22

EARLY IDENTIFICATION AND INTERVENTION

Every child is unique. Children progress rapidly in their early years. Individual children have their own strengths and weaknesses. Their developmental progress occurs in certain sequences, but the pace of development may vary. However, if children display marked problems or difficulties in one (or more) developmental area(s), then they need special care and support.

The early identification of children's developmental delays or learning difficulties helps us understand and take the required steps to support the children and ensure their optimum development and learning. This early identification facilitates the use of intervention strategies to provide the required positive early experiences for children at risk of academic difficulties.

In this lesson you will study the importance of early identification, identification of children requiring special care or interventions.

LEARNING OUTCOMES

After studying this lesson, you will be able to:

- describe the meaning and significance of early identification;
- discuss the strategies for early identification;
- explain the concept and significance of early intervention;
- identify the strategies for early intervention; and
- discuss assistive technologies for supporting inclusion.

22.1 CHILDREN WITH DISABILITIES

Disability can be defined as any limitation or restriction to perform developmentally



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appropriate activities which are desired by society. The International Classification of Functioning, Disability and Health: Children and Youth Version (ICF-CY) defined disability as, "neither purely biological nor social but instead the interaction between health conditions, environmental and personal factors." It described disability at three levels:

- an impairment in body function or structure, such as a cataract which prevents the passage of light and sensing of form, shape, and size of visual stimuli;
- a limitation in activity, such as the inability to read or move around;
- a restriction in participation, such as exclusion from school.

The term, children with disabilities, is used to refer to the children with disabling health conditions or impairment or as a result of illness, poor nutrition or injury.

22.1.1 THE MAJOR DISABILITIES

In our community we see people around who cannot walk or have some body part deformed; have difficulty in seeing or hearing; have difficulty in understanding or learning. These people are suffering from some impairment and are having disability. There is a range of disabilities as defined by different models. The major are listed below.

Sensory impairment: Any condition which implies a loss or impairment of the sensory organs such as hearing, vision, speech and olfactory senses. While a majority of such conditions can be treated and rehabilitated, some conditions persist lifelong and might require therapy and constant support.

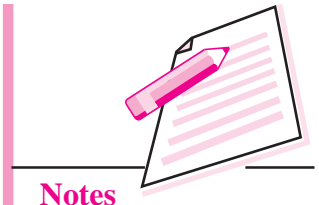
Developmental disabilities: These are diverse group of chronic conditions which are due to mental or physical impairment. This may include delayed or abnormal development. The conditions such as Autism Spectrum Disorder, Cerebral Palsy, Down syndrome and Asperger Syndrome falls under this.

Learning disability: This refers to an impairment of cognitive abilities that manifests as a certain type of learning-related disability. These differ from child to child, based on the particular cognitive function that is affected like:

- input (difficulty processing visual information)
- difficulty in processing audio or lingual information
- integration (putting together the information and making sense of it)
- storage (memory-related)
- output (having trouble expressing the information)

The biggest challenge with learning disability is that they are harder to identify and diagnose.

Behavioural issues: Children with behavioural issues may experience difficulty in responding to the regular forms of care and discipline that works with other



children. For example, conditions like Attention Deficit Hyperactivity Disorder (ADHD), Oppositional Defiant Disorder (ODD) and Conduct Disorder (CD) are difficult to identify and diagnose since many of these children are initially assumed to be 'difficult' or 'temperamental'.

Mental and psychological conditions: Delayed mental development and mental retardation can be listed as intellectual disorders in children while conditions such as anxiety, chronic depression and mood swings can be classified as psychological disorders. While children with intellectual disorders have early symptoms that can be diagnosed easily, psychological disorders take longer to be detected.

Medical conditions: This bracket includes children suffering from weakening chronic conditions such as heart disease, muscular dystrophy, cancer, cerebral palsy, etc. These children may suffer from long periods of extremely poor health, interspersed with numerous tests, hospital stays and prolonged medication. This negatively impacts a normal childhood.

While each one of these conditions is different from the other, the similarity is in the need for identifying, diagnosing and treating the condition coupled with the need to find the right kind of support, schooling and home environment.

INTEXT QUESTIONS 22.1

Fill in the blanks.

(a) _____ can be defined as any limitation or restriction to perform developmentally appropriate activities.

(b) Sensory impairment implies impairment of _____.

(c) Children with _____ may experience difficulty in responding to the regular forms of care and discipline.

(d) _____ refers to an impairment of cognitive abilities that manifests as a certain type of learning-related disability.

