired child to rearrange the cards using semantic organization. They can be given matching exercise order in of exercises, questions regarding what, when, where and how. Hanging of charts in the room also speed up the language acquisition.
For mathematical ability, training use of abacuses, plastic chip, coins and other small objects, value boxes, number lines, playing card, semiastract materials facilitate learning. Hearing deficient children are not poor in abstract and conceptual ability but because of language deficit their overall performance is retarded.

Speech therapy has been recommended for reinforcing speed and sound patterns. Close communication with speech therapist will result in consistent and concentrated programmes. Use of hearing aids individually and group hearing aids in the classroom facilitate instruction and leaning.

What are the protecting devices to protect your hearings?

12.6 Role of Teacher for dealing Hearing Impaired Children

Managing hearing impaired children: The regular teacher may at one time or another have hard-of-hearing children in his class. He has an important role to play in managing such children in the class.

(1) There are behavioral characteristics or symptoms of hearing impairments which the regular classroom teacher should watch for. He should refer suspected cases or advise parents to consult with specialist doctors for medical treatment.

(2) The very presence of one or two hearing-impaired children in the class of 35 to 40 hearing students is likely to create a feeling of uneasiness in the minds of the class teacher. If he has no previous knowledge of such children and their handicap he will ask himself, "How will I teach them?" Certainly they create a problem for him. He should, therefore, attend short-term training or orientation course so that he will know the implications of their handicap, understand their educational needs, and make necessary adjustments so that such children feel at home and secure in the class.

(3) He should develop a positive attitude and show love and affection towards such children. The impact of the teacher's behaviour will be reflected in the behaviour of his peers.

(4) He should arrange seats for them in the front row of the room preferably on one side, so that they obtain a better view of both the teacher and the classmates.

(5) He should keep the auditory and visual distracters to a minimum. Although such distraction may not always be under the control of the teacher, excessive noises from under the control of the teachers, excessive noises from the hall, other rooms, and outside should be eliminated, especially when he is talking. It should be remembered that environmental noises are also a problem for the child with a hearing aid, since all noises are implied for him.

(6) To optimize the child's opportunities to speech-read, the teacher should try to maintain a distance of about six feet between himself and the child, standing too close can be a hindrance because it prevents the child from being able to observe situations.

(7) If he notices any disorder or wrong use steps should be taken to rectify the defect and ensure correct use.

(8) The teacher should speak naturally and follow other principles of speech reading and auditory training.

(9) The teacher should attempt to standstill when talking, because excessive movement adds to the difficulty of speech reading.

(10) The teacher should be careful not to turn his back to the class and talk while writing on the black-board.

(11) New vocabulary should be introduced both orally and in writing.

(12) The teacher should encourage the child to ask questions when he is unsure of what is being told. When it is necessary. To repeat something the teacher should try to rephrase the instruction.
There are something the teacher should try to rephrase the instruction. There are some words and phrases that are easier to lip read than others, and rephrasing increases the chances that the child will be exposed to words he can comprehend.

(13) The teacher should make every effort to use visual aids in the instructional process. The use of transparencies on an overhead projects (if possible) is a good way to do this. Simply writing instruction or new vocabulary items or important points on the black-board is another good method.

The teacher should see that the hearing impaired child uses the hearing aid regularly and that the hearing aid is in perfect condition.

Self Assessment

3. Multiple Choice Questions

Choose the correct option:

(i) Hearing deficient children are not poor in abstract and ...................... .
   (a) speaking ability (b) conceptual ability (c) linguistic ability (d) experience

(ii) Speech therapy has been recommended for reinforcing speed and ........ patterns.
    (a) sound (b) language (c) light (d) care

(iii) Teacher should arrange seats for them in the ........... of the room preferably on one side.
     (a) side row (b) last row (c) front row (d) near the gate

(iv) To optimize the child's opportunities to speech read, the teacher should try to maintain a distance of labour .................... between himself and the child.
    (a) 2 feet (b) 6 feet (c) 8 feet (d) 4 feet

12.7 Summary

- In this unit we have discussed about prevention and teaching strategies of speech and hearing impaired child.

- For the prevention of speech impairment, parents should consult ENT (Ear, Nose, Throat) specialist to check nasal, mouth cud palate abnormalities in child, should avoid loud music and noise because many speech impairment are caused due to hearing problems.

- The use of regular classroom with some speech impaired friendly facilities create a good environment for impaired child, teacher should provide visual clues, good speech and language model, verbal directions, repeat words and sentences, read story are some classroom management and teaching strategies for speech impaired children.

- The special Schools are effective if the teacher and therapists are on full time establishments. Two approaches have been used to present stimuli and tasks.

(i) Operant training is structured and uses repetitive presentation of a single word processor concept.

(ii) The cognitive discovery approach emphasizes creating an opportunity to experience the concept or target word.

- Prevention for hearing impairment is a major issue in present scenario. Some of main points which should be remember by children and their parents like do not use sharp object to clean ears, do not insert any object into ear canal, do not neglect earaches without consulting doctor, prevent rear infection, hearing checkup etc.

- Teaching Strategies: There is a great responsibility of teacher to check the improvement in hearing impaired child.
• To develop oral communication and language skills among hearing impaired language experience training should be in corporate as a regular feature in the school emphasizing all the aspect of language competence, comprehension and skills of communication role playing, action illustration cards, pictures, drills picture, word dictionaries phonics are to be used.

• Written comprehension and expression can be enhanced by waiting simple sentences on a topic and presenting them in a crumbled order.

• Speech therapy has been recommended for reinforcing speed and sound patterns, training of use of abacus, plastic chips, and coins and other small objects, value boxes, number lines should be used for mathematical ability.

• Above all the role of teacher is very important by different technique he should be make able to teach as well as take care of them.

12.8 Keywords
- Ligament : Strong band of tissue in the body.
- Pediatrician : A doctor who studies and treats the diseases of children.
- Optimize : To make something as good as it can be to use something in the best possible.
- Exposure : The state of being in a place or situation where there is no protection from something harmful or unpleasant.

12.9 Review Questions
1. How can we prevent hearing impairment. give any two methods?
2. What are the main causes of hearing impairment?
3. Describe the role of teacher for hearing impaired children.
4. What are teaching strategies for speech impaired childrens.
5. Give the role of special school for speech impaired children.

Answer: Self Assessment
1. (i) deafing, hearing (ii) speech therapist
   (iii) hearing abilities (iv) speech impairment
   (v) sensitive
2. (i) False (ii) True (iii) True (iv) False
   (v) True
3. (i) (b) (ii) (a) (iii) (c) (iv) (b)

12.10 Further Readings
1. Special Education: Laura Rothstein; Scott F. Johnson; Sage Publisher, Inc.
2. Special Education: Daniel P. Hallahan, James M. Kauffman, Paige C. Pullen; Pearson Education, Inc.
3. ERIC Clearinghouse on Handicapped and Gifted Children Reston VA: Visually handicapped: Requires special educational provisions because of ... as lighting, use of optical aids and devices, tasks, and personal characteristics.
Unit 13: Mentally Retarded: Definition, Types, Characteristics

CONTENTS
Objectives
Introduction
13.1 Meaning and Definition of Mentally Retarded Children
13.2 Types of Mentally Retarded Children
13.3 Characteristics of Mental Retardation
13.4 Summary
13.5 Keywords
13.6 Review Questions
13.7 Further Readings

Objectives
The objectives of this unit can be summarized as below:
• to know about the meaning and definition of Mentally retarted children.
• to explain the types of mentally retarted children.
• to describe the characteristics of mental retardation.

Introduction
Mental retardation refers to sub average intellectual functioning which originates during the developmental period. Mental retardation is due to both heredity as well as environmental factors. Mental retardation is remediable. Mental retardation is to be diagnosed and remediation can be given.

The children who cannot mentally function as well as most children we find in society. These children are subnormal in intelligence and behaviour. This retardation is pervasive and is been in all societies and cultures in varying proportions. Students will get comprehensive and clear idea about mentally retarded children after reading the text presented here.

13.1 Meaning and Definition of Mentally Retarded Children
There are some important definitions of mental retardation.
“Mental deficiency is characterized by inadequate intellectual functioning in adaptive, associative and learning power, yet sufficient with I.Q. fifty (50) to become socially adequate and occupationally competent with the help of special educational facilities.”

The most comprehensive definition given by the American Association on Mental Retardation. The definition a given is 1983 which is as follow :
“Mental Retardation refers to significantly sub-average general intellectual functioning, resulting in or associated with concurrent impairments in adaptive behaviour, and mainfested during the developmental period.”

The children with mental deficiency lack in mental development and possess less I.Q. their I.Q. is less than 75 but more than 50.
Classification of Mental Retardation

Children with mental retardation show no physical problem but may be slow in instructions. Their performance in class is affected by their delayed development. The observable behaviours that will help the teacher in identifying such children are given in the checklist given below.


Self Assessment

1. Fill in the blanks:

(i) The children with ............... lack in mental development and possess less I.Q. is less than 75 but more than 50.

(ii) The psychological classification of mental retardation on the level of ............... .

(iii) The various classifications provide an understanding of the level at which the mentally retarded persons functions with respect to his ............... , appropriate ............... and degree of the independence.

13.2 Types of Mentally Retarded Children

There are different methods of classification of mental retardation. The medical classification is based on the cause, the psychological classification on the level of intelligence, and the educational classification on the current level of functioning of the mentally retarded person/child. The proportion of children who fall under the various categories of mental retardation are depicted below.

<table>
<thead>
<tr>
<th>Type of Retardation</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild Retarded</td>
<td>89%</td>
</tr>
<tr>
<td>Moderate Retarded</td>
<td>67%</td>
</tr>
<tr>
<td>Severe Retarded</td>
<td>35%</td>
</tr>
<tr>
<td>Profound Retarded</td>
<td>15%</td>
</tr>
</tbody>
</table>

The classification of mentally retarded children has been given in the following table with reference to Medical, Educational and Psychological.

Clinical Classification of MR Children

There are six categories of clinical type of MR children:

1. Simple types
2. Mongolism (Down’s Syndrome)
3. Microcephaly
4. Hydrocephaly
5. Traumatic Amentia
6. Cretinism (Thyroid Deficiency)

Classification of Mentally Retarded Children

<table>
<thead>
<tr>
<th>Medical</th>
<th>Educational</th>
<th>Wechsler</th>
<th>Standard Binet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infections and Intoxication</td>
<td>1. Educable-IQ 60-85</td>
<td>1. Mild IQ 55-69</td>
<td>IQ-52-67</td>
</tr>
<tr>
<td>Trauma or physical agent</td>
<td>2. Trainable-IQ 30-59</td>
<td>2. Moderate IQ 40-54</td>
<td>IQ-36-51</td>
</tr>
<tr>
<td>Grossbrain disease (Post natal)</td>
<td>4. Profound IQ Below 25</td>
<td></td>
<td>IQ-20-35</td>
</tr>
<tr>
<td>Unknown prenatal influence</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chromosomal anomaly</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gestational disorder</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Special Education

Notes

Environmental influence

The various classifications provide an understanding of the level at which the mentally retarded person functions with respect to his education, appropriate behaviour and the degree of the independence. The characteristics of mentally retarded persons very depending upon the level of retardation, country, age, culture etc. The terms currently used to described the various degrees of mental retardation are mild, moderate, severe and profound.

Did u know?

Generally 60 to 70 percent of mental defective display no distinguishing physical characteristics.

13.3 Characteristics of Mental Retardation

Some authorities have described the characteristics according to the severity of retardation some other experts have mentioned the characteristics not according to the degree of disability but in terms of there educatability. Thus the characteristics of mentally retarded children are classified in two categories - (1) General characteristics and (3) Specified characteristics.

(1) General Characteristics of Mentally Retarded Children: The following are some important features of mentally retarded children:

1. Mentally retarded child has low intelligence but his development is not adequate according his mental level.
2. Mentally retarded children are of two type (a) Educable mentally retarded and (b) Trainable mentally I.Q. (55-50) trainable retarded. I.Q. (50-75) educable,
3. Mentally retarded child differs with regard to learning emotions, adjustment and physical development from normal children.
4. Mentally retarded children has poor adjustment due to several reasons-lack of motivation, feeling of insecurity.
5. Identification is difficult of such has been. They lack in abstract understand quickly, (v) Inability to decide, (vi) Lack of concentration, (vii) Short temper, (viii) Inability to remember, (ix) Lack of coordination, and (x) Delay in development.

Mental Retarded children have many characteristics are common with the normal children.

(2) Specific Characteristics of Mentally Retarded Children: Some features of MR children are classified into three categories:

(a) Educable Mentally Retarded (EMR)
(b) Trainable Mentally Retarded (TMAR) and
(c) Custodial Mentally Retarded (CMR).

(a) Educable Mentally Retarded (EMR): The EMR children have I.Q 50 to 75. They have normal appearance and remain unidentified until late teens. They function at an intellectual level generally limited to learning the most basic school subjects, skills such as reading, spelling, writing and numerical calculation. They are expected to learn up to the seventh standard. They can communicate effectively in everyday conversation, enjoy friendship and group social activities. They can travel with ease in their home town or locality. During adulthood, they are able to live independently, marry or have children. They can hold are able to live independently, marry or have children. They can hold skilled or semi-skilled jobs. But at times they may need assistance in doing their job. They can be educated in regular classrooms.
(b) **Trainable Mentally Retarded (TMR):** The TMR children have IQ 25 to 50. They are expected to have physical or sensory impairments and many tend to look different in terms of facial features and physical characteristics. They function at a level where formal academic learning is quite limited. They can learn to feed, toilet and dress self adequately. They can carry on rudimentary conversation, and do simple house hold work. But they need training in self care activities, language development and rudimentary academic skills. They are usually placed in special classes or special schools.

(c) **Custodial Mentally Retarded (CMR):** The CMR have IQ below 25. They are so much retarded in intellectual functioning and adaptive behaviour that they remain totally dependent on others for their existence. It is because of their severe retardation that they are institutionalised early in life. Their speech and toilet habits remain at a primitive level. Behaviour modification and environmental stimulation techniques are usually recommended for their training.

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**Self Assessment**

2. **Multiple Choice Questions**

*Choose the correct option:*

- (i) __________ child has low intelligence but his development is not adequate according his mental level.
  - (a) Physical disabled
  - (b) Mentally retarded
  - (c) Backward
  - (d) delinquent

- (ii) Mentally retarded children has poor __________ due to several reasons lack of motivation, feeling of insecurity.
  - (a) adjustment
  - (b) critical
  - (c) understand
  - (d) lack of motivation

- (iii) The EMR children have I.Q. ________________.
  - (a) 500 to 100
  - (b) 50 to 80
  - (c) 50 to 75
  - (d) 50 to 90

- (iv) The TMR children have I.Q. ________________.
  - (a) 20 to 40
  - (b) 25 to 50
  - (c) 70 to 100
  - (d) 10 to 25

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13.4 **Summary**

- “Mental deficiency is characterized by inadequate intellectual functioning in adaptive, associative and learning power, yet sufficient with I.Q. fifty (50) to become socially adequate and occupationally competent with the help of special educational facilities.”
- Children with mental retardation show no physical problem but may be slow in instructions.
- There are six categories of clinical type of mentally retarded children: (i) Simple types (ii) Mongolism (Down’s syndrome) (iii) Microcephaly (iv) Hydrocephaly (v) Trarematic Amantia (vi) Cretinism (Thyroid deficiency).
- The characteristics of mentally retarded persons very depending upon the level of retardation, country, age, culture etc. The terms currently used to described the various degrees of mental retardation are mild, moderate, severe and profound.
- **Educable Mentally Retarded (EMR):** The EMR children have IQ 50 to 75. They have normal appearance and remain unidentified until late teens.
Notes

- **Trainable Mentally Retarded (TMR)**: The TMR children have IQ 25 to 50. They are expected to have physical or sensory impairments and many tend to look different in terms of facial features and physical characteristics.

- **Custodial Mentally Retarded (CMR)**: The CMR have IQ below 25. They are so much retarded in intellectual functioning and adaptive behaviour that they remain totally dependent on others for their existence.

13.5 Keywords

- **Formal**: Received in a school, college or university.
- **Adaptive**: Concerned with changing, able to change when necessary in order to deal with different situations.
- **Effectively**: In a way that produces the intended result.
- **Adjustment**: A small change made to something in order to correct or improve it.

13.6 Review Questions

1. Who are mentally retarded children?
2. What are the types of mentally retarded children?
3. What are the characteristics of mental retardation?
5. What are specific characteristics of mentally retarded children?

**Answers: Self Assessment**

1. (i) Mental deficiency  (ii) Intelligence
   (iii) Education, behaviour
2. (i) (b)  (ii) (a)  (iii) (c)  (iv) (c)

13.7 Further Readings

1. Special Education: *Linda Wilmshurst, Ph.D., ABPP, Alan W. Brue, Ph.D., NCSP*
2. Special Education: *Laura Rothstein; Scott F. Johnson; Sage Publisher, Inc.*
3. Special Education: *Daniel P. Hallahan, James M. Kauffman, Paige C. Pullen; Pearson Education, Inc.*
Unit 14: Identification: Causes, Problems of Mentally Retarded

CONTENTS
Objectives
Introduction
14.1 Identification of MR Children
14.2 Causes of Mental Retardation
14.3 Problems of MR Children
14.4 Summary
14.6 Keywords
14.7 Review Questions
14.8 Further Readings

Objectives
The objectives of this unit can be summarized as below:

• to know about the identification of MR children.
• to explain and causes and problems of mental retardation.

Introduction
Mental retardation has been known for centuries and different terms have been used to explain it. Early in the twentieth century, the terms moron, imbecile and idiot explained the three levels of retardation. During the 1940s the term feeble-minded was used. In recent years terms like mental subnormality and ‘developmental disability’ are being used.

Until the twentieth century, retardation was defined in terms of an individual’s inability to meet the minimal demands of society. In 1905 Alfred Binet developed a method of identifying students who could be expected to fail in the regular school curriculum and who therefore required a special instructional programme, which was translated and used in the USA by Henry Herbert Goddard. Terman’s 1916 edition of the Standard Binet Intelligence Scale was quickly adopted as standardized, objective, norm-referenced way of identifying retarded children. I.Q. became standard for classification of mental retardation. However, David Wechsler, who devised a series of intelligence tests, warned against the rigid use of intelligence test scores as the sole criterion for diagnosing retardation.

This definition was subsequently restated as: “Mental retardation refers to significantly sub-average general intellectual functioning, resulting in or associated with, concurrent impairments in adaptive behaviour and manifested during the developmental period.” This definition has three aspects:

1. Sub-average intellectual functioning.
2. Developmental in origin, and
3. Impairment in adaptive behaviour.

Mentally Retarded Children who function at different levels of retardation require different educational programmes, curricula, methods, and materials. In recent years, differences observed among them have led to the use of four levels: mild, moderate, severe, and profound retardation. The mild group, which makes up approximately 75 to 80. IQ students in the EMR range are capable of learning basic academic skills of reading, writing and arithmetic. Most children can learn vocational skills.
These children may enter school at the usual age, but formal reading and writing instruction may be delayed until about age eight or nine. During school years, they may be given instruction in simple arithmetical concepts, understanding of the home and community, and development of good work habits. Curricula are designed to provide basic skills for coping with the environment. Educable children usually develop language skills.

The moderate level of retardation (IQ range about 35 to 60) includes essentially the same group as those called trainable mentally retarded (TMR) in schools. Until the 1950s, this group was usually not admitted to public schools. Gradually separate classes were started for them under the public school system. The curricula for TMR students differ from that of EMR curricula. TMR students are unlikely to develop independence as adults. They are unlikely to learn to handle finances beyond simple purchases and usually need some supervisory help.

### 14.1 Identification of MR Children

For the mentally retarded, assessment includes basically intelligence and adaptive behaviour along with developmental material supplied by parents, teachers, social workers and professionals. The two most widely used intelligence tests are the Stanford Binet, and the Weschler Intelligence Scale for Children. These individual tests along with functional assessment tests developed by the national Institute for mentally handicapped can be used.

Adaptive behaviour is assessed using adaptive behaviour scales. In these scales, assessment is made on the basis of maturational and developmental skills in the areas of communication, motor ability and self-help in early childhood. In adolescence, social and vocational adjustments are emphasised.

*Educational assessment* of the mentally retarded needs to be more functional than verbal. School readiness measures developed by Muralidharan, the Harison reading readiness profile, and Furrel analysis of reading difficulty can be given to M.R. children as high as up to the sixth grade. The Illinois test of Psycholinguistic abilities form of adoption available in our country can be used for diagnosis and related language processes. There are tests which can be profitable used; the Peabody Picture Vocabulary Test (PPVT), Auditory discrimination test, verbal language development scale.

The crux of the issue lies in developing systematic testing methods, devising certain norms, modifying them in terms of progress achieved, adapting them to the regional languages and variations.

### The Psychometric Approach

The approach so far has been the use of psychometric tests even though adaptive behaviour assessment has formed a basic component in testing for screening, placing and making any intervention. American Association on Mental Deficiency (AAMD) adaptive behaviour scale, Vineland Social Maturity Scale and a few others have been adapted in our country, there have been wide shortcomings in their use. There are culturally a typical children, hyperactive children to whom such tests can be administered with lots of difficulties. Their motivation and attitude are different. The apprehension of parents about testing because of bias of apprehension of stigma, use of tests for identification by Psuedo professionals, Para-professionals as a measure of social welfare activities attached to such identification have further posed problems.

### Self Assessment

1. Fill in the blanks:
   
   (i) The two most widely used intelligence tests are ................. and ................. for children.
   
   (ii) ................. is assessed using adaptive behaviour
   
   (iii) ................. of the mentally retarded needs to be more functional than verbal.
   
   (iv) ................. test is a profitable used test.

### 14.2 Causes of Mental Retardation

It has been mentioned that mental retardation is due to both type of factors- 1. Heredity-Endo-genous factors and 2. Environment exogenous factors.
1. **Heredity-Endogenous factors**: may be of the following types—
   
   (a) **Development defects**: before birth, skull deformities and endocrine disorders.
   
   (b) **Metabolic defects**: skin diseases, infantile juvenile.
   
   (c) **Neuromotor defect**: motor skills defects, motor paralysis
   
   (d) **Psychological disorder**: sensory defects, psychic defects.

2. **Environment-Exogenous factors**: these may be of the following types—
   
   (a) Developments after the birth of the child.
   
   (b) Anti-measures used by mother in pregnancy.
   
   (c) **Post natal conditions**: direct injury, disease etc.
   

Kirk has enumerated the causes of retardation into three categories— (1) Organic or biological, (2) Genetic or heredity and (3) Cultural or environmental factors. The empirical research studies have yielded that three types of factors are responsible for the mental retardation of children.

Mental Retardation occurs due to genetic and environmental factors which come into play at pre-natal, perinatal and postnatal stages of development.

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**Mentally Retarded Children are identified by using both observation of their behaviours and administering intelligence test to ascertain their level of intelligence.**

---

**Hereditary-Endogenous Causes of MR**

One of the most visible conditions associated with mental retardation of Down’s Syndrome. Down’s Syndrome contains the non-sex determining chromosome. Chromosomal anomaly explains many forms of mental disorders. In non-dysjunction Down’s Syndrom one pair of genes faild to separate at conception, resulting in an extra or 47th chromosome after forty-six known as Tirsomy-21. The face of the child has palpebral fissures that are oblique and narrow laterally, specked iris, flatness of the nose bridge, enlarged tongue, small ears, and short and broad neck. Other common anomalies are flattening of the occiput, broad hands with the little finger curved, short broad feet with a wide space between the first and second toes, pelvic anomalies, and congenital heart anomalies in almost 25% of patients. Intellectual development is impaired.

There is clear cut association between Mental Age and Trisomy - 21

<table>
<thead>
<tr>
<th>Down’s Syndrom</th>
<th>Below 20</th>
<th>20-24</th>
<th>25-29</th>
<th>30-34</th>
<th>35-39</th>
<th>40+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incidence per 1000</td>
<td>0.46</td>
<td>0.65</td>
<td>0.88</td>
<td>1.26</td>
<td>3.92</td>
<td>17.60</td>
</tr>
</tbody>
</table>

Whatever the IQ value, it seems safe to say that Trisomy-21 children will not be able to enjoy an independent life, even if some of them reach borderline intelligence. Mongolism or Down’s Syndrome is due to the presence of three types of chromosomal anomalies. Three main cytogenetic forms are known: with 47 chromosome and a standard trisomy-21 (95% of all case); with normal mosaics, with 46 chromosomes/trisomy-21 (two three percent), and with translocations (two to three percent). Although it is not known that the causes are a close association between maternal age and trisomy 21 has been repeatedly demonstrated.

These children need extra care. Parental support is a vital need to ensure that infant stimulation programmes emphasizing self-help skills, language acquisition, feeding, toilet training, and positive socialization, are provided. Down’s syndrome individuals are educable and should have exposure to their non-handicapped peers from their early years. In the past, professionals advised parents to place their Down’s syndrome child in 24-hour institutional care based on
the false assumption that the Down’s syndrome individual would be severely or profoundly retarded. Custodial care is seldom warranted unless severe medical, psychological or social problems occur.

The greatest general development is found in Down’s Syndrome individuals who are reared at home and well stimulated. Optimum programme occurs when facilities are positive and training begins early and comprehensive.

Translocation is common. It occurs because of faulty cell division in which one chromosome is attached to another. In Mosaicism, the cell receives an extra twenty first chromosomes, but there are few abnormalities in this form of Down’s Syndrome.

(2) Environment-Exogenous Behaviours

A combination of genetic and environmental actors is responsible for familial type of mental retardation. Early emotional deprivation and disturbed parent-child relationships are some of the potent factors associated with mental retardation of this type. Emotionally disturbed children are considered to be oversensitive to psychological stress and vitamin deficiency is likely to causes oversusceptibility to infection.

Did u know?

Down’ in 1865, was the first to use the term mongolian idiocy to name a particular form of mental retardation, now referred to as mongolism or Down’s Syndrome.

Self Assessment

2. Multiple Choice Questions

Choose the correct option:

(i) .......... is not a process of growth and development?

(a) Developmental defects  (b) Metabolic defects
(c) Genetic or heredity level  (d) Cultural defects

(ii) In non-disjunction Down’s syndrome one pair of genes failed to separate at conception, resulting in an extra or .......... chromosomes.

(a) 45th  (b) 47th  (c) 49th  (d) 46th

(iii) .......... is not found in Down’s syndrome child.

(a) Palpebral fissures  (b) Oblique and narrow laterally
(c) Speckled iris  (d) Filarisis

14.3 Problems of MR Children

Generally, there is no significant difference between normal children and mentally retarded children with regard to their psychical health, but special psychological difficulties for retardates are found in day-to-day life. These are as follows:

(1) Mild depression, feeling of worthlessness and helplessness are experienced.

(2) As a retardate grows older, he becomes lonely and unable to adjust in society. Evidence points towards the frustration of psychological and social needs which predispose some retardates to feel angry and rebellious.

(3) Parents of such children develop a guilt complex. Parental overprotection is a glaring example. Sometimes they do not encourage self-help; rather they continue to dress and feed the child up to an advanced age. As a result, this type of behaviour encourages a dependent style of interaction in the child. Mainly overprotection and denial of the parents invite adjustment difficulties of such type of children.
The mentally retarded children have usually the following type problems-
1. Physiological and mental development problems.
2. Adjustment problems in home, school and society.

Generally the parent have high expectation from his child. Mentally retarded children are unable to come to their expectations because they have in mental deficiency or low intelligence. The parents get-disappointment from the child. They begin to scold him. The child feel humiliate due to his unabilities. More or less similar situation in the school and classroom. They can not pace with class and teacher can not make them learn any thing through his normal teaching. The child wants to avoid the classroom and become truant. Such children are deprived from the affection sympating of their parents and their teacher. Thus the problem of adjustment areas in family, school and society.

There are three provisions remedial programme-

<table>
<thead>
<tr>
<th>103</th>
<th>Unit 14: Identification: Causes, Problems of Mentally Retarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Physiological and mental development; problems.</td>
</tr>
<tr>
<td>2.</td>
<td>Adjustment problems in home, school and society.</td>
</tr>
</tbody>
</table>

**Self Assessment**

3. State whether the following statements are ‘True’ or ‘False’:

   (i) Mentally retarded children are unable to come to their expectations they have low intelligence.
   (ii) Mentally retarded children have no psychological difficulties.
   (iii) The child does not feel humiliation due to his unabilities.
   (iv) The child does not want to avoid the classroom and become truant.
   (v) The intelligence tests should be administered at the time of admission in the school.

**14.4 Summary**

- There are two most widely used intelligence tests are (i) Stanford Binet test (ii) Weschler Intelligence scale for identification of mentally retarded children.
- Except it, Harison reading readiness profile, furred analysis of reading difficulty, Illinois test of psycholinguistic abilities, Peabody picture vocabulary test (PPVT), auditory discrimination test, verbal language development sale are other important tests for mentally related children identification test.
- AAMD adaptive behavior scale, Vineland social maturity scale are some tests which are adapted in our country.
- The causes of mental retardation are of two main types: (i) Hereditary-Endogenous factors (ii) Environment-Exogenous factors.
- **(i) Hereditary-Endogenous factors are of following types:**
  (a) Developmental defects, before birth, skill deformities.
  (b) Metabolic defects-skin disease.
  (c) Neuromotor defects - motor skills defects.
  (d) Psychological disorder - Sensory's defects.
- **(ii) Environmental - Exogenous Factors:**
  (a) Developments after birth.
  (b) Anti measures used by mother in pregnancy.
  (c) Post natal conditions.
  (d) Process of growth and development.
Notes

- Problems of Mentally retarded - having following types of problems:
  (i) Physiological and mental development problems.
  (ii) Adjustment problems in home, school and society.
  (iii) Emotional problems in family, school and society.

14.6 Keywords

- Moderate : Not extreme
- Intellectual : Well educated or using person’s ability to think in a logical way.
- Significantly : In a way that is large or important enough to have an effect on something.

14.7 Review Questions

2. What is psychometric approach?
3. What are the causes of mental retardation?
4. What are the categories of retardation given by Kirk?

Answers: Self Assessment

1. (i) Stanford Binet, Weschler intelligence scale
   (ii) Adaptive behavior
   (iii) Educational assessment
   (iv) PPVT
2. (i) (d) (ii) (b) (iii) (d)
3. (i) True (ii) False (iii) False (iv) False (v) True

14.8 Further Readings

1. Special Education: Linda Wilmhurst, Ph.D., ABPP, Alan W. Brue, Ph.D., NCSP
2. Special Education: Laura Rothstein; Scott F. Johnson; Sage Publisher, Inc.
Unit 15: Mentally Retarded: Prevention and Teaching Strategies

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Introduction
15.1 Prevention for MR Children
15.2 Teaching Strategies
15.3 Education in General School (Mainstreaming)
15.4 Role of the Teacher
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15.6 Keywords
15.7 Review Questions
15.8 Further Readings

Objectives
The objectives of this unit can be summarized as below:
• to know about the prevention of MR children.
• to explain about the teaching strategies.
• to analyse the education in general school and role of teacher.

Introduction
The development of child’s personality and his general adjustment can not be described by the influence of parents and family, of the community and the school practices but mainly depends on the mental health of the learners and the teacher. It is said that mother is first teacher or equal to the several teacher. The home is the principal environmental factor contributing to his personality development and his adjustment, and there after, during his school years. he is still subject to the influences of home and community. Especially his home should have provided for his basic organic needs and should have furnished an environment well suited to meet his needs for security and adequacy. The pleasant and satisfactory experiences should be provided for the personality development and adjustment of the student.

15.1 Prevention for MR Children
Preventive measures of mental retardation: The intelligence tests should be administered at the time of admission in the school. A check list may be given to the parents to know above his behaviours and activities. The parents should be educated in this context.

Treatment of mental retardation: The special educational programmes should be used for such students. These programmes have been discussed under heading of education of mentally retarded children.

There are two provisions remedical programme: (1) Prevention (2) Special Education

(1) Prevention: Generally compensatory education aims at preventing developmental defect that interfere with educational progress in the disadvantaged pre-school child. This project was proved successful in USA. Mainly it demonstrates the effectiveness of early and comprehensive intervention
in the prevention of cultural familial retardation. The above project aims at selecting children of mentally retarded parents with and I.Q. of 70. This given the children some structured programme of sensory and language stimulation that emphasises achievement motivation, problem-solving skills and interpersonal relations, which is imparted to the children daily, and the mothers of these children receive training in the understanding and managing the retarded children in their homes.

(2) Special Education: We know that a retardate learns at a slow pace. So structured curricular materials and techniques are necessary for educating retarded children. From the 6th month till the onset of puberty, individual programmes from multidisciplinary points of view are devised and implement for children. It given a healing touch to the children with the onset of puberty.

It is true that such kid of individual-based programmes are not found in India and neither does it appear possible in the near future. But an attempt can be made to work out programems involving small groups.

(3) Parent Counselling: In our society, the parents of mentally retarded children face some special problems. They brother about their children’s physical and emotional problems. Also social adustments of these children place heavy demands in the society. As the children grow older.

Notes
Recently individual centred programmes have been tried out at the Institute of Defectology in Moscow, USSR. At this centre, the retarded child is identified within six months after its birth.

Self Assessment
1. Fill in the blanks:
   (i) Retarted learns at a ................................ pace.
   (ii) At the institute of defectology in MOSCOW, USSR the retarded child is identified within ................. months after its birth.
   (iii) “Project head start” aims at selecting children of mentally retarded parents with and I.Q. of ................. .
   (iv) The mothers of mentally retarted children receive ............ in the understanding and managing of the retarded children in their homes.

15.2 Teaching Strategies
The special methods which are generally adopted in teaching the educable mentally retarded are as follows:

(1) Individualisation: While we consider the special methods for educating the educable mentally retarded, obviously the dominant theme which comes to mind is the “individualisation of education.” This term does not mean that the 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. Of course, these children need opportunities for group participation, so that correct social attitudes may be developed.

(2) Learning by Doing: For educating the educable mentally retarded children, the implication of the “principle of learning by doing” cannot be ignored. Here the basic principle of special education is that the children should learn by doing. Top priority is given to activity methods which lay emphasis on learning through experience. These children learn better through such materials which appeal most to their senses.

(3) Need for Learning Readiness: The concepts of maturation and willingness to learn should be given due importance while introducing academic work to the mentally handicapped. These children have the ability to learn to read, but they should be prepared through appropriate
(4) **Graded Curriculums**: 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 tough task for teachers, still, not impossible to accomplish.

(5) **Repetition**: Mentally handicapped children have a poor memory. For them, reaching method must provide for a considerable amount of repetition if learned material is to be retained. However, there is no justification for learning. The children should understand the materials clearly before facing any retention test. The memory span of these children can be increased by making them interested and motivated. Research has shown that the memory span of these children increases, if the learning materials have meaningful associations.

(6) **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 important to note as to how long a child can concentrate when the subject is stimulating.

(7) **Projects**: ‘Introduction of Projects” or “Centres of Interest” is a significant approach for teaching mentally retarded children. Research is on to know how this can be done without serious disruption of the basic subject programme. The teachers should not introduce the topics around which centres of interest grow and develop. But it should arise naturally out of classroom situations where the manifestation of further information is clear. Here the point of origin may be a short story, a poem, a song, a film or a picture in a magazine or newspaper. Undue importance should not be given to the source, but the teacher must know how to present it through careful planning and guidance.

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**Did you know?**
Generally the defect of the mentally handicapped child lies in the area of relational and abstract thought. So he faces difficulties in learning where the method of communication is largely verbal.

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**Self Assessment**

2. State whether the following statements are True or False:

(i) MR children need opportunities for group participation, so that correct social attitudes may be developed.

(ii) Mentally retarded children have good power of concentration.

(iii) “Introduction of projects” or “centres of interest” is a significant approach for teaching mentally retarded children.

(iv) Mentally handicapped children have a sharp memory.

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**15.3 Education in General School (Mainstreaming)**

(1) EMR children should receive education in common with others in general schools. Educational programme for the EMR children should aim at development of (a) Academic skills, (b) Social competence, (c) Personal adjustment, and (d) Occupational adequacy.

(2) Depending upon the nature of retardation they may be educated in the regular classroom or regular classroom with part time instruction in the resource room or special class in the regular school.

(3) The curriculum at the primary stage should be an extension of that of pre-school education. The curriculum for EMR children should be oriented towards providing readiness skills, language development concept formation, socially adaptive behaviours and teaching basic of reading, mathematics and handwriting. Teaching of tool subjects such as reading, arithmetic, handwriting,
oral language should be very simple and interesting and of the standard expected of normal kindergarten-age children.

