

## Learning Disabilities: A Important Factor in Human Development

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There is at present a growing concern for child with Learning Disability but there is evidence that some of the world's most distinguished persons had unusual difficulties in certain aspect of learning. As we can see Thomas Edison, the great inventor & Albert Einstein, the great mathematical genius suffered from Learning Disability.

The field of Learning Disabilities divides into three distinct periods of development by Wiederholt (1974). These periods were - A Foundation Phase, A Transition Phase & an Integration Phase.

During the Foundation Phase (about 1800-1930) medical theories of brain function and dysfunction were formulated by studying behavioral characteristics of adults who acquired brain damage and consequently lost certain skills. During the Transition Phase (about 1930-1960), pioneering psychologists and educators attempted to translate the theoretical formulations of the first phase into remedial practices for children.

The Integration Phase (from 1963 to till today) is characterized by the rapid growth of school programme for learning disabled children and by eclectic application of a large variety of theories, assessment methods and teaching strategies.

According to the National Joint Committee for Learning Disabilities (1991)-

Learning Disabilities is a generic term that refers to a heterogeneous group of disorders that are 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 are presumed to be due to central nervous system dysfunctions. Even through a Learning Disability may occur concomitantly with other handicapping conditions (e.g. sensory impairment, Mental retardation, Social and Emotional disturbance, Insufficient/ Inappropriate instructions and psychogenic factors) it is not the real result of those conditions or influences. So that on the basis of above references the presenters wants to know-

The types of Learning Disabilities, Identification and assessment program of Learning Disabilities.

### **Types of Learning Disabilities:-**

**Language and Reading Disorders-** Language disorders in a general term referring to difficulties in listening, speaking, phonological mastery, word recognition, reading, spelling and writing.

About 80% of children with Learning Disabilities have difficulty in word and letter recognition or reading comprehension.

**Dyslexia** - Dyslexia is a Learning Disability that results in significant reading difficulties. It has been defined as a complex syndrome of associated psycho-neurological deficiencies that may include disturbance in written language, spelling memory, auditory and visual perception, motor skills and related sensory abilities. Many children with severe reading disabilities caused by perceptual linguistic distortions make reversals or mirror images of letter, words and symbols-A condition considered a diagnostic sign of dyslexia.

Dyslexic readers tend to have an inefficient visual memory system. This means they can not recall the sequence of letters in a word.

**Dysgraphia** - Handwriting is the graph motor skill by which children express themselves in writing. Handwriting requires combining of visual perceptual knowledge, visual memory and motor coordination. Children having problems in any one or more of these areas will have problems in handwriting.

Children having dysgraphia have difficulty in pencil manipulation, executing the voluntary coordinated motor act of writing, despite knowing how the completed product should appear.

**Dyscalculia** - Dyscalculia is defined as a specific disturbance in learning mathematical concepts and computation and is associated with organic dysfunctions.

### **Children having problems in these areas:**

- Students are unable to design numbers in columns, reverse the numbers (write 9 as 6, read 23 as 32) may