22.2 MEANING AND SIGNIFICANCE OF EARLY IDENTIFICATION

Early Identification refers to the process of recognizing any disability or developmental variations in early childhood years and to understand the need of early intervention. Early identification of learning difficulty or any related developmental delays can make a huge and a positive difference in the life of children and their families. Early identification can significantly minimize the social, behavioral, or learning difficulties the child experiences.

Preschool and kindergarten teachers are at an advantageous position to catch the early signs and symptoms of a developmental delay or disability, and to identify children who are at risk in learning and school. Teachers need to be aware of symptoms and share their observations and concerns with parents and other school specialists.

New legislation, advances in research, and changes in practices have emphasised the need for early identification and interventions. The purpose of early identification is to determine which children have developmental problems that may be obstacles to learning or that places children at risk. Development in early childhood years is characterised by broad variability in rates and patterns of maturation. For some children, differences and delays in abilities are temporary and are resolved during the normal course of development. For other children, delays may persist in different domains of functioning, necessitating the child's referral for special assessment and/or comprehensive evaluation.

The Convention on the Rights of Persons with Disabilities (UN, 2006) describes people with disabilities as "…those who have long-term physical, mental, intellectual or sensory impairments which, in interaction with various barriers, may hinder their full and effective participation in society on an equal basis with others."

At present, no clear distinction can be made in the early years between children whose problems may persist, and those who will make adequate progress with time. Therefore, young children who demonstrate difficulties in early development may or may not be at risk for Learning Disabilities. Nevertheless, screening, evaluation, enhanced learning opportunities, and intervention services should be provided. In the child's best interest, it is not recommended to "wait and see" or hope that the child will "grow out of" her or his problems.

The purpose of early identification is to determine which children have developmental difficulties that may become obstacles to their learning or may place the children at risk. Thus, there is an urgent and substantial need to identify as early as possible those young children in need of services. This will help to ensure that intervention is provided when the developing brain of the young child is most capable of change.

The need for early identification of learning disabilities is highly related to potential. Children who may initially have been thought to have lower intelligence than their peers may have normal intelligence, but may have some other difficulty or different style/approach of learning that prevents them from reaching their potential. Early help can offer children the support needed to reach their full potential. It can improve the quality of a children's life and enable them to perform better at school and in life later.

In order to diagnose a learning disability, it is necessary to establish that the child is experiencing an unexpectedly high level of difficulty in a particular



academic area. For example, it is recognised that children with dyslexia will generally have ongoing difficulties reading accurately and fluently. It is not really easy to judge about academic performance too early, as all children make mistakes when they first start learning to read, spell, write and calculate. This is generally to be expected. It becomes 'unexpected' when these children progress very slowly or continue to struggle for a much longer period of time than the expected period.

Identifying is about recognising difficulties and making prompt interventions to support children and their families so that issues are tackled before they become more serious problems.

Early identification is everyone's responsibility : parents, teachers and other caregivers. There is an increased expectation of all school staff to identify a child who is struggling and put the support in place. Thus, it is important that they have the skills and knowledge they need, to be able to do so.

22.2.1 Identifying Children with Disabilities

Children with disabilities require interventions and support, if they are experiencing any of the following:

Difficulty in oral language

1. Slow development in speaking words or sentences (also referred to as,late talkers)
2. Pronunciation problems
3. Difficulty learning new words; slow vocabulary growth
4. Difficulty finding the right word to use when speaking
5. Difficulty understanding and following simple (one-step) directions
6. Difficulty understanding questions
7. Difficulty recognizing or learning rhyming words
8. Lack of interest in storytelling

Difficulty in reading and writing skills

1. Slow speed in naming objects and colours
2. Limited phonological awareness (rhyming and syllable blending)
3. Difficulty understanding that written language is composed of phonemes (individual sounds) and letters that make up syllables and words
4. Minimal interest in print and limited print awareness
5. Difficulty recognizing and learning the letters of the alphabet
6. Difficulty learning the connection between letters and sounds

Difficulty related to cognition

1. Trouble memorising the alphabet, numbers, days of the week etc.
2. Poor memory for what should be routine (everyday procedures)
3. Difficulty with cause and effect, sequencing, and counting
4. Difficulty with basic concepts, such as size, shape, and colour

Difficulty in motor skills

1. Clumsiness
2. Poor balance
3. Difficulty with fine motor skills and manipulating small objects (stringing beads, tying shoes, buttoning)
4. Difficulty with running, jumping, or climbing (delayed gross motor skills)