(4) If some retarded children are in need of special class instruction the following principles should be followed.

(i) The younger the children, the smaller the class.
(ii) The more heterogeneous the group, the smaller the class.
(iii) Special class should always be organised within the regular primary school.
(iv) Special class instruction should be given by the resource teacher or the itinerant teacher only.
(v) Adequate diagnosis should be made before they are placed in the special class.
(vi) The resource teacher should have considerable freedom in adapting the curriculum to the needs of individual children.

(5) Whether the retarded child is educated in the regular classroom or resources room, instruction should be systematic and sequential in nature.

(6) As the child makes progress in the class less and less emphasis should be placed on readiness skills and more and more emphasis should be given on academic skills and the basic tool subjects such as reading, writing and arithmetic.

(7) Emphasis should be gradually placed on work-habits, vocational training, and family life education as the child makes progress from primary education to the secondary education. This should be particularly emphasized for older retarded students.

Vocational training should actually pass through five phases, such as vocational exploration, vocational evaluation, vocational training, vocational placement and follow up. In the phase of vocational exploration, the MER student is familiarized with the nature of various occupations and their skills requirements. In the second phase the retarded student is exposed to experiences with different job skills in order to determine the vocational abilities and preferences of the student. In the third phase emphasis is given on developing job skills and on preparing the student for a range or occupations. This is the stage of non job experiences. The fourth stage consists of locating a job for the student and placing him in the job. The last stage entails counselling and further training or replacement.

What is the EMR?

15.4 Role of The Teacher

A large number of mildly and some moderately retarded children do enter the regular primary schools. They remain unidentified and unnoticed for some years until their problems become so serious that they experience failure and frustration and later drop-out from the school. This calls for early identification, diagnosis and assessment and making instruction systematic and sensitive. The regular classroom teacher has to play a significant role in teaching such children in the regular classroom.

1. The regular teacher should be familiar with the behavioural characteristics of MR children for purpose of identifying and referring them to the psychologist for assessment.
2. He should develop a positive and optimistic view about the educability of such children.
3. He should avoid as far as possible labelling the child, passing on damaging remarks and also see that the non-retarded peers behave in a positive way with the child.
4. He should create favourable conditions in his class and the schools for social and academic integration of EMR children.
5. He should constantly attempt to sequence learning tasks. Relatively complex units should be broken down into a hierarchy of sub-units and attempt should be made to teach one sub-unit at a time, help children to learn the sub unit, and then to proceed to the next sub-unit.

6. The teacher should encourage retarded children to make use of verbal mediation in learning the tool subjects. The retarded child should rehearse verbally what he is to learn and remember. Verbal mediation is a very useful learning strategy for learning concepts and problem-solving.

7. Retarded children do not know how to learn different subjects. Learning to learn is a useful technique for retarded children. The retarded child should be told verbally and exposed to models and tutoring by non-disabled peers for learning how to learn.

8. Many retarded children learn best by drill and repetition. Thus the teacher should give emphasis on drill and repetition in teaching language items and arithmetic skills.

9. Retarded children learn best through concrete experiences, play-way method, audio-visual aids and action-oriented teaching, etc. The regular teacher should, therefore make use of concrete objects.

**Self Assessment**

3. Multiple Choice Questions

Choose the correct option:

(i) The MR child is educated in the regular ................., instruction should be systematic and sequential in nature.
   (a) classroom  (b) school  (c) communication centre  (d) hospital

(ii) In the second phase the retarded student is exposed to ................. with different job skills in order to determine the vocational abilities and preference of the student.
   (a) punctuality  (b) regularity  (c) experiences  (d) community

(iii) The regular teacher should be familiar with the behavioural characteristics of ................. children for purpose of identifying and referring them to psychologist for assessment.
   (a) backward  (b) MR  (c) bearing impaired  (d) visually impaired

15.5 Summary

- There are three provisions remedial programme:
  (i) Prevention (ii) Special education (iii) Parent counselling
  (i) Prevention: Compensatory education aims at preventing developmental defect that interfere with educations progress in the disadvantaged pre-school child. the education should be given about the causes of mental retardation.
  (ii) Special education: Structured curricular materials and techniques for education retarded children.
  (iii) Parent counselling: In our society, the parents of mentally retarded children face some special problems. Social adjustment of the mentally retarded children place heavy demands in the society, as the children grow older.

- The basic principle of special education is that the children should learn by doing.

- The concepts of maturation and willingness to learn should be given due importance while introducing academic work to the mentally handicapped. These children have the ability to learn to read, but they should be prepared through appropriate readiness programmes.

- Mentally handicapped children have a poor memory. For them, reaching method must provide for a considerable amount of repetition if learned material is to be retained.
Notes

- The curriculum at the primary stage should be an extension of that of pre-school education. The curriculum for EMR children should be oriented towards providing readiness skills, language development concept formation, socially adaptive behaviours and teaching basic of reading, mathematics and handwriting.
- Emphasis should be gradually placed on work-habits, vocational training, and family life education as the child makes progress from primary education to the secondary education.
- The regular classroom teacher has to play a significant role in teaching such children in the regular classroom.

15.6 Keywords

- Educator : A person whose job is to teach or educate people.
- Individual : Considered separately rather than as part of a group.
- Necessity : The fact that something must happen or be done, the need for something.
- Maturation : The process of becoming made mature or adult.

15.7 Review Questions

1. Write a note on the following teaching strategies:
   (i) Learning by doing
   (ii) Graded curriculums
2. What is individualization process of teaching?
3. What are the preventive measures for MR children?
4. What is the role of the teacher in the education of MR children?

Answers: Self Assessment

1. (i) slow (ii) 6 (iii) 70 (iv) training
2. (i) True (ii) False (iii) True (iv) True
3. (i) (a) (ii) (c) (iii) (b)

15.8 Further Readings

1. Special Education: Daniel P. Hallahan, James M. Kauffman, Paige C. Pullen; Pearson Education, Inc.
2. ERIC Clearinghouse on Handicapped and Gifted Children Reston VA: Visually handicapped: Requires special educational provisions because of ... as lighting, use of optical aids and devices, tasks, and personal characteristics.
3. Special Education : Laura Rothstein; Scott F. Johnson; Sage Publisher, Inc.
Unit 16: Learning Disabilities: Definition, Type, Characteristics

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16.2 Definitions of Learning Disability
16.3 Types of Learning Disability
16.4 Characteristics of LD Children
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Objectives

The objectives of this unit can be summarized as below:

• to know the meaning of learning disabled children.
• to define the learning disability.
• to describe the characteristics of LD children.
• to explain about the types of learning disability.

Introduction

In the years since 1963, many people have tried to define learning disabilities, but no one has yet developed a definition that is acceptable to everyone. The federal definition (U.S.A) of learning disabilities included in Public Law (94-142), the Education for All Handicapped Children Act of 1975, reads:

"The term "children with specific learning disabilities" means "those children who have a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which may manifest itself in a imperfect ability to listen, think, speak, read, write, spell or do mathematical calculation. The term includes such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia and developmental aphasia. The term does not include children who have learning problems which are primarily the result of visual hearing, or motor handicaps, of mental retardation, of emotional disturbance, or of environmental, cultural or economic disadvantage."

Since learning disabilities could span over a variety of abilities, ten areas, each representing a basic psychological process, have been selected for the present study. A deficit in any of the area or areas or a combination of any, would lead to a learning problem.

Some children who in most ways seem normal, have difficulty in learning or remembering. They have difficulty in educational performance copying writing, listening, understanding, number speech and communication. In the present chapter their problems are discussed with a view to providing an indepth knowledge of:

Learning disability refers to learning problems which manifest in an imperfect ability to listen, think, speak, read, write or do mathematical calculations which are not primarily due to visual impairment,
hearing impairment, motor handicap, mental retardation environmental or economic disadvantages, but due to a disorder in the psychological process involved in understanding or in using language. Kirk (1962) has defined: “Learning disability refers to a retardation disorder, or delayed development in one or more of the process of speech, language, reading, spelling, writing or arithmetic resulting from a possible cerebral dysfunction and/or emotional or behavioural disturbance and not from mental retardation, sensory deprivation, cultural or instructional factors.”

16.1 Meaning of Learning Disabled Children

The concept of learning disability has brief and turbulent history. Some children are quite normal and yet at all times display learning problems. They write ‘deb’ for ‘bed’, was’ for ‘saw’ and cannot concentrate if there is background noise. The National Advisory Committee on Handicapped Children (USA) defined learning disability as follows (1986):

“LD children exhibit disorder in one or more basic psychological process involved in understanding and in using spoken or written languages. The disorders are manifested in listening, thinking, talking, reading, writing, spelling, and arithmetic. They include conditions which are referred to as perceptual problems, brain injury, minimal brain dysfunction, dyslexia, developmental aphasia etc. They do not include learning problems which are primarily due to visual, hearing, or motor handicaps, mental retardation, emotional disturbance, or the environmental disadvantage.”

There are a large number of children who have problems in learning specific subjects. Usually learning problems may occur due to any one or a combination of the following factors:

1. Low level of intelligence
2. Mental retardation
3. Visual impairment
4. Motor handicaps
5. Economic difficulties
6. Cultural disadvantage
7. Poor instruction.

Learning problems caused by the above mentioned factors are not considered to be learning disability. For example, a mentally retarded child has learning problems in all the school subjects. The learning problems of a mentally retarded child are not caused by learning disability but low level of intelligence. Similarly learning problems of a blind child are due to his visual impairment and this is not learning disability.

16.2 Definitions of Learning Disability

The definition of learning disability adopted by National Advisory Committee on Handicapped Children (USA, 1968) is given as under:

“Children with specific learning disabilities exhibit a disorder in one or more of the basic psychological processes involved in understanding or using spoken or written language. These may be manifested in disorders of listening, thinking, talking, reading, writing, spelling or arithmetic. They include conditions which have been referred to as perceptual handicaps, dyslexia, developmental ashaasia, etc. They do not include learning problems which are due primarily to visual, learning, motor handicaps, mental retardation, emotional disturbances, or environmental disadvantages.”

The National Joint Committee of Learning Disabilities gave the following definition of learning disability which is unanimously accepted at international level:

“Learning disability is a generic term that refers to a heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning or mathematical abilities. These disorders are intrinsic to the individual and presumed to be due to central nervous system dysfunction. Even though learning disability may occur concomitantly with other handicapping conditions (e.g., sensory impairment, mental retardation, social and emotional disturbance) or environmental influences (e.g., cultural differences, insufficient/inappropriate instruction, psychogenic factors) it is not the direct result of these condition or influences.”
The two definitions are fairly similar. It is safe to assume that a learning disability may or may not be caused by central nervous system dysfunction. Many students with LD have a lower than average IQ, many also have high IQ and sometimes reach the gifted range.

Originally children whose achievement was far below the capability were categorised under brain injured children, suffering from neurophrenia, minima bran dysfunction. It was for the first time that Kirk in 1963 suggested the word "learning disabilities" to describe all the child’s behavioural symptoms that arise from dysfunction of the central processing mechanisms. This term described a group of children who had disorders in the development of language, speech, reading and associated communication skills needed for social interaction. Children with sensory and/or emotional handicap are excluded from this category.

The term learning disability refers to conditions which were previously called brain injury, minimal brain dysfunction, sensory aphasia (the loss of the power to understand spoken words, signs, gestures or print), expressive aphasia (the loss of the ability to speak), alexia or word blindness (the loss of the ability to read - a mild degree of alexia is called dyslexia), acalculia (the loss of arithmetical ability - at a lower level it is called dyscalculia) - agraphia (the inability to learning to write - a mild degree of agraphia is called dysgraphia).

The leaning disabled have significant problems in learning academic skills that are not due to other handicapping conditions.

Self Assessment

1. Fill in the blanks:
   (i) The term .................. refer to conditions which were called previously brain injury, minimal dysfunction, sensory aphasia.
   (ii) .................. is the disability of the power to understand spoken words, signs gestures or print.
   (iii) .................. is the inability to learning to write.
   (iv) .................. is the inability to read words.
   (v) The loss of arithmetical ability is called .................. .

16.3 Types of Learning Disability

Learning disability may occur in various forms such as reading disability, writing disability, communication and comprehension disability, writing disability, communication and comprehension disability, numerical disability, etc.

(1) Reading Disability: Children suffering from reading disability are unable to read. There are two forms of this disability. In a mild form the affected person has difficulty in reading, but in severe cases of the impairment there is a total loss of the ability to read. This is sometimes also known as 'Word Blindness'. Children with the mild form of the disability are already in the general classroom. If identified early, proper help can be given and integration with their normal peers is also easier. The severely affected child will need intensive remedial exercises.

(2) Writing Disability: The affected children are not able to write spontaneously. There are two forms of this impairment - the mild and severe. Children affected by the mild from have difficulty in learning to write legibly. They study in general schools. Their problems can be corrected if identified early and provided timely help. Those affected by the severe type of impairment can copy writing without distortion but they cannot write spontaneously. They are identified by their inability to learn to write. The severely affected children need remedial exercises and are thus hard to integrate in the academic areas.
Problems in Comprehending Communication: Children with this disability have a problem in communication through writing, speaking, or reading. Those affected by the mild form of this impairment have difficulty in understanding both the spoken and written words. The child finds it difficult to understand even signs and gestures. These children can be integrated if corrective measures are given in time. Otherwise, linguistic problems of articulation and fluency may develop. The severely affected child is unable to understand speech and written material, nor can be learn to speak, read and write. He is unable to communicate even through signs and gestures. Such children are difficult cases for integration. They need intensive remedial exercises.

Problems of Numerical Ability: The affected child has problems in calculations, even simple arithmetic, because of an inability to manipulate number relationships. Numerical inability is again of two kinds - mild and severe. Numerical problems seem difficult even if they are very simple for a normal child to do. Children with the mild form of this disability may already be studying in the general classroom. They are not easily identified at pre-primary levels. The disability becomes obvious when they start learning numbers and simple addition and subtraction. If identified at pre-primary levels. The disability becomes obvious when they start learning numbers and simple addition and subtraction. If identified early and with appropriate correction, they can study in the regular classes. If the problem is severe, the child will not be able to learn number symbols and their relationships. This is also termed as loss of arithmetic ability. The severe cases are difficult of integration and will require intensive remedial exercises.

Self Assessment
2. State whether the following statements are True or False:
   (i) The LD children have poor receptive auditory ability.
   (ii) They have excellent expressive-vocal ability.
   (iii) Learner (1985) stated that LD children do displace haptic and movements as well as have defects in social perception.
   (iv) The LD children have short attention span.
   (v) They are able to perceive a figure against a background.
   (vi) The children with writing disability do not study in general schools.
   (vii) The children who are affected by reading disability severely there is a total loss of the ability to read.

16.4 Characteristics of LD Children
There have been many attempts to categories the major characteristics of learning disabled children. One of the earliest attempt was made by Clements (1966) through a Task force on LD. They observed general characteristics based on the assumption that LD is a neurological impairment:

- Hyperactivity,
- Disorders of attention,
- Disorders in memory and thinking,
- General coordination deficits,
- Impulsivity, and
- Specific learning disability, and
- Equivocal neurological signs.

16.4.1 Language and Speech of LD Children
LD children have difficulty both in expressive and receptive language, and relatively more in case of the former. They do show difficulty in comprehension of meaning and use of pronouns. They have difficulties in understanding and using passive tense, negatives contractions and past tense, adjectives and using passive tense, negatives, contractions and past tense, adjectives and adverbs. They fail to maintain conversation and can not argue or ask appropriate questions. So far as written language is concerned they do problems in handwriting, spelling and punctuation LD children have more of spelling errors than their non-learning disabled peers even when IQ were controlled.
16.4.2 Perceptual and Motor Ability of LD Children

Lerner (1985) demonstrated that LD children display problems in spatial relations, visual discrimination, figure and ground discrimination, of similarities and differences, auditory sequencing auditory blending and auditory memory. Lerner (1985) further stated that LD children do display haptic and movements as well as have defects in social perception. They do show problems in gross and fine motor skills (balance, laterality, directional) and body and body image and image less. They can not copy a geometric figure i.e., have visual-motor disintegration.

(1) They are unable to identify, discriminate and interpret sensation.
(2) They have poor visual decoding (unable to reproduce geometric forms accurately, figure-ground configurations letter reversals).
(3) They have poor auditory decoding (inability to recognise tunes, to differentiate between sounds).
(4) They cannot identify familiar objects by touch alone (cutaneous misperception).
(5) They have poor kinesthetic and vestibular perception (problems in coordination, movement, directionality, space orientation, and balance, difficulties in perception lead to difficulties in concept formation abstraction ability, cognitive ability, and language ability).

Motor Activity - These characteristics very according to type of motor activity. These are described below:

Hyperactivity - Constantly engaged in movement, unable to sit still, too much of talking in the class, very much inattentive. (reverse of hyperactivity)-lethargic, quiet, passive.

Incoordination - Physical awkwardness, poor motor integration, poor activities in running, catching, skipping and jumping; walking is rigid and stiff; poor performance in writing, drawing; frequent falls, stubbing, and clumsy behaviour.

Preservation - Involuntary continuation of behaviour; this behaviour is witnessed in speaking, writing, drawing, pointing, and oral reading; incorrect spelling, repetition of error.

16.4.3 Social and Emotional Characteristics of LD. Children

They are more anxious and withdrawn, have more problems in interacting with teacher and parents, have behaviour problems and are less socially skilled. Many LD student had little insight into nature of their problems and attributed these to luck. They show lower self-concept, more external locus of control and lower level of aspiration than non LD peers.

(1) They are quiet and obedient but daydream and cannot read.
(2) They have frequent temper outburts, sometimes for no apparent reason.
(3) They are nervous: attention is difficult to hold.
(4) They jump from one thing to another, and mind everyone’s business but their own.
(5) They talk of self control but cannot work with other children.
(6) They are emotionally labile and unstillable.
Emotional instability arises mainly due to prolonged dependency on the mother and lack of contact with the outside world which generates frustrations. The LD children constitute a heterogenous group. Some LD children have reading problems and some others have writing problems. Some LD children have problems of comprehension whereas others may have problems in telling the time, locating a place on the map. Thus, it is difficult to mention the characteristics which are noticed in all LD children. The most frequently mentioned characteristics of LD children include the following:

1. **Ability Level**: The ability level of LD children varies from near average to average to above average.

2. **Activity Level**: The LD children may be either hyperactive or hypoactive. If they are hyperactive, they show the following behaviours - constant motor activity, restless, tapping of finger or foot, jumping out of seat, skipping from task to task, etc. If they are hypoactive, they fail to react or seem to do everything in slow motion.

3. **Attention Problems**: The LD children have short attention span; they are easily distractible: they are unable to concentrate on any task for a very long time. They often perseverate. Their attention becomes fixed upon a single task which is repeated over and over; this may be motor or verbal activity.

4. **Motor Problems**: The LD children are generally clumsy or awkward with poor, fine and gross motor co-ordination. They demonstrate poor tactile discrimination, excessive need to touch, poor writing and drawing performance.

5. **Visual Perceptual Problems**: The LD children are unable to distinguish between visual stimuli (visual discrimination). They are unable to perceive a figure against a background (visual figure-ground). They are unable to fill in missing parts when only part of a word or object is seen (visual closure); they are also unable to remember and revisualise images or sequences very well (visual memory).

6. **Auditory Perceptual Problems**: The LD children are unable to distinguish between sounds (auditory discrimination) they are unable to obtain meaning from the spoken word and/or environmental sounds (auditory comprehension). They are unable to attend to important auditory stimuli by pushing all other auditory stimuli into the background (auditory figure-ground). They are unable to fill in missing sounds when only parts of the word are heard (auditory closure); they are also unable to remember auditory stimuli or sequences very well (auditory memory).

7. **Language Problems**: The LD children demonstrate delayed or slow development of speech articulation, and an inability to organise words to form phrases, clauses, or sentences.

8. **Social Emotional Behaviour Problems**: The LD children are impulsive in nature. They fail to think about consequences of their behaviour. At times they exhibit explosive behaviour. They display rage reactions or throw tantrums when crossed. They lack social competence. Their social competence is often below the average for their age and ability. They are unable to adjust to changes. They exhibit rapid mood variation, even from hour.

9. **Orientation Problems**: The LD children process poorly developed concept of space, and distorted body image. They have difficulty in judging distance and size and in discriminating figure from ground, parts from the whole and left from right. They are disoriented in time and experience trouble relating to concepts like before and after, now and then, and today and tomorrow.

10. **Work Habits**: The LD children organise work poorly. They work slowly, and frequently confuse directions or rush through work carelessly.

11. **Academic Disabilities**: The LD children have problems in reading, arithmetic, writing, spelling, telling time and even locating places on the map.

   In general LD children possess these characteristics. But not all LD children demonstrate these characteristics. Some LD children may have one or more such characteristics.
What are the verbal perceptual problems?

16.5 Summary

- Learning disability refers to learning problems which manifest in an imperfect ability to listen, think, speak, read, write or do mathematical calculations which are not primarily due to visual impairment, hearing impairment, motor handicap, mental retardation environmental or economic disadvantages, but due to a disorder in the psychological process involved in understanding or in using language.

- There are following types of summary learning disabilities:
  (i) **Alexia:** Children suffering from reading disability are unable to read. This disability is also called “Alexia” reading disability.
  (ii) **Acalculia:** The affected children having problem in arithmetical terms.
  (iii) **Expressive aphasia:** The loss of ability to speak.
  (iv) **Sensory aphasia:** The loss of power to understand spoken words, signs, gestures or print.

- There are a large number of children who have problems in learning specific subjects. Usually learning problems may occur due to any one or a combination of the following factors:

- General characteristics based on the assumption that LD is a neurological impairment:

- Lerner (1985) demonstrated that LD children display problems in spatial relations, visual discrimination, figure and ground discrimination, of similarities and differences, auditory sequencing auditory blending and auditory memory.

- There are characteristics of mentally retarded children under following categories:
  (i) **Language and Speech Impairment:** Poor receptive auditory ability (spoken symbol, requests for repetition), receptive visual difficulty (subvocalise reading, read without understanding, motor difficulties (spelling disorders drawing disorders)
  (ii) **Perceptual and Motor Ability of LD children:** Unable to identify, discriminate and interpret sensation poor visual decoding, poor auditory deciding, poor, kinesthetic and vestibular perception (problems in coordination movement, space orientation etc.).
  (iii) Social and emotional characteristics quiet and obedient daydream and cannot read, attentions difficult to hold, cannot work with other children, emotionally liable and unstable. They are impulsive in nature, they fail to think about consequences of their behaviour, display rage reaction they lack social competence.

- Some LD children have reading problems and some others have writing problems.
- It is difficult to mention the characteristics which are noticed in all LD children.

16.6 Keywords

- **Disability:** A physical or mental condition that means you cannot use a part of your body completely.
- **Orientation:** The type of aims
- **Auditory:** Connected with hearing.
- **Careless:** Not giving enough attention or not showing interest or offer.
16.7 Review Questions

1. What is reading disability?
2. What do you understand by the “learning disability?”
3. What are the characteristics of LD children?
4. Explain perceptual and motor ability of LD children.
5. How many special schools run by NGOs with Government support?

Answers: Self Assessment

1. (i) learning disability  (ii) Sensory aphasia
   (iii) Agraphia  (iv) Alexia
   (v) dyscalculia

2. (i) True  (ii) False  (iii) True  (iv) True
   (v) False  (vi) False  (vii) True

16.8 Further Readings

1. Special Education: Laura Rothstein; Scott F. Johnson; Sage Publisher, Inc.
2. Special Education: Daniel P. Hallahan, James M. Kauffman, Paige C. Pullen; Pearson Education, Inc.
3. Special Education: Linda Wilmshurst, Ph.D., ABPP, Alan W. Brue, Ph.D., NCSP.
Unit 17: Identification: Causes, Problems of Learning Disabilities

Objectives
The objectives of this unit can be summarized as below:
- to know about the identification, causes and problems of learning disabled children.
- to describe the diagnosis of LD children.
- to explain about the remediation of LD children.

Introduction
Learning disabilities, or learning disorders, are umbrella terms for a wide variety of learning problems. A learning disability is not a problem with intelligence or motivation. Kids with learning disabilities are not lazy or dumb (LD). Every person is different. One person with LD may not have the same kind of learning problems as another person with LD. We will discuss about how we identify them, and what are the causes and problems of learning disabilities.

17.1 Identification of Learning Disabled Children
Individuals are assessed usually as learning disabled after they start having problems in school. A variety of tests are administered even after certain tell-tale signs. The three indicators of LD have to be identified: The following questions can be put to the learning disabled children:
1. Has difficulty in telling the time, remembering the order of days, months and seasons and mathematical tables.
2. Finds it difficult to organize his work and is often late in submitting his class-work.
3. Seem dull and slow in responding to others.
4. Cannot correctly recall oral instructions when asked to repeat them.
5. Does not seem to listen to or understand instructions given at home or in the classroom (asks for repetition).
6. Shows excessive inconsistency in the quality of performance; form time to time; seems to be bright in many ways, but still does poorly in school.
Notes

7. Gets easily distracted even by a slight disturbance.
8. Confuses between left and right.
9. Gets so excited that he cannot sit still in the classroom even for a short period.
10. While reading, misses outlines or reads them twice.
11. Finds difficulty in synthesising a word after spelling its component letters: Example: says b/e/g but cannot say beg, or may say bed instead.
12. Makes wild guesses at words whether they make sense or not (for example, 'huge' for 'hurt', 'turned' for 'trainer').
13. Reads word backwards (for example 'no for 'on', 'saw' for 'was').
14. Puts letters in the wrong order (reading 'felt' as 'left', 'act' as 'cat')
15. Shortens words ('sunly' for 'suddenly', 'member' for remember').
16. Misreads words which look similar ('help' for held, 'housl' for horse).
17. Has difficulty in recollecting words automatically and correct sentences.
18. Misreads number ('e' as '9', '3' as '8') writes letters in the wrong order (time for 'item').
19. Mirror writes (ram for mar).
20. Reverse letter ('b' as 'd', 'p' as 'q').
21. Mirror writes (6 as '9', 'q' as 'p').
22. Omits letters ('limp' as lip', 'went' as 'wet').
23. Adds letters ('want' as 'whart', 'what' as 'what').
24. Does not write the appropriate letters when given the sound.
25. Does not pick out letter of the alphabet when the name of the letter is called out.
26. Does not match the letters when asked to.
27. Difficulty in academic subjects. Sometimes the student is deficient in only one subject or a combination of subjects.

The National Council of Educational Research and Training, New Delhi has developed ‘Functional Assessment Guide’ for use by teachers. After identification and assessment, LD children should be placed in an appropriate environment for their education and training. Mildly handicapped children can be placed in regular classroom with provision of resource room help. Severely handicapped children cannot profit from regular classroom instruction. They may be educated and trained by competent professionals in special class settings.

After identifying LD children by using the check list mentioned above the teacher should see that such children are assessed properly. Such assessment may be medical and psychological. In most cases experts such as doctors and psychologists are not available for medical and psychological assessment of LD children. In rural areas particularly, trained professionals are not available. In such cases the teacher can conduct functional assessment. Based on functional assessment the teacher can plan and provide specialised service and help in the school.

Functional assessment which is not a replacement of medical or psychological assessment indicates what a child can do and what he cannot do.

Self Assessment

1. Fill in the blanks:
   
   (i) Learning disabled children have .................... in telling the time, remembering the order of days, months etc.

   (ii) They show .................... inconsistency in the quality of performance, seems to be bright in many ways but still does poorly in school.

   (iii) Sometimes the student is .................... in only one subject or a combination of subjects.
17.2 Etiology of LD Children (Causes)

The causes of learning disability could be organised under organic, environmental and genetic.

(1) **Organic Causes**: LD arises because of Minimal Brain Dysfunction (MBD). The dysfunction occurs in central nervous system which consists of the brain and the spinal cord. The malfunctioning is not due to damage, but due to dysfunction which is only minimal. Minimal brain dysfunction arises due to (a) cerebral hemorrhage, cerebral disease because of high fever, head injury, (b) intrauterine environment premature birth, anoxia, physical trauma, (c) constitutional-genetic-neurochemical dysfunction. It must be noted that all brain dysfunctions are not associated with learning disability and all types of learning disability do not arise due to brain dysfunction.

Any factor that can cause neurological damage can cause learning problems.

(2) **Genetic Causes**: Learning problems and hyperactivity run in families. Nearly 20% of hyperactive children had one parent hyperactive. Children with Turner’s syndrome have higher incidence of learning disabilities.

(3) **Environmental Causes**: Maternal factors known to have a negative effect include the use of drugs, the consumption of alcohol and contraction of rubella. Complications during pregnancy such as anoxia (loss of Oxygen), birth injury causing brain damage, and children who received neonatal intensive care subsequently become LD. Learning disability may be caused due to insufficient early experience and stimulation. It is also caused by poor or inadequate instruction.

Did you know? Hypoglycemia or low blood sugar is a cause of learning problem.

17.3 Problems of Learning Disabled Children

These children are like other children in intellectual functioning. They are not mentally retarded, nor do they have visual or hearing problems. But they have problems in spelling, reading, writing, arithmetic listening and comprehension because of difficulties in their psychological process, particularly in perception. The problem may be due to cerebral dysfunction/emotional/behavioural disturbance, but it is not due to mental retardation, sensory deprivation or cultural instructional practices. They can be categorized into mildly and severely learning disabled.

The mild learning disabled can be educated in regular schools. Such children are to be found in regular schools. They are, however, difficult to identify at the initial stages. They face problems in learning basic academic skills. The problem may occur in one or more area of learning skill but of a relatively mild degree. The child can be helped if identified early and given proper training and practice. Since their problem is mild in nature these children can be integrated for higher classes in general schools with some adaptation and adjustment in the curriculum.

The severe learning disabled include those who manifest and inability to master basic academic skills (reading, writing etc.). Their problem may be due to brain dysfunction or environmental deprivation. It is difficult to integrate such children in general schools.

Children with learning disability differ in their behavioural characteristics. But all of them have a severe discrepancy between achievement and intellectual ability. This is the basic problem that they face. But there may also be secondary problems like emotional, and social maladjustment associated with the basic skills. A description of these problems has been given below:

(1) **Attention Disorders of LD**: Attentional problems are shown to affect student’s test taking abilities because attend to inappropriate distracters.
Notes

(1) They cannot sustain attention for the required amount to time.
(2) They are unable to attend to the relevant and ignore the irrelevant. They may be attracted to every stimulus that surrounds him.
(3) They can be diverted easily form one topic to another.
(4) They put excessive attention to unimportant details while disregarding the essentials (attends to the page number than to the printed matter or the picture on the page).

(2) Memory Problem of LD: Many LD children are passive learners and do not use strategies (rehearsal, mnemonics). These children are poor task planners and organisers. They display certain characteristics as regards remembering.

(1) Disorder of memory involve difficulty in the assimilation, storage, and retrieval of information, and may be associated with visual auditory, or other learning processes.
(2) The LD children have difficulties in reproducing rhythm patterns, sequence of digits, words, or phrases.
(3) They have difficulty in revisualising letters, words or forms.
(4) Both the short-term and the long-term memory of the LD child are poor.
(5) They fail to see the relationship between his present and past experience.

(3) Reading Problem of LD: Nearly 85 to 90 percent of learning disabled children have reading problems and therefore, have poor academic achievement. These include micpronunciation, skipping, adding or substituting words as well as problem in memory, reversing letters or words and blending sounds together. They display both oral reading and comprehension problems.

In case of learning disabled children one finds visual and auditory spellers. The visual spellers write right letters in wrong orders-WTARE-Water. The auditory spellers try to sound outwards: Posishun-Position. There are also omission errors or substitution errors. These defects continue to adolescence and are responsible for learning deficits.

(4) Reading Disability: Children suffering from reading disability are unable to read. There are two forms of this disability. In a mild form, the affected person has difficulty in reading, but in severe cases of the impairments, there is a total loss of the ability to read. This is sometimes also known as ‘Word Blindness’. Children with the mild form of the disability are already in the general classroom. If identified early, proper help can be given and integration with their normal peers is also easier. The severely affected child will need intensive remedial exercises.

(5) Writing Disability: The affected children are not able to write spontaneously. There are two forms of this impairment-the mild and severe. Children affected by the mild form have difficulty in learning to write legibly. They study in general schools. Their problem can be corrected if identified early and provided timely help. Those affected by the severe type of impairment can copy writing without distortion but they cannot write spontaneously. They are identified by their inability to learn to write. The severely affected child need remedial exercises and are thus hard to integrate in the academic areas.

(6) Problem in Comprehending Communication: Children with this disability have a problem in communication through writing, speaking or reading. Those affected by the mild form of this impairment have difficulty in understanding both the spoken and written words. The child finds it difficult to understand even signs and gestures. These children can be integrated if corrective measures are given in time. Otherwise, linguistic problems of articulation and fluency may develop. The severely affected child is unable to understand speech and written material, nor can he learn to speak, read and write. He is unable to communicate even through signs and gestures. Such children are difficult cases for integration. They need intensive remedial exercises.

(7) Problems of Numerical Ability: The affected child has problems incalculations, even simple arithmetic, because of an inability to manipulate number relationships. Numerical inability is again of two kinds-mild and severe. Numerical problems seem difficult even if they are very simple for a normal child to do. Children with the mild form of this disability may already be
studying in the general classroom. They are not easily identified at pre-primary levels. The disability becomes obvious when they start learning numbers and simple addition and substraction. If identified early and with appropriate correction, they can study in the regular classes. If the problems is severe, the child will not be able to learn number symbols and their relationships. This is also termed as loss of arithmetic ability. The severe cases are difficult for integration and will require intensive remedial exercises.

There are some specific problems of learning disabled children which are as follows:

(i) Eye-Hand-Co-ordination (EHC),
(ii) Figure Ground Perception (FG),
(iii) Figure Constancy (FC),
(iv) Position in Space (PS),
(v) Spatial Relations (SR),
(vi) Auditory Perception (AP).

Last four areas represent the aspect of cognitive functioning, viz; (7) Memory (M), (8) Cognitive Abilities (CA), (9) Receptive Language (RL) and (10) Expressive language (EL).

What is the memory problem of LD children?

Self Assessment

2. Multiple Choice Questions

Choose the correct option:

(i) The mild learning disabled face problems in learning basic................. skills.
   (a) academic (b) professional (c) systematic (d) higher

(ii) The problem may not due to .................
   (a) cerebral dysfunction (b) accident
   (c) emotional disturbance (d) behavioural disturbance

(iii) Children with learning disability differ in their behavioral .................
   (a) changes (b) concepts (c) characteristics (d) skills

(iv) Nearly of ................. learning disabled children have reading problems and have poor academic achievement.
   (a) 70 to 80% (b) 80 to 85% (c) 85 to 90% (d) 90 to 110%

17.4 Diagnosis of LD Children

Assessment of pre-school level children can be made as per DIAL model (Developmental Indicators for the Assessment of Learning). It is meant for 21/2 to 51/2 year old in the areas of sensory, motor, affective, social, conceptual, language communication in less than 30 minutes. The tests consists of visual and auditory activity, gross motor movements, fine motor movements, finger agility, anxiety, task attention, focus and persistence, social skills, identifying objects, colours, sorting, receiving and expressing language, articulation etc.

At the elementary and secondary level identifications of learning disabilities become relatively easier because availability of instruments, teacher observations and achievement index. Each learning disabled child undergoes neurological examinations, Reading tests, Visual- motor Gestalt tests requiring them to copy various geometric forms, awareness of one’s body parts (Draw a Man Test). Findings (hearing sounds) and bio-chemical screening. These medical characteristics are necessary to deal with learning disabled children besides intellectual and achievement scores.

The following tests are commonly used in diagnosis of LD.

1. Informal Graded word-Recognition Test. It measures quickly reading level and errors.
2. Information reading Inventory-It measure quickly reading skills, reading levels, types of errors, unknown words, related behavioural characteristics.
3. Informal Arithmetic Test.
Notes

4. Wechsler-Intelligence Scale for Children (Revised).
5. Stanford-Binet Intelligence Scale.
9. Vineland Social Maturity Scale.
11. Kauffman Test of Educational Assessment.
12. Wide Range Achievement Test.

17.5 Remediation of LD Children

The children with learning disability are benefited mostly from remedial instruction. Remedial instruction is nothing but good teaching with two definite and specific objectives, such as:

Eliminating ineffective habits and reteaching skills which have been incorrectly learned. This refers to remediation of defects.

Teaching for the first time those habits, skills and behaviours which have never been learned but should have been learned by the child to acquire academic skills. This refers to developmental teaching or development of increased competencies.