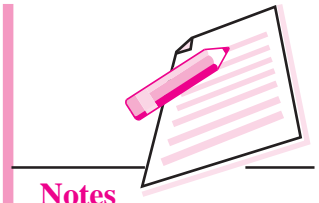
Difficulty in social behavior

1. Trouble interacting with others or playing alone
2. Easily frustrated
3. Hard to manage, temper tantrums
4. Has difficulty following directions
5. Distracted easily and inattentive
6. Impulsive
7. Hyperactive
8. Difficulty in changing activities or handling disruptions to routines

INTEXT QUESTIONS 22.2

State whether the following statements are true or false:

1. Early identification can significantly increases the social, behavioral or learning difficulties of children with disabilities.
2. Preschool teachers are at disadvantageous position to catch the early signs and symptoms of a developmental delay or disability.
3. Development in early childhood years is characterized by broad variability in rates and patterns of maturation.
4. Identifying is about recognising difficulties quickly and making prompt interventions.
5. Poor memory for what should be routine, is associated with motor skills.



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22.2.2 Early Identification Strategies

The need for early identification of children with disabilities is important for the parents, schools and community. Various strategies can be adopted to identify the needs of these children. Various National Policies have emphasized the need for early identification and appropriate interventions to help children with special needs, especially the very young.

National Policy for Persons with Disabilities (2006) also emphasises that children upto the age of six years may be identified at the earliest and necessary interventions be made urgently so that they are capable of joining inclusive education at the right age.

The identification process includes:

(1) Screening

(2) Examination for the presence of risk indicators and protective factors

(3) Systematic observations

(4) Comprehensive evaluation

***Screening*:** Screening refers to determining the areas where children need assistance. There should be a system to identify, locate, and evaluate all children with disabilities who need early intervention or special education services.

Risk indicators and protective factors: A range of environmental, biological, genetic, and prenatal conditions are associated with adverse developmental outcomes and may be considered as risk indicators or warning signs of learning disability. However, risk indicators do not always predict which children will have future learning problems. Risk indicators must be considered within the context of typical developmental expectations. Protective factors like special schools, educators and therapists are factors that reduce risk and foster resilience and help buffer children from circumstances that place them at risk.

Systematic observations : Systematic observations of a child's behavior and abilities over time is important. Observations may be informal or may follow a standard observation methodology. In either case, they should be conducted multiple times and in varying contexts (e.g., home, preschool, classroom, playgroup). Observations should provide information of the frequency, consistency and severity of the behaviors leading to concerns.

Comprehensive evaluation: When a screening, a review of risk indicators and protective factors, and systematic observations suggest that a child is at risk then professionals should conduct periodic evaluations to ascertain whether development follows expected patterns. The major goal of a comprehensive evaluation is to determine the individual child's specific pattern of abilities and



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needs and to identify strategies and resources to address learning and behavioral problems as soon as possible. These evaluations should occur across different settings and should consider multiple perspectives.

Proper identification is crucial for the implementation of appropriate and timely intervention. Early intervention to address developmental delays can make a crucial difference in the children's life.

22.3 EARLY INTERVENTIONS

Early intervention means doing things as early as possible to work on the child's developmental, health and support needs. Early intervention services give specialised support to children and families in the early years, generally from birth until the child turns five. It is hoped that these services, provided early, will address any delays in development.

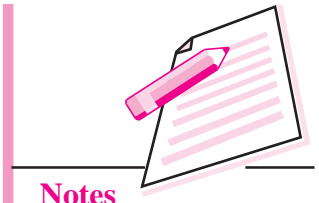
Early intervention services are a range of special and specific services to help young children who have developmental delays. Different types of specialists work with these children giving them specialised support. This support might include special educators, therapists, counselors etc. Early intervention helps to address the developmental delays and can make a crucial difference in the children's life.

A child who qualifies for an early intervention programme may receive one or more of these services:

- Screening and assessment
- Speech and language therapy
- Physical or occupational therapy
- Psychological services
- Home visits
- Medical, nursing or nutrition services
- Hearing (audiology) or vision services
- Social work services
- Transportation or mobility

Advantages of early interventions

- Improve children's developmental, social and educational gains
- Reduce feelings of isolation, stress and frustration that families may experience
- Help alleviate and reduce behavioural issues by using positive behaviour strategies and interventions



- Help children with disabilities grow up to become productive, independent individuals
- Reduce the future costs of special education, rehabilitation and healthcare needs

INTEXT QUESTIONS 22.3

Explain the following terms listed below in one sentence only:

1. Screening
2. Comprehensive evaluation
3. Early intervention
4. Risk indicators

22.3.1 Strategies for Early Intervention

Intensive early intervention for children with disability is the most effective kind of intervention. It is not just about the number of hours, it is also about the quality of those hours and how the therapy supports the child. Parents and teachers are usually the first interventionists for developmentally delayed infants and young children.