Remedial instruction required proper diagnosis of a child’s abilities and disabilities in specific school subjects, identifying skills and process which require remediation, and then providing him just good teaching in areas of his weakness through systematic planning, individualised instruction, tutoring in one-to-one or small group situation, evaluating his progress periodically and if necessary reteaching, encouraging intensive drill, practice or repetition and modifying the programme and adopting alternate materials and methods, using work-books, supplementary materials and multisensory approach, most LD children improve their performance dramatically after exposure to remedial instruction in resource rooms which seemed difficult in regular classroom settings.

Remedial instruction in the resource room can vary from one hour even day to a half-day’s programme regularly depending upon deficiencies and the amount of training required. It is to be emphasized that the sooner the remedial instruction starts in the elementary school the easier for the child to compensate his deficiencies and the better for his later progress in upper classes.

17.6 Summary

- Identification of learning disabled children is a major aspect in providing education to these children.
- They show symptoms like difficulty in telling time remembering the order of days, months and seasons and mathematical tables, incorrectly recall oral instructions shows excessive inconsistency in the quality of performance etc.
- After identifying LD children teacher should see that children are assessed properly by expert (doctor’s psychologist).
- **There are some causes of LD children:**
  (i) Organic causes: LD arises because of minimal brain dysfunction (MBD). The dysfunction occurs in central nervous system which consists of the brain and the spinal cord.
  (ii) Genetic Causes: Children with Turner’s syndrome have higher incidence of learning disabilities.
  (iii) Environmental causes: Complications during pregnancy such as anoxia (loss of oxygen, birth injury causing brain damage.
• The LD children face marries problems.
• The mild learning disabled face problems in learning basic academic skills.
• The severe learning disabled have a severe discrepancy between achievement and intellectual ability.
• There also are secondary problems like emotional and social maladjustment wills the basic skills. Attention disorders, memory problems, reading problems writing disability, communication disability and problems in numerical ability are the important problems of learning disability.

17.7 Keywords
• Remediation : The process of aimed at solving a problem.
• Diagnosis : Connected with identifying something specially an illness.
• Systematic : Done according to a system or plan.

17.8 Review Questions
1. What are the diagnosis of LD children?
2. Write about the memory problem of LD.
3. Give the notes on Reading disability and writing disability.
4. What are the remediation of LD children?
5. What are the identification of learning disabled children?

Answers: Self Assessment
1. (i) difficulty (ii) excessive (iii) deficient (iv) handicapped (v) rural
2. (i) (a) (ii) (b) (iii) (c) (iv) (c)

17.9 Further Readings

1. ERIC Clearinghouse on Handicapped and Gifted Children Reston VA: Visually handicapped: Requires special educational provisions because of ... as lighting, use of optical aids and devices, tasks, and personal characteristics.
2. Special Education : Laura Rothstein; Scott F. Johnson; Sage Publisher, Inc.
3. Special Education: Daniel P. Hallahan, James M. Kauffman, Paige C. Pullen; Pearson Education, Inc.
Unit 18: Learning Disabilities: Prevention and Teaching Strategies

Objectives
The objectives of this unit can be summarized as below:
• to know about the treatment approaches of LD children (prevention of learning disabilities)
• to describe about the educational provision.
• to explain the teaching strategies for LD children.
• to describe about remedial approach for LD children.

Introduction
The intention to prevent learning disabilities requires an exploration of the early learning experiences that occur between birth and five years of age. When children enroll in school with learning disabilities already in evidence it suggest that something is negatively impacting the child in his out of school environment. To prevent learning disabilities, research finding endorse identifying and removing the specific factors in the home that are preventing normal development of the child’s central nervous system. Teaching children with learning disabilities is a big challenge to most parents and teacher. Most people know or are taught at an early age, how to process in formation and develop an organized plan when confronted with a people. We will discuss teaching methods used for learning disabled children.

18.1 Treatment Approaches of LD Children (Prevention of Learning Disabilities)
There are two approaches for the care and treatment of LD children. These are: Medical-Neurological approach and Psycho-Educational approach.

(1) Medical-Neurological Approach: The medical-neurological approach views the LD child as a patient afflicted with minimal brain dysfunction (MBD). Such a child should be treated just like any other individual afflicted with disease or injury. The most common symptom associated with MBD is hyperactivity. Thus quite logically, medication associated with MBD is hyperactivity. Thus quite logically, medication of some type would be sought to alleviate the child’s symptoms. The most widely prescribed drugs to alleviate the symptoms of hyperactivity are psychostimulants.
Psychostimulants may bring about improvements in the behaviour of the LD child, but their effect on improving the learning of such children is not clearly established by research findings. Psychostimulant drugs can have a positive effect on a child’s classroom behaviour, in reducing his activity level and making him more manageable and teachable but we cannot always count on them to remediate the child’s learning problems. In addition to psychostimulant drugs mega-vitamin therapy and diet management are inconclusive. What is needed therefore is a behaviouristic approach or a psycho-educational approach which relies on the teacher’s effectiveness in working with such children, motivating them and providing appropriate instruction to them.

(2) Psycho-Educational Approach: The psycho-educational approach views the LD children not as a patient but as learner waiting to be taught. From the psycho-educational perspectives, the LD children are to be identified early, assessed medically and psychologically to arrive at a correct diagnosis of their difficulties and weaknesses and provided with appropriate instruction and training in regular schools, resource rooms, special classes or special schools depending upon their degree of disability. There are various approaches for the education and training of LD, Children. All these approaches fall under five categories such as:

(1) Process training approach
(2) Multisensory approach
(3) Environmental approach
(4) Cognitive training approach
(5) Other special approach

(1) Process Training Approach: Process training is based on the contention that learning academic subjects requires understanding the underlying psychological processes. Learning disabled children have a disorder in the psychological processes which underly in understanding or using speech, in reading, writing, arithmetic, etc. Thus it may be of value to train the LD child in the psychological process which underly various academic subjects.

(2) Multisensory Approach: Multisensory approach is based on the assumption that the child will be more likely to learn if more than one of his sense is involved in the learning experiences. One such method is called the VAKT method (V stands for visual A stands for auditory, K stands for kinesthetic and T stand for tactual). For example, the teacher asks the child to tell a story. The teacher writes down the words of the child to tell a story. The teacher writes down the words of the story on the blackboard. These words serve as material as the child learns to read. In learning the words, the child first sees the word (visual). He hears the teacher say the word (auditory). He says the word (auditory). Finally the child traces the word (kinesthetic and tactual).

(3) Environmental Approach: Learning disabled children are usually destructible and hyperactive. For such children an environmental approach is sometimes recommended by some educators. Environmental approach emphasises reducing the irrelevant stimuli in the classroom environment which might distract the child’s attention from the learning task. The classroom environment may be modified in the following ways as far as possible and as per necessity to make it free from unnecessary distraction:

1. Sound-proofing of walls and ceilings.
2. Carpeting
3. Opaque windows
4. Enclosed book cases and cupboards
5. Limited use of bulletin boards
6. Use of cubicles, three-sided work areas
7. Removing the pictures, calenders and other hanging objects from the walls.
8. Ensuring a noise-free and in other ways a distraction-free environment outside the classroom.
9. Enhancing the intensity of the teaching materials in terms of colour, size, and vividness.

(4) **Cognitive Training Approach**: Many learning disabled children exhibit deficient problem-solving skills. They are likely to act impulsively rather than reflectively, responding quickly without considering the various alternatives. In order to reduce their impulsively and to increase their reflectivity two techniques are found successful:

(a) Cognitive modelling; and
(b) Self-instructional training.

(a) **Cognitive Modelling**: Cognitive modelling is sometimes known as metacognition, meta memory and cognitive behaviour modification strategy. This approach is directed towards providing LD children with an awareness of how people learn or remember. In cognitive modelling the LD child is exposed to models (adults or peers) who tend to be more reflective so that he can imitate the model and learn the appropriate strategy. Through this technique the LD child is taught how to slow himself down before he reads a word or given an answer, looks carefully at all cues and possibilities, considers his response carefully, and then responds. In remembering, he is taught to group information into small bits or clusters, rehearses these by saying them over and over to himself and even use mnemonic devices to aid in memory storage, many LD children improve dramatically when they are simple made aware of the most effective way to learn and remember.

(b) **Self-instruction Training**: Modelling can also be combined with self-instructional training. In self-instructional training the impulsive child is encouraged to learn to develop verbal control of his behaviour. The following is an example:

(i) The teacher (adult model) performs a task (solving an arithmetic problem) while talking out to himself loudly.
(ii) The child performs the same task under the direction of the teacher.
(iii) The child whispers the instruction to himself as he goes through the task, and finally.
(iv) The child performs the task while guiding his performance via private speech.

Through self-instructional training the LD child is helped to monitor his own performance in learning situation—to be aware of his own approach to cognitive tasks.

(5) **Other Special Approaches and Techniques**: The LD children have characteristics which are unique to them. Although they are not visually impaired they have difficulty in visual perception. They have difficulty in visual reception, visual discrimination, and visual memory. Similarly although they are not auditorily handicapped they have difficulty in auditory awareness, auditory discrimination, and auditory memory. They have problems in attention and retention. These difficulties hinder their acquisition of language, their ability to read and write, listening skills, etc. Hence, special training in these areas is very useful for LD children. The resource teacher can provide such training to the LD children in the resource room. The following approaches and activities are useful for LD children.

(i) **Listening Exercise**: The LD children have problems of distractibility which hinder their acquisition of listening skills and hence their ability to follow direction. Listening exercise for such children are often helpful. One exercise involves having someone who is out of sight produce various sounds for the children to identify, such as when the group goes for a walk, the children can be instructed to listen for common sound, including a care running, a train chugging, or a bird singing. To improve comprehension of spoken words in children with listening problems, the teacher can give direction orally, beginning with short and simple ones and increasing the difficulty as the child progress (‘stand up, turn around, and then sit down’). Riddles can also be used to develop listening power and comprehension.

(ii) **Discrimination Learning**: The LD children have difficulties in discriminating one letter from another, one word from another and one number from another. Discrimination learning can be encouraged among such children for the above purpose. In discrimination learning children
must be trained to attend to the similarities and difference between two letters, words, or numbers (e.g., b, d, p, q; 6, 9; 3, 8; hat, bat etc.) and then to make the correct response. In teaching such children letters, words, or numbers, these are to be written in the beginning in large sizes in crayon on news print paper. The children can trace the letters with their index fingers, while saying the letters, words, or numbers aloud. Visual and auditory attention is thus heightened in relation to these letters, words, or numbers. In order to improve their retention ability repetition or overhearing may be encouraged.

(iii) **Visual Reception Training:** Visual reception can be encouraged by having children identify common objects by name and tell both their proper use and to whom each object belongs. They can be asked to stand in front of a mirror each day in the resource room and comment on what they see. Children can be given pictures to interpret in terms objects seen, colours, sizes, motion, and other details.

(iv) **Visual Memory Training:** Visual memory can be developed by having children close their eyes and describe their clothing, a bulletin board in the room, or other children.

(v) **Spatial Training:** Spatial training can be introduced by having children find the top, bottom, sides, and back of an object. The concepts of up, down, over, under, in, bigger, heavier, etc. can be demonstrated.

(vi) **Auditory Awareness Training:** Auditory awareness can be encouraged by having children remember various types of sounds heard during walk. The children can identify the source of each sound and give it an appropriate label. The teacher can hold a wrist watch to a child’s ear at varying distances and train the child to listen and to raise a hand when the ticking is no longer audible. Directions can be whispered to the child at varying distances from each ear. Quiet periods can be held during which children are asked to listen to various sounds.

(vii) **Auditory Discrimination Exercise:** Auditory discrimination exercises can include hiding a ticking clock and asking a child to point to the direction of the clock. The teacher can tap several times on the desk and have the children listen, count to themselves and report the number of taps. While blind folded, a child can identify a classmate by his voice.

(viii) **Auditory Memory and Sequencing Training:** Auditory memory and sequencing can be developed by asking children to repeat directions, phone numbers, and clapping patterns. They can listen to nursery rhymes and songs and pick out details they will be asked to repeat afterwards. The teacher can tell simple jokes and have the children repeat them.

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**Self Assessment**

1. **Multiple Choice Questions**

   **Choose the correct option:**

   (i) The medical-neurological approach views the LD child as a patient afflicted with.............. .
   (a) MBD (b) CAD (c) DAK (d) MAS

   (ii) The Psycho-educational approach views the LD children not as a patient but as ............ waiting to be taught.
   (a) process (b) learner (c) teacher (d) approach

   (iii) ................. is based on the contention that learning academic subjects requires understanding the underlying psychological processes.
   (a) Content (b) approach (c) Process training (d) Special approach

---

A LD child believed to have reading problems because of difficulties in visual perception will be trained in visual perception.
Notes

(iv) ................ children are usually destructible and hyperactive.
(a) Backward  (b) Learning disabled
(c) Mentally retarded  (d) Orthopaedic

18.2 Educational Provisions

The educational provisions for learning disabled children primarily consists of three types:

1. **Day school**: where the learning disabled children receive specialised schooling using special teachers essentially on the same curriculum but with greater care and pace. This is a segregated setting.

2. **Special class in a Regular School**: where LD children are given special instruction in a self contained classroom by special teacher as well as regular classroom teacher do assist in teaching subject matters. These children receive instruction on academic in these classes but for social activities etc. They are with general students.

3. Their number is large, and they do not pose organic problems or problems of low IQ. these children are integrated in the regular classroom with resources room facilities (mainstreaming/integration).

What is spatial training?

18.3 Teaching Strategies for LD Children

The following teaching strategies are used for LD children:


The details are given in the following paras:

1. **Asal Teaching**

   It has the following advantages and limitations details with LD children:

   **Advantage**: (1) Comprehensive. (2) Controlled vocabulary. (3) Sequential introduction of skills. (4) Reinforcement of skills. (5) Diagnostic and evaluative material usually provided.

   **Limitations**: (1) Limited flexibility in teaching style. (2) Individualized instruction not encouraged. (3) Lack of depth of material necessary for skill mastery. (4) Lack of provision for processing deficits. (5) No choice of analytic or synthetic phonics instruction. (6) Subjects to repetition of the same stories and methods resulting from failure.

2. **Phonics Teaching**

   It has the following advantages and limitations details with LD children:

   **Advantage**: Effective decoding techniques for pupils with good auditory abilities.

   **Limitations**: (1) Not effective for pupils with auditory deficits. (2) May be taught in isolation. (3) Comprehension neglected. (4) Invariance in English language may cause confusion.

3. **Linguistics Teaching**

   It has the following advantages and limitations details with LD children:

   **Advantage**: (1) Control for irregular spelling in initial stages. (2) Gradual introduction of phones. (3) Extensive repetition.

   **Limitations**: (1) Little emphasis on comprehension in initial stages. (2) Vocabulary controlled for regular elements and does not utilize spoken language of pupil.
4. **Language Experience Teaching**  
It has the following advantages and limitations details with LD children:

**Advantage:** (1) Motivates with personal stories. (2) Uses pupil’s oral language. (3) Can incorporate specific skill development. (4) Can include language art skills. (5) Good for pupils with good visual-motor abilities.

**Limitations:** (1) May be limited by pupils’ language level. (2) Lacks structured systematic approach to skill development.

5. **Programmed Instruction Teaching**  
It has the following advantages and limitations details with LD children:

**Advantage:** (1) Small, sequential steps. (2) Immediate feedback. (3) May be boring because of.

**Limitations:** (1) Lacks direct instruction. (2) May be confusing format constancy.

6. **Multisensory Teaching**  
It has the following advantages and limitations details with LD children:

**Advantage:** (1) Uses more than one sensory input to get message to the brain. (2) Can use an analytic approach or a synthetic approach.

**Limitations:** Lack of sequential skill development in some programmes. (2) Sensory overload experienced by some pupils.

7. **Rebus Picture Teaching**  
It has the following advantages and limitations details with LD children:

**Advantage:** (1) Use a rebus (picture) instead of a word to simplify initial stages of reading. (2) Well structured materials. (3) Provides for transition to traditional print materials.

**Limitations:** Format appearing immature for older pupils.

**Self Assessment**
2. Fill in the blanks:

(i) ...................... is effective decoding technique for pupils with good auditory abilities.

(ii) Lack of depth of material necessary for skill mastery is the limitation of ....................

(iii) ...................... controls irregular spelling in initial stages.

(iv) ...................... uses pupil’s oral language.

18.4 **General Remedial Approach for LD Children**
Mildly and moderately learning disabled pupil can function satisfactory in the regular classroom with these adjustments. The regular classroom curriculum may require little modification. These are some of the general techniques of remediation but a specific theoretical model should guide the practitioner.

(1) **Cognitive Processing Approach** : The developmental approach emphasises sequential approach for remediation. Test related approach identifies specific areas of deficiency which can be taught.

(2) **Specialised Techniques Approach** : The specialised techniques indicate that the teacher would follow the prescribed order and fashion for a specified period of time. Hierarchy of skills are to be developed in the skill development approach using criterion referenced teaching. Published materials can be used for remediation of learning disability.

(3) **Behavioural Approach** : The behavioural approach refers to behaviour modification approach for manipulations of environmental conditions of learning. Apply reinforcement and change behaviour. Psychotherapeutic approach should build feelings of success and establish a healthy psychodynamic relationship between teacher and student. The major cause of reading failure is dyspedagogia i.e., lack of good teaching. Inadequacy in the child’s teacher and the teacher environment are the answer to remediation.
Remediation of Learning Problems

- Analysis of the child.
- Analysis of content.
- Analysis of environment conditions.

- Cognitive Processing
- Developmental Test related
- Specialised Techniques
- Behavioural Psychotherapeutic
- Skill development
- Pedagogical

The model of remediation suggested are not mutually exclusive. A teacher can use one or more of the several approaches to deal with the situations. Koppitz (1973) stated:

“Learning disabilities can not be corrected or cured by a specific teaching method or training technique. It is imperative that teachers have a wide range of instructional materials and techniques at their disposal and that they are imaginative and flexible enough to adapt these to specific needs of their pupils.”

The cognitive processing approach provides a way of thinking about how a child learns and offers a framework for teaching.

Self Assessment

3. State whether the following statements are True or False:
   (i) The regular classroom curriculum may require little modification.
   (ii) The related approach does not identify.
   (iii) Psychotherapeutic approach should not build feeling of success.
   (iv) Learning disabilities cannot be corrected or cured by a specific teaching method or training techniques.
   (v) Published materials can be used for remediation of learning disability.

18.5 Summary

- There are two approaches for the care and treatment of LD children. These are: Medical-Neurological approach and Psycho-Educational approach (Hewett and Forness, 1984).
- **Medical-Neurological Approach:** The medical-neurological approach views the LD child as a patient afflicted with minimal brain dysfunction (MBD).
- **Psycho-Educational Approach:** The psycho-educational approach views the LD children not as a patient but as learner waiting to be taught.
- There are various approaches for the education and training of LD children. All these approaches fall under five categories:
  (i) **Process Training Approach:** Process training is based on the contention that learning academic subjects requires understanding the underlying psychological processes.
  (ii) **Multisensory Approach:** Multisensory approach is based on the assumption that the child will be more likely to learn if more than one of his sense is involved in the learning experiences.
  (iii) **Environmental approach:** This approach emphasizes reducing the irrelevant stimuli in the classroom environment which might distract the child’s attention from the learning task.
(iv) **Cognitive Training approach**: This approach directed towards providing LD children with an awareness of how people learn or remember.

(v) **There are two techniques**: (i) cognitive modelling; (ii) self instruction training.

- **Other Special Approaches and Techniques**: Listening exercises, discrimination learning, visual reception training, visual memory training, spatial training, auditory awareness training, auditory discrimination, and memory and sequencing training are other types of special approaches for LD children.

- **There are different types of teaching strategies**:
  
  (i) **Asal Teaching**: It is comprehensive, it helps in reinforcement of skills, provides diagnostic and evaluative material.

  (ii) **Phonic Teaching**: It is effective decoding technique for pupils with good auditory abilities.

  (iii) **Linguistics Teaching**: It controls for irregular spelling in initial stages.

  (iv) **Language Experience Teaching**: It motivates with personal stories, uses pupil’s oral language, specific skill development.

  (v) **Programmed Instruction Teaching**: Small sequential steps, immediate feedback.

  (vi) **Multisensory Teaching**: Use more than one sensory input to get message to the brain.

  (vii) **Rebus Picture Teaching**: Uses a rebus picture instead of word to simplify initial.

- **There is Remedial approach for LD children**:
  
  (i) **Cognitive Processing approach**: emphasized sequential approach for mediation.

  (ii) **Specialised Techniques approach**: Hierarchy of skills is to be developed in the skills development.

  (iii) Behavioural approach: refers to behaviours modification approach for manipulations of environmental conditions of learning.

- **Advantage**: (1) Comprehensive. (2) Controlled vocabulary.

- **Limitations**: (1) Limited flexibility in teaching style. (2) Individualized instruction not encouraged.

- **Advantage**: Effective decoding techniques for pupils with good auditory abilities.

- **Limitations**: (1) Not effective for pupils with auditory deficits. (2) May be taught in isolation. (3) Comprehension neglected.

- **Advantage**: (1) Motivates with personal stories. (2) Uses pupil’s oral language.

- **Limitations**: (1) May be limited by pupils’ language level. (2) Lacks structured systematic approach to skill development.

  (1) Small, sequential steps. (2) Immediate feedback. (3) May be boring because of.

- **(1) Lacks direct instruction. (2) May be confusing format constancy.**

### 18.6 Keywords

- **Approach**: To come near to somebody/something in distance or time.
- **Discrimination**: The practice of treating somebody or a particular group in activity.
- **Enhance**: To increase or further improve the good quality, value or status of somebody.
- **Modelling**: The work of making a simple description of a system.

### 18.7 Review Questions

1. What is cognitive training approach?
2. Give a note on self instruction training.
3. Give five categories of psycho-educational approach.
Notes

4. Write about general remedial approach for LD children.
5. What is specialized techniques approach?

Answers: Self Assessment

1. (i) (a) (ii) (b) (iii) (c) (iv) (c)
2. (i) phonies teaching (ii) Asal teaching (iii) language experience teaching (iv) Multisensory teaching
3. (i) True (ii) False (iii) False (iv) True (v) True

18.8 Further Readings

1. Special Education: Daniel P. Hallahan, James M. Kauffman, Paige C. Pullen; Pearson Education, Inc.
2. ERIC Clearinghouse on Handicapped and Gifted Children Reston VA: Visually handicapped: Requires special educational provisions because of ... as lighting, use of optical aids and devices, tasks, and personal characteristics.
Unit 19: Gifted Children: Definition, Types, Characteristics

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Objectives
The objectives of this unit can be summarized as below:
• to describe the meaning and definition of gifted children.
• to explain about the characteristics of gifted children.
• to know about the types of gifted children.

Introduction
If a child shows the best of any one of ability is known as gifted child. The giftedness refers to mental ability of a child. Parent often wonders if their child is gifted when they see evidence of advanced abilities. They can begin to get a sense of their child's giftedness by looking at lists of characterizes a child not have to have all of the traits to be gifted. A high I.Q. score is often a good indication that child is gifted. In this unit there is discussion about identification problems of gifted children.

19.1 Meaning and Definition of Gifted Children
The term 'giftedness' has been defined by the psychologists in various ways. They have stated the term with help of intelligent quotient, social potentialities or social efficiency and also statistically. Some of the important definitions of 'giftedness' have been stated as follows:

According to W.B. Kolesnik: "The term gifted has been applied to every child who, in his group, is superior in some ability which may make him an outstanding contribution to the welfare and quality living in our society"

According to Prem Pasricha: "The gifted child is the one who exhibits superiority in intelligence or the one who is in possession of special abilities of high order in the field which are not necessarily associated with high intelligent quotient".

According to Havighurst: "The talented or gifted child is one who shows constantly remarkable performance or outstanding behaviour in any worthwhile endeavour".

According to Terman and Vitty: The gifted children that Terman and Witty studied is, "Superior in physical development, educational achievement, intelligent and social personality".

According to Simption and Lucking: "The gifted children are those who possess a superior central
The nervous system characterized by the potential to perform tasks requiring a comparatively high degree of intellectual obstruction of creative imagination of both, are called gifted child.

According to Lucito: "The gifted are those children whose potential, intellectual powers and abilities are at such as high ideational level in both productive and evaluative thinking that it can be reasonably assumed that they could by further problem solvers, innovators and evaluators of the culture if adequate educational experiences are provided to them."

Did u know? The psychologists have identified gifted children on the basis of I.Q. J.P. Guilford in his theory of 'Structure of Intellect' has given 120 abilities.

19.2 Types of Gifted Children
In 1988, after some years of research work, George Betts and Maureen Neihart identified 6 personality types of gifted and talented children.

The classification is based on behaviour, feeling, and special needs of the gifted children. They should be observed, understood and addressed by the parents, in order for the child to develop smoothly and reach his or her full potential.

(i) Successful Gifted Child Personality Type: These children are usually successful academically, and identified as gifted at school. They are high achievers and perfectionists who seek for other people's approval. The problem, however, is that with time they often get bored and devote minimum effort to achieving. At home these gifted children need independence and freedom of choice, as well as time for personal interests, and risk taking experiences.

(ii) Challenging Gifted Child Personality Type: This personality type includes very creative, but often frustrated or bored, gifted children. They question the systems around them and are often rebellious because their abilities are unrecognized. Impatient, direct, and competitive, such children have low self-esteem. They need acceptance, understanding, and advocacy from, the parents. Family activities and positive examples of behavior are what the family should provide for such gifted children.

(iii) Underground Gifted Children Personality Type: Many of such children are never identified as gifted since they are usually quiet and insecure. They often hide their talents, resist challenges, and drop out of gifted school programs because of their shyness. These gifted children should be supported at home, and be given freedom to choose and to spend time with their friends of the same age. Ideally, parents should provide them with gifted role models of life-long learning.

(iv) Dropout Gifted Child Personality Type: These gifted children are angry and depressed because the school system does not recognize their abilities, and does not address their special educational needs. That is why they resist the system by refusing to complete school assignments or to attend school. Being considered average or below average, they have poor self-esteem, are defensive and self-abusive. Professional counseling is recommended for such children.

(v) Double-labeled Gifted Child Personality Type: This type of gifted child is often unrecognized because these children have a physical, emotional or learning disability. Adults fail to notice giftedness due to being focused on the areas where the child is less able. Parents of such children should provide them with recognition of their abilities, risk-taking opportunities, advocacy, and family activities to challenge the child. Family counseling may also be a good option.

(vi) Autonomous Gifted Child Personality Type: These are self-confident and independent children that are successful academically, motivated, goal-oriented, and responsible. At home, such gifted children need family support, advocacy, family activities and opportunities related to their interests. They should be allowed to have friends of all ages, and have no time or space restrictions.
Each subtype of giftedness can be strongly pronounced in one personality. At the same time, combinations are possible since the subtypes are not mutually exclusive. So, a gifted or talented child may possess the characteristics of more than one type of giftedness.

The personality type may change with time as the child grows and develops. Therefore, the parents should be attentive to their gifted children in order to provide timely support and advocacy. Autonomously and successful personality types of a gifted child are usually easy to recognize and deal with. The achievements of these children cannot be unnoticed. Challenging, underground, double-labeled and dropout personalities of gifted children require special attention. They should be recognized as early as possible for the parents to know what measures should be taken to address all the special needs of such children.

**Self Assessment**

2. State whether the following statements are 'True' or 'False':

   (i) The successful gifted child personality type children are usually successful academically, and identified as gifted at school.

   (ii) At home successful gifted child personality type children need not independence and not freedom of choice.

   (iii) Challenging gifted children are very creative but often frustrated or bored, gifted children.

   (iv) Underground gifted children personality type children are identified as gifted since they are usually quiet and in secure.

   (v) The dropout gifted children are angry and depressed because the school system does not recognize their abilities, and does not address their special educational needs.

**19.3 Characteristics of Gifted Children**

In the above definitions of 'giftedness', psychologists have enumerated the following general characteristics:

1. The giftedness is supper extreme on the normal distribution of any trait e.g. social, mental and aptitude.
2. A gifted child is one who shows remarkable and outstanding performance in any worthwhile task.
3. He possesses a superior central nervous system high degree of intellectual, creative and imagination.
4. A gifted child makes outstanding contribution to the welfare, quality of living and our society.
5. Gifted child possesses high ideational level in productive and evaluative thinking.
6. He is problem solver, innovators and evaluators of cultural and educational experiences.

These characteristics may be classified into the following three categories (1) intellectual characteristics, (2) personality characteristics, and (3) social characteristics.

(a) **Positive Characteristics of Gifted Children**

They possess positive qualities some are as follows:

(1) **Intellectual Characteristics**: The following are intellectual characteristics:

1. Have extensive rapidity in learning and comprehension,
2. Quick and clear self-expressions,
3. Good in abstract thinking and good insight,
Notes

4. Good imagination power-use original ideas,
5. Better understanding and comprehensive power,
6. Keen and accurate observation power-can note minute details,
7. Rich Vocabulary,
8. Good common sense and good general knowledge,
9. Generally better in science and Arithmetic,
10. Possess broad span of attention,
11. May be good in one or more than specific ability like music, art, science etc.,
12. Varied and wide interests, and
13. I.Q. above 125 (according to Davidson and Goddard), 130+ (according to Hollingworth), and 140+ (according to Terman).

(2) Personality Characteristics: The following are specific personality characteristics of gifted children:

1. Have better ability to adjust, organize, analyse and synthesize things,
2. Sometimes show emotional-unstability also,
3. Better planning capacity,
4. Have lack of recognition of their potentialities,
5. Feel boredem in classroom,
6. May participate actively in discussion,
7. More found of questioning,
8. May be popular,
9. General superior personality,
10. Superior character,
11. More humorous, cheerful and generous,
12. Have friends of higher age and of class,
13. Sincere and dutiful,
14. High achievers in class,
15. Proccesses high character, and
16. Possesses good physical health.

(3) Social Characteristics: The following are the specific social characteristics of children:

1. They are socially well mature,
2. They are popular in his group,
3. They are responsible in performing their duties or assigned work,
4. They have quality of leadership,
5. They have capacity to be socially useful and intermingle to others,
6. They are humours and honest or great trust worthiness,
7. They are democratic and less autocratic, and
8. They possess high moral qualities

The gifted children have, better ability to organize, analyses, memories, synthesize reason out things.
(c) Negative Characteristic of Gifted Children

They possess some negative qualities which are as follows:
1. May be restless, inattentive and disturbing.
2. May be coned isolated and neglected, if their potentialities are not paid due to attention.
3. Become lazy if they find the school curriculum unchallenging to them, and does not take interest in school academic activities.
4. May be indifferent to class-work when not interested.
5. May become outspoken, and sensitive temperament.
6. Shows egoistic and jealous behavior,
7. Is generally careless and poor in spellings and handwriting, and
8. May not like the school curriculum which is for normal's.

Self Assessment

1. Fill in the blanks:
   (i) According to Prem Pasricha "The gifted child is the one who exhibits ...................... in intelligence or the one who is in possession of special abilities of high order in the field which are not necessarily associated with high intelligent.
   (ii) The .................... is super extreme on the .................... of any trait.
   (iii) A gifted child makes ............... contribution to the welfare.
   (iv) Gifted child possesses, high ............... level in productive and evalulative level.
   (v) Good in abstract thinking and good insight is the positive characteristics of ....................
   (vi) I.Q. above 125 (according to Davidson and Goddard) 130+ (according to Hollingworth) and 140+ (according to .......................).
   (vii) Have better ability to adjust, organize, analyse and synthesize things are the ............... 
   (viii) Shows egoistic and jealous behaviour are eristics.

19.4 Summary

• The gifted child is one who exhibits superiority in intelligence or the one who is in possession of special abilities of high order in the field which are not necessarily associated with high intelligent quotient.

• There are following types of gifted children:
   (i) Successful child personality type: These children are successfully academically and identified as gifted at school.
   (ii) Challenging gifted child personality type: They are very creative, but often frustrated or bored. They question the system around them.
   (iii) Underground gifted children: They are never identified as gifted they are usually quiet and in secure. They often hide their talents, resist, challenges and drop out of gifted school programmes because of their shyness.
   (iv) Dropout gifted personality: They are angry and school system does not recognize their abilities.
   (v) Double labeled gifted child personality: They often unrecognized because, these children have a physical, emotional or learning disability.
   (vi) Autonomous gifted child: They are self confident and independent children.

• There are some special characteristics of gifted children:
   Positive characteristics: Intellectual characteristics, IQ above 125°, 130°, 140°.
   Personality Characteristics: Better ability to adjust organize, analyse, better planning capacity. Superior personality superior more humorous, cheerful and generous
Notes

- **Social characteristics:** Socially well mature, popular, responsible, quality of leadership honest and great trust worthiness.
- **Negative characteristics:** (i) may be restless, inattentive, disturbing, may become outspoken, and shows jealous behaviour, careless and poor in spellings and hand writing.

19.5 Keywords

- Autonomous : Able to govern itself or control its own affairs.
- Challenging : Difficult in an interesting way that tests your ability.
- Exclusive : Only to be used by one particular person or group.
- Underground : Under the surface of the ground.

19.6 Review Questions

1. What do you mean by ‘gifted children’?
2. Write any 5 characteristics of gifted children.
3. Give the types of gifted children.
4. What are the positive and negative characteristics?

**Answers: Self Assessment**

1. (i) True (ii) False (iii) True (iv) False
   (v) True
2. (i) Superiority (ii) Giftedness, normal distribution
   (iii) outstanding (iv) professional
   (v) gifted children (vi) Terman
   (vii) Personality characteristics (viii) Negative characteristics

19.7 Further Readings

1. Special Education: *Laura Rothstein; Scott F. Johnson; Sage Publisher, Inc.*
2. Special Education: *Daniel P. Hallahan, James M. Kauffman, Paige C. Pullen; Pearson Education, Inc.*
3. Special Education: *Linda Wilmshurst, Ph.D., ABPP, Alan W. Brue, Ph.D., NCSP*
Unit 20: Identification, Causes, Problems of Gifted Children

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Objectives
The objectives of this unit can be summarized as below:
• to know about the identification of gifted children.
• to describe about the causes of gifted children.
• to know about causes and factors for the problem of gifted children.

Introduction
Gifted children have been defined as those who by nature of outstanding abilities are capable of high performance. The term 'outstanding abilities' refers to general intellectual ability, specific academic aptitude, leadership ability, ability in the visual or performing arts, creative thinking or athletic ability. In this unit we will discuss about identification, causes and problems of gifted children.

20.1 Identification of Gifted Children
The identification of gifted children had been discussed in two aspects:
(1) need of identification and (2) Basis of identifying gifted children.

20.1.1 Need of Indentification of Gifted Children
Sammual A Krik has rightly stated that several gifted children remain undeveloped and their potentialities are not properly utilized by the society because they have not been identified in schools. There is no provision for them for special education. They are taught along normal children in schools. The curriculum has been designed in view of needs of average students. There is need to identify such children. Two methods are commonly used:
1. Informal method or observation method is used by teachers and parents, and
2. Formal or Testing method is used by teachers guides and counsellors. Tests are employed for this purpose.

In democracy gifted children are an asset to the nation as well as to society.
20.1.2 Basis of Identifying Gifted Children
The following qualities and behaviours are the basis for identifying gifted children-A gifted child-
1. Learns rapidly and easily.
2. Uses a lot of common sense and practical knowledge.
3. Thinks clearly and recognizes complex relationships and comprehends meaning easily.
4. Good memory, makes less use of rote drill, better under.
5. Better general knowledge.
6. Good in language.
7. Can read books that are one to two years in advance of the rest of the class.
8. Performs difficult mental tasks.
9. Has more curiosity.
11. Is keen observer and good vocabulary.
12. Is quick in reaction and language proficiency.
13. Uses original but unusual methods or ideas.
15. Has better concentration and attention.
16. Interest in and liking for books.

Self Assessment
1. Fill in the blanks:
   (i) Gifted children learns .............................. and ..............................
   (ii) Gifted child is ............ and language proficiency.
   (iii) A gifted child is very ..............

20.1.3 Procedure of Identifying Gifted Children
The formal method is most appropriate for identifying such children. The commonly used procedures
are as follows-
1. By administering intelligence tests may be verbal, non-verbal and performance.
2. By administering, achievement, tests, scholastic tests.
3. By observing cumulative and academic record.
4. By collecting observations and opinions of teachers parents, friends and neighbour.
5. By the participation in co-curricular activities of schools and social functions.