Different children respond in different ways to interventions, so no single programme will suit all children and their families. Focus on what the child requires. A good intervention involves regular assessment to ensure that the child is making progress. The gains might be small initially, but they could all add up. Many children with a disability can benefit from some type of early intervention or therapy. For example:

- **Occupational therapy** can help with fine motor skills, play and self-help skills like dressing and toilet training
- **Physiotherapy** can help with motor skills like balance, sitting, crawling and walking
- **Speech therapy** can help with speech, language, eating and drinking skills

A variety of some other child-focused strategies have shown evidence of success including interacting with peers, prompts, modeling techniques and intermittent reinforcement. These strategies should be implemented with uniformity, conformity and regularity. Parents and educators need to be properly trained to implement these teaching strategies. It is important to remember that all children are unique and require techniques and strategies individualised to their needs.

22.3.2 Characteristics of Quality Interventions

Family-centred

- Includes the family members to work alongside the professionals and learn how to help the child
- Is flexible, can be offered in the home as well as in other settings such as preschools and early intervention centres
- Provides the family with support and guidance

Developmentally appropriate

- Is specially designed for children in relation to the disability
- Has staff who are specially trained in the intervention and services they provide
- Develops an individual plan for each child and reviews the plan regularly
- Tracks the children's progress with regular assessments

Child-focused

- Includes strategies to help children practice difficult skills or learn new skills and use them in different settings
- Prepares and supports children for optimum development
- Finds ways of getting children with disability together with other children, ideally of the same age

Supportive and structured

- Provides a supportive learning environment where children feel comfortable and supported
- Is highly structured, well organised, regular and predictable

These interventions consist of multidisciplinary services to enhance skills, minimise developmental delays and functional deterioration and promote health and well-being of children.

INTEXT QUESTIONS 22.4

Match column A with column B.

Column A	Column B
1. Occupational therapy	(i) speaking
2. Physiotherapy	(ii) individual plan for each child
3. Speech therapy	(iii) supportive learning environment
4. Supportive and structured	(iv) self-help skills
5. Developmentally appropriate	(v) balance, sitting, crawling



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22.4 ASSISTIVE TECHNOLOGIES FOR SUPPORTING INCLUSION

When children with disabilities are given opportunities to flourish like all other children, they have the potential to lead fulfilling lives and to contribute socially, culturally and economically. One of the most important ways for children with disabilities to flourish is through their access to assistive technology.

Assistive technology refers to "any item, piece of equipment, or product system, whether acquired commercially, modified, or customized, that is used to increase, maintain, or improve functional capabilities of individuals with disabilities." Assistive technology includes products and related services that contribute to the functioning of children with disabilities. They promote children's development and health, as well as their participation in various activities of life. Assistive devices and technologies are those whose primary purpose is to maintain or improve an individual's functioning and independence to facilitate participation and to enhance overall well-being. They can also help prevent impairments and secondary health conditions. Examples of assistive devices and technologies include wheelchairs, prostheses, hearings aids, visual aids, and specialized computer software and hardware that increase mobility, hearing, vision, or communication capacities.

Assistive technology can enhance the quality of life of both children and their families through communication, mobility, self-care, household tasks, family relationships, education, and engagement in play and recreation.

To improve access to assistive technology, all related stakeholders need to come together for the provision of assistive technology. Appropriate assistive technology can be a powerful tool to increase children's independence and improve their participation. It can help children become mobile, communicate more effectively, see and hear better, and participate more fully in learning and play activities.

Providing assistive technology to children as early as possible will facilitate their development and prevent secondary conditions such as deformities.

22.4.1 Examples of Assistive Technologies

Some examples of assistive technologies are:

- Mobility aids, such as wheelchairs, scooters, walkers, canes, crutches, prosthetic devices, and orthotic devices
- Hearing aids to hear or hear more clearly
- Braille, speech-audio recorders or screen-reader for visually impaired
- Cognitive aids, including computer or electrical assistive devices, to help with memory, attention, or other challenges
- Computer software and hardware, such as voice recognition programs, screen

readers, and screen enlargement applications.