20.2 Causes
It is widely agreed that both genetics (mutation) and environment (nurture) play a role in determining
giftedness, but their relative importance is debated. Current thinking suggests that the importance
of the gene is greater, though without appropriate nourishment, the gifted child's potential can often
remain unfulfilled. Researchers suggest that all of us are born with certain predispositions to learning
in which our brains are wired in slightly different ways that makes connections between neurons
more dense.
20.3 Problems of Gifted Children

The gifted children have their own problems which are related to their adjustment in different areas:
1. Problem of adjustment in family
2. Adjustment in school
3. Adjustment in society
4. Mental adjustment
5. Teaching methods and unsuitable curriculum
6. In case their giftedness is not recognized they may become perverted intelligent. They may show hostile attitude and fell themselves as rejected unwanted and isolated. They may develop inferiority complex and insecurity.
7. If the classroom work is easy for them they may not take interest, and therefore may feel boredom in class. They may become truant or may use daydreaming or fantasy for the work of higher lever.
8. If they do not get proper guidance they may develop the tendency of negativism and bad reactions to authority.
9. Because of varied interest they find themselves in great difficulty in choosing right type of school subjects, and vocations in future life.
10. If these children of not get good friends of their level, their social development is blocked.
11. If they get over attention of parents and teachers, may develop boastful and conceited attitude and tendencies.

Did u know? If they do not get favourable attitude or love, affection and sympathy from elders they may join gangs.

Self Assessment

2. State whether the following statements are True or False:
   (i) The gifted children have problem of adjustment in family.
   (ii) They may become truant or may use day dreaming or fantasy for the work of higher level.
   (iii) If these children of not get good friends of their level, their social development becomes good.
   (iv) If they get over attention of parents and teachers, may not develop boastful and connected attitude and tendencies.

20.4 Summary

• There is some identification of gifted children.
• They learn rapidly and easily, they have lot of common sense and practical knowledge, better general knowledge, good in language, performs better general knowledge, high intelligence.
• Gifted children can be identified by administering intelligence tests, achievement test, scholastic test, cumulative and academic record, by the participation in co-curricular activities.
• Giftedness is not a disability or problem. It has no physical causes or deficiency. It is caused by mutation in some genes of child during pregnancy.
• There are some problems of gifted children like problem of adjustment in family, school, and society due to their high level of intelligence. They get bored in the class due to easy assessment. If they get over a attention of parents and teachers, may develop boastful and attitude.
20.5 Keywords

- Gifted: having a lot of natural ability or intelligence.
- Procedure: A way of doing something especially the usual correct way.
- Administration: The activities that are done in order to plan, organize and run a business, school.

20.6 Review Questions

1. What are problems of gifted children?
2. Write the identification points of gifted children.
3. What is the need of identification of gifted children?

Answers: Self Assessment

1. (i) rapidly, easily (ii) quick in reaction (iii) attentive
2. (i) True (ii) True (iii) False (iv) False

20.7 Further Readings

1. Special Education: Laura Rothstein; Scott F. Johnson; Sage Publisher, Inc.
2. Special Education: Daniel P. Hallahan, James M. Kauffman, Paige C. Pullen; Pearson Education, Inc., P
Unit 21: Gifted Children: Teaching Strategies

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Objectives
The objectives of this unit can be summarized as below:
• to know about educational provisions for gifted children.
• to describe the teaching strategies.
• to explain the curriculum for gifted children.
• to assess general methods and techniques for gifted children.

Introduction
Most gifted children display a higher rate of concentration and memory capacity. There is no typical
gifted child, for particular talents and social environments give rise to varying personality patterns.
Achievement patterns also vary. Difference among them will be found even when they are grouped
together. Some are very strong in one subject weak in others different capabilities and strength of
gifted children the teaching strategies are also different.

21.1 Educational Provisions for Gifted Children
Gifted children that they possess different mental, social and emotional characteristics. Therefore, it
is essential to have advanced curriculum, method of teaching, school problems and qualified trained
teachers. Our present system and programmes of education is highly structured schedule, basically
it has been designed for normal students. The following may be objectives. Methods approaches,
curriculum and qualities of teachers for gifted children.

Objectives of Education
The following may be objectives in addition to the objectives formulated for normal children:
1. To further increase the range of their knowledge, skill and understanding.
2. To develop an alertness, initiative and creative power.
3. To develop an attitude of critical thinking.
4. To develop power to work independently and independent thinking.
5. To develop leadership and social efficiency.
6. To accelerate the process of problem solving.
7. To enhance the capacity of adjustment in home, school and society with normal children.
21.2 Teaching Strategies

Three main strategies which may be used for gifted children: (1) Acceleration strategies, (2) Enrichment strategies and (3) Special group strategies

(1) **Acceleration strategies:** It is an old strategies for gifted education.

The term 'acceleration' refers to the school process of educational programmes-early entrance into school, skipping entire grades, doing more work per year (perhaps 3 year's work in two years or doing advanced work for advanced standing).

(2) **Ability Grouping:** has two types of classes

(i) Special classes, and (ii) Special coping grades schools.

Acceleration is defined as progress through an educational programme at a faster rate of a age younger than convention discus.

**Evaluation:** (1) It is not possible to find out separate time for these students. (2) This is costly affair

(3) Causes wrong Psychology or impressions on others, or feel jealous (4) Underdemocratic (5) Intellectual aristocracy. Therefore, it is not psychological method, but open education system can be introduced for levels to meet the demands of gifted children.

(3) **Enrichment Strategies:** The enrichment of curriculum must be both qualitative and quantitative. Quality refers the depth while quantity enrichment means breadth of the content or work.

1. The programme for gifted child should represent an extension of general educational objectives.
2. The educational programmes generate a stimulating learning environment both in school and outside the school.
3. The programme should place a special emphasis on creative ability, insight and social responsibilities.
4. The educational programme should promote basic fundamental skills knowledge, appreciation and creativity etc.

Self Assessment

1. Fill in the blanks:

(i) .................. is an old strategy for gifted children.

(ii) .................. is defined as progress through an educational programme at a faster rate of a age younger than convention discus.

(iii) The enrichment of curriculum must be both ............... and .............. .

(iv) Under enrichment strategy the programme for gifted child should represent an extension of general .............. .

(v) The programme should promote basic ................. .

21.3 The Curriculum for Gifted Children

"Gifted children need less drill to master them on fundamental processes. It is important to notice, at what points they merely marking time, what lessons finished early, and what times he opens library book or show signs of restless or boredom. On this basis find time for enrichment, special attention and stimulate in ordinary class and they should be given some high or difficult home task. Reorganise the curriculum with pupil-teacher planning as ambitious and rich, which can sustain interest in school work and stimulate their mental capacities".
(1) Special Teaching Methods
The following methods of teaching are used of gifted children:
1. *Individual enrichment*-Arrange enrichment activity which the gifted student can carry out by himself at his desk
2. *Group oriented method*-Development enrichment spontaneously out of the units and committee work of the whole class.
3. Variety of teaching methods can be used. Give reference material, thoughtful questions and home assignment of higher difficulty, which are appropriate for fitted students should be used.
4. Establishing the higher goals for gifted pupil.
5. Stimulating individual research.
6. Assigning the project to use potential of the child e.g. home projects in agriculture-which provide more rich experience.
7. Special project for gifted students.
8. Establishing objectives and selecting appropriate techniques.
9. To provide the awareness to the gifted students about the plans and programmes and their potentialities. and
10. Flexibility in teaching units.

What is the curriculum for gifted children?

(2) Special Group Approach: Under this approach is has been suggested that there should be special schools for gifted students. There should be separate provision in the schools by forming groups of gifted students. The groups may be formed on the following units:
1. There should be special group in general classes in primary or elementary school.
2. There should be separate provision related to the subjects-English language, mathematics, science and social studies at junior and secondary schools.
3. There should be provision for special curriculum at higher secondary schools.
4. There should be honours courses at college and university level. Separate plan and procedure for special group.

Make realistic appraisal of each one's capability then use this appraisal for homogenous grouping. This will narrow down the range of ability and achievement in each group as compared to the class as a whole.

(1) Group leader-assign every student one problem provide occasions for independent reading, reference work, interviews in community etc., gifted students can be appointed as a leader of the group. So that he has time to exercise leadership ability and imagination. In this way they can gain experience in organizing individuals to work together in dealing with human relations problems and in accepting responsibility for group action.

(2) Arrange to broader the gifted group's activity into a total class project by the use of round table discussions, displays, field trips and assemblies. With some modification these activities become a learning activity for the entire class, and they also become interested in pursuing similar activities themselves.

(3) These large, flexible units lend themselves to varied teaching techniques-individualized instruction, work in small groups and total class groups.

(4) Project method may be used for special group. Some challenging tasks may be assigned to such group.
Special Education

Notes

(5) Reflective level teaching or problem solving technique should be employed for gifted group.
(6) The teacher should acquire the knowledge of psychology of gifted children and special training for teaching and dealing gifted group students. He should be democratic, flexible in his behaviour.
(7) Regular conferences with gifted students-for their working and help them plan their work-difficulties and evaluation.

Did you know?
Gifted children prefer, concept formation, generalization and completing the gaps. Teacher should not explain each and every aspect of the content, he should leave same gaps to be filled by them.

21.4 General Method and Techniques for Gifted Children

Some of general methods and techniques which are very useful in the studies of gifted children are given below:

1. The positive reinforcement or praise and encouragement devices are effective but challenge and criticism devices are much more effective to reinforce their behaviour. For example "We do not expect such behaviour student like you".
2. The repetition in teaching is boring to them. They do not take interest in the unnecessary interpretation and repetition of content in classroom teaching.
3. Teacher should probe into the depth of the content to develop some insight into it.
4. There should be the provision and facilities of library, reading, laboratories and field work.
5. In class room teaching difficult questions are put for providing challenge them.

Self Assessment

2. State whether the following statements are True or False:
   (i) In group oriented method-developement enrichment spontaneously out of the units and committee work of the whole class.
   (ii) Gifted children prefer, concept formation, generalization and completing the ..................... .
   (iii) Teacher should not probe into the depth of the content to develop some insight into it.
   (iv) There should not be the provision and facilities of library reading, laboratories and field work.

21.5 Summary

- Gifted children possess different mental, social and emotional characteristics. It is essential to have advanced curriculum, method of teaching, school problems and qualified trained teachers.
- The education is given to gifted children has many objectives which are useful for then.
- Special education is given to further increase in range of their knowledge, skill and understanding, to develop an alertness, initiative and creative power, to develop on attitude of critical thinking, develop power to work independently.
- There are three teaching strategies used for gifted children: (i) Acceleration strategies (ii) enrichment strategies (iii) Special group strategies
- Acceleration refers to the school to school process of educational programmes. Early entrance into school, skipping entire grades, doing more work.
- Enrichment of curriculum must be both qualitative and quantitative quality refers to the depth while quantity enrichment means breadth of the content.
• Special group strategies: It has to type of class (a) Special classes (b) Special coping grades school. Progress though an educational programme at a faster rate of an age younger than convention discs.

• There are various methods of teaching to gifted children:
  (i) Individual enrichment, group oriented method, special project for gifted children, flexibility in teaching units, and stimulating individual as search.
  (ii) Positive reinforcement or praise and encouragement devices are effective provision should probe into depth of content difficult teaching questions are some other teaching methods.

21.6 Keywords

• Giftedness : A special ability to do the work more efficiently and in early time as compared to other persons.
• Technique : A method or way for doing any task.
• Acceleration : An increase in how fast something happens.

21.7 Review Questions

1. What should be the curriculum for gifted children?
2. Give any two teaching strategies for gifted children.
3. What is ability grouping? Explain.

Answers: Self Assessment
1. (i) acceleration strategy (ii) acceleration
   (iii) qualitative, quantitative (iv) educational objectives
   (v) fundamental skills knowledge
2. (i) True (ii) True (iii) False (iv) False

21.8 Further Readings

1. Special Education : Laura Rothstein; Scott F. Johnson; Sage Publisher, Inc.
2. Special Education: Linda Wilmshurst, Ph.D., ABPP, Alan W. Brue, Ph.D., NCSP
3. Special Education: Daniel P. Hallahan, James M. Kauffman, Paige C. Pullen; Pearson Education, Inc.
Unit 22: Backward and Delinquent Children: Definition, Types, Characteristics

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22.4 Meaning and Definition of Delinquent Children
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Objectives
The objectives of this unit can be summarized as below:
• to know about meaning and definitions of backward children.
• to describe about characteristics of backward children.
• to explain about the types of backward children.
• to know about the meaning and definition of delinquent children.
• to discuss about the characteristics of delinquents.
• to explain about the types of delinquency.

Introduction
The children, who fall at lower extreme of normal distribution of educational attainment trait, are known as backward. The causes of backwardness may be due heredity and environmental factors. The backward children are classified in two categories-mental retardation and educational retardation. The degree of backwardness can be understood with the help of intelligence tests and achievement tests. In the classroom they deviate from their classmates in school achievement. They are not benefited by the normal teaching in school achievement. They are not benefited by the normal teaching in school. The teacher can easily locate them on basis of their participation in classroom activities. These children are a great liability for the society and nation as well.

22.1 Meaning and Definition of Backward Children
The term 'backwardness' may be defined arbitrarily but it difficult to define comprehensively.

According to Cyril Burt: "The backward child is one who is unable to do the work of the class next below that which is normal of his age".
The term backwardness can be explained in terms of education quotient (E.Q.). A backward child is one whose educational quotient is 85 or below. The word E.Q. or "educational quotient indicates, presumably, whether a pupil's knowledge of a group of school subjects is commensurate with his chronological age, or whether it is above or below the level to be expected to him for his age". The simple formula therefore, is:

The delinquents are anti-social behaviour children who are at the lower extreme ends of normal distribution of social tract. The problem of delinquency has posed as serious concern for persons, teachers, parents, psychologists and social workers who believe in harmonious development of human personality. The teachers are responsible for shaping the personality of young student. The delinquents are found generally at the stage of adolescence. The children who are delinquents below the age of eighteen years are known juvenile delinquent.

22.2 Characteristic of Backward Children

Cyril Burt and Schonell have statistical characterized with help of mental age and chronological age of the child.

1. The backward child mental age is smaller than his chronological age.
2. A backward child may be retarded as well but not always.
3. The dullness of a child may be one of the causes of his backwardness.
4. A backward child has low educational attainment than what he is capable of.
5. He can not keep pace with the class even in one subject or in all subjects.
6. A backward child is unable to do the work of the class next below. Who is normal for the age, weak in class assignments and examination or class tests.

A backward child has certain general characteristics. These are classified into four main categories.

1. Physical Characteristics: Physically backward children are slow or inferior in physical or health development. They have certain physical defects and deficiency or deformity of eyes, nose and speech defects, their muscular coordination may be poor or slow.

2. Mental Characteristics: The major area of backwardness is the intelligence, their I.Q. is less than average. They lack in reasoning, abstract thinking to see the relationship abilities. They are unable to correlated their various experiences.

3. Social and Moral Characteristics: The social development is slow as compared with normal children. The maturity age is higher than the averages. He may be the isolate in this class. They may develop some anti-social or undesirable traits. They have poor adjustment with his peers.

4. Educational Characteristics: Education attainment and participation in school programme are the basic qualities of backward children. They cannot pace with class in academic progress. They are poor in one subject or may be poor in all subjects. They are also poor in doing the home assignments or class assignment. They have the poor interaction with teacher and poor participation in classroom activities. They are low achievers and weak in examination and class tests.

22.3 Types of Backward Children

These 'backward children' can be placed under three categories: Those who show signs of brain damage or neurological deficit like Aphasias (can see and read the words but cannot say what it means-can bear words but cannot given their meaning-can hear and see words but cannot write). The use of unaffected sensory apparatus (Vision or Hearing) and hands in building up proper meaningful associations yield positive result in this case. Reports reveal the some children have either been forced to change from their left-handedness to right-handedness or have a 'Split-literality' (Crossed-Eye-Hand Dominance), i.e., they have a dominant right-handiness with a left evenness or difference in the perception and shape of the object through their left and right eyes. This is popularly know as 'Primary Reading Disability.'
Notes

**Slow Learner Children:** Research has shown that specific reading disabilities (dyslexia) are seen in about 10-12 percent of school-sense children who are intellectually normal. They have a poor sense of self-esteem and some children show signs of mild depression. They have adequate vision; but their reading ability is retarded. Usually this disability is more pronounced in the boy than in girls. Very often, these children show signs of tension in habitual manipulation of body parts, and aggressive behaviour. These children can memories will, often spell words or numbers without working what they are spelling or having a 'numbers-sense.'

**Self Assessment**

1. Fill in the blanks:
   
   (i) Backward child is one whose educational quotient is .................... or below.
   
   (ii) The ................ are anti-social behaviour children who are at the lower extreme ends of normal distribution of social tract.
   
   (iii) The mental age backward child is smaller than his .................... age.
   
   (iv) The children who are delinquents below the age of eighteen years are known ...............
   
   (v) The major area of backwardness is the intelligence, their .................... is less than average.

**22.4 Meaning and Definition of Delinquent Children**

It is difficult to define the term 'delinquency' comprehensively and universally because it has wide coverage of anti-social behaviour that varies time to time, place to place, cultural, social and political conditions of particular conditions. It may be stated that the child who violates the social normal and values, is called delinquent.

These offences are said to be criminal actions when committed by a person beyond the age handled by juvenile courts. Cyril Burt, in his book revealed, "A child is said to be regarded technical as a delinquent, when his anti-social tendencies appear so grave that he becomes or ought to be become the subject of official action." There are some definitions of deliquent child given below:

"A child who deviates from the social norms of behaviour, is called delinquent children."

  -Healy

"A delinquent is one who behaves against social norms breaks, laws, creates indiscipline in school or other institutions of disobey the rules. His immoral behaviour is considered not so serious that he should be considered a culprit juvenile courts look into his illegal behaviour."

  -Education Dictionary

"A child is technically delinquent when his antisocial tendencies appear so grave that he becomes or ought to become the subject of official action."

  -Cyril Burt

"Delinquency may be defined as anti-social behaviour."

  -Head field

"Delinquency implies from anti-social behaviour involving personal and social disorganization."

  -Neumeyer

"Delinquency, like aggressive behaviour in general, can understood as aggressive, hostile behaviour or culturally acquired way of life."

  -Telford and Sawrey

"A child, who breaks the law, is way ward, habitually disobedient or who behaves in away that endages the health or moral of himself or other who attempt to enter the marriage relation without the consent of his parents, is called delinquent."

The term 'delinquency' has been defined and explained by experts of different disciplines-psychologists, sociologists biologists, lawyers and experts of mental health and hygiene.

(1) **According to Biologists:** The accounts for anti-social behaviour as rising from organic or pathological factors located in the nervous system of an individual. The delinquent cannot adjust to social environment. Biologists emphasize the genetically basis of delinquency.

(2) **According to Mental hygienists:** The delinquency is the expression of an individual needs and his mental ailments. He cannot gratify his needs by socially acceptable behaviour due to his
incompetency or due to economic conditions. He tries to achieve the goal by his anti-social activities which are known as delinquent act. The delinquent behaviour is the symptom of his needs and mental ailments.

(3) **According to Sociologists**: They have emphasized on social conditions which contribute to anti-social behaviour or delinquency. The political and economic stress can lead to undesirable acts or behaviour. They violate the social and cultural norms. A person is compelled by the circumstances to achieve his goal by adopting antisocial methods. Thus delinquency is the result of unsuccessful efforts to achieve goals of life or society, this is the reason that a person adopts anti-social acts. It is collective reaction formation.

(4) **According to Psychologists**: It is deficiency in the formation of supper ego. He is unable to identify with the values of his parents and seeks pleasure at the cost of sacrificing the principles of reality and morality. The delinquency is as holes in superego. Moreover (1961) defined delinquency as moral deficiency because of weak conscience due to improper teaching of the child in early age of life. The delinquency is the manifestation of frustrated needs of the child which ultimately lead to aggression. The delinquent would be a person whose misbehavior is relatively illegal offence, which in appropriate to his level of development, is not committed as a result of extreme low intellect.

**According to Travis Hirchi**: 'Delinquency is defined by acts, the detection of which is thought to result in punishment of the person committing them by agents of the large society.'

The legal definition does not reveal any picture of the delinquent's personality or the causes of his behaviour. Law delinquent's personality or the causes of his behaviour. Law-makers are not concerned so much with delinquency as with delinquents and naturally their definition of delinquency has been mostly incomplete and misleading. Psychologists say that a delinquent is one whose attitude towards society is such that will eventually lead to a violation of the law. They have tried to relate delinquency to the frustration of dependency needs which cause aggression. In many studies, psychologists came up with differences between the psychological make-up of the delinquent and non-delinquent. The difference was quantitative rather than qualitative. The consider delinquency to be an unfortunate expression of the personality and emphasis that the various indices of maladjustment shown by the delinquents have one or more personal meanings behind them.

A child is said to be a delinquent when he starts stealing assaulting, indulging in sex offences and develops symptoms like pathological lying and truancy.

### Self Assessment

2. **Multiple Choice Questions**:

   Choose the correct option:

   (i) The slow learners can be placed under ................. categories.
   (a) 2 (b) 3 (c) 5 (d) 7

   (ii) ................. has given the definition of delinquency may be defined as anti-social behaviours
   (a) Head field (b) Cyril Burt (c) Healy (d) Niemeyer

   (iii) According to biologists the accounts for anti social-behaviour as rising from organic or pathological factors located in the ....................... of an individual.
   (a) muscular system (b) skeleton system
   (c) Nervous system (d) circularly system

   (iv) The ................... is expression of an individual needs and his mental ailments.
   (a) delinquency (b) backwardness
   (c) mental retardness (d) anti sociality
The delinquency is the manifestation of frustrated needs of the child which ultimately lead to

(a) award  (b) aggression  (c) need  (d) personality

**22.5 Characteristics of Delinquents**

In the above definitions of delinquency indicate the following characteristics which have been enumerated as follows:

1. A delinquent child posses anti-social behaviour.
2. He breaks the laws and create indiscipline in school.
3. A delinquent, deviates from norms of social behaviour and creates problems in society.
4. A delinquent child is aggressive and hostile behaviour.
5. He behaves in such away that it is harmful for himself and also for other.
6. His ego is bent upon immediate pleasure without obey in the norms of social behaviour.
7. His immoral behaviour is not considered so serious that may be referred to court of law.
8. His anxiety level is generally very high.
9. It is acquired behaviour by the child and not the innate.
10. The delinquents are emotional and maladjusted.
11. The economic conditions of his family is generally poor. The parents are unable to fulfill his needs.
12. It is unmindful of social norms and expectations.
13. Delinquency is problem for everyone.
14. Delinquency is not the abnormality in its true sense.

Taking the above point into consideration, delinquency may be considered as an ego defense for the tension caused by frustration of one or several of the needs present in the individual. Due to their intrinsic nature, the nation’s laws cannot be applied to every individual.

No one can deny the relationship that exists between delinquency and psychological or psychiatric factors. Some individuals in a group follow the rules and taboos while others do not. The latter do not form a psychologically homogeneous group. But psychology can help to explain their behaviour. Although the majority of juvenile delinquents are found among this group, not all of them are delinquents. Again, all delinquents are not maladjusted. Delinquent behaviour can be adaptive, getting the special circumstances in which a group finds itself, although such behaviour clashes with the generally accepted laws of the society to which the group belongs. This observation is made from a psychiatrically, and thereby to a certain extent from a psychological point of view.

The concept of delinquency is artificial in nature. This nature varies according to the laws in force or the ways in which they are applied. It becomes very difficult to establish one period and another. Research works reveal that this is a major obstacle to research and is a possible source of serious error.

**22.6 Types of Delinquency**

The psychologists have classified delinquency in various ways. The classification of delinquency in five categories have been done by Had Field, have been listed below:

**(1) Benign Delinquency:** It includes such which may be termed as breach of discipline or law, or crimes form legal point of view but from mental health view, they may be normal behaviour e.g., truancy on some beautiful rainy day or for seeing some extraordinary act in the city.
(2) Temperamental Delinquency: Temperamental delinquency is the result of the conflict between the need of child and the home, school or society conditions. It is also known as anti-social behaviour. The main cause may be the poor environment, in which the child is living.

(3) Simple Delinquency: Simple delinquency is the result of the conflict between the need of child and the home, school or society conditions. It is also known as anti-social behaviour. The main cause may be the poor environment, in which the child is living.

(4) Reaction Delinquency: Reaction delinquency, as its name suggests, arises from the reactions of the children against the society when the child thinks that he is the victim of the society, he revolts and tries to break the rules and conventions of the existing society. For this type of delinquency the child should be guided very carefully and psychological.

(5) Psychoneurotic Delinquency: This type of delinquency is created on account of the expression in anti-social manner of the repressed tendencies. These repressions occur on account of resentment. For example repression of sex urge or instinct may develop the tendency of truancy or telling lie or stealing etc. For psycho-neurotic delinquency the teachers and parents should refer their children to some clinical psychologists.

(6) Aggressive Tendency: The mode of attack may be physical aggression damaging school property, Torturing, committing suicide and forgery.

**Task**

What is dyslexia? Explain.

**Other Classification of Delinquency:** The following are the other categories.

(1) Aggressive and hostile basis with some persons, institutions, objects, elder, birds and animals and may be with self.

(2) Standard basis—may be of four types (a) Institutionalized (b) Offended at large (c) Habit basis (d) Individual standard.

(3) Basis of Individual standard—Individual and group.

(4) Habit basis—First offended and habitual offended.

(5) Truancy from school, and running from home.

Nowadays, psychiatrist has recognized two types of reactions that are different both in terms of prognosis and management.

(1) Dissocial Reaction: Under this type of reaction, the children are brought up in a normal or immoral home or social environment. Their behaviour is in conformity with that small community although they are unacceptable to the society at large, for example, the children of gypsies, migrant or criminal tribes. Children's personality development is influenced by distorted values of a special subculture. Here the children are capable or establishing enduring emotional attachments and loyalties.

(2) Psychopathic Reaction: The children in the second category have poor ego development and even poorer development of super ego. They are incapable of forming stable emotional relationships. They have no insight or foresight and they cannot profit from past experiences. They show poor control and seek gratification of immediate desires. Most of them are refractory to all forms of punishment. These children tend to use other human beings as 'pawns' or 'toys.'

The second group cases have constitutional or genetic defects. There are some behavioral disturbances of children that are also seen in adult psychopaths like truancy, alcoholism, drug addiction, stealing, burglary and sexual promiscuity. In 1951, the International Union of Child Welfare especially recommended the following categories of offences (by children) for investigation: Stealing from home, persistent telling of lies, wandering from home, cruelty to animals and other children, reputed truancy, setting fire and sexual offences etc. Of these setting fire and sexual offences are not so commonly reported in India.

There may be very thin line of demarcation between deviance and delinquency because if effective interventions do not offer at appropriate stages, there is every like hood of a deviant turning into a
delinquent. So the value system of any society, as reflected in its legal norms, continues to serve as the basis for identifying juvenile delinquents. Taking this view into consideration, a juvenile delinquent is one who falls within the age group of 7-16 years (18 years in case of girls) and indulges in any act that is prohibited by the Indian Penal Code or Local or Special Acts relating to arms, gambling, explosives etc.

Self Assessment

3. State whether the following statements are 'True' or 'False':
   (i) The classification of delinquency in four categories have been done by Had Field.
   (ii) Simple delinquency is the result of the conflict between the need of child and the home, school or society conditions.
   (iii) Delinquency is the abnormality in its true sense.
   (iv) The concept of delinquency is artificial in nature.
   (v) Temperamental delinquency of certain physiological activities.
   (vi) A juvenile delinquent is one who falls within the age group of (10-25) years.

22.7 Summary

• The backward child is one who is unable to do the work of the class next below that which is normal of his age.

• **Physical Characteristics:** Physically backward children are slow or inferior in physical or health development.

• **Mental Characteristics:** The major area of backwardness is the intelligence, their I.Q. is less than average. They lack in reasoning, abstract thinking to see the relationship abilities.

• **Social and Moral Characteristics:** The social development is slow as compared with normal children.

• **Educational Characteristics:** Education attainment and participation in school programme are the basic qualities of backward children.

• These 'backward children' can be placed under three categories: Those who show signs of brain damage or neurological deficit like Aphasias
  (i) can see and read the words but cannot say what it means.
  (ii) can bear words but cannot given their meaning.
  (iii) can hear and see words but cannot write).

• "A delinquent is one who behaves against social norms breaks, laws, creates indiscipline in school or other institutions of disobey the rules. His immoral behaviour is considered not so serious that he should be considered a culprit juvenile courts look into his illegal behaviour."

• **Characteristics of Delinquents:** The Characteristics of Delinquents are as follows:
  (i) A delinquent child possess anti-social behaviour.
  (ii) He breaks the laws and create indiscipline in school.
  (iii) A delinquent, deviates from norms of social behaviour and creates problems in society.
  (iv) A delinquent child is aggressive and hostile behaviour.

• The classification of delinquency in five categories have been done by Had Field, have been listed below:
  (1) **Benign Delinquency:** It includes such which may be termed as breach of discipline or law.
  (2) **Temperamental Delinquency:** Temperamental delinquency of certain physiological activities.
(3) **Simple Delinquency**: Simple delinquency is the result of the conflict between the need of child and the home, school or society conditions.

(4) **Reaction Delinquency**: Reaction delinquency, as its name suggests, arise from the reactions of the children against the society when the child thinks that he is the victim of the society, he revolts and tries to break the rules and conventions of the existing society.

(5) **Psychoneurotic Delinquency**: "This type of delinquency is created on account of the expression in anti-social manner of the repressed tendencies.

(6) **Aggressive Tendency**: The mode of attack may be physical aggression damaging school property Torturing, committing suicide and forgery.

• **Other Classification of Delinquency**: The following are the other categories.
  1. Aggressive and hostile basis with some persons; (2) Standard basis; (3) Basis of Individual standard; (4) Habit basis; (5) Truancy from school.

### 22.8 Keywords

- **Delinquency**: bad or criminal bahaviour.
- **Conflict**: A situation in which people, groups or countries are involved in a serious disagreement.
- **Temperamental**: A person's nature as shown in the way they react to situations.
- **Ego**: Your sense of your own value and importance.

### 22.9 Review Questions

1. Define "Backward children". Explain the characteristics of backward children.
2. What do you understand by "delinquent children".
3. Give any five characteristics of delinquents.
4. Give at least five types of delinquency. Explain.
5. What is aggressive tendency?

**Answers: Self Assessment**

1. (i) 85 (ii) delinquent (iii) chronological 
   (iv) Juvenile delinquent (v) I.Q.
2. (i) (b) (ii) (a) (iii) (c) (iv) (a) 
   (v) (b)
3. (i) False (ii) True (iii) False (iv) True 
   (v) True (vi) False

### 22.10 Further Readings

1. Special Education: Daniel P. Hallahan, James M. Kauffman, Paige C. Pullen; Pearson Education, Inc.
2. Special Education: Linda Wilmshurst, Ph.D., ABPP, Alan W. Brue, Ph.D., NCSP.
Unit 23: Identification, Causes, Problems of Backward and Delinquent Children

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Objectives
The objectives of this unit can be summarized as below:
• to discuss about identification of backward children.
• to describe the causes and problems of backward children.
• to explain about the educational provisions of backward.
• to know about identification of delinquent children.
• to analysis about the causes and problems of delinquent children.

Introduction
One of every six students that are in the classroom today has been calcification as backward child or slow learner. Usually this type of child is very difficult to recognition backward child is the students with below average cognitive abilities who are not disabled in this unit. We will discuss about backward children, their identification, causes and problems as well as delinquent children. Juvenile delinquency, substance abuse and violent behaviors among children have increased dramatically over the last 20 years. It is to be believed that the increasing delinquency rate has been caused by the signification emphasis placed on sociological theories and the rehabilitative program as a developed and implemented.

23.1 Identification of Backward Children
Backwardness may be identified by employing formal and informal methods. The observation technique is most commonly used by teachers and parents or guides, counsellors and researcher. The following are the four methods which are used for this purpose.
1. **Observation Method:** It is both formal and informal method of identifying backward children. Teachers and parents use this method. They observe their wards and pupils daily in home and in classroom.

2. **Mental Tests:** Its group test of intelligence, verbal and non-verbal are used to measure the mental age of the students. By comparing mental age with chronological, the backwardness can be identified. This is a statistical method.

3. **Achievement Test:** Achievement tests in school subjects can be used to assess the level of achievement. If the child is poor in all subjects, it will be considered as general backwardness. This child is poor in one subject it will be treated as specific backwardness.

4. **Personality Inventory and Case Study:** The adjustment inventory is used for identifying the area of maladjustment. The school maladjustment, indicates the backwardness. The school records or conducting case study of the child can also be used for locating the backwardness.

### 23.2 Etiology of Backwardness (Causes)

There are several cause of backwardness, some important causes have been listed here:

1. Low intelligence,  
2. Physical cause,  
3. Poor environment of family,  
4. Truancy,  
5. Poor conditions of school,  
6. Postural defects.

There may be other causes of backwardness, it depends on the individual conditions of living.

1. **Physical cause:** Physical defect may be also equally important in contributing towards backwardness. Schonell how found about 75% backwardness is due to the various types of physical diseases and defects e.g., defective eyesight, hard of hearing, speech defects chronic diseases (like typhoid, tonsil, cough trouble, stomach trouble) poor nourishment and physical deformities. Burt has found the following facts through his studies: (1) 30% of backward children were poorly nourished, (2) 10% very seriously ill nourished, (3) 37% were suffering from tonsils, speech defects-stammering and suturing He has noted that eyesight and hard hearing was the most common cause.

2. **Postural Defects:** Postural defects may be of two types, (a) acquired, and other (b) innate. Postural defects may lead to the defects in vertebral column, which may lead to lack of concentration and sitting for long period and hence promote backwardness. Burt has found that they were very excitable and emotional. Boys were found more dominance and girls were noted with submissive and timid nature. These students are either more talkative, responsive, excitable and emotionally instable or they may be slow, submissive, timid, repressed and nervous.

3. **Poor Environment of Family:** Burt has found that 12% of backward children were having poor home environment and 8% were having poor school atmosphere. If the home environment is poor, the parents cannot manage even essential reading books etc. for their children and therefore they become backward. Thus, low economic conditions of home may lead to many complexes regarding reading material, clothing’s (uniforms), Fees etc. The backwards and sympathy from their parents. They feel neglected and becomes backward. The following other factors related to home also contribute towards backwardness: 1. Presences of step father and step mother, 2. Quarrels in the family, 3. Authoritarian atmosphere, 4. Mental abnormality of the parents, 5. Unhealthy sibling’s competitions, 6. Low social status of the family, 7. Poverty, 8. Overcrowding in family, 9. Position of the family, 10. Bed neighborhood, 11. Lack of appreciation from parents on success and achievements, and 12. Unfavorable comparison by parents.

4. **Poor Conditions of School:** If the teachers in the schools are not sympathetic, do not love and take care of their students, do not have willingness to work, may be give rise to more backward students. Horror of teacher, lack of personnel guidance programmes, harsh treatment of teachers etc., are some other important cause of backwardness in schools. In efficient and untrained teachers, wrong and unpsychological teaching methods, defective time table, lack of interest in the subject, unhygienic conditions in schools and long absence in school due to illness etc., are also the factors which are responsible for backwardness.
5. **Low Intelligence**: Low intelligence or lack of general intelligence is the primary cause of backwardness. Burt has found that every three children out of five backward children have I.Q. less than 70.

According to this findings ‘in every big primary school out of very 8 children will be I.Q. less than 85’. Therefore it is very necessary to administer and analyze intelligence test to locate such students. One of the basis of these tests lack of intellectual, perceptual and visual ability can be visualized. They may help us in knowing the extent of their intelligence and to help us in perceiving the intellectual causes. Burt has recorded that 75 percent backwardness is due to low intelligence.

Did u know? Over protection and underproduction both may generate backwardness.

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### 23.3 Problem of Backward Children

A checklist containing 69 behaviour symptoms arranged under five problem patterns was primarily aimed at identifying specific problems of mild retardates who constitute a significant group of backward children. A single problems provides a clue to analyse certain learning problems of child.

1. **Cognitive Learning Problems**: (1) The backward children learn at a slower rate and they face difficulty in retaining what they have learned. (2) The backward children prefer concrete learning to abstract learning. (3) Transfer of learning becomes impossible for backward children. (4) They lack judgement and common sense and they are highly destructible. (5) They gain from direct teaching and do not acquire skills incidentally and (6) A slow learning is an underachiever and has a very short span of attention.

2. **Language or Speech Problems**: (1) Verbal expressions for slow learners are difficult. (2) Oral reading is more difficult than silent reading. (3) Backward children face articulation problems. (4) Proper expression of thoughts becomes difficult for them.

3. **Auditory Perceptual Problems**: (1) Backward children face trouble in writing from dictation. They usually leave common prefixes and suffixes while writing. (2) backward children fail to understand verbal direction. So they are unable to give proper reply, when a question is asked. (3) They prefer visually presented materials to orally presented materials. (4) Identification of different sounds becomes difficult for them. They also find difficulty in distinguishing between similar sounding words. (e.g., Tap-Tap-Tap, Pen-Pin etc.). (5) Backward children usually given inappropriate answers to verbal questions. They also fail to learn the art of counting by memory.

4. **Visual-Motor Problems**: (1) Backward children are easily distracted by visual stimuli. They have awkward movements. (2) They find it difficulty to recall to memory the objects that they see. (3) They have a very poor handwriting and face difficulties in motor work. Very often they complain about physical problems. Recognition of common objects becomes a problems for them. (5) Backward children prefer part learning to whole learning and find oral learning tasks easier.

5. **Social and Emotional Problems**: (1) Backward children do not have the stamina to sit in a class for long periods. (2) They are lovers of solitude and are not gregarious. They fail to make friends and are not at all sociable. (3) Backward children become aggressive towards their friends and peers on trivial matters and they are afraid and self-conscious. They daydream in excess compared to normal children. (4) Nail-biting is another interesting characteristics of backward children. Sometimes they also engage themselves in anti-social activities. (5) Their mood changes frequently and their achievements is below expectancy. (6) They prefer not to work in a group and have inappropriate and excessive verbalisation.
23.4 Educational Provision of Backward Children

The following methods to prevent backwardness, if it is not due to lack of intelligence. The cure for the backward students having low intelligence is very difficult and complex. They will remain always backward in studies than the average students. The following are some suggestions for the education of backward children.


1. Administrative provisions are of three types:
   
   (a) Backward child in regular class or mainstream
   
   (b) The Special class for backward children, and
   
   (c) The Special schools of backward children.

Medical examinations should be arranged periodically to find out the physical status of the children. If the child suffers from some disease, the remedies should be applied for that and the education should also be arranged accordingly.

(a) It has been observed that backward children study in regular classes with the average children. The regular teaching is adequate for them because they can not pace with regular class. It is the responsibility of the teacher that he should help them to deal with them. There should be provision for tutorial classes for the backward student. Teacher should have helping and sympathetic treatment. They require sufficient individual attention in the classroom.

(b) The special class of backward children should be arranged in the school to remove their difficulties. Teacher should have special qualification and training of teaching. He should understand their needs and problems.

Their parents may have some objections. They should be taken in confidence that the class has been formed for their betterment.

(c) The special schools for backward children: There are separate schools for blind, deaf and dumb children. Similarly, Separate schools may be established for such students. The curricular, objectives, methods of teaching and teachers are to be managed according to their needs and problems. The parents of such children may not like such isolation of the children from regular schools. Such school may be expensive and costly for children.

The class size of specially for backward students should be small 15 to 20 students.

Self Assessment

1. Fill in the blanks:

   (i) ......................... is both formal and informal method of identifying backward children.
   
   (ii) Mental test is .................... method.
   
   (iii) The school ..................... , indicates the backwardness.
   
   (iv) The observation.......................... is most commonly used by teachers and parents or guides, counselors and researcher.
   
   (v) If child is poor in one it will be treated as specific .................. .
23.5 Identification of Delinquent Children

The delinquent children are identified by observing their behaviours in society and school, situation. Delinquency behaviour is a part of a dynamic process and it can be understood only in relation to the sequence of experience of which it is a part. So when we deal with juvenile delinquency, we must view it in terms of both the conditions of the individual person or the social environment in which he lives.

The violate the law of the land and commit offences like thefts, gambling, cheating, pick-pocketing, number, robber, dacoity, destruction or property, violence and assault, intoxicating, vagrancy begging, kidnapping abduction and other sexual offences etc.

23.6 Etiology of Delinquent Children or Delinquency (Causes)

Delinquency is a acquired behaviour of a child which is not in accordance with social standard and norms. It is not caused by one single factor but it is an end product or several factors. Some are hereditary and other are environmental, social and psychological. There may be some physiological factors are responsible of delinquency. These are as follows:

1. Heredity Factors
2. Environmental Factors
3. School Environment
4. Physical Constitutional Factors and
5. Psychological Factors

1. Heredity Factors: In some of the studies, it has been found that the heredity also contributes for delinquency. The children may get certain delinquency-tendencies form their parents (heredity) who are suffering from epilepsy etc. Certain inherited physical defects may also give rise to delinquency e.g. an ugly boy in physical aspect may wish to destroy whole society because his defect was laughed at, and therefore he may adopt anti-social behaviour.

   Mental retardation and low I.Q. tendencies are also sometimes help in developing delinquency. Parents who have low. I.Q. generally have their children of lower I.Q., which may encourage anti-social behaviour.

   The innate emotional unstability is also found responsible for anti-social behaviour. Aggression may lead to delinquency.

   The sex of child also plays an important part e.g. The girls show delinquent behaviour during their menses. The maladjusted parents also have maladjusted off-spring and this maladjustment may also help in getting delinquency.

2. Environment Factors: The following factors play an important part in causing delinquency.

   (1) The poor socio-economic status of the family e.g. 'hunger and starvation tempt people to tread the easy devilish path of crime.' Primary needs are not fulfilled. (2) Unemployment for long time may lead to anti-social behaviour like stealing or getting money through using illegal acts, (3) Presence of step father or mother, (4) Quarrels among the parents, (5) Lack of parental love and affection, (6) Discriminatory on partial treatment towards children, (7) Over or under protection by parents, (8) High expectations and ambitions of parents from their children. Parents have usually high expectation, (9) Either too lenient or to harsh discipline, (10) Delinquent members of the delinquent home, (13) Bad friends and classmates are not good, (14) Sexual and poor films and T.V. Programmes (15) Poor neighbourhood and bad peers, (16) Uncongenial school atmosphere, (17) Parents low character and mental abnormality and (18) Lack of recreational facilities, or cultural programmes.

3. School Environment: A child enters in school after his home and family environment. The teacher is an ideal for the students. The following factors may causes for delinquency.

   (1) Teacher-behaviour is not impartial. He favours some of the students and his behaviour not sympathetic for the students, may cause for delinquency.

   (2) Individual difference. In teaching process of classroom may not consider the individual difference. There is great variation among the students with regard interest needs and temperament. If the child, needs are not satisfied, it may great tension in him.
Teaching methods and techniques are appropriate for some of the students. They would like to attend the class, they may develop the habit of truancy. The high work load assignment, lack co-curricular activities, the examination, strict discipline may cause for delinquency.

4. **Physical Constitutional Factors**: The physical deformities of a child may be one the reason for delinquency. The defects of body organs make the child sensitive and emotional.

5. **Psychological Factors**: Freud 'Psycho-analysis' is the significant factors for delinquency. The mental retardation development of glands, emotional unstability and mental diseases are the factors of delinquency.

**Causative Factors**: These are classified into two major categories:

(A) **Primary Factors** and (B) **Secondary Factors**

**A) Primary Factors**: Biological and Psychological Factors

1. Biological Factors:
   (a) Inheritance and (b) Constitution defects

2. Psychological Factors:
   (a) Intellectual Seakness (b) Lack of security and affection
   (c) Mental disease (d) Emotional Instability
   (e) Weak supper ago and (f) Personality trait

(B) **Secondary Factors**: Social and Environmental Factors

1. Biological Factors:
   (a) Family (b) Society

2. Environmental Factors:
   (a) School Environmental

**Review of Causative Factors**: Some eminent scholars reveal that causative factors are really hypotheses, attempting to account for the deviant behaviour in the individual case. William Healy, in his research on 'delinquency,' set the pattern for this approach and discovered that, in contrast to their many, general theories of criminal behaviour, delinquency in individual cases is a product of multiple causative factors.

### 23.7 Problems of Delinquent Children

- The delinquent children have destructive and aggressive nature, people do not want to talk them, and do not want to keep any relation with them, so the delinquent children feel lonely. They are socially "boycott".
- They feel depressed and again do more crimes and destruction.
- They have more reading and writing disability as compared to other disable people.
- Delinquent children are twice as likely to live in a correctional facility, drug treatment centre or on the street after leaving school.

**Did u know?** The diseases related to sex organs may cause delinquency.

### Self Assessment

2. Multiple Choice Questions

*Choose the correct option:*

(i) ......................... backwardness is due to the various types of physical diseases and defects.

(a) 50% (b) 75% (c) 80% (d) 90%
**Notes**

(ii) ....................... of backward children were poorly nourished.
(a) 20%  (b) 10%  (c) 30%  (d) 40%

(iii) ....................... is not the cause of backwardness in class.
(a) Horror of teacher  (b) Lack of personnel guidance programmes
(c) Harsh treatment of teachers  (d) water supply.

(iv) A checklist containing ....................... behaviour symptoms arranged under five problem patterns.
(a) 69  (b) 60  (c) 60  (d) 55

(v) ....................... is the significant factor for delinquency.
(a) Mental factor  (b) Secondary factor
(c) Primary factor  (d) Psycho-analysis

(vi) Which of the following is not a psychological factors.
(a) Intellectual seakness  (b) Emotional stability
(c) Personality trait  (d) Constitution defects

### 23.8 Summary

- **Backwardness** may be identified by employing formal and informal methods. The observation technique is most commonly used by teachers and parents or guides, counsellors and researcher. The following are the four methods which are used for this purpose.
- It is both formal and informal method of identifying backward children. Teachers and parents use this method.
- There may be other causes of backwardness, it depends on the individual conditions of living.
- **Physical cause:** Physical defect may be also equally important in contributing towards backwardness. Schonell how found about 75% backwardness is due to the various types of physical diseases and defects e.g., defective eyesight, hard of hearing, speech defects chronic diseases (like typhoid, tonsil, cough trouble, stomach trouble) poor nourishment and physical deformities.
- (1) The backward children learn at a slower rate and they face difficulty in retaining what they have learned. (2) The backward children prefer concrete learning to abstract learning, (3) Transfer of learning becomes impossible for backward children. (4) They lack judgement and common sense and they are highly destructible. (5) They gain from direct teaching and do not acquire skills incidentally and (6) A slow learning is an underachiever and has a very short span of attention.
- Medical examinations should be arranged periodically to find out the physical status of the children. If the child suffers from some disease, the remedies should be applied for that and the education should also be arranged accordingly.
- The special class of backward children should be arranged in the school to remove their difficulties. Teacher should have special qualification and training of teaching. He should understand their needs and problems.
- **The delinquent** children are identified by observing their behaviours in society and school, situation.
- Delinquency behaviour is a part of a dynamic process and it can be understood only in relation to the sequence of experience of which it is a part.
- Delinquency is a acquired behaviour of a child which is not in accordance with social standard and norms.
• There may be some physiological factors are responsible of delinquency. These are as follows:
     Factors and 5. Psychological Factors.

• **Heredity Factors:** In some of the studies, it has been found that the heredity also contributes
  for delinquency. The children may get certain delinquency-tendencies form their parents
  (heredity) who are suffering from epilepsy etc. Certain inherited physical defects may also give
  rise to delinquency.

• **Environmental factors:** The following factors play an important part in causing delinquency.
  (1) The poor socio-economic status of the family e.g. 'hunger and starvation tempt people to
     tread the easy devilish path of crime.' Primary needs are not fulfilled. (2) Unemployment for
     long time may lead to anti-social behaviour like stealing or getting money through using illegal
     acts.

• **School Environment:** A child enters in school after his home and family environment. The
  teacher is an ideal for the students. The following factors may causes for delinquency. (1) Teacher-
  behaviour is not impartial. He favours some of the students and his behaviour not sympathetic
  for the students, may cause for delinquency.

• **Physical Constitutional Factors:** The physical deformities of a child may be one the reason for
  delinquency. The defects of body organs make the child sensitive and emotional.

• **Psychological Factors:** Freud 'Psycho-analysis' is the significant factors for delinquency. The
  mental retardation development of glands, emotional unstability and mental diseases are the
  factors of delinquency.

• **Causative Factors:** These are classified into two major categories: (A) Primary Factors and (B)
  Secondary Factors

  • The delinquent children have destructive and aggressive nature, people do not want to talk
    them, and do not want to keep any relation with them, so the delinquent children feel lonely.
    They are socially "boycott".

  • They feel depressed and again do more crimes and destruction.

  • The physical deformities of a child may be one the reason for delinquency. The defects of body
    organs make the child sensitive and emotional.

  • Freud 'Psycho-analysis' is the significant factors for delinquency. The mental retardation
    development of glands, emotional unstability and mental diseases are the factors of delinquency.
    Causative Factors: (A) Primary Factors and (B) Secondary Factors.

23.9 **Keywords**

• **Observation** : The act of watching somebody carefully for a period of time, especially to
  learn

• **Chronological** : arranged in the order in which they happened.

• **Personality** : The various aspects of a person's character that combine to make them different
  from other people.

• **Postural** : Connected with the way you hold your body when standing or sitting.

23.10 **Review Questions**

1. What are the different methods for identification?
2. What are the causes of backwardness?
4. What are the problems of backward children?
5. Write the identification and causes of delinquent children.
6. What are the prevention from delinquency?
Notes

Answers: Self Assessment

1. (i) Observation method  (ii) Statistical
   (iii) maladjustment  (iv) techniques
   (v) backwardness

2. (i) (b)  (ii) (c)  (iii) (d)  (iv) (b)
   (v) (d)  (vi) (d)

3. (i) True  (ii) True  (iii) False  (iv) False
   (v) True

23.11 Further Readings

1. Special Education: Linda Wilmshurst, Ph.D., ABPP, Alan W. Brue, Ph.D., NCSP
2. Special Education: Daniel P. Hallahan, James M. Kauffman, Paige C. Pullen; Pearson
   Education, Inc.
3. Special Education: Laura Rothstein; Scott F. Johnson; Sage Publisher, Inc.
Unit 24: Backward and Delinquent Children: Preventions and Teaching Strategies

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Objectives
The objectives of this unit can be summarized as below:
• to discuss about the prevention of backward children.
• to explain about the method of teaching for backward children.
• to describe about the prevention of delinquency.
• to explain about treatment and teaching strategies for delinquent children.

Introduction
Backward children are too often interring prated as meaning "being unable to learn". The causes for backward children learning difficulties can vary greatly. Teaching backward students can be more difficult than teaching students who are doing well enough or very pupils present a challenge teacher has to respond to resolving backward children's problems is a major challenge for a teacher. We will also know about prevention and teacher strategies of delinquent children delinquency is a kind of abnormality when an individual deviates from the course of normal social life. His behaviour is called delinquency. When a juvenile below an age specified under a statute exhibits behavior. Which may prove to be dangerous to society. If is very necessary to prevent it. These children require total care. So the teaching should be more effective in case of delinquency.

24.1 Prevention of Backward Children
• Provide a quiet place to work, where the child can be easily observed and motivated.
• Keep homework sessions short.
• Provide activity times before and during homework.
• Add a variety of tasks to the learning even if not assigned, such as painting a picture of a reading assignment.
• Allow for success.
• Ask questions about the assignment while the child is working.
Notes

- Go over the homework before bed and before school.
- Teach how to use a calendar to keep track of assignments.
- Read to the child.
- Student must take information and do three things with it beside reading. For example, read it, explain it to someone else, draw a picture of it, and take notes on it.
- Be patient but consistent.
- Do not reward unfinished tasks.

Self Assessment

1. Fill in the blanks:
   
   (i) Teaching should be arranged according to the .......... of these children.
   
   (ii) ................. should not be assigned heavy load of work.
   
   (iii) Teacher should arrange some ............... for these children
   
   (iv) Low intelligent children should be taught with ................. .
   
   (v) For the prevention of backward children provide a quiet place to work, where the child can be easily ........... and motivated.
   
   (vi) Teachers should not give .......... on unfinished tasks.

24.2 Method of Teaching Backward Children

In the classroom teaching, the backward children should be treated psychologically.

1. Healthy atmosphere should be created at school and also in community. It should be conducive for learning.

2. Teaching should be arranged according to the interests of these children. Their needs and problems should be considered.

3. Backward children should not be assigned heavy load of work. They should be assigned easy school work.

4. Teacher should be serious and should take classes regularly. He should pay individual attention.

5. Parents should be informed regarding student's ability and should request to treat accordingly. They should be given progress report.

6. Practical activities should be organized for their participation. They should be assigned some practical work.

7. Teacher should not use harsh treatment for them. Their responses should be immediately reinforced.

8. Good methods of teaching be employed in class.

9. Children should be motivated properly.

10. Teacher should arrange some extra class for these children. Tutorial classes should be organized.

11. Low intelligent children should be taught with slower speed. Teacher should pace with them.

12. Teacher should consult expert and specialists if need arise and may refer the children to them.

13. Programmed instructional material can be used for remedial purpose. Their should be the provision for assimilation.

14. The curriculum should be according to their needs and requirements. It should be divided into smaller units. Theoretical knowledge should imparted after the practical work.

15. The deductive method of teaching should be used by the teacher in classroom.
24.3 Prevention and Treatment of Delinquency

Prevention and treatment both the devices are employed in delinquency. It has two phases the first phase is to treat those who have become delinquents, another phase is to prevent delinquency by organizing educational programmes and other activities in such a way that children may not become delinquents.

1. Treatment of delinquents and
2. Prevention from delinquency.

1. Treatment of Delinquent Children: Generally the following methods and techniques are use in the treat of delinquents.
   1. Psychological method of treatments and
   2. Psychoanalytic method of treatments.

   (a) Camp programme approach
   (b) Community Planning or Sociological method and
   (c) Change of environment.

(a) Camp programme approach: In this approach, a camp is made a treatment centre for the adolescent because it is generally felt that the adolescents are more difficult to handle without intensive observation. This programme has got three main themes:

(i) Group-counselling is keystone of the programme, which was "built around the concept of the conscious cooperation of all elements within it for the welfare and development of the inmates."

(ii) The camp programme strive to attain the cooperation of guards and to involve the inmates in their own treatment.

(iii) It has a 'Probation-Recovery Camp' also if the campers do not have a desirable home to go back to. This approach has been used for prisoners in USA but now attempts are being made to use it for non-prisoners also.

(b) Community Planning or Sociological Method: After identifying the delinquent children efforts are made to change the environment of the children. The basic needs of child are fulfilled. Parent are also approached to have proper attitude towards the goods deeds and bad habits. This method is based on good suggestion, sympathy and good instructions.

(c) Change in the Environment: When it is found that the existing environment can not be improved, the delinquent child has to be shifted to some other good environment e.g. in nurseries or reformatories.

(2) Psycho-analytic Method of Treatment: Though it is very time consuming and difficult method, but very pinpointed and effective one. By adopting 'Psychonalysis' the clinical psychologists diagnose the reasons of delinquency and try to cure. "Psychoanalysis is a comprehensive approach to human behaviour whose broad outlines were laid down by Sigmund Freud. It comprises a theory of personality development and functioning, psychotherapeutic techniques, and research techniques for the investigation of personality functions."

Treatment of delinquent children is done by psychotherapy. The counsellor or psychotherapist may use an appropriate methods on the basis of his observation and magnitude of the problem:
(1) Re-education: The scientific approach which is very much conducive for treating juveniles is re-education. This technique reforms the offender, re-educates him and rehabilitates him. The objectives also include the change of behaviour and attitude of the offender. By that he will look upon the world as a fully potential friend. Social adaptation under better conditions is possible through this technique.

(2) Mental Catharsis: Catharsis means the avoidance of under repression. It provides opportunity to the child to express his pent up and suppressed emotional feelings by means of free expression. Catharsis consists simply in eliminating troubles, worries and conflicts. Therapist has to hear the delinquent's outpouring patiently and without imposing any comments of his own. Through this method, the delinquent is encouraged to realise the cause of his own problems.

(3) Persuasion: Through this procedure, the patient's symptoms, actions and reactions are analysed, many logical and common sense facts are suggested and the delinquents it therapists may persuade the delinquent not to get involved in delinquency in future. But this persuasion should be logical and appealing.

One major drawback of this procedure is that it is limited to the conscious level, whereas the delinquents whose problems lie in the unconscious, cannot benefit from this technique.

(4) Suggestion: Suggestion is nothing but the implantation of an idea and is a successful appeal to the subliminal self. It is true that children are more suggestive than adults. Positive suggestions may strengthen the superego of juveniles. Basically this technique implies the influence of one person upon the other and it is a process of communication from one personality to another. It is one of the oldest techniques of mental treatment and is used to supplement other methods of cure.

(5) Change in Environment: Different studies on delinquency reveal that changes in human and material environment of the delinquent can help in removing many of the symptoms of the delinquency in him. Nobody is a born delinquent. Rather delinquents are the products of environmental influences. Psychotherapists suggest that the delinquents may be shifted to better environments like foster homes.

2. Prevention from Delinquency

The purpose of prevention is to develop attitudes, moral value and other competencies among the children so that they may not acquire anti-social behaviour. The prevention measures have a very wide field and requires the cooperation of home, school society and other social agencies. The causes of delinquency have been discussed that parents behaviour and home conditions are responsible for delinquency. There is an urgent need is to educate parents. The method of prevention of delinquency are as follows:

1. Home conditions and Family System and
2. State and social agencies.

(1) Family System and Well-Adjusted Homes: Rapid urbanisation and scientific advancement have resulted in weakening the family affecting the vitally important husband-wife and parent-child relationships. The consequential social change has an adverse effect on unified life in a family. In our traditioneloving society, the family is the sole agency for handing down the cultural heritage. The behaviour of the individual is regulated by social control groups to which he belongs. In big cities,
people keep oneself to oneself. They have one group security. Though physical health is good, many reactive depression, attributed to boredom, social isolation and a false set values.

Parents should not quarrel in front of their children and they must observe the norms of good conduct. They should be impartial and just to all the children. Besides that the parents must be aware of the interests of their children. The children should be made to realise that the parents are always there to help them whenever they face any problem.

**Home Conditions:** The following preventive measures should be used for improving the home conditions:

1. Proper atmosphere should be provided in the home.
2. Have sympathetic and affectionate attitude towards children. Parents' behaviour should be encouraging.
3. Parents should be given the knowledge of child psychology and child guidance. They should understand the needs of the children.
4. No over or under protection be given by the parents.
5. Keep conscious watch on the friends of your children.
6. ‘Population-education’ should be given to parents.
7. Adequate amount of pocket money be given to the children.
8. Parents should provide good examples themselves, show good or ideal behaviour.
9. Parents should know about the progress of their children in school. They should know their company in which they move.

**State and Social Agencies:** May be helpful or preventing delinquency in the following ways.

1. Should establish good schools with good staff, equipment, and atmosphere.
2. Should make provisions for educating the poor students by giving concessions and financial assistance.
3. Should try to eliminate evil influences in the society e.g., drinking and gambling.
4. Should open some ‘children homes’ to provide a homely atmosphere to illegitimate children.
6. Should sterilize persons having serious mental disorders to save our new generation.
7. Strict film censor policy should be there.
8. Antisocial persons should be adequately dealt with the law.
9. Should establish welfare councils like Bharat Scouts and Guides, National Youth Services, Red Cross Societies etc.
10. Slums area should be improved.
11. Students should not be allowed to participate in political activities.
12. Proper books and library facilities should be provided.
13. Should have provision for daily assemblies and for moral and religious education.
14. Should pay attention to improve the curriculum of the school for each class, more pertaining to practical life.
15. Proper records should be maintained about children.

**Task**

What should be the home condition for delinquent children?
2. Multiple Choice Questions

Choose the correct option:

(i) ...................... is keystone of the comp programme.
(a) Group counseling (b) Community planning (c) Pscho-analytic method (d) Persuasion

(ii) Treatment of delinquent children is done by-
(a) catharsis (b) persuasion (c) suggestion (d) psychotherapy

(iii) ...................... means the avoidance of under repression-
(a) Depression (b) Catharsis (c) Persuasion (d) Community planning

(iv) Which of the following is not purpose of prevention of delinquent children.
(a) attitudes (b) moral value (c) social behaviour (d) arrogant

24.4 Teaching Strategies for Delinquent Children

(1) Adequate Schooling: Adequate schooling can contribute a great deal towards the prevention and control of delinquency by playing a more responsible role. Personality development of children is largely influenced by the schooling. That is why, in many affluent societies, attempts are being made to make the school an extension of home with the same atmosphere of informality and freedom.

First, the school needs trained teachers with high moral character. They must be prepared to solve the problems of the students psychologically. In the school education must be imparted according to the child’s interests and abilities. Besides this, the school must have library and recreational facilities. Children must be encouraged to read. They are to be motivated by the teachers. Further, a coordination between homes and schools should be maintained. Teachers and parents should inform each other about the problems of the child.

(2) Recreational Activities: Research reports show that the recreational activities play an important role in preventing delinquency. In rural areas, the lack of healthy recreation and of a community centre may induce youths to make their gathering place with gamblers, prostitutes and other dubious acquaintances. Poor children living in slums do not have facilities for any healthy recreation. In most cases, it is necessary to take the child away from its unhealthy surroundings. It is wise to institute active guidance, allowing the child to establish new emotional bonds with healthy people. Improper use of leisure time is another sole cause of delinquency in children. Properly organised and supervised play and recreation can not only prevent delinquency among children but also improve their physical and mental health. Organised recreation has therapeutic values the provision of adequate broad-based recreation services may make a substantial measurable contribution to the dimension of the problem of juvenile delinquency.

School Environment: School environment can be made conducive for learning with help of the following measures:

(1) Only good and trained teacher should be appointed.
(2) Individual attention should be paid to children.
(3) Healthy recreational and co-curricular activities should be provided.
(4) Teacher should teach according to the age, ability and level of the students. He should pace with students.
(5) A.V. aids and library facilities should be used to make lesson more interesting.
(6) Teacher should select right teaching strategies.
(7) Educational, personal and vocational guidance programmes should be started. Counselling facility should be available.

(8) Teacher should try to maintain democratic environment of class and school. The school climate should be more open of class and school.

(9) There should be good coordination between homes and school through proper 'teacher-parent associations' etc.

(10) Medical check up should be arranged periodically for diagnosing physical defects, deformities and disease, among students.

The delinquents are found at stage of adolescence or secondary and higher secondary level. The child enters in the school with set pattern of his behaviour and attitudes. Even than education can play crucial role in both treatment and preventing delinquencing.

Self Assessment

3. State whether the following statements are True or False:
   
   (i) Personality development of children is largely influenced by schooling.
   
   (ii) The school need not trained teachers with high moral character.
   
   (iii) Children must be encouraged to read.
   
   (iv) Poor children living in slums do have facilities for any healthy recreation.
   
   (v) Teachers and parents should informs each other about the problems of the child.

24.5 Summary

• Prevention of backward Children:
  
  • By providing quiet place to work to child, keep homework sessions short, add a variety of tasks to the learning, ask questions about assignment, be patient but consistent, we can prevent the backwardness in children.

• Teaching Strategies:
  
  • Teaching should be arranged according to the interests, their need problems.
  
  • Practical activities should be organized for their participation.
  
  • Good methods of teaching are employed in class.
  
  • Low intelligent children should be taught with slower speed.
  
  • Curriculum should be according to their needs and requirements.

• Prevention of Delinquency: prevention and treatment both the devices are employed in delinquency.

(1) Treatment of delinquents.


(i) Psychological method - involves three devices

   (a) Camp programme approach

   (b) Community planning

   (c) Change of environment

(ii) Psychoanalytic method of treatment - It comprises a theory of personality development and functioning.

• Psychotherapeutic techniques and research techniques.

   (i) Rod education

   (ii) Mental catharsis
Notes

(iii) Persuasion
(iv) Suggestion
(v) Change in environment is some methods of above treatment.

• The purpose of prevention from delinquency is to develop attitude, moral value and other competencies among the children.

• The method of prevention of delinquency:
  (a) Home conditions and family system
  (b) State and social agencies

• Home system: Parents should not quarrel in front of their children they should not in partial to all the children, proper at most here should be provided, no over and under protection attitude of parents.

• State and social agencies: Should establish good schools with good staff, equipments, should eliminate evil influences, should have provision for daily assemblies and for moral and religious education, should open some children homes to provide homely atmosphere to illegitimate children.

• Teaching Strategies:
  (i) Adequate Schooling: Adequate schooling can contribute a great deal towards control of delinquency. For trained teachers with high moral character should be in school. Children must be encouraged to read.
  (ii) Recreational activities: Poor children living in slums do not have faciliti8es for any healthy recreation. Properly organized and supervised play and recreation cannot only prevent delinquency among children but also improve their physical and mental health.
  (iii) Social Environment: individual attention should be paid to children, healthy recreational and co-curricular activities should be provided, teacher should teach according to the age, ability and level of the students. Audio visual and library facility should be used. There should be good co-ordination between homes and school through proper teacher parent associations.

24.6 Keywords

• Juvenile : Connected with young people who are not yet adults.
• Psychoanalytic : To treat or study somebody who is mentally ill by asking them to talk about past experiences and feelings in order to try to find explanations for their present problems.
• Persuade : To make somebody do something by given them good reasons for doing it.
• Recreational : Connected with activities that people do for enjoyment when they are not working.

24.7 Review Questions
1. Give the methods of teaching backward children.
2. Write any five points for prevention of backward children.
3. What are the psychological methods of treatments?
4. What is prevention from delinquency?
5. Explain some teaching strategies.
Answers: Self Assessment

1. (i) interests  (ii) backward children
   (iii) extra classes  (iv) slower speed
   (v) learn  (vi) reward

2. (i) (a)  (ii) (d)  (iii) (b)  (iv) (d)

3. (i) True  (ii) False  (iii) True  (iv) False
   (v) True

24.8 Further Readings

1. Special Education: Laura Rothstein; Scott F. Johnson; Sage Publisher, Inc.
2. Special Education: Linda Wilmhurst, Ph.D., ABPP, Alan W. Brue, Ph.D., NCSP.

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Objectives
The objectives of this unit can be summarized as below:
• to know about the historical background of special education.
• to explain about education of children with special needs in international as well as national perspectives.
• to analyse major and supplementary schemes.
• to explain the initial experiments on integrated education in India.

Introduction
Over the years, the objective of the struggle has charged from survival to equality. The concept of equality includes the rights of the disabled as approved by the United General Assembly in 1975. Despite inclusion in the U.N. Charter, these rights have not become a practical reality for million of handicapped persons throughout the developing world.

India is committed to the welfare and uplift of its less privileged citizens. Towards this goal, several provisions have been included in the Indian Constitution for care and protection of disadvantaged groups.

Exploratory efforts began in 1980 to suggest a comprehensive law for the disabled. These continued and intensified in this decade. The goals of 1981 which was declared as a International year for Disabled Persons (IYDP) were equality and full participation.

In India, however, there is no such law but policies of education from 1964 on wards have recommended placement of these children in regular schools with adequate support system.

The centrally sponsored scheme for Integrated Education for Disabled Children (IEDC) was initiated in early seventies by the Government of India in various states. The scheme has been revised and now covers the following types of the handicaps.

1. Mental Retardation
2. Learning Disability
25.1 Historical Background of Special Education

The early history of special education started with the hearing handicapped as early as 1555 when the Spanish monk Pedro Ponce de Leon (1520-1584) taught a small number of deaf children to read, write and speak and learn academic subjects. Juan Pablo Ronet in 1620 wrote the first book on the education of the deaf and developed a one-handed manual alphabet that is being used even today. In England John Bulwer published another book on the education of the deaf in 1644, followed by the Deaf and Dumb Man's Tutor by George Dalgarno in 1680 which set out instructional methods.

The first school for the deaf in Great Britain was established in 1767 in Edinburgh by Thomas Braidwood. Braidwood’s method combined oral and manual method teaching alphabets and signs. At about the same time Samuel Heinickje (1729-1784) developed the oral method emphasizing lip reading and speaking skills in Germany at Leipzig in 1778 which was further developed by F.M. Hill (1805-1874).

In France, Michel del’ Epee (1720-1789) who established the first school in Paris in 1755, and Ambroise Sicard (1742-1822) were developing sign language. The French system also emphasized training of the senses of sight and touch which became the forerunner to Montessori's sensory training approach. Education of children with mental retardation began with the attempt by a French physician Itard (1775-1835) to educate an 11 year old boy who had been found living as a savage in the woods. This was documented in the book "The Wild Boy of Aveyron". Edward Seguin (1812-1880) followed the technique in France and United States and Maria Montessori (1870-1952) in Italy. Seguin published his book "Idiocy and its treatment by the physiological method" in 1866. It contained ideas which are relevant even now-total education of the child, individualization of instruction, beginning instruction at the child's current level of functioning, and rapport between teacher and pupil. These were included in the famous method of Montessori for the education of the handicapped and non-handicapped.

Decroly (1871-1932) in Belgium developed a curriculum for mentally retarded children early in the 20th century and established schools throughout Europe. Binet (1857-1911) made immense contribution with the invention of intelligence testing.

In 1839 the first blind and mentally retarded (MR) child was enrolled in the Perkins Institute for the Blind in the USA. In 1848 the first residential school for the MR was opened in Massachusetts. By 1917 all states except four provided instructional care for the mentally retarded in the USA.

The first public school with special classes for children with mental retardation was formed in Germany in 1859 and thereafter in other European nation in the next decades. In the USA the first public school with special classes for the MR was opened in 1896 at Providence, Rhode Island.

25.2 Education of Children with Special Needs: International Perspective

The concept of integrating CWSN in regular schools was introduced in many countries in 1960’s. 1970’s witnessed new initiatives in the area of integrated education, with awareness and services for children with special needs becoming more accessible. Further thrust was given to this sector when the UN General Assembly declared 1981 as the International Year of Disabled Persons, with equalization of opportunities and full participation of the disabled being the main goals. Subsequently, 1983-1992 was proclaimed as the Decade of the Disabled by UN. In this decade, UN standard rules on equalization of opportunities for persons with disabilities were framed in which education of children with special needs in regular schools along with appropriate services was emphasized. This Decade also became memorable as the World Conference on EFA was held in March, 1990, which affirmed the ultimate goal of meeting the basic learning all children, youth and adults. This Decade was followed by the UNESCAP Decade of the Disabled Persons from 1993-2002. During the ESCAP Decade, the Government of Spain in cooperation with UNESCO organized the World Conference on
Special Education

Notes

Special Needs Education in Salamanca in June 1994, which casted responsibility on the general school system to find ways of successfully educating all children, including those who have serious disabilities. Thus, various Declarations and Decades promoted by organisations like UN have had a significant effect on the policies regarding persons with disabilities.

Self Assessment

1. Fill in the blanks:
   (i) In 1839 the first blind and mentally retarded (MR) child was enrolled in the ............... for the blind in the USA.
   (ii) The first public school with special classes for children with mental retardation was formed in ............... in 1859.
   (iii) The concept of integrating ............... in regular schools was introduced in many countries in 1960s.
   (iv) The (1983-1992) decade became memorable as the world conference on ............... was held in March, 1990.
   (v) During the ESCAP decade, the government of Spain in cooperation with UNESCO organized the world conference on ............... in salamanca in June 1994.
   (vi) Da croly (1871-1932) in ............... developed a curriculum for mentally retarded children early in the 20th century.

25.3 Education of Children with Special Needs: National Perspective

Efforts to educate children with special needs began soon after independence when Ministry of Education established a special unit to deal with education of special children in 1947. The Ministry drew on the experience already gained by NGOs in this field since the last two decades of the nineteen-century, which saw the establishment of the first school for the Deaf in Bombay in 1883. The first school for the Blind was set up at Amritsar in 1887. Before the end of the century a number of special schools for the Blind and Deaf were set up. This had firmly established the special school tradition, which continued till the mid 1950s.

25.3.1 National Policy on Education (NPE) – 1986

The NPE brought the fundamental issue of equality centre stage. Section 4.9 of the policy clearly focuses on the needs of the children with disabilities. “The objective should be to integrate the physically and mentally handicapped with the general community as equal partners, to prepare them for normal growth and to enable them to face life with courage and confidence. The following measures will be taken in this regard:

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

25.3.2 Plan of Action (POA) – 1992

The NPE was followed by POA (1992). The POA suggested a pragmatic placement principle for children with special needs. It is postulated that a child with disability who can be educated in a general school should be educated in a general school only and not in a special school. Even those children who are initially admitted to special schools for training in plus curriculum skills should be transferred to general schools once they acquire daily living skills, communication skills and basic academic skills.
25.3.3 Rehabilitation Council of India Act (RCI) -1992

The POA was strengthened by the enactment of the RCI Act, 1992. Experience showed that there was no mechanism in the country to standardize and monitor the training of special educators and other rehabilitation professionals in the country. Therefore, in 1992, Parliament of India enacted the RCI Act, subsequently amended in 2000, to establish a statutory mechanism for monitoring and standardizing courses for the training of 16 categories of professionals required in the field of special education and rehabilitation of persons with disability.