- Tools such as automatic page turners, book holders, and adapted pencil grips to help children with disabilities participate in educational activities
- Physical modifications in the built environment, including ramps, grab bars, and wider doorways to enable access to school.
- Lightweight, high-performance mobility devices that enable to play sports and be physically active
- Adaptive switches and utensils to allow those with limited motor skills to eat, play games, and accomplish other activities
- Protective headgear that ensure the physical well-being of children with epilepsy and enable them to participate in activities important for social well-being
- A pressure relief cushion in a wheelchair that can protect a child with paralysis from pressure sores and associated infections
- A communication board that can support a child with speech difficulties to express themselves
- A screen reader that can make it possible for a child who cannot see to access information on the Internet
- An alternative way of showing time that can help a child with an intellectual disability

Some children with severe disabilities who are unable to attend school can access education from home and communicate with others with the help of assistive technologies. For example, ICTs offer new ways to break down accessibility barriers and provide children with disabilities varied opportunities.

22.4.2 Barriers to Assistive Technology

Disability is related to the interaction between a child with impairment and an environment with barriers that hinder his or her participation on an equal basis with others. Assistive technology can help reduce or eliminate such barriers.

Some barriers to easy access to assistive technology are:

Lack of awareness: Many people with disabilities and their families have limited awareness of assistive products and services.

Lack of governance including legislation, policies and national programmes: For many states, provision of assistive technology is a relatively low area of priority.



Lack of services: Assistive technology services are often in short supply and located far away from where children with disabilities live.

Lack of products: In many countries, there is no production of assistive products or are produced on a small scale. It is small not only in terms of quantity, but also in terms of the range of types, models and sizes of the products.

Children with special needs ought to be provided diagnosis and remediation early in their lives. The parents are the primary interventionists with the school personnel providing additional support and directions for the remedial activities. Intervention needs to be implemented early and consistently to assure success of all children in academics as well as social interactions. A coordinated effort of intervention will contribute immensely to the inclusion into the mainstream and academic achievement.



INTEXT QUESTIONS 22.5

Fill in the blanks.

1. ..... can help prevent impairments and secondary health conditions in children with disabilities.
2. Assistive technology can ..... the quality of life of both children and their families through communication, mobility and self-care.
3. Wheelchairs, scooters, walkers, canes, crutches are examples of .... aids
4. Many people with disabilities and their families have ..... awareness of assistive products and services.



WHAT YOU HAVE LEARNT

- Children with disabilities
- The major dsabilities:
  - Sensory impairment
  - Developmental disabilities
  - Learning disability
  - Behavioural issues
  - Mental and psychological conditions
  - Medical conditions



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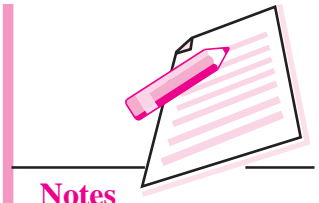
- Identifying children with disabilities
  - Difficulty in oral language
  - Difficulty in reading and writing Sskills
  - Difficulty related to cognition
  - Difficulty in motor skills
  - Difficulty in social behavior
- Meaning and significance of early identification
- Early identification strategies
  - Screening,
  - Examination
  - Systematic observations
  - Comprehensive evaluation
- Early interventions
  - Early intervention programme services
  - Advantages of early interventions
- Strategies for early intervention
  - Occupational therapy
  - Physiotherapy
  - Speech therapy
- Characteristics of quality interventions
  - Family centred
  - Developmentally appropriate
  - Child focused
  - Supportive and structured
- Assistive technologies for supporting inclusion
  - Types of assistive technologies
- Barriers in assistive technology
  - Lack of awareness
  - Lack of governance including legislation, policies and national programmes
  - Lack of services
  - Lack of products



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TERMINAL EXERCISE

1. What do you mean by "Children with Disabilities" ?
2. List the areas in which children may exhibit a disability.
3. Explain in brief the meaning and significance of early identification.
4. Discuss in brief some early identification strategies.
5. Explain briefly strategies for early intervention.
6. List the characteristics of quality interventions.
7. How can assistive technologies support inclusion?
8. What are the barriers to easy access of assistive technologies?

ANSWERS TO INTEXT QUESTIONS

22.1

(a) Disability (b) Sensory organs (c) behavioural issues (d) Learning disability

22.2

1. False 2. True 3. True 4. True 5. False

22.3

1. Determining areas where children need assistance.
2. Determining child's specific pattern of abilities and needs and identifying to address the needs.
3. Providing support as early as possible to work on the children's developmental, health and other needs.
4. A range of environmental, biological, genetic, and prenatal conditions.

22.4

1. (iv) ; 2. (v); 3. (i); 4. (iii) ; 5. (ii)

22.5

1. Assistive technology 2. enhance 3. mobility 4. limited



Notes

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