Training of special educators and resource teachers that can offer support services to children with special needs in regular schools is the responsibility of RCI.

25.3.4 Persons With Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995:

The most landmark legislation in the history of special education in India is the Persons with Disabilities (Equal opportunities, protection of rights and full participation) Act, 1995. This comprehensive Act covers seven disabilities namely blindness, low vision, hearing impaired, locomotor impaired, mental retardation, leprosy cured and mental illness. Chapter V (Section 26) of the Act, which deals with education, mentions that the appropriate Governments and the local authorities shall:

- Ensure that every child with a disability has access to free education in an appropriate environment till he attains the age of eighteen years;
- Endeavour to promote the integration of students with disabilities in the normal schools.
- Promote setting up of special schools in governments and private sector for those in need of special education, in such a manner that children with disabilities living in any part of the country have success to such schools;
- Endeavour to equip the special schools for children with disabilities with vocational training facilities.

25.3.5 National Trust Act -1999

Another landmark legislation is the National Trust Act. In 1999, the Indian Parliament passed an Act entitled "National Trust for the Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disability. This Act seeks to protect and promote the rights of persons who, within the disability sector, have been even more marginalized than others. Though the National Trust Act of 1999 does not directly deal with the education of children with special needs, one of its thrust areas is to promote programmes, which foster inclusion and independence by creating barrier free environment, developing functional skills of the disabled and promoting self-help groups.

These three landmark legislations have highlighted the enormous thrust that this area has received from the Ministry of Social Justice and Empowerment and the Ministry of Human Resource Development.

What efforts have to be done for special children in India?

25.4 Major Schemes

The schemes dealing with CWSN can be categorized into educational and supplementary schemes. The Educational scheme includes the Integrated Education of Disabled Children (IEDC) and the
supplementary schemes include the Scholarship as well as the Assistance to Disabled Persons for Purchase/Fitting of Aids and Appliances (ADIP).

25.4.1 Educational Schemes for Children with Special Needs

The Government of India’s appreciation of the need to integrate children with special needs came in 1974, when the Union Ministry of Welfare launched the centrally sponsored scheme of Integrated Education of Disabled Children (IEDC). In 1982, this scheme was transferred over to the then Department of Education of the Ministry of Human Resource Development. The centrally sponsored scheme of Integrated Education of the Disabled Children provides educational opportunities for the disabled children in common schools, to facilitate their retention in the school system, and also to place in common schools, such children already placed in special schools after they acquire the communication and the daily living skills at the functional level. The scheme provides for the following:

- Actual expenses on books and stationery upto Rs. 400 per annum.
- Actual expenses on uniforms upto Rs. 200 per annum.
- Transport allowance upto Rs. 50 per month. If a disabled child 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 upto Class V.
- Escort allowance for severely disabled children with lower extremity disability at the rate of Rs. 75 per month.
- Actual cost of equipment subject to a maximum of Rs. 2000 per month for a period of five years.

Besides, the above mentioned provisions, it also provides for teachers’ salaries, facilities to students in terms of board and lodging allowance, readers’ allowance, transport allowance, escort allowance, cost of equipment, cost of uniform, cost of removal of architectural barriers, provision of resource room etc.

Self Assessment

2. Multiple Choice Questions

Choose the correct option:

(i) National Policy on Education (NPE) was formed in the year .............. .
   (a) 1990 (b) 1986 (c) 1980 (d) 1950

(ii) Plan of action was formed in ............... .
   (a) 1998 (b) 1990 (c) 1992 (d) 1996

(iii) Persons with disabilities act covers ............. disabilities.
   (a) 7 (b) 5 (c) 12 (d) 10

(iv) The educational scheme includes the ........ and supplementary schemes include the scholarship.
   (a) CID (b) IEDC (c) ADIP (d) DIC

25.5 Supplementary Schemes

Scholarship: The Government of India started giving scholarships for elementary and higher education to the visually impaired, hearing impaired and locomotor impaired children in 1955. Gradually, the number of scholars rose to 10,000. In 1974 the scheme was transferred to the states and today most of the states are awarding scholarships to those children with special needs who are pursuing elementary education in regular schools without support services.

Scheme of Assistance to Disabled Persons for Purchase/Fitting of Aids and Appliances (ADIP) Scheme: Education of CWSN cannot be successful until they are provided those essential aids and appliances that enhance their functional ability. Therefore, the Union Ministry of Social Welfare in 1981 launched the ADIP Scheme. The main objective of the scheme is to assist the needy disabled children in procuring durable, sophisticated and scientifically manufactured, modern, standard aids.
and appliances that can promote their physical, social and psychological well being by enhancing their educational potential. The scheme provides aids and appliances to locomotor disabled, visually disabled, hearing disabled, mentally disabled and multiple disabled.

25.6 Initial Experiments on Integrated Education in India

The early attempts to include CWSN in regular schools were through Project Integrated Education for the Disabled (PIED) and District Primary Education Programme (DPEP).

25.6.1 Project Integrated Education for the Disabled (PIED)

The first pilot project on integrated education in India came in the form of Project Integrated Education for the Disabled (PIED). PIED launched in 1987, was a joint venture of MHRD and UNICEF. This project was implemented in one administrative block each in Madhya Pradesh, Maharashtra, Nagaland, Orissa, Rajasthan, Tamil Nadu, Haryana, Mizoram, Delhi Municipal Corporation and Baroda Municipal Corporation. In these ten blocks, 6000 children with special needs were integrated in regular schools.

25.6.2 District Primary Education Programme (DPEP)

The success of PIED led to the inclusion of the component of Integrated Education of the Disabled (IED) in DPEP, a scheme launched by the Government of India for the development of elementary education.

25.6.3 Sarva Shiksha Abhiyan (SSA)

A recent initiative of the Government of India to Universalise Elementary Education is Sarva Shiksha Abhiyan (SSA). SSA is a response to the demand for quality basic education all over the country. However, UEE cannot be achieved unless children with special needs are also provided access to education. Hence, education of CWSN is an essential part of the SSA framework.

At present, IED in DPEP is going on in 242 districts of 18 states. In these states, approximately 6.21 lakh children with special needs have been enrolled in regular schools with adequate support services.

25.7 Summary

- The early history of special education started with the hearing handicapped as early as 1555 when the Spanish monk Pedro Ponce de Leon (1520-1584) taught a small number of deaf children to read, write and speak and learn academic subjects.
- The first school for the deaf in Great Britain was established in 1767 in Edinburgh by Thomas Braidwood. Braidwood's method combined oral and manual method teaching alphabets and signs.
- In France, Michel del' Epee (1920-1789) who established the first school in Paris in 1755, and Ambroise Sicard (1742-1822) were developing sign language.
- Education of children with mental retardation began with the attempt by a French physician Itard (1775-1835) to educate an 11 year old boy who had been found living as a savage in the woods. This was documented in the book "The Wild Boy of Aveyron". Edward Seguin (1812-1880) followed the technique in France and United States and Maria Montessori (1870-1952) in Italy.
- Decroly (1871-1932) in Belgium developed a curriculum for mentally retarded children early in the 20th century and established schools throughout Europe.
- In 1839 the first blind and mentally retarded (MR) child was enrolled in the Perkins Institute for the Blind in the USA.
The first public school with special classes for children with mental retardation was formed in Germany in 1859 and thereafter in other European nations in the next decades.

The concept of integrating CWSN in regular schools was introduced in many countries in the 1960s. 1970s witnessed new initiatives in the area of integrated education, with awareness and services for children with special needs becoming more accessible.

The NPE brought the fundamental issue of equality centre stage. Section 4.9 of the policy clearly focuses on the needs of the children with disabilities. "The objective should be to integrate the physically and mentally handicapped with the general community as equal partners.

The NPE was followed by POA (1992). The POA suggested a pragmatic placement principle for children with special needs. It is postulated that a child with disability who can be educated in a general school should be educated in a general school only and not in a special school.

The POA was strengthened by the enactment of the RCI Act, 1992. Experience showed that there was no mechanism in the country to standardize and monitor the training of special educators and other rehabilitation professionals in the country.

The most landmark legislation in the history of special education in India is the Persons with Disabilities (Equal opportunities, protection of rights and full participation) Act, 1995. This comprehensive Act covers seven disabilities namely blindness, low vision, hearing impaired, locomotor impaired, mental retardation, leprosy cured and mental illness.

Another landmark legislation is the National Trust Act. In 1999, the Indian Parliament passed an Act entitled "National Trust for the Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disability. This Act seeks to protect and promote the rights of persons who, within the disability sector, have been even more marginalized than others.

The schemes dealing with CWSN can be categorized into educational and supplementary schemes. The Educational scheme includes the Integrated Education of Disabled Children (IEDC) and the supplementary schemes include the Scholarship as well as the Assistance to Disabled Persons.

The Government of India’s appreciation of the need to integrate children with special needs came in 1974, when the Union Ministry of Welfare launched the centrally sponsored scheme of Integrated Education of Disabled Children (IEDC).

The Government of India started giving scholarships for elementary and higher education to the visually impaired, hearing impaired and locomotor impaired children in 1955.

Education of CWSN cannot be successful until they are provided those essential aids and appliances that enhance their functional ability.

The first pilot project on integrated education in India came in the form of Project Integrated Education for the Disabled (PIED). PIED launched in 1987, was a joint venture of MHRD and UNICEF.

The success of PIED led to the inclusion of the component of Integrated Education of the Disabled (IED) in DPEP, a scheme launched by the Government of India for the development of elementary education.

A recent initiative of the Government of India to Universalise Elementary Education is Sarva Shiksha Abhiyan (SSA).

Self Assessment

3. State whether the following statements are True or False:

(i) The number of scholars rose to 10,000.
(ii) The union ministry of social welfare in 1990, launched the ADIP scheme.
(iii) The first pilot project on integrated education in India came in the form of project integrated education for the disabled (PIED).
(iv) At present, IED in DPEP is going on in 150 districts of 20 states.
(v) SSA is a response to the demand for quality basic education all over the country.
25.8 Keywords

- Objective : Something that you are trying to achieve.
- Exploratory : Done, with the intention of examining something in order to find out more about it.
- Integrated : In which many different parts are closely connected and work successfully.
- International : Connected with or involving two or more countries.
- Perspective : A particular attitude towards something.

25.9 Review Questions

1. Explain the education of children with special needs in international and national perspective.
2. Write a not on the following-
   (a) National Policy on Education (NPE)
   (b) Plan of Action (PoA)
   (c) Rehabilitation Council of India Act (RCI)
3. What are the supplementary schemes?
4. What do you understand by District Primary Education Programme (DPEP)?
5. What is PIED?

Answers: Self Assessment

1. (i) Perkins institute (ii) Germany
   (iii) CWSN (iv) EFA
   (v) Special needs (vi) Belgium
2. (i) (b) (ii) (c) (iii) (a) (iv) (b)
3. (i) True (ii) False (iii) True (iv) False
   (v) True

25.10 Further Readings

1. Special Education : Laura Rothstein; Scott F. Johnson; Sage Publisher, Inc.
2. Special Education: Daniel P. Hallahan, James M. Kauffman, Paige C. Pullen; Pearson Education, Inc.
3. Special Education: Linda Wilmhurst, Ph.D., ABPP, Alan W. Brue, Ph.D., NCSP
Objectives

The objectives of this unit can be summarized as below:

• to explain about the disability act 1995 and its provisions.

Introduction

The Constitution of India ensures equality, freedom, justice and dignity of all individuals and implicitly mandates an inclusive society for all including persons with disabilities. In the recent years, there have been vast and positive changes in the perception of the society towards persons with disabilities. It has been realized that a majority of persons with disabilities can lead a better quality of life if they have equal opportunities and effective access to rehabilitation measures.

According to the Census 2001, there are 2.19 crore persons with disabilities in India who constitute 2.13 percent of the total population. This includes persons with visual, hearing, speech, locomotor and mental disabilities. Seventy five per cent of persons with disabilities live in rural areas, 49 per cent of disabled population is literate and only 34 per cent are employed. The earlier emphasis on medical rehabilitation has now been replaced by an emphasis on social rehabilitation. There has been an increasing recognition of abilities of persons with disabilities and emphasis on mainstreaming them in the society based on their capabilities. The Government of India has enacted three legislations (Equal Opportunities, Protection of Rights and Full Participation) for persons with disabilities viz. In this unit we will discuss about the disability act-1995 and its aspects in various fields of life, like education, employment, and social respect etc. for disabled persons.

26.1 Disability Act-1995

Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995 was enacted in 1995 to give effect to the Proclamation on the Full Participation and Equality of the People with Disability. The aims and objectives of the Act are:

• To spell out the responsibility of the state towards the prevention of disabilities, protection of rights, provision of medical care, education, training, employment and rehabilitation of persons with disabilities;
• To create a barrier free environment for person with disabilities in the sharing of development benefits, vis-a-vis non disabled persons;
• To counteract any situation of abuse and exploitation of persons with disabilities; and
• To make special provision of the integration of persons with disabilities into the social mainstream.
Blindness and low vision has been included in the definition of disability.

In order to achieve its aims and objectives the act imposes obligations on the appropriate governments (central, state and local governments) in the following areas:

- prevention and early detection of disabilities (Section 25)
- providing equality in education (Section 26, 27, 28, 29, 30, 31)
- providing equality in employment (Section 32, 33, 34, 35, 37, 38, 39, 40, 41, 47)
- providing affirmative action programmes in providing aids and appliances to persons with disabilities and preferential allotment of land at concessional rates for housing, setting up businesses setting up of special schools establishment of research centres establishment of factories by entrepreneurs with disabilities (Section 42, 43)
- providing non-discrimination by removing physical barriers (Section 44, 45, 46)
- providing research manpower development (Section 48, 49)
- setting up institutions for persons with disabilities (Section 52)
- providing social security for the disabled (Section 56, 67, 68)

26.1.1 Provision of Prevention and early detection of disabilities

In order to prevent the occurrence of disabilities, the appropriate government authorities have to (within their economic capacity and development):

- undertake surveys, investigations and research concerning the cause of occurrence of disabilities
- promote various methods of preventing disabilities
- screen all the children at least once in a year for the purpose of identifying "at risk" cases
- provide facilities for training to the staff at the primary health centres
- sponsor awareness campaigns and disseminate information on general hygiene, health and sanitation,
- take measures for pre-natal and post-natal care of mother and child;
- educate the public through the pre-schools, schools, primary health centres, village level workers and anganwadi workers;
- create awareness amongst the masses through television, radio and other mass media on the causes of disabilities and the preventive measures to be adopted.

26.1.2 Provision for Education under Disability Act–1995

In order to provide equal opportunities for the disabled in education, the appropriate government and local authorities have been entrusted with:

- Ensuring that every child with disabilities have access to free education in an appropriate environment till 18 years of age.
- Promoting the integration of students with disabilities in normal schools.
- Promoting setting up of special schools in government and private sector in such a manner that children with disabilities living in any part of the country have access to such schools and equip these schools with vocational training facilities.
- Conducting part-time classes in respect of children with disabilities who having completed education up to class fifth and could not continue their studies on a whole-time basis;
- Conducting special part-time classes for providing functional literacy for children in the age group of sixteen and above;
- Imparting non-formal education by utilizing the available manpower in rural areas after giving them appropriate orientation;
- Imparting education through open schools or open universities;
- Conducting class and discussions through interactive electronic or other media;
26.1.3 Provision for Employment under Disability Act–1995

The appropriate governments are to identify posts in government establishments, which can be reserved for disabled persons and review the list of posts at periodic intervals (not exceedingly three years) (Section 32)

At least 3 percent of vacancies in every government establishment are to be reserved for persons with disabilities. Out of which 1 per cent each shall be reserved for persons suffering from blindness or low vision and the other 2 percent for persons with hearing impairment and loco motor disability or cerebral palsy. But the central government may exempt any establishment from the above requirements if the nature of work in such establishments is such that disabled persons are unable to work in such establishments. (Section 33)

If a vacancy cannot be filled up due to non-availability of a suitable disabled person, the vacancy is to be carried forward to the next recruitment year and if in that next recruitment year, a suitable person with disability is not found, the post is to be filled by an interchange of categories of disabled persons. Only if there is no suitable disabled person available for the job, can an able person be employed. (Section 37)

Self Assessment

1. Fill in the blanks:

(i) According to disability act-95 ...................... has been included in the definition of disability under section (26) (U).

(ii) Under the section 25 of disability act-95 government authorities have to create awareness amongst the masses through .................. and other masses media on the cause of disability and preventive measures.

(iii) There is provision for providing every child with disability free for cost ................ and equipments needed for his education under................. .

(iv) In the 3% of vacancies section 27 1% each shall be reserved for persons suffering from blindness and other 2% for persons with ............. or locomotor disability.

26.1.4 Provision for Allotment of Land at Concessional Rate

The appropriate governments have to frame schemes to provide aids and appliances to disabled persons. (Section 42) Special schemes are to be notified for the preferential allotment of land at concessional rates for:

• Housing
• Setting up business
• Setting up special recreational centres
• Establishment of special schools
• Establishment of research centres
• Establishment of factories by entrepreneurs with disabilities (Section 43)

26.1.5 Provision for Non-discrimination under Disability Act–1995

In order to create a physical barrier free environment for disabled persons, the appropriate governments or local authorities have to (in their economic capacity and development) take special measures to:

• Adapt rail compartments, buses, vessels and aircrafts in such a way as to permit easy access to such persons;
• Adapt toilets in rail compartments, vessels, aircrafts and waiting rooms in such a way as to permit the wheel chair users to use them conveniently.
• Install auditory signals at red lights in the public roads for the benefit of persons with visually handicap;
• Make curb cuts and slopes in pavements for the easy access of wheel chair users;
• Engrave the surface of the zebra crossing for the blind or for persons with low vision;
• Engrave the edges of railway platforms for the blind or for persons with low vision;
• Devise appropriate symbols of disability;
• Provide warning signals at appropriate places. (Section 45)
• Provide ramps in public buildings;
• Provide Braille symbols and auditory signals in elevators or lifts;
• Provide ramps in hospitals, primary health centers and other medical care and rehabilitation institutions. (Section 46)

The appropriate government and local authorities are entrusted with sponsoring and promoting research in following areas:
• prevention of disability;
• rehabilitation including community based rehabilitation;
• development of assistive devices including their psycho-social aspects;
• job identification;
• on site modifications in offices and factories. (Section 48)

Universities, other institutions of higher learning, professional bodies and non-governmental organisations that undertake research on special education, rehabilitation and manpower development are to be provided financial assistance by appropriate governments for undertaking research for education, rehabilitation and manpower development. (Section 49)

26.1.6 Provision for Social Security under Disability Act-1995

While formulating rehabilitation policies the appropriate governments have to consult non-governmental organisations working in the field of disability. Within their economic capacity and development they are to undertake rehabilitation of all disabled persons for which financial assistance shall be given non-governmental organisations working in the fields of disability. (Section 66)

Insurance schemes or alternate security schemes are to be framed by the appropriate government for the benefit of its employees with disabilities. (Section 67)

Schemes are also to be framed for payment of an unemployment allowance to persons with disabilities that are registered with the special employment exchange for more than two years and have not been placed in any gainful occupation. (Section 68).

Task: What are policies of government about research areas of higher learning?

26.1.7 Implementation Agencies

The act has set up a central coordination committee at the national level to serve as a national focal point for disability matters to facilitate the continuous evaluation of a comprehensive policy towards solving the problems faced by disabled the persons. (Section 8) At the state level a state coordination committees have been set up. (Section 13) . To assist the central coordination committee and state coordination committees, a central executive committee (Section 10) and a state coordination committee have been set up. (Section 23)

The Chief Commissioner and Commissioners for persons with disabilities have to safe guard the rights of persons with disabilities and submit reports to the government on implementation of the act. (Sections 57, 58, 59, 60, 61, 62, 63, 64, 65)
If there is any violation of the act, the aggrieved person can approach the head of the establishment under which he/she is employed or the Chief Commissioner or the Commissioner for Persons With Disabilities or the High court under article 226 of the Constitution of India or the Supreme Court under article 32 of the Constitution of India or even the National or State Human Rights Commissions.

Self Assessment
2. State whether the following statements are True or False:

(i) There is no engagement of the surface of the zebra crossing for the blind or for persons with low vision.

(ii) In order to create a physical barrier free environment for disabled persons, the government have to take special measure like to make curb cuts and slopes in pavements, adapt rail compartments, vessels aircrafts and waiting rooms for disabled persons.

(iii) The appropriate government and local authorities are not responsible for promoting the research in the area of prevention of disability.

(iv) Insurance schemes or alternate security schemes are to be framed by the appropriate government for the benefit of its employees with disability.

26.2 Summary
• Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995 was enacted in 1995 to give effect to the Proclamation on the Full Participation and Equality of the People with Disability.

• The disability act has the following provision:
  (i) Provision for Early detection: Provision for early detection of disabled person has been given in act. The surveys, investigations and researches concerning the causes of occurrence of disability and the various methods of preventing disabilities are used under the provision.
  (ii) Provision for Education: Under section 26, 27, 28, 29,, 30 and 31) of disability act there is provision of equal opportunity in education like free education till 18 years of age, promoting the students with disabilities in normal schools, setting up special schools, conducting part time classes for providing functional literacy, education through open school.
  (iii) Provision for Employment: (Under section 32, 33, 34, 35, 37, 38, 39, 40, 41, 47) of disability act the opportunities for employment for disabled has been given. According to it 3 percent reservation for disabled persons in every government has been given , out of which 1 percent for blindness or low vision and 2 percent for hearing impairment.
  (iv) Provision for Allotment of land at concessional rate: Disability act has provided action programmes and schemes for allotment of land at concessional rate under section (42, 43).
  (v) Provision for removing physical barriers: According to section (44, 45, 46) special measures have been provided for creating physical barrier free environment for disabled persons. Like provide appropriate symbol of disability, Braille symbols, engrave the surface of zebra crossing for blind etc.
  (vi) Social Security: Under section (56, 67, 68) of disability act 1995 the social security of disabled persons is considered a major responsibility of government.

(vii) Implementation agencies: Central co-ordination committee at the national level and state level has been set up for solving the problems of disabled persons.
• The chief commissioner and commissioner for persons with disabilities have to safe guard rights of persons with disabilities.
• If there is any violation of the act, the victim can approach to the chief commissioner or high court or even national or state human rights commission.
26.3 Keywords

- Detection: The process of detecting something.
- Affirmative: A positive statement or response.
- Discrimination: The practice of treating somebody or a particular group in society.

26.4 Review Questions

1. Explain the prevention and early detection of disability.
2. What are the affirmative action done by governments?
3. What are education policies for disabled children?

Answers: Self Assessment

1. (i) blindness and low vision (ii) television, radio
   (iii) special books, section (27) (iv) hearing impairment
2. (i) False (ii) True (iii) False (iv) True

26.5 Further Readings

1. Special Education: Laura Rothstein; Scott F. Johnson; Sage Publisher, Inc.
2. Special Education: Daniel P. Hallahan, James M. Kauffman, Paige C. Pullen; Pearson Education, Inc.
3. Special Education: Linda Wilmshurst, Ph.D., ABPP, Alan W. Brue, Ph.D., NCSP.
Unit 27: The IED Scheme

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Objectives
The objectives of this unit can be summarized as below:
• to explain about scheme of integrated education for the disabled children 1992 (IED).
• to describe about evaluation/history of IEDC in the directorate of education (DoE).
• to discuss about the functional structure of IEDC in N.C.T of Delhi.
• to explain about the step taken by the date of education.
• to describe about scheme of integrated education for the disabled children 1992.
• to analyse about the procedure for grants to state governments/UT administrations.
• to explain about the procedure for grant to voluntary organizations.
• to discuss about the conditions of grant of voluntary organizations.

Introduction
The education and training of individuals with disabilities has undergone many changes. A person, who is severely impaired, never knows her/his own hidden sources of strength until she is not treated like a human being and encouraged to shape her/his own life.

Integrated Education for Disabled (IED) is the education of disabled children in the regular classroom. It refers to the opportunity for children with special needs to participate fully in all the educational activities.
27.1 Scheme of Integrated Education for the Disabled Children 1992 (IED)

The country has witnessed a phenomenal expansion of educational opportunities in the post-Independence period. The disabled children, however, have not benefited substantially from this growth in educational facilities. The Government of India, therefore, has brought the education of this group of children for special attention to achieve the goal of education for all. The objective is to integrate the handicapped with the general community at all levels as equal partners, to prepare them for normal growth and to enable them to face life with courage and confidence.

27.1.1 Need of IED

Population census gives the figure of about 10 million disabled in Indian population. Obviously such a vast percentage of people can not be ignored while having any kind of vision or mission for our country. Integrating children in ordinary schools is the most effective and economical way of providing educational opportunities to them in large numbers. This also has the social and psychological advantages of giving a boost to their self-esteem to enable them to face life with courage and confidence.

27.1.2 History and Evaluation of IED

The IED scheme financed by the Ministry of Human Resource Development, Government of India, and the scheme is being implemented by the department of school education since 1983. At present it is part of the directorate of Primary Education and receiving substantial financial support under SSA.

It has substantial field support from the district DIETs and a large number of voluntary organizations and is being implemented bin schools run by the state government as well as registered and recognized societies. The nature of disability includes visual impairment, hearing impairment, mental retardation and orthopedic handicaps. At present over 36000 children in about 5600 schools come under the scheme. Nearly 2000 resource teachers are involved in the instructional programme.

27.1.3 Objectives of IED

The centrally sponsored scheme of Integrated Education for the Disabled Children (IEDC ) purports to provide educational opportunities for the disabled children in common schools, to facilitate their retention in the school system.

- To provide least restrictive environment to disabled children so that they may grow and develop like other children.
- To integrate the children with mild to severe disabilities to formal Govt. schools.
- Parent / Sibling Conselling
- To support manpower development activities and train required personal such as normal school teachers, DIET lecturers and itinerant teachers.
- To setup resource centres.
- To provide an equal opportunity to the disabled children and prepare them for life like other members of the society.
- To mainstream the disabled children to achieve principle of normalization.

27.1.4 Major Activities

- Conducting field surveys and assessment of disability.
- Development of resource support facilities and instructional materials at various levels.
- Training/orientation of resource personnel at various levels.
- Conducting awareness campaigns and enrollment drives.
- Distribution of assistance to the intended beneficiaries.
Notes

- **Identification of children with special needs**: Identification of Children with special needs (CWSN) from 0-14 age group done every year through House Hold Survey in all 70 district.

- **Integration of Children With Special Need (CWSN)**

- **Medical assessment Camps**

- **Providing assistive devices to CWSN**

- **Teacher's Training on IED**: 5 days long orientation training on IED have been given to provide academic support to CWSN in their class.

- **45 Days Resource Teachers training**: 45 days long training given to DIET lecturers teachers to serve as a resource persons to provide academic support to all primary & upper primary schools of their respective blocks/cluster.

- **Development of Instructional Materials**: 6 Folders and one teacher's handbook, 'Creative Equal Chances', 'Towards Inclusion' and 'Abhilasha' have been prepared and printed for providing concrete experience on disability and guidance to the parents and teachers for skill and concept training.

- **Parents Counseling**: For the better knowledge and awareness of disabilities, how to teach and help CWSN 15 - 20 active parents of CWSN have been helped. IEP of CWSN have been prepared. According to IEP, following steps discussed in counselling:

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**Did you know?**

These teachers responsible for the selected 8 - 10 schools in one block. Selection criteria of schools on the basis of the number of children of that disability. Teacher deployment at block level. Itinerant teachers completed their two days orientation training at state level.

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**Self Assessment**

1. Fill in the blanks:
   
   (i) Population census given the figure of about ....................... disabled in India.

   (ii) The IED scheme is financed by the ministry of ..................., government of India.

   (iii) The main objective of the IEDC (Integrated education for disabled children) scheme is to provide education for the .................. along with normal children in normal schools.

27.1.5 **Type of Scheme**

This is a centrally sponsored scheme under which the Central Government will assist the States/Union Territories in its implementation on the basis of the criteria laid down. Assistance for all the items covered in the scheme will be on 100 per cent basis but assistance for the programme would be conditional on provision of professionally qualified staff.

27.1.6 **Scope**

(i) It is proposed to provide educational facilities under this scheme for children with disabilities who can be integrated in general schools. While rehabilitation assistance will be made available to all children with disabilities, student benefits will be extended on the recommendation by the Assessment Team.

(ii) The scope of the scheme includes pre-school training for the disabled children and counselling for the parents. This would be an activity preparatory to the child coming into the regular school system. It would include, among other things, special training for the hearing handicapped children, mobility and orientation training for the visually handicapped, daily living and communication skills training required by children with other disabilities, parent counselling and training in home management of these children.
The education of the disabled children under this scheme will continue up to the senior secondary school level and includes vocational courses equivalent to the senior secondary stage.

A disabled child in receipt of any scholarship/assistance under some other scheme relating to disability from State/Central Government will not be eligible for any of the benefits under this scheme unless he/she is willing to forego the other sources of assistance.

27.2 Procedure for Implementation

(i) The implementing agency should set up an administrative cell under an officer not below the rank of Deputy Director to implement, monitor and evaluate the programme. These officials will be chosen for their special qualifications in the field, or if they are not so qualified, will be trained in a course conducted by the National Council of Educational Research and Training (NCERT) or some other designated organization. This cell will identify the areas and institutions for implementing the scheme.

(ii) It is preferable that in order to properly plan and supervise the implementation of the scheme a number of developmental blocks should be selected for operation of the scheme, rather than scattering the schools under this scheme all over the state. Within the area of a selected block all the desired inputs should be provided to the schools covered.

(iii) To identify disabled children in the blocks/districts where the scheme is yet to be implemented, the first task should be to provide suitable orientation to all school teachers in the area for conducting a survey to identify disabled children in general schools. Teachers may be provided a small honorarium for conducting the survey. Each primary school may be provided Rs. 100 (to be shared by teachers) for conducting this survey. The IEDC cell should provide printed survey forms for identifications of these children. Assistance up to ₹10,000 may be provided to the IEDC cell for this purpose. These efforts should be supplemented by publicity through mass media.

(iv) The State-level cell will make arrangements for equipment, learning materials, staff etc. in order to provide education to disabled children. The cell will also set up the machinery for assessment of the disabled children. Wherever survey has been conducted by any other agency it would be utilized and augmented with the survey of disabilities not covered by the earlier survey. Monitoring and evaluation of the scheme at the State level will be carried out by the cell. The cell will ensure that the information regarding the scheme is widely known.

27.3 Assessment of the Disabled Children

(i) The Coordinator of the programme will be responsible for arranging for the assessment of the children and monitoring their progress on ongoing basis. A three-member assessment team, comprising a doctor, a psychologist and a special educator will be formed. The State/UT assessment team would function under the Administrative Cell. Specialists will be drawn upon in consultation with the State Health Department. Wherever district rehabilitation centers have been established, its resources for assessment may be used. The non-government organizations (NGOs) with infrastructural facilities may also be used for assessment purposes.

(ii) The average cost of an assessment should not exceed Rs. 150 per disabled child. It will be necessary to examine a large number of children to select those considered suitable for placement in an integrated programme. Members of the assessment team would be given TA and DA as per State Government/UT Administration rules.

(iii) The Assessment report should be comprehensive enough for educational programming; a profile of what a particular child can or cannot do during testing situations should be adequately reported. The report should specifically indicate whether the child can be put directly into school or should receive preparation in special school/special preparatory class in the Early Childhood Education Centre specially equipped for this purpose. Functional assessment can be
carried out by the teacher if formal assessment is to take a long time so that the educational programme can be started for these children.

### 27.4 Facilities for Disabled Children

(i) A disabled child may be given the following kinds of facilities at the rates prevalent in the State/UT concerned. The facilities should, as far as possible, be given in kind. In case similar incentives are not being offered by the State Government/UT Administration under any other scheme, the following rates could be adopted.

- **(a)** Actual expenses on books and stationary up to Rs. 400 per annum.
- **(b)** Actual expenses on uniform up to Rs. 200 per annum.
- **(c)** 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.
- **(d)** Reader allowance of Rs. 50 per month in case of blind children after Class V.
- **(e)** Escort allowance for severely handicapped with lower extremity disability at the rate of Rs. 75 per month.
- **(f)** Actual cost of equipment subject to a maximum of Rs. 2000 per student for a period of five years.

(ii) In the case of severely orthopaedically handicapped children, it may be necessary to allow one attendant for 10 children in a school. The attendant may be given the standard scale of pay prescribed for Class IV employees in the State/UT concerned.

(iii) Disabled children residing in school hostels within the same institution where they are studying may also be paid boarding and lodging charges as admissible under the State Government rules/schemes. Where there is no State scheme of scholarships to hostelers, the disabled children whose parental income does not exceed Rs. 5,000 per month may be paid actual boarding and lodging charges subject to a maximum of Rs. 200 per month. However, disabled children should generally not be placed in hostels unless the required educational facilities are not available in the nearby schools.

(iv) Severely orthopaedically 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.

The disabled children who are placed in special schools should also be integrated in common schools once they acquire the communication and daily living skills at the functional level.

### Self Assessment

2. Multiple Choice Questions

**Choose the correct option:**

(i) The average cost of an assessment should not exceed .................

- (a) 100 per disabled child
- (b) 150 per disabled child
- (c) 200 per disabled child
- (d) 250 per disabled child

(ii) The IEDC cell should provide printed for identification of disabled children. Assistance up to ₹ ....................... may be provided to the IEDC cell for this purpose.

- (a) 5,000 ₹
- (b) 10,000 ₹
- (c) 20,000 ₹
- (d) 40,000 ₹
(iii) The ................. of the programme will be responsible for arranging for the assessment of children and monitoring their progress on ongoing basis.

(a) programmer (b) survey (c) co-ordinator (d) assistance

(iv) In the case of severely orthopedically handicapped children, it may be necessary to allow an attendant for ................. children.

(a) 10 (b) 5 (c) 15 (d) 20

(v) The average cost of an assessment should not exceed ................. per disabled child.

(a) 100 ₹ (b) 150 ₹ (c) 200 ₹ (d) 250 ₹

27.5 Procedure for Grants to State Governments/UT Administrations

The State Governments/UT Administrations should formulate their programmes, make assessment of their financial requirements and submit detailed proposals for the next financial year to the Ministry of Human Resource Development (Department of Education, Government of India) by the end of December every year. The proposals should contain full information on various items given in the prescribed proforma. The proposals should be accompanied by utilization certificates for grants released in the previous year and implementation report in respect of the previous year indicating, interalia, detailed information regarding areas covered, the number of disabled children covered school-wise, teachers training programmes conducted etc. as per prescribed proforma.

The proposal should specify clearly whether for the purpose of various allowances to the disabled children the State Government rates have been taken or in their absence the rates given in this scheme have been adopted. The proposals will be examined in the Ministry and 50 per cent of the approved grant for the year will be released as the first instalment. The remaining 50 per cent of the Grant will be sanctioned as soon as the State/UT Administration reports utilization of at least 75 per cent of the grant sanctioned earlier. The request for the release of the second instalment should be accompanied by an implementation report and a detailed statement of expenditure.

27.6 Procedure for Grant to Voluntary Organisations

The voluntary organizations desirous of implementing the scheme should send their applications on the prescribed proforma through the concerned State Government/UT Administration (with a copy endorsed directly to the Ministry). The State Government should give its views within a period of three months regarding the organizations' eligibility, suitability, relevance of the proposal and the capacity of the agency to implement it. Comments should be sent by the State Government even if the proposal is not recommended giving reasons therefore.

In order to be eligible for financial assistance under this scheme voluntary organizations, public trusts and non-profit making companies should.

(i) have proper constitution of articles of association;

(ii) have a properly constituted managing body with its power and duties clearly defined in the constitution;

(iii) be in a position to secure the involvement, on voluntary basis, a knowledgeable persons for furtherance of their programmes;

(iv) not discriminate against any person or group of persons on ground of sex, religion, caste or creed;

(v) not be run for the profit of any individual or a body of individuals;

(vi) not directly function for the furtherance of the interests of any political party; and

(vii) not in any manner incite communal disharmony.

Only those eligible agencies which have been in existence for three years would be considered for assistance under this scheme. This requirement may be waived in respect of agencies with specially qualified workers or which can otherwise justify a special consideration.
If any agency is already receiving or expecting to receive grant from some other official source for a project for which application is made under this scheme, assistance under this scheme will be made after taking into the consideration the grant received, or likely to be received for such other official sources. It should also be ensured that an agency already in receipt of a grant from any other official source, Central or a State, should not transfer any part of that liability to a grant to be sanctioned under this scheme.

### 27.7 Conditions of Grant to Voluntary Organisations

1. The grant-receiving will be required to execute a bond on a prescribed form. The bond should be supported by two sureties if the agency is not a legal entity.

2. An agency in receipt of financial assistance shall be open to inspection by an officer of the Union Ministry of Human Resource Development or the State Education Department.

3. The accounts of the project shall be maintained properly and separately and submitted as and when required. They should be open to check by an officer deputed by the Government of India or the State Government. They shall also be open to a test-check by the Controller and Auditor General of India at his discretion.

4. The audited accounts together with the utilization certificate in the prescribed form duly countersigned by the Chartered Accountant are required to be furnished within six months in respect of a preceding year or after expiry of the duration for which grant is approved.

5. The agency shall maintain a record of all assets acquired wholly or partially out of Government grant and maintain a register of such assets in the prescribed proforma. Such assets shall not be disposed of, encumbered or utilized for the purposes other than those for which the grant was given, without prior sanction of the Government of India. Should the agency cease to exist at any time, such properties shall revert to the Government of India.

### Self Assessment

3. State whether the following statements are True or False:

1. The state government should give its views within a period of three months regarding the organizations eligibility suitability, relevance of the proposal and capacity of agency to implement it.

2. An agency in receipt of financial assistance shall not be open to inspection by an officer of the union Ministry of Human Resource Development or the state education department.

3. The voluntary organizations desirous of implementing the scheme should send their applications on the prescribed proforma through the concerned state government.

### 27.8 Summary

- The Government of India, therefore, has brought the education of disabled group of children for special attention to achieve the goal of education for all.

- The IED scheme financed by the Ministry of Human Resource Development, Government of India, and the scheme is being implemented by the department of school education since 1983. At present it is part of the directorate of Primary Education and receiving substantial financial support under SSA.

- The main objective of the IEDC (Integrated education for disabled children) scheme is to provide education for the disabled children along with normal children in normal schools.
Identification of children with special needs: Identification of Children with special needs (CWSN) from 0-14 age group done every year through House Hold Survey in all 70 district.

Integration of Children With Special Need (CWSN); Medical assessment Camps; Providing assistive devices to CWSN; Teacher's Training on IED; 45 Days Resource Teachers training; Development of Instructional Materials are the major activities of IED.

This is a centrally sponsored scheme under which the Central Government will assist the States/Union Territories in its implementation on the basis of the criteria laid down.

It is proposed to provide educational facilities under this scheme for children with disabilities who can be integrated in general schools.

The scope of the scheme includes pre-school training for the disabled children and counselling for the parents.

The implementing agency should set up an administrative cell under an officer not below the rank of Deputy Director to implement, monitor and evaluate the programme.

To identify disabled children in the blocks/districts where the scheme is yet to be implemented, the first task should be to provide suitable orientation to all school teachers in the area for conducting a survey to identify disabled children in general schools.

The State-level cell will make arrangements for equipment, learning materials, staff etc. in order to provide education to disabled children. The cell will also set up the machinery for assessment of the disabled children.

The Coordinator of the programme will be responsible for arranging for the assessment of the children and monitoring their progress on ongoing basis. A three-member assessment team, comprising a doctor, a psychologist and a special educator will be formed.

A disabled child may be given the following kinds of facilities at the rates prevalent in the State/UT concerned.

(a) Actual expenses on books and stationary up to Rs. 400 per annum.
(b) Actual expenses on uniform up to Rs. 200 per annum.
(c) 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.

(d) Reader allowance of Rs. 50 per month in case of blind children after Class V.

The State Governments/UT Administrations should formulate their programmes, make assessment of their financial requirements and submit detailed proposals for the next financial year to the Ministry of Human Resource Development (Department of Education, Government of India) by the end of December every year.

The voluntary organizations desirous of implementing the scheme should send their applications on the prescribed proforma through the concerned State Government/UT Administration (with a copy endorsed directly to the Ministry). The State Government should give its views within a period of three months regarding the organizations' eligibility, suitability, relevance of the proposal and the capacity of the agency to implement it.

The grant-receiving will be required to execute a bond on a prescribed form. The bond should be supported by two sureties if the agency is not a legal entity.

An agency in receipt of financial assistance shall be open to inspection by an officer of the Union Ministry of Human Resource Development or the State Education Department.

27.9 Keywords

- Equipment: The things that are needed for a particular purpose or activity.
- Orientation: The type of aims or interests that person or an organization has.
- Council: A group of people who are elected to govern an area such as a city.
27.10 Review Questions

1. Why is need for IED?
2. Describe the functional structure of IEDC in N.C.T.
3. What are the aims and objectives of the IED scheme?
4. Explain the assessment of the disabled children.

Answers: Self Assessment

1. (i) 10 million (ii) administrative cell (iii) special
2. (i) (b) (ii) (b) (iii) (c) (iv) (a) (v) (b)
3. (i) True (ii) False (iii) True

27.11 Further Readings

1. Special Education: Laura Rothstein; Scott F. Johnson; Sage Publisher, Inc.
2. Special Education: Daniel P. Hallahan, James M. Kauffman, Paige C. Pullen; Pearson Education, Inc.
3. Special Education: Linda Wilmshurst, Ph.D., ABPP, Alan W. Brue, Ph.D., NCSP.
Unit 28: Inclusive Education and Mainstreaming

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Objectives
The objectives of this unit can be summarized as below:
• to know about inclusive education.
• to explain the mainstreaming its teaching methods and trends.
• to discuss about methods of teaching in mainstreaming.
• to describe trends in mainstreaming.

Introduction
Owing to lack of knowledge, educational access and technology, disabled children were initially treated as unwanted and segregated from other children. Later their education was carried out in special schools. In recent times there has been a shift towards having children with disabilities attend the same schools as non-disabled children. The educationists now feel that each child should be allowed to learn in his own way. The concept of inclusive education has been spelt out in the all governments have been urged to "adopt as a matter of law or policy, the principle of inclusive education, enrolling all children in regular schools unless there are compelling reasons for doing otherwise". The basic premise is that the school should meet the educational needs of all children irrespective of their disabilities or limitations.

28.1 Inclusive Education
It is the implementation of the 'policy and process' that allows all children to participate in all programmes. 'Policy' means that disabled children should be accepted without any restrictions in all the educational programmes meant for other children. It denotes equality, and accepts every child with his own unique capabilities. This principle must be accepted by all the international, national and local programmes. The 'process' of inclusion denotes the ways in which the system makes itself welcoming to all. In terms of inclusion of disabled children, it means the shift in services from 'care of the disabled child' to his 'education and personal development'. Inclusive education goes one step further by defining these children as 'children with special needs' who need special attention, rather than children who are 'impaired' or 'handicapped'. Inclusive education is nothing but 'Making the programme for disabled children as an integral part of the general educational system rather than a system within general education'.
**28.1.1 Objectives of policies on inclusive education**

1. The governments have to give the highest policy and budgetary priority to improve their education systems to enable them to include all children regardless of individual differences or difficulties.
2. The governments have to adopt as a matter of law or policy the principle of inclusive education, enrolling all children in regular schools unless there are compelling reasons for doing otherwise.
3. The training programmes for the teachers have to include the education of disabled children.
4. All children have access to general education system, to expand the coverage to reach the unreached population.

**28.1.2 Need of Inclusive Education**

UNESCO (1994) states that 'All children learn together, whatever possible, regardless of any difficulties or differences they may have. Inclusive schools must recognise and respond to the diverse needs of their students, accommodating both different styles and rates of learning and ensuring quality education to all through appropriate curricula, organisational arrangements, teaching strategies, resource use and partnerships with their communities'. Inclusive education promotes child-to-child learning and participation of parents and community in planning and execution of services for children in general and disabled children in particular.

**28.1.3 Some Pioneering Experiments**

In several parts of India, the Project Integrated Education for the Disabled (PIED) has been functioning since 1987. A Composite Area Approach (CAA) is followed where regular classroom teachers, specialist teachers, parents and community members jointly work in the programme. The regular teachers are given training in handling disabled children.

**Self Assessment**

1. Fill in the blanks:
   
   (i) Children in ..................... were seen as a geographically and socially segregated from their peers.
   
   (ii) There is little engagement with the commutations of ............ and teacher flexibility for all children.
   
   (iii) The Project Integrated Education for the Disabled has been functioning since ............

**28.2 Mainstreaming**

Mainstreaming is an inclusive form of education in which students are taught in a comprehensive school system. Special education is available for students with special needs, but the goal is for the majority of students and those with special needs to learn in the same classroom whenever possible. Students with medical and physical disabilities are protected by and may still receive special accommodations at school, such as adaptive equipment, but they do not receive special education unless they show educational need.

By the late 1980s, after additional observation and research, many educators and parents favored the merging of special and regular education into a comprehensive school system. Advocates pointed out that a dual system did not meet students' needs, was inefficient to administer, and promoted inappropriate attitudes toward students with disabilities.

Advocates were more interested in increasing the ability of mainstream education to meet the needs of all students, rather than spending time classifying students to see who should be in the mainstream. School districts found themselves on shifting ground. They had to understand and accommodate students with special needs, without creating a counterproductive separate-but-equal atmosphere.

Autism, deaf-blindness, deafness, hearing impairment, mental retardation, multiple disabilities, orthopedic impairment, other health impairment, serious emotional disturbance, special learning
disability, speech or language impairment, traumatic brain injury, and visual impairment. States and school districts were free, however, to use their own definitions, and there is wide variety in classification.

National statistics show that enrollment in special education is highest in the elementary school years. By high school, typically 4 to 5 percent of special education students are returned to general education classrooms.

An overview of the guidelines shows that for a student to be eligible for special education, he or she must have a disability that can only be helped by special education. Special education can be used only when education in a regular classroom does not work. For example, a school district would need to make other arrangements if a special needs student was disruptive and prevented the students in a standard classroom from learning, or if the standard classroom wasn't providing a sufficient education for a student with special needs.

The trend is for school districts to appoint support facilitators who help regular teachers with resources and equipment. Ideally, support facilitators work in the classroom with all students who need help, rather than focusing exclusively on the special needs student and drawing undue attention to him or her.

Forced educators to reexamine the practice of mainstreaming to see whether it could be improved. In response to the lawsuits, educators recommended that schools spend more time determining the least restrictive environment available for each special education student. To this aim, a series of questions should be applied to each special education student's individualized educational plan (IEP). Would it be possible for the student to learn in a regular classroom if supplementary aids and services were provided? What steps have been taken to accommodate the student in a regular classroom? Can the student with a disability benefit from being in a regular classroom? What is the effect of the disabled student on classmates? Is the student likely to monopolize the time of the teacher or aides? Is the student likely to be disruptive and to interfere with the ability of other students to learn? Educators stress the importance of a team approach to exploring these questions, with the regular classroom teacher and special education teacher working together.

Researchers studying special education issues point to the importance of considering a range of options for each special needs student. There are many gradations in between spending full time in a regular classroom or full time in a special education classroom. For example, some students might benefit from learning subjects such as music, art and physical education with their class in full, while they are pulled away for special education instruction in reading and math. Many schools have resource rooms where students can receive individual tutoring or small-group instruction.

What is IEP? Explain.

**28.3 Methods of Teaching in Mainstreaming**

Educators have developed many strategies for providing a mixture of regular education and special education. The special education student spends most of the week in a regular classroom and is pulled out for individualized or small-group instruction three to five hours a week. Educators have experimented with different systems of grouping special needs children by grade level or by degree of disability when they meet in a small-group setting in the resource room. Education Digest described one school system's experience in attempting to "push in" most special education students to a regular classroom. The school system learned that to function well, some special education students actually needed more pullout time, not less. There was another option in which a special education teacher would come to a regular classroom and "pull aside" special needs students at a separate table and assist them in doing the regular class work with some modifications.

Special education teachers and aides also assisted the special needs students with organizational tasks. Each morning, the teachers and aides would check to be sure the special needs students had
the books, supplies and homework they needed to begin the school day. At the end of the school day, the special needs students would receive similar support to make sure they took home the proper materials for their homework.

School systems that experimented with grouping severely disruptive special needs students in one small classroom found there were advantages as well as drawbacks. The disruptive students were not preventing other students from learning, and they had large blocks of time devoted to the intensive instruction and counseling they needed. However, the disruptive children had no positive peer role models in the classroom.

In a retrospective study of school districts' experiences with mainstreaming, Education Digest reported that when a student is two years behind by the time she reaches third grade, it is almost impossible to bring her up to grade level, regardless of the intensity of the remediation effort.

In a 1982 case brought in the early days of mainstreaming, the United States Supreme Court ruled that it was not a school district's responsibility to develop every disabled child to his or her maximum potential. Rather, the intent was to provide every disabled child with equal access to public school education.

When inclusive education was first tried in the United States, with special needs students and regular students taught side by side, there were few attempts to back up the theory with research. Mainstreaming was seen as a moral imperative, almost a human rights effort on behalf of special needs children. No one was studying the techniques, teaching methods, staffing and training needed for a comprehensive program of inclusion. This lack of preparation and research led to poor planning and poor implementation in many school districts. Since mainstreaming was more a campaign than a carefully thought out program, there were times when the needs of individual children were ignored.

The needs of children who were medically fragile or severely emotionally disturbed could not be met in a regular classroom and in some situations, the best option was for the school district to provide home tutoring. To add to the confusion, it was difficult to devise an orderly system of evaluation. For example, one deaf child might do very well in a regular classroom while a different child with the same degree of disability might need a customized mix of standard education, special education and one-on-one instruction.

For students with mild to moderate learning disabilities or speech/language impairments, the "pullout" system is common used.

### 28.4 Trends in Mainstreaming

The various trends in mainstreaming come to a head at the end of high school, when districts award diplomas differently. Some high schools grant diplomas with the same set of standards, exams, and course work applied to all students. Other schools offer a different credential or certificate of completion for special education students. The diploma, therefore, may not always mean the same thing.

The act calls for standards-based reform that would reorganize educational standards. The ultimate goal would be to devise a fair way of developing one system of accountability that applies to all students. Special education students would still have an individualized educational program (IEP) and achievable goals, and there would be more of an effort to tailor goals to every student's abilities and needs. Advocates would like to see school districts break away from evaluating students chiefly on norms that are based on peer performance. Ideally, all graduates would have a credential that accurately reflected their skills and achievements.

The Committee on Goals 2000 recognized that not enough is known about special education and standards-based reform and recommended long-term research in search of new information. Education studies have either omitted special education students or have measured them inconsistently. There is very little data on how special education students compare with general education students. There isn't enough information on funding special education and there is no information on how standards-
based reform would be paid for. While educators acknowledge that schools classify disabled students in many different ways, there is little information on how these local decisions are actually made. In addition, families of disabled students are often overlooked and more models are needed for using families in educational planning.

**Self Assessment**

3. State whether the following statements are True or False:

   (i) By the late 1980s, after additional observation and research many educators and parents favored the merging of special and regular education into a comprehensive school system.

   (ii) The special education student does not spend most of the week in a regular classroom.

   (iii) Education have experimented with different systems of grouping special needs children by grade level or by degree of disability.

   (iv) Mainstreaming was not seen as a moral imperative.

**28.5 Summary**

- The ‘process’ of inclusion denotes the ways in which the system makes itself welcoming to all. In terms of inclusion of disabled children, it means the shift in services from ‘care of the disabled child’ to his ‘education and personal development’.

- The governments have to give the highest policy and budgetary priority to improve their education systems to enable them to include all children regardless of individual differences or difficulties.

- The governments have to adopt as a matter of law or policy the principle of inclusive education, enrolling all children in regular schools unless there are compelling reasons for doing otherwise.

- Mainstreaming is an inclusive form of education in which students are taught in a comprehensive school system. Special education is available for students with special needs, but the goal is for the majority of students and those with special needs to learn in the same classroom whenever possible.

- By the late 1980s, after additional observation and research, many educators and parents favored the merging of special and regular education into a comprehensive school system.

- An overview of the guidelines shows that for a student to be eligible for special education, he or she must have a disability that can only be helped by special education. Special education can be used only when education in a regular classroom does not work.

- The trend is for school districts to appoint support facilitators who help regular teachers with resources and equipment.

- Forced educators to reexamine the practice of mainstreaming to see whether it could be improved.

- Researchers studying special education issues point to the importance of considering a range of options for each special needs student.

- Educators have developed many strategies for providing a mixture of regular education and special education.

- The special education student spends most of the week in a regular classroom and is pulled out for individualized or small-group instruction three to five hours a week.

- School systems that experimented with grouping severely disruptive special needs students in one small classroom found there were advantages as well as drawbacks. The disruptive students
were not preventing other students from learning, and they had large blocks of time devoted to
the intensive instruction and counseling they needed. However, the disruptive children had no
positive peer role models in the classroom.

• Mainstreaming was seen as a moral imperative, almost a human rights effort on behalf of special
needs children. No one was studying the techniques, teaching methods, staffing and training
needed for a comprehensive program of inclusion. This lack of preparation and research led to
poor planning and poor implementation in many school districts.

• Special education students would still have an individualized educational program (IEP) and
achievable goals, and there would be more of an effort to tailor goals to every student's abilities
and needs.

28.6 Keywords

• Implementation : To make something that has been officially decided start to happen
• Inclusive : Including a wide range of people having somebody as a part of a group.
• Mainstream : The ideas and opening that are thought to be normal because they are
shared by most people.
• Trends : A general direction in which a situation is changing.

28.7 Review Questions

1. Define the term "inclusive education".
2. What is mainstreaming?
3. What are objectives of policies on inclusive education?
4. Describe the teaching methods in mainstreaming.

Answers: Self Assessment

1. (i) inclusive education (ii) disabilities (iii) 1987
2. (i) True (ii) False (iii) True (iv) False

28.8 Further Readings

1. The Principles and Practice of Educational Management: Tony Bush, Les Bell,
   SAGE Publisher, 2002.
2. Educational Management: Strategy, Quality, and Resources, Margaret Preedy, Ron.
Unit 29: Apex Bodies on Special Education: RCI and NIMH

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Objectives
The objectives of this unit can be summarized as below:
• to know about rehabilitation council of India.
• to explain about objectives of RCI.
• to discuss about RCI Act 1992 and amendments 2000.
• to explain about national institute for the mentally handicapped.

Introduction
The Rehabilitation Council of India was set up as a registered society in 1986 under the aegies of the Ministry of Social Justice & Empowerment (then Ministry of Social Welfare) to standardize and maintain uniform standards of training of professionals. However, it was soon realised that the Society could not ensure proper standardization and acceptance of the standards by other Organizations. The Parliament enacted the Rehabilitation Council of India Act in 1992. The Rehabilitation Council of India became a Statutory Body on 22nd June 1993.

The RCI Act was amended by the Parliament in 2000 to make it more broad based. The Act casts onerous responsibility on the Council. It also prescribes that any one delivering services to people with disability, who does not possess qualifications recognised by RCI, could be prosecuted. Thus the Council has the twin responsibility of standardizing and regulating the training of professional and personnel in the field of Rehabilitation and Special Education.

National Institute for the Mentally Handicapped established in the year 1984 at Manovikasnagar, Secunderabad (AP) is an Autonomous Body under the administrative control of Ministry of Social Justice & Empowerment, Government of India and thus the institute is fast approaching towards its silver jubilee to celebrate its dedicated services to persons with mental retardation in the national interest.

NIMH has three regional centers located at New Delhi, Kolkata, & Mumbai, NIMH Model Special Education Center located at New Delhi. The institute endeavors to excel in building capacities to empower persons with mental retardation. Since the quality of life of every person with mental
Notes retardation is equal to other citizens in the country, in that they live independently to the maximum extent possible and through constant professional endeavors, National Institute for the Mentally Handicapped empowers the persons with mental retardation to access the state of the art rehabilitation intervention viz., educational, therapeutic, vocational, employment, leisure and social activities, sports, cultural programmes and full participation. The objectives for which NIMH works are listed as under:-

29.1 Rehabilitation Council of India

RCI is a statutory body under the Ministry of Social Justice and Empowerment, which is the nodal ministry for disability rehabilitation in the country. The major objectives of RCI are:

- Regulate human resource development in rehabilitation throughout the country.
- Certify qualified personnel and professionals in the field of disabilities
- Ensure quality, standard and uniformity in the rehabilitation programmes offered throughout the country.

In 1992, Rehabilitation Council of India (RCI) Act was passed which brought about major development in human resource development in the area of disabilities.

All HRD programmes including those for intellectual disabilities are regulated and monitored by RCI throughout the country. It also ensures that the registered professionals are updated with recent developments in the field by organizing continuing rehabilitation education programmes and making participation mandatory for renewal of registration. So far, 16 categories of professionals numbering 28,460 are registered by the Council, and 42 long term rehabilitation courses are standardized by the Council which is carried out in various organizations throughout the country. Among the courses six are exclusively in the area of mental retardation which include all disabilities cover mental retardation also.

Human resource development programmes ranging from training of grass root level functionaries to master trainers are regulated by RCI and a standard register of professionals are maintained by RCI.

29.2 Objectives of RCI

There are following objectives of RCI:

- 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.
Notes

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

Self Assessment

1. Fill in the blanks:
   (i) Human resource development programmes ranging from training of grass root level functionaries to master trainers are regulated by ....................... .
   (ii) There are ....................... long term rehabilitation courses are standardized by the rehabilitation council.
   (iii) The one of the main objective of RCI is to regulate the training policies and programmes in the field of ....................... of persons with disabilities.
   (iv) Six courses are exclusively in the area of ....................... which include all disabilities cover mental retardation also.

29.3 RCI Act 1992 and Amendments 2000

An act to provide for the constitution of the Rehabilitation Council of India for regulating the training of rehabilitation professionals and the maintenance of a Central Rehabilitation Register and for matters connected therewith or incidental thereto.

The Ministry of Social Justice & Empowerment has requested the RCI to submit a list of proposed amendments to the RCI, ACT,

Accordingly, RCI has organized regional meetings and suggestions have been collected. At the National Expert Meeting in Bhavanagar detailed discussions were held by each group. Subsequently a sub-committee was constituted and a meeting was held to harmonize all the suggestions received and adds new ones to make the amendments more broad based and more contemporary in terms of RCI’s present and future expanded role in HRD.

Objectives

- Human Resources Development
- Research and Development
- Development of models of care and rehabilitation.
- Documentation and dissemination.
- Consultancy services to voluntary organizations
To achieve optimum results, the institute has developed and introduced innovative structured training courses like Early Intervention, Rehabilitation Psychology, Special Education and Disability Rehabilitation at Masters level. The training programmes are offered on gradual scale from certificate - diploma - undergraduate - graduate - post - graduate - Masters levels. Presently, the Institute conducts 5 Certificate Courses, 4 Diploma Courses (DSE(MR), DVR, DECSE, DCBR). Further, 2 Graduate courses (BRT & B.Ed Spl.Ed(MR)), 1 Post-graduate Diploma course (PGDEI) and 2 Master courses (M.Ed Spl.Ed) and 2 M.Phil (Special Education and Rehabilitation Psychology) level courses in affiliation with different universities.

29.4 National Institute for the Mentally Handicapped

Ministry of social justice and empowerment has established National Institutes for various disabilities. National Institute for the Mentally Handicapped (NIMH) was established in the year 1984 and it serves as an apex body in the area of mental retardation, It has, as its objectives, human resource development, research and development, service delivery models, documentation and dissemination, extension and outreach programmes. It is head quartered in Secunderabad and has its regional centres in Delhi, Mumbai and Kolkata. Establishment of NIMH has resulted in strengthening the HRD programmes in the country and has brought out a number of publications in the area of mental retardation as an outcome of research projects.

29.4.1 Objectives of NIMH

- It has also resulted in creating awareness about mental retardation.
- education and training facilities.
- vocational training and placement.
- parent support programmes
- schemes and benefits for persons with mental retardation in the country.

NIMH has developed service models and contributed very significantly in the dissemination and documentation. the performance in the extension and outreach programmes is par excellence covering large areas across the country. It is a "vision", "mission" and "value" driven organisation having work culture appropriate to higher education. Manoranjan is service unit for persons with profound mental retardation.

What is "Manoranjan" in the reference mental disability education?

Self Assessment

2. Multiple Choice Questions

Choose the correct option:

(i) National Institute for the mentally handicapped (NIMH) was established in the year ..........  
(a) 1984  (b) 1986  (c) 1988  (d) 1990

(ii) It's headquarter is in ................. .
(a) Mumbai  (b) Secunderabad  (c) Chennai  (d) Kolkata

(iii) NIMH is a "vision", "mission" and "value" driven organisation having work culture appropriate to ................. .
29.5 Summary

- The Rehabilitation Council of India was set up as a registered society in 1986 under the aegis of the Ministry of Social Justice & Empowerment (then Ministry of Social Welfare) to standardize and maintain uniform standards of training of professionals.
- RCI is a statutory body under the Ministry of Social Justice and Empowerment, which is the nodal ministry for disability rehabilitation in the country. The major objectives of RCI are:
  1. Regulate human resource development in rehabilitation throughout the country.
  2. Certify qualified personnel and professionals in the field of disabilities
  3. Ensure quality, standard and uniformity in the rehabilitation programmes offered throughout the country.
- All HRD programmes including those for intellectual disabilities are regulated and monitored by RCI throughout the country.
- 16 categories of professionals numbering 28,460 are registered by the Council, and 42 long term rehabilitation courses are standardized by the Council which is carried out in various organizations throughout the country.
- There are following objectives of RCI:
  1. To regulate the training policies and programmes in the field of rehabilitation of persons with disabilities.
  2. To bring about standardization of training courses for professionals dealing with persons with disabilities.
  3. To prescribe minimum standards of education and training of various categories of professionals/personnel dealing with people with disabilities.
  4. To regulate these standards in all training institutions uniformly throughout the country.

- An act to provide for the constitution of the Rehabilitation Council of India for regulating the training of rehabilitation professionals and the maintenance of a Central Rehabilitation Register and for matters connected therewith or incidental thereto.
- Ministry of social justice and empowerment has established National Institutes for various disabilities. National Institute for the Mentally Handicapped (NIMH) was established in the year 1984 and it serves as an apex body in the area of mental retardation.

29.6 Keywords

- Rehabilitation: To help somebody to have a normal.
- Empower: To give somebody the power or authority to do something.
- Mentally: Connected with or happening in the mind.

29.7 Review Questions

1. What are the main objectives of RCI?
2. When was study fellowship introduced by NIMH?
3. Where are the regional centres of NIMH located in India?
4. Write about rehabilitation programmes organized by RCI.
Notes

**Answers: Self Assessment**

1. (i) RCI  (ii) 42  (iii) rehabilitation  
   (iv) mental retardation
2. (i) (a)  (ii) (b)  (iii) (c)

**29.8 Further Readings**

1. Special Education: Linda Wilmshurst, Ph.D., ABPP, Alan W. Brue, Ph.D., NCSP
2. Special Education: Laura Rothstein; Scott F. Johnson; Sage Publisher, Inc.
3. Special Education: Daniel P. Hallahan, James M. Kauffman, Paige C. Pullen; Pearson Education, Inc.
Unit 30: Apex Bodies on Special Education: NIVH, NIOH

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Objectives

The objectives of this unit can be summarized as below:
- to know about objectives and significance of NIVH.
- to describe about objectives of NIOH.
- to discuss about objective of RTI about NIVH and NIOH.

Introduction

The National Institute for the Visually Handicapped (NIVH) at Dehradun is an apex body in the field of Education and Rehabilitation of the Visually Handicapped in India under the Ministry of Social Justice and Empowerment, Government of India. The institute occupies 43 acres on the Mussoorie-Dehradun Highway.

The National Institute for the Visually Handicapped (NIVH) in Dehradun orginated as St. Dunstan's hostel for the war-blinded in 1943. The Government of India took over the building on January 1, 1950 and renamed it as the 'Training Centre for the Adult Blind' (Men).

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

30.1 Objectives of NIVH

The aims and objectives of the NIVH as stated in the Memorandum of Association are as follows:
(i) To conduct, sponsor, co-ordinate and/or subsidize research in collaboration with other NGOs and research organizations including Universities into various dimensions of the education and rehabilitation of the visually impaired.
(ii) To undertake, sponsor, co-ordinate or subsidise research into biomedical engineering leading to the effective evaluation of special appliances/instruments or suitable surgical or medical procedures or the development of new special appliances/instruments.
(iii) To undertake or sponsor the training of trainees and various specialized professionals including Teachers, Employment Officers, Psychologists, Vocational Counsellors and such other personnel as deemed necessary.
Notes

(iv) To distribute, promote, or subsidise the manufacture of prototypes and to manage distribution of any or all devices designed to promote any aspect of the education, rehabilitation or employment of the Visually Impaired.

In order to achieve the aims and objectives, following Departments and Units are functioning:

(i) Department of Special Education
(ii) Department of Vocational Training/Training Centre for the Adult Blind
(iii) Department of Psychology: Counselling and Crisis Intervention
(iv) Model School for the Visually Handicapped
(v) Braille Development Unit
(vi) Design and Development Unit
(vii) Rehabilitation and Consultancy Unit
(viii) Placement Unit
(ix) National Talking Book Library
(x) National Library for the Print Handicapped
(xi) Central Braille Press
(xii) Workshop for the Manufacturing of Aids and Appliances
(xiii) Mass Media Unit

NIVH is autonomous in nature, it is considered to be the largest of its kind in Asia.

Self Assessment
1. Fill in the blanks:

   (i) The National Institute for the ............... in Dehradun originated as St. Dunstan’s hostel for the war-blinded in 1943.

   (ii) National Institute for the .......... handicapped is an apex organization in the area of locomotors disability.

   (iii) The objectives of NIOH is to develop Human resource for providing services to the orthopedically handicapped population, namely training of ............... , occupational therapists.

   (iv) NIOH stands for ......................... .

30.2 Significance of NIVH

The national Institute for visually handicapped is an autonomous body. It works efficiently for blind and visually impaired children in the field of education research and training. It has following significances:

• Human Resource Development
• Research and Development
• Designing and Delivery of Model Services
• Designing and Production of supportive devices
• Production and circulation of books in Braille and audio forms
• Education, Vocational Training and Rehabilitation services
• Production of Education, Computational, Mobility and recreational aids and appliances
• Provision of consultancy services.
30.3 Objectives of NIOH

National Institute for Orthopedically Handicapped (NIOH) is conduct for the betterment and issue of physically (orthopedic) handicapped persons. Ministry of social justice and empowerment of government of India. It has following objectives:

(i) To develop Human Resource (manpower) for providing services to the Orthopaedically Handicapped population, namely training of Physiotherapists, Occupational Therapists, Orthotic and Prosthetic.

(ii) Employment and Placement Officers and Vocational Counsellor etc.

(iii) To conduct and sponsor research in all aspects related to the rehabilitation of the Orthopaedically handicapped.

(iv) To provide services in the area of rehabilitation, restorative surgery, aids and appliances and vocation training to the persons with disability.

(v) To standardize aids and appliances and to promote their manufacturing and distribution.

(vi) To provide consultancy to the State Government and voluntary agencies. To serve as an apex documentation and information centre in the area of disability and rehabilitation.

30.4 Objective of RTI about Disability

• To promote transparency and accountability in the various activities of NIOH
• To set up a partial regime or Right to Information in order to promote openness for giving citizens access to information that is under the control of NIOH.
• To disseminate every piece of information related to NIOH as prescribed in the Gazette of India (The Right to Information Act, 2005).

Self Assessment

2. State whether the following statements are 'True' or 'False':

(i) The objective of RTI to promote transparency and accountability in the various activities of NIOH.

(ii) The initiative of right to information has not come from group and communities demanding from the government, its agencies and departments.

30.5 Summary

• The National Institute for the Visually Handicapped (NIVH) at Dehradun is an apex body in the field of Education and Rehabilitation of the Visually Handicapped in India under the Ministry of Social Justice and Empowerment, Government of India.

• National Institute for the Orthopaedically Handicapped is an apex organization in the area of locomotor disability Orthopaedically Handicapped) which came into the nation's service since 1978 as an autonomous body under the ministry of Social Justice and Empowerment, Government of India.
Notes

- The aims and objectives of the NIVH as stated in the Memorandum of Association are as follows:
  - To conduct, sponsor, co-ordinate and/or subsidize research in collaboration with other NGOs and research organizations including Universities into various dimensions of the education and rehabilitation of the visually impaired.
  - To undertake, sponsor, co-ordinate or subsidise research into biomedical engineering leading to the effective evaluation of special appliances/instruments or suitable surgical or medical procedures or the development of new special appliances/instruments.
  - To develop Human Resource (manpower) for providing services to the Orthopaedically Handicapped population, namely training of Physiotherapists, Occupational Therapists, Orthotic and Prosthetic Employment and Placement Officers and Vocational Counsellor etc.

30.6 Keywords

- Objective : Something that you are trying to achieve.
- Significance : The importance of something, especially when this has an effect on what happened.
- Physiotherapists : a person whose job is to give patients physiotherapy.

30.7 Review Questions

1. Give notes on NIVH.
2. Give a brief account of NIOH.

Answers: Self Assessment

1. (i) Visually handicapped (ii) orthopedically
   (iii) physiotherapists (iv) National institute for orthopedically handicapped
2. (i) True (ii) False

30.8 Further Readings

1. Special Education: Daniel P. Hallahan, James M. Kauffman, Paige C. Pullen; Pearson Education, Inc.
2. Special Education: Linda Wilmshurst, Ph.D., ABPP, Alan W. Brue, Ph.D., NCSP
Unit 31: Rehabilitation of Exceptional Children: Role of Peers, Role of Family

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31.1 Role of Family
31.2 Parental Involvement
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Objectives
The objectives of this unit can be summarized as below:
• to describe the role of family.
• to explain about parental involvement.
• to discuss about the role of peers.

Introduction
Although it is widely accepted that peer influence is a powerful factor in adolescent development, profession use of this resource has been generally confined to exceptional or problematic populations. The research literature suggests that peer group programs have produced orderly, productive, and positive academic and rehabilitative environments. Peer group paradigms have also generated positive results in creating productive social group living environments and have helped reduce aggressive behaviors in group living settings. Elements to facilitate a peer group approach to cognitive problem-solving development school and group living settings the highlighting the adult-imposed roadblocks to that process.

31.1 Role of Family
Parents are the center and control of the family unit. In any circumstance, parents are the immediate responsible decision maker for the child until he or she becomes major. Parenting defined as purposive activities aimed at ensuring the survival and development of children. This indicates that parenting involves a demanding and exhausting yet enjoyable task. Considering the two setups i.e. the joint and nuclear families relatively parenting becomes softer in joint family. Joint families, with some variations consist of grandparents, one or more couples of parents (uncles and aunts), and children's and also at times members of close relatives staying with the family is supportive for parenting. In case of difficult circumstances professionals also recommend and prescribe such support, which is very significant and appreciated in psychological research. In nuclear families all the responsibilities of parenting rests with the couple. It is not affordable or at times convincing to many parents the help from babysitter or day care center for children. Both parents occupied with job make the situation more difficult. It implicitly involves joy and stress of responsibility as well. This event became disastrous if the newborn is different 'exceptional' or in the course of development of the child.
parents realizes that their child is 'exceptional'. This event designates parents also as 'exceptional'.
Further, this status is extended to the entire family. The dynamic impact of stress is tremendous
which further encompass the parents individually, siblings and family. Many factors are detrimental
for positive and negative coping of a family with person with disability. The range of these detrimental
factors can be from individual resources of family members, couple relationship, couple relationship
with the family, family resources, community support and professional resources. The first major
stress that a family experience while facing the news from the professional that the new borne is
different i.e. 'exceptional'. Other variables affecting parental adjustment are individual differences in
resistance to stress, the extent and nature of the child’s disability and the tolerance of the community
to that. Thurston, states that all parents experience emotional upset and anxiety when they learn
they have a handicapped child. Experts have predicted three probable stages for effective counseling
among parents. These involved the acceptance of the disability, the setting of long-range plans and
counseling parents about attitudes and feelings.

### 31.1.1 Parental Acceptance

Acceptance, which involves viewing the child with disability realistically and withdrawal of emotional
investment from the loss of a healthy child and attachment to the real child with person with disability,
is a crucial and important aspect, where each parent individually goes through the process of mourning
at his or her own space. Gives a detail description of various psychological models of parent's reaction.
Accepting and recognizing that the child is in some way different is a process called as 'mourning'
and is similar to the experience of feelings after death of a close person or other major loss. Although
the process of mourning involved in adjusting (accepting) tend to be similar, not necessarily all
parents will follow similar course of grieving. Parental reactions to the emerging awareness of child's
problem differ. That mourning process is not necessarily completed, however the family with a child
with disability experiences a non-pathologic state of chronic sorrow. Family understanding and
acceptance serve as the deciding factors to success in school adjustment of children. A good family
encompasses a warm and easy husband-wife relationship. In order to promote parental
understanding, physicians, psychologists, therapists and teachers must show a warm compassionate
attitude toward the child. It is observed that the process of realistic acceptance of a child of a person
with disability is affected by factors like parental attributions of causes for disability, Nature of
disability, parent's personality makeup and the birth order of the child with disability.
The Mother Participates in a programme which is committed to avoiding disabled children from
being taken from their family home and community. Instead it aims to provide support for the family
while it adapts to having a disabled child at home; and principally, to take the family into consideration
during the rehabilitation of the disabled child.

Trying to change the perception that disabled children are 'ill' and are trying to work towards a less
'medical' and more 'social' treatment of the problem.
For a poor country, with precarious health services, it is almost impossible to maintain such centres
in a good condition. But there is no doubt that the main problem is the way that families are torn
apart when a child is taken away at a very young age and placed in an institution. The emotional ties
that bind the members of the family are broken and the child grows up to become a linely adult,
without a family, until, at the age of 18, he or she returns home or is admitted to another institution,
this time for adults.

### 31.1.2 Causes for disability

Whether the cause of the handicap is known or unknown contributes to variety of parental reactions.
If the cause is known and could not be prohibited by the parents for example some sort of brain
injury during birth, parents usually experience less guilt. When known cause is apparent by the
parents and avoidable for example parental infections of the mother or seizures and injuries resulting from the child falling or dropped by mother, father or by some family member the guilt experience is relatively more. Causes are not known or not detectable in around 30-40% of cases who are Mentally Challenged (Indian council of medical research, 1996). Parents then may torture themselves about what the cause may be; parent's fantasies of what may have caused the disability range from concern like quarrels during pregnancy to blaming themselves, others even to their fate. In Indian society, it can be observed that if the in-laws and the couple are expecting a male child and if the mother gave birth to a female child. In such circumstances, the mother is blamed, tortured and even isolated from the family. In case of giving birth to a child with disability, chances of mother to be blamed are more. She is been blamed either of some sin, curse or some misbehavior on her part in the marital life. The blame is also extended to the fate of the mother but not the couple or the in-laws family together. However, multiculturalism is criticized for various reasons. Here the role of professionals is very crucial. Multicultural orientation of the professionals is the key for intervention to deal with these issues in the process of conselling. To deal with the misconceptions which consolidates the belief system which further give rise to negative thoughts after the critical incidence of having a child with disability can be best dealt by intervening in to the culture specific issues responsible for holding particular dysfunctional assumptions. Along with this, it is helpful for parents to share, discuss, evaluate and understand their ideas regarding the causes of disability.

All over the world, there is a trend towards trying to avoid taking disabled children away from their family and therapists are increasingly taking an interest in the idea of encouraging the active participation of mothers in the whole process.

31.1.3 Nature of disability

Nature of disability, what exactly is wrong with the child is one of the major concerns of the parents of child with disability. It affects the realistic acceptance of the parents of child with disability. There can be two scenarios either the disability can be obvious or not obvious. When the disability is physically obvious and noticeable then it becomes easier for the parents to accept the reality of disability. When the disability is not physically obvious and noticeable, it becomes difficult for parents to accept that their child has some disability for example such as hearing impairment. Two reasons for this discrepancy can be observed: one, it is more difficult to consider that a child who does not look 'different' from other children has a disability. Second, often the disability in normal appearing children is not evident until later in infancy or in the preschool years, so that parents have developed attachments to and expectations for a non-handicapped child. However, parents might experience fear of not having a normal child but they do not expect a non-normal child. Many factors work behind this thought process. Becoming a parent is a positive feeling for a couple who is expecting child that generates positive thoughts in the mind and dreaming about themselves and their offspring positive future. This kind of thoughts works as a defense and denies the fact though the non-normality is obvious. When the physical disability is not obvious and the parents realizes that their child is lagging behind compare to other children in home, school or in neighborhood, a bargaining process starts of how everything was "normal" since conception. Such situations, force parents to reexamine their perceptions regarding their child, build tremendous stress on the couple. This increases their vulnerability for further physical and mental ill health.

Self Assessment

1. Fill in the blanks:

   (i) ....................... orientation of the professionals is the key for intervention to deal with these disability issues in the process of counseling.

   (ii) The first major stress that a family experience while facing the news from the professional that the new borne is ................. .
(iii) Causes are not known or not detectable in around ................. of cases that are mentally challenged.
(iv) ................. orientation of the professionals is the key for intervention to deal with these disability issues in the process of counseling.
(v) When the ................. is physically obvious and noticeable, it becomes difficult for parents to accept that their child has some disability.

31.2 Parental Involvement

Firstly, it is highly important to understand the significance of parental involvement in rehabilitation process. Hoover-Dempsey and Sandler (1997) defined parent involvement that includes two types of activities for the parents: one is home-based activities related to children's learning at school - for example, reviewing the child's work and monitoring child progress, helping with homework, discussing school events or course issues with the child, providing enrichment activities pertinent to school success, and talking by phone with the teacher. Second, School-based involvement, focused on such activities as driving on a field trip, staffing a concession booth at school games, coming to school for scheduled conferences or informal conversations, volunteering at school, serving on a parent-teacher advisory board.

The most comprehensive model of parent involvement is perhaps the one proposed by Epstein (2001). She describes six major levels of involvement.

1. **Parenting** includes the basic parenting and child rearing approaches that prepare children for school.
2. **Communicating** with families, providing information about the school programs and children's progress is the second level of involvement, which are the basic responsibilities on the part of the schools.
3. **Volunteering** by parents for assisting the teachers in classrooms. It may also include parental support for their children in extracurricular activities such as sports, and other events.
4. **Learning at home** includes requests and guidance from teachers for parents to assist their own children at home in activities to coordinate with the children's class work.
5. **Decision-making** i.e. including parents in school governance.
6. **Community partnership** final level of involvement is collaborating with the community to strengthen school programs.

According to Brito and Waller, parent involvement is a concept that can include many different activities. It can range from an impersonal visit to school once a year to frequent parent teacher consultations to active school governorship. Thus, individual parents can be placed on a continuum ranging from very low (or nonexistent) to very active involvement. With this understanding, parental involvement can be seen as an extending and investing genuinely, positively and non-judgmentally beyond themselves. In case of parents of a child with disability, the issue of involvement can become more complex.

Parental involvement is the gateway to benefit person with disability from the possible professional help. The term 'parental involvement' means different things to different people.

31.2.1 Facilitating Parental Involvement

Relationship of rehabilitation professional and parents became the foundation to motivate and increase effective parental involvement in the process of rehabilitation. It is important to develop trustworthy and healthy relationship among parents and rehabilitation professionals. While dealing with the parents emphasis on the following aspects is facilitative:
31.2.2 Collaborative Working relationship

It is important to communicate parents that the responsibility rest not only with the professionals but also with parents. Parents must feel that rehabilitation professional is not working for them as a substitute; rather solution to problem will be sort together. For an example, the overprotected atmosphere in the sheltered workshops can increase the dependency of the child with disability and of parents. Parents may feel that it is ‘rescue time’ for them when their child is in sheltered workshop. However, at home parents can assist their own children in activities to coordinate with the children's class work.

1. This will help to generate the feeling of security and assurance regarding their child progress and abilities.
2. Understanding the importance of need for their (parents) active involvement.
3. Immediate feedback of the working together relationship, which can further reinforce their (parents) involvement.
4. It will help parents to overcome the feeling of helplessness and increase sense of worth among them.

31.2.3 Professional's attitude towards the child with disability

Parents are always struggling with the feelings of acceptance of their child with disability. However, rehabilitation professionals accepting attitude towards child with disability will generate similar feelings in parents too. If parental acceptance is good it will definitely promote parental involvement.

To foster parental involvement:

1. Rehabilitation Professionals needs to be nonjudgmental, accepting and should have unconditional positive regard for the child with disability.
2. Rehabilitation professional should see the child with disability as an individual - a special person.
3. Rehabilitation professional should communicate that he likes their child and would like to work with him.

During the interaction with child rehabilitation professional is also modeling to the parents how should be behavior towards the child with disability. This positive attitude of the rehabilitation professional will not only help the child but parents will also learn in the process. Rehabilitation professional’s attitude will have significant impact on parents. Further, rehabilitation professional attitude towards their child with disability will help parents to deal with the feelings of rejection and augment parental involvement.

31.2.4 Appreciating parents for their efforts

Parents struggle to do the best they can for their child from the moment they realize the problem of their child. It is observed that parents do their all possible for their child’s benefit. The feeling of appreciating by the rehabilitation professional helps to sustain the motivation of the parents and maintain further involvement in rehabilitation process.

1. Rehabilitation professional should communicate parents that parents also have their own strengths and ideas that are important and necessary in the rehabilitation processes of their child.
2. Rehabilitation professional must appreciate parents though they have incidences of failure and shortcoming in their efforts.

Appreciation by the rehabilitation professional boosts the self-esteem of the parents, strength them to deal with stress and create belief regarding their active involvement for their child’s assured and better future.

31.2.5 Assessment feedback

After completion of the assessment of the child, a detail feed back to the parents is helpful. Rehabilitation professional must communicate to the parents all possible aspects of assessment, as it
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will help in realistic appraisal of the situation of their child. The multidimensional assessment will
give clear directions and action plan to the rehabilitation professionals and most important to the
parents.
1. It will help to anticipate further necessary action that needs from parents.
2. It will help parents to look for possible resources required in the rehabilitation process of their
child.
3. It will also help them to clarify their role in rehabilitation process that can save their energy
from unnecessary efforts.
4. It will increase the feeling of certainty regarding their child among parent that can reduce
further stress.

Self Assessment

2. State whether the following statements are 'True' or 'False':
   (i) Epstein describes six major levels of involvement.
   (ii) According to Brito and Waller (1994) parent involvement is not a concept that can include
       many different activities.
   (iii) It is important to communicate parents that the responsibility rest not only with the
        professionals but also with parents.
   (iv) Parents may not feel that it is 'rescuer time' for them who their child is in sheltered workshop.
   (v) Rehabilitation professionals should see the child with disability as an individual.

31.3 Role of Peers

The impact of peer influence on exceptional children is generally associated with negative
connotations. The use of the peer group as a vehicle for problem-solving development has not been
fully utilized, even though it presents significant opportunities for childcare practitioners and
educators.

It is widely accepted that membership in peer groups is a powerful force in exceptional children
education. These groups provide an important developmental point of reference through which
special children gain an understanding of the world outside of their families. Failure to develop
close relationships with agemates, however, often results in a variety of problems for special children
- from delinquency and substance abuse to higher peer stress and less companionship support from
peers has been associated with a lower social self-concept in special education.

As children progress special education, they build knowledge bases that help them navigate social
situations. An abundance of literature has suggested that there is considerable individual variation
regarding cognitive skill development in special education as it relates to peer influence. Dodge's
(1993) research indicated that poor peer relationships were closely associated with social cognitive
skill deficits. He found that exceptional children who had developed positive peer relationships
generated more alternative solutions to problems, proposed more mature solutions, and were less
aggressive than youth who had developed negative peer relationships. Along those same lines, found
that adolescents who compared themselves negatively in reference to their peers experienced a
reduction in attention to problem-solving tasks.

Peer Influence as a Behavior Management Tool: Most public and private childcare systems continue
to overlook peer influence despite the growing body of literature indicating that it represents a
powerful force in maintaining orderly, productive, and positive academic and rehabilitative
environments. Schools all but ignore the incorporation of peer group strategies as a vehicle for
developing problem-solving skills in the classroom, focusing instead on individual memorization of
facts and concepts (while removing "problem" children from the classroom). One only needs to review
the contents of school proficiency tests to realize that education administrators have become more
interested in teaching children "what" to think than "how" to think.
Similarly, rehabilitation programs generally focus on rules and conformity, practices that are often
designed to control youth and maintain staff-imposed order. Mental health systems commonly focus
on individual pathology and seek to improve client functioning through adult-child counseling
approaches. In those instances where peer group approaches have been used with special education,
it has usually been to arrest or change maladaptive social behaviors.

Over the past two decades, child- and family-service programs have popularized the term
empowerment and, to some extent, have incorporated peer-referenced paradigms into their
approaches with adolescents. Many programs have failed to truly value children as partners in this
process; instead, they have used peer influence to police the environment and maintain order once
children have broken adult-imposed rules.

**Adult Views of Troubled special Children:** Unfortunately, many childcare professionals have a
pessimistic view of children and behavior that is detrimental to the rehabilitative process, and the
basis of most therapeutic approaches for children with behavior disorders is a negative attitude. A
pervasive clinical orientation that explains problematic behaviors as pathological or deliberate has
prevented child-care professionals from viewing behaviors as symptoms of personal distress.
Furthermore, the managed care movement has been overly obsessed with the quick elimination of
isolated problematic behaviors, usually delivered in the most economical forum available. As a
consequence, treatment interventions often fail to modify or restructure those particular values or
cognitive structures that led to the adolescent's misbehavior.

**Dynamics of Problem Solving:** Troubled adolescents typically have a difficult time with problem-
solving tasks. How they go about seeking solutions may be more important than what alternatives
they produce. Developing problem-solving processes (the "how") promotes generalization to future
problem-solving situations; what solutions they choose may offer only temporary relief from a
momentary difficulty.

Developmental theorists have proposed that effective problem solving is at the heart of mental health
and adjustment. Furthermore, the literature strongly supports the impact of peer influence in this
process. Bronfenbrenner's (1979) theory on directive beliefs supports the idea that peer group
microsystems contribute to an adolescent's development as the adolescent organizes experiences to
develop future plans.

### 31.4 Summary

There are following role of peers and family in rehabilitation of exceptional children.

- Acceptance, which involves viewing the child with disability realistically and withdrawal of
  emotional investment from the loss of a healthy child and attachment to the real child with
  person with disability, is a crucial and important aspect, where each parent individually goes
  through the process of mourning at his or her own space

- A good family encompasses a warm and easy husband-wife relationship. In order to promote
  parental understanding, physicians, psychologists, therapists and teachers must show a warm
  compassionate attitude toward the child.

- The Mother Participates in a programme which is committed to avoiding disabled children
  from being taken from their family home and community.

- Cause of the handicap is known or unknown contributes to variety of parental reactions. If the
  cause is known and could not be prohibited by the parents for example some sort of brain
  injury during birth, parents usually experience less guilt. When known cause is apparent by
  the parents and avoidable for example parental infections of the mother or seizures and injuries
  resulting from the child falling or dropped by mother, father or by some family member the
  guilt experience is relatively more. Causes are not known or not detectable in around 30-40% of
cases who are Mentally Challenged (Indian council of medical research, 1996).

- Nature of disability, what exactly is wrong with the child is one of the major concerns of the
  parents of child with disability. It affects the realistic acceptance of the parents of child with
Notes
disability. There can be two scenarios either the disability can be obvious or not obvious. When the disability is physically obvious and noticeable then it becomes easier for the parents to accept the reality of disability.

- Relationship of rehabilitation professional and parents became the foundation to motivate and increase effective parental involvement in the process of rehabilitation.
- It is important to communicate parents that the responsibility rest not only with the professionals but also with parents. Parents must feel that rehabilitation professional is not working for them as a substitute; rather solution to problem will be sort together. For an example, the overprotected atmosphere in the sheltered workshops can increase the dependency of the child with disability and of parents.
- Parents are always struggling with the feelings of acceptance of their child with disability. However, rehabilitation professionals accepting attitude towards child with disability will generate similar feelings in parents too.
- During the interaction with child rehabilitation professional is also modeling to the parents how should be behavior towards the child with disability. This positive attitude of the rehabilitation professional will not only help the child but parents will also learn in the process.
- Parents struggle to do the best they can for their child from the moment they realize the problem of their child.
- After completion of the assessment of the child, a detail feed back to the parents is helpful. Rehabilitation professional must communicate to the parents all possible aspects of assessment, as it will help in realistic appraisal of the situation of their child.
- The impact of peer influence on exceptional children is generally associated with negative connotations. The use of the peer group as a vehicle for problem-solving development has not been fully utilized, even though it presents significant opportunities for childcare practitioners and educators.
- It is widely accepted that membership in peer groups is a powerful force in exceptional children education. These groups provide an important developmental point of reference through which special children gain an understanding of the world outside of their families.
- Unfortunately, many childcare professionals have a pessimistic view of children and behavior that is detrimental to the rehabilitative process, and the basis of most therapeutic approaches for children with behavior disorders is a negative attitude. A pervasive clinical orientation that explains problematic behaviors as pathological or deliberate has prevented child-care professionals from viewing behaviors as symptoms of personal distress.
- Troubled adolescents typically have a difficult time with problem-solving tasks. How they go about seeking solutions may be more important than what alternatives they produce. Developing problem-solving processes (the “how”) promotes generalization to future problem-solving situations; what solutions they choose may offer only temporary relief from a momentary difficulty.

31.5 Keywords

- Peer : A person who is the same age or who has the same social status as you.
- Parental : Connected with a parent.
- Collaborative : Involving, or done by several people or groups of people.

31.6 Review Questions

1. What is the role of family in rehabilitations of disabled children?
2. What is the family behaviour according to the nature of disability?
3. What are the six level of parent involvement given by Epstein?
### Answers: Self Assessment

1. (i) Parenting  (ii) Exceptional  (iii) 30-40%  (iv) Multicultural  (v) Disability

2. (i) True  (ii) False  (iii) True  (iv) False  (v) True

### 31.7 Further Readings

1. Special Education: Laura Rothstein; Scott F. Johnson; Sage Publisher, Inc.
2. Special Education: Daniel P. Hallahan, James M. Kauffman, Paige C. Pullen; Pearson Education, Inc.
3. Special Education: Linda Wilmshurst, Ph.D., ABPP, Alan W. Brue, Ph.D., NCSP
Unit 32: Rehabilitation of Exceptional Children: Role of Community, Role of Government

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Objectives
The objectives of this unit can be summarized as below:
• to describe the role of community in rehabilitation of exceptional children
• to discuss about role of government in rehabilitation of exceptional children.
• to explain the government efforts to prevent the disability.

Introduction
Between 5 and 10% of Indians have some impairment or disabling condition. This means that India has a huge population of disabled people. At the policy level, progressive legislation, schemes and provisions exist for them. But at the ground level, the disabled continue to be neglected. India needs to mark a shift from the medical model of intervention to community-based rehabilitation of the disabled Central to the community-based rehabilitation (CBR) approach is the concept of community participation.

There is need to measure all dimensions of participation including measurement of the number of people with disabilities reached and quantity and quality of resources generated as a result of community participation. Valid and reliable measures of community participation need to be developed.

The Government of India offers various schemes to encourage voluntary action for rehabilitation of the disabled. Through these schemes NGOs can access government support. Prominent among these schemes are provision for grants-in-aid to special schools, vocational training, employment, community-based rehabilitation projects, residential homes, and leisure and recreation centres etc. The NGO should be a registered society/public trust existing for at least two years prior to applying for financial aid.

32.1 Role of Community in Rehabilitation of Exceptional Children
Community-Based Rehabilitation is essentially meant to ensure that disabled people, wherever they are, are not discriminated against or deprived. For many people in the world now it is still a big problem to get help for their disability. City institutions are far away and cost too much. The idea of
CBR is that disabled people should have the right to a good life. The help should be available to them, at a low cost. It should be offered to them and their family in a way that suits their usual way of living, whether in a village, a town or a city. They should have education like everybody else. They should be able to take up jobs and earn their living. They should be able to take a full part in all the activities of their village, or town or city. The idea of CBR is that, even if people learn very slowly, or have problems seeing or hearing, or find it hard to move about, they should still be respected for being men and women, girls and boys. Nobody should be looked down on, or treated badly just because they have a disability. Houses, shops and schools should be built in such a way that everyone can easily go in and out and make use of them. Information should be given to people in a way they understand, not only in writing, which is hard for people who cannot read or have problems seeing it. Information should be given in spoken forms as well, so that everyone has a fair chance to use it. To do all this would mean a lot of changes. But they would be good changes, because everyone could live a better life, helping each other and respecting one another.

Between 5 and 10% of Indians have some impairment or disabling condition. This means that India has a huge population of disabled people.

32.1.1 Different ways to CBR
Most people agree that disabled people should have a better life. But people have different ideas about how it should be done. Around the world, people live in many different ways, and have different beliefs about what people should do. So, people use the CBR in many different ways. Some people think the government should take money away from the city institutions, and use it to pay for more people with healing and counselling skills in villages. Some people want specialists to go out from the city and travel round the villages, giving everyone a chance to see them. Some people want to send village healers to the city for training, so that they could go back to the village with a lot more knowledge and skills.

Self Assessment
1. Fill in the blanks:
   (i) ....................... should be given to people in a way they understand, not only in writing, which is hard for people who cannot read.
   (ii) ....................... is essentially meant to ensure that disabled people, wherever they are not discriminated against or deprived.
   (iii) City....................... are far away and cost too much for disabled people.

32.2 Role of Government in Rehabilitation of Exceptional Children
The Government of India offers special concessions to the disabled in the following areas:
1. **Travel:** The Ministry of Railways offers a discount of 75% on fare for all classes, and 50% on season tickets to a person with disability on production of a valid Certificate of Disability. Concession is also allowed for an escort accompanying a disabled person. Those with visual impairment and locomotor disability are eligible for 50% discount on airfare if they travel by Indian Airlines.
2. **Communication:** Blind literature and packages are exempt from postage and postal fees under prescribed conditions. Persons with visual and locomotor disability get preferential allotment for running STD/PCO telephone facilities.
3. **Customs concessions:** Import of special learning and mobility aids for personal use of persons with disability are exempt from customs duty.
4. **Income tax concessions**: The parent or guardian of a disabled person is entitled to a deduction up to Rs 40,000 in tax on income. Deduction is also permissible to an individual or family member with respect to expenditure incurred on medical treatment of a disabled person. The limit of this deduction is Rs 41,000. Deduction from total income of a disabled person has been raised to Rs 40,000.

5. **Bank loans and subsidy**: Persons with physical disabilities and institutions working for such persons can avail of loans from public sector banks at differential rates of interest. Under the Integrated Rural Development Programme, the physically disabled receive subsidy up to Rs 6,000.

### 32.2.1 Implementing machinery

Various agencies have been established to spearhead, maintain and encourage rehabilitation efforts. The National Institutes provide direct services (e.g. assessment, early intervention, training etc.), conduct human resource development programmes, engage in research activities independently and in collaboration with voluntary agencies, and produce resource material and equipment relevant to Indian needs. Each National Institute has regional centres in different parts of India.

Under the provisions of the Persons with Disability Act (1995), the government has appointed a Chief Commissioner of Disabilities at the Centre, and a Commissioner of Disabilities in each state, who are responsible for implementing the Act. At the state level, the Ministry of Social Justice & Empowerment implements its policies by funding and monitoring rehabilitation efforts of government and non-government agencies.

The University Grants Commission (UGC), the apex government funding agency for monitoring higher education, has sanctioned the setting up of Disability Units in universities to promote opportunities for higher education for persons with disabilities. Established under the UGC scheme of Higher Education for Persons with Special Needs (HEPSN), the Disability Units are expected to ensure that the physical and educational environments in affiliated colleges and departments of the university are conducive to students with disabilities pursuing higher education. Additionally, the Units would ensure that persons with visual, hearing and physical impairments are employed in the university under the 3% job reservation scheme.

![Task](image)

**Task** What are functions of UGC in the context of disabled students?

### 32.2.2 Disability: From paper to practice

Whatever the provisions on paper, India’s approach towards the rehabilitation of the disabled reflects the confused state of mind of a person who wants to be emancipated and modern while preserving age-old traditional values.

Government policy, legislative actions, schemes and provisions for the disabled give the impression of a State that is committed to human rights and equal opportunities.

Most people believe that disability is either an irremediable medical condition or an act of fate. In both cases the onus of care must rest with the family of the disabled and not on the community. Myths and misconceptions about disability abound, causing the disabled to be isolated and marginalised. The legal definitions (Persons with Disability Act 1995) view disability strictly from the medical and/or psychometric perspective. This ends up reinforcing a medical model of intervention rather than the much-needed community-based rehabilitation.

Prevention and early detection are important components of the medical model. However, measures taken for these are insufficient. While the Pulse Polio drive and immunisation against diphtheria, pertussis and tetanus have been quite successful, efforts for the prevention of other conditions such as blindness, deafness and neurological disabilities have been dismal. The incidence of developmental
disabilities (e.g., mental retardation, autism) has increased to an alarming level. This is a bad sign for healthy society.

Various schemes have been offered for the welfare of the disabled population. At times, the process of availing of the benefits of schemes is so cumbersome and time-consuming that most people prefer to by-pass them.

Often, the government department selected for implementing a scheme is not notified of its details and their role in it. On the other hand, when the department concerned is notified, the officers assume a patronising attitude towards potential beneficiaries and delay the process of implementation.

The Persons with Disability Act (PDA) promises creation of facilities in almost all areas pertaining to disability. But 'appropriate authorities' are directed to 'endeavour' or 'promote' integration (of persons with disabilities) 'within the limits of their economic capacity and development'.

Reactions to the provisions in the Act range from complete acceptance to total rejection. Those endorsing the Act do not feel the need to analyse its contents because they believe it is its efforts that finally culminated in legislation for the disabled. The critics of the PDA are concerned about the lack of an implementation mechanism. While clauses confer immunity to government authorities, parents and family members can be criminally charged for neglect and abuse.

Full inclusion of the disabled would mean removing the physical barriers of participation. Conditions and regulations that actually build physical barriers must be changed immediately. Thus rules for public buildings must be modified so that such buildings are accessible to persons with disabilities. The Motor Vehicles Act should make wheelchair accessibility an essential condition for manufacture of public transport vehicles.

Some people view the PDA as the government's effort to provide a legislative structure to what, in effect, is a statement of policy. But constitutional provisions without penal sanctions negate the advantage of enforcement, and make the usefulness of the legislative instrument questionable.

To the stakeholders in the field, disability legislation in India seems progressive in spirit but lacking in the strength to progress. On the other hand, a strong legislation might remove legal barriers to participation but cannot ensure removal of social barriers against people with disabilities. The use of powerful legislation has the advantage of creating an enforceable right, but the disadvantage is that the disabled may obtain inclusion without participation.

This brings us back to the social attitude towards disability. Most Indians view disability as matter of charity rather than a human rights issue. The charity perspective, while ensuring care and tolerance, promotes dependency among the disabled. The charity perspective also reinforces the belief that decisions regarding the nature, amount and recipient of charity should lie with the donor. On the other hand, the disabled and their families must accept their hardship with fortitude, as it is a part of their karma.

**Self Assessment**

2. **Multiple Choice Questions**

*Choose the correct option:*

(i) The ministry of Railways offers a discount of ....................... on fare for all classes and 50% on season tickets to a person with disability on production of a valid certificate of disability.

   (a) 50%  (b) 25%  (c) 75%  (d) 90%

(ii) The parent of guardian of a disabled person is entitled to a deduction of ....................... in tax or income.

   (a) 40,000  (b) 10,000  (c) 20,000  (d) 80,000

(iii) The disability unit of universities would ensure that persons with visual, hearing and physical impairments are employed in the university under the ............... job reservation scheme.

   (a) 4%  (b) 3%  (c) 5%  (d) 7%
The motor vehicle act should make accessibility an essential condition for manufacture of public transport vehicles.

(a) wheelchair  (b) pedals  (c) sticks  (d) backbone support

32.3 Government Efforts to Prevent the Disability

32.3.1 Prevention

Prevention must be the priority of any government in order to reduce the incidence of disability. The Integrated Child Development Services (ICDS) scheme was launched in 1975-76. Its objectives were to improve the nutritional and health status of children in the 0-6 age-group, provide nutrition and health education for all women within the age range of 15-44, and enhance the capability of mothers to tend to the health and nutritional needs of children.

The National Health Policy (1983) incorporated the WHO-sponsored Expanded Programme of Immunisation. The universal immunisation programme is a drive against diphtheria, pertussis, neonatal tetanus, tuberculosis, poliomyelitis and measles. The Pulse Polio programme has been undertaken nationwide for all Indian children (0-5 years) irrespective of their immunisation status. The target is complete eradication of polio.

The National Iodine Deficiency Disorder Control Programme of 1986 aimed to prevent occurrence of goitre, mental retardation and hearing impairment.

The Child Survival and Safe Motherhood Programme (1992) educates communities about pre-natal, peri-natal and post-natal care of the mother and infant in order to prevent infant mortality and developmental disabilities. The government has also set up a network of Primary Health Centres in the country.

Efforts for early identification of disability have been made both by government and non-government organisations (NGOs). Government hospitals are expected to have the expertise and equipment to screen and identify disability. Positive steps towards early identification of disability include the organisation of eye camps, and the involvement of anganwadi workers (nursery teachers in rural and urban poor areas), village communities and mass media.

Early intervention through infant stimulation, physiotherapy, occupational therapy, speech and language therapy, parent counselling and training, has been provided by many government hospitals and clinics run by NGOs. But these services are located in major cities and large towns only.

The role played by the National Institutes (autonomous bodies functioning under the Ministry of Social Justice & Empowerment) is significant in prevention, detection and early intervention. The government has set up four National Institutes, one each for hearing impairment, visual impairment, locomotor disabilities and mental retardation. A fifth is being considered for multiple disabilities.

32.3.2 Education, training and employment

The education of children with disabilities is offered through a variety of service models ranging from segregation to full inclusion in a mainstream classroom.

More than 50,000 children with disability are enrolled in the Integrated Education for Disabled Children, a government-sponsored programme.

A few schools have resource rooms and employ special education teachers to help retain children with special needs in their system.

Since there are almost no special schools or special educational services in rural India, integrated education for children with special needs is provided by default in the village schools.

Pre-vocational and vocational training is provided within the special educational centres. Besides this, training and rehabilitation education is also available at Vocational Rehabilitation Centres (VRC).
in cities, District Rehabilitation Centres (DRC) for rural population in select areas and Regional Rehabilitation Centres (RRC) in four major cities of the country.

According to a government order a 3% reservation in jobs has been provided for the blind, deaf and physically impaired, in Grade C and D posts, so that each group avails a quota of 1% reservation. Certain jobs have been identified, and the decision made to post people with disabilities in jobs near their place of residence. Age and eligibility criteria may be waived to fit a person with disability in a given post.

Did you know? There are more than 3,000 special schools in India today.

32.3.3 Legislative actions

The last decade of the 20th century saw the enactment of three legislations for the rehabilitation and welfare of people with disabilities.

The Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act was passed in 1995. This is an important legislation that provides for both preventive and promotional aspects of rehabilitation such as education, employment and vocational training, reservation, research and human resource development, creation of barrier-free environment, inclusion and independent living.

The Rehabilitation Council of India Act 1992 led to the establishment of the Rehabilitation Council of India (RCI). The RCI is responsible for standardising and monitoring training courses for rehabilitation professionals, granting recognition to institutions running courses, and maintaining a Central Rehabilitation Register of rehabilitation professionals. The RCI Act was amended in 2000 to give the RCI the additional responsibility of promoting research in rehabilitation and special education.

The National Trust Act 1999 provides for the constitution of a national body for the welfare of people with autism, cerebral palsy, mental retardation, and multiple disabilities. The Act mandates promotion of measures for the care and protection of persons with these disabilities in the event of the death of their parents, procedures for appointment of guardians and trustees for persons in need of such protection, and support to registered organisations to provide need-based services in times of crisis to the families of the disabled.

The three legislations are comprehensive in spirit, and together deal with all aspects pertaining to rehabilitation, from prevention, training, employment, long-term settlement, human resource development and research and documentation.

Self Assessment

3. State whether the following statements are True or False:

(i) The integrated child development services (ICDS) scheme was launched in (1975-1976).

(ii) Efforts for early identification of disability have not been made both by government and non-government organisations (NGOs).

(iii) Government hospitals are expected to have the expertise and equipment to screen and identify disability.

(iv) The persons with disabilities act was passed in 1990.

32.4 Summary

• Community-Based Rehabilitation is essentially meant to ensure that disabled people, wherever they are, are not discriminated against or deprived.

• The idea of CBR is that, even if people learn very slowly, or have problems seeing or hearing, or find it hard to move about, they should still be respected for being men and women, girls and boys.
• The Ministry of Railways offers a discount of 75% on fare for all classes, and 50% on season tickets to a person with disability on production of a valid Certificate of Disability.
• Blind literature and packages are exempt from postage and postal fees under prescribed conditions. Persons with visual and locomotor disability get preferential allotment.
• The parent or guardian of a disabled person is entitled to a deduction up to Rs 40,000 in tax on income. Deduction is also permissible to an individual or family member with respect to expenditure incurred on medical treatment of a disabled person.
• Various agencies have been established to spearhead, maintain and encourage rehabilitation efforts. The National Institutes provide direct services (e.g. assessment, early intervention, training etc.), conduct human resource development programmes, engage in research activities independently and in collaboration with voluntary agencies, and produce resource material and equipment relevant to Indian needs.
• Most people believe that disability is either an irremediable medical condition or an act of fate. In both cases the care must rest with the family of the disabled and not on the community.
• Prevention and early detection are important components of the medical model. However, measures taken for these are insufficient.
• At times the process of availing of the benefits of schemes is so cumbersome and time-consuming that most people prefer to by-pass them.
• The Persons with Disability Act (PDA) promises creation of facilities in almost all areas pertaining to disability. But ‘appropriate authorities’ are directed to ‘endeavour’ or ‘promote’ integration (of persons with disabilities) ‘within the limits of their economic capacity and development’.
• Full inclusion of the disabled would mean removing the physical barriers of participation. Conditions and regulations that actually build physical barriers must be changed immediately.
• To the stakeholders in the field, disability legislation in India seems progressive in spirit but lacking in the strength to progress. On the other hand, a strong legislation might remove legal barriers to participation but cannot ensure removal of social barriers against people with disabilities.
• The Integrated Child Development Services (ICDS) scheme was launched in 1975-76. Its objectives were to improve the nutritional and health status of children in the 0-6 age-group, provide nutrition and health education for all women within the age range of 15-44, and enhance the capability of mothers to tend to the health and nutritional needs of children.
• The National Iodine Deficiency Disorder Control Programme of 1986 aimed to prevent occurrence of goitre, mental retardation and hearing impairment.
• Efforts for early identification of disability have been made both by government and non-government organisations (NGOs). Government hospitals are expected to have the expertise and equipment to screen and identify disability.
• The education of children with disabilities is offered through a variety of service models ranging from segregation to full inclusion in a mainstream classroom.
• More than 50,000 children with disability are enrolled in the Integrated Education for Disabled Children, a government-sponsored programme.
• The last decade of the 20th century saw the enactment of three legislations for the rehabilitation and welfare of people with disabilities.
• The Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act was passed in 1995. This is an important legislation that provides for both preventive and promotional aspects of rehabilitation such as education, employment and vocational training, reservation, research and human resource development, creation of barrier-free environment, inclusion and independent living.
• The Rehabilitation Council of India Act 1992 led to the establishment of the Rehabilitation Council of India (RCI).
• The National Trust Act 1999 provides for the constitution of a national body for the welfare of people with autism, cerebral palsy, mental retardation, and multiple disabilities.
32.5 Keywords

- Community: All the people who live in a particular area, country.
- Exceptional: Unusually good.
- Integrated: In which many different parts are closely connected and work successfully together.
- Legislative: Connected with the act of making and passing laws.

32.6 Review Questions

1. What is ICDS?
2. Explain the persons with disability act (PDA).
3. What is the work of disability unit in universities?
4. What is CBR?

Answers: Self Assessment

1. (i) Information (ii) Community based rehabilitation (iii) Institution
2. (i) (c) (ii) (a) (iii) (b) (iv) (a)
3. (i) True (ii) False (iii) True (iv) False

32.7 Further Readings

1. Special Education: Laura Rothstein; Scott F. Johnson; Sage Publisher, Inc.
2. Special Education: Daniel P. Hallahan, James M. Kauffman, Paige C. Pullen; Pearson Education, Inc.
3. Special Education: Linda Wilmshurst, Ph.D., ABPP, Alan W. Brue, Ph.D., NCSP.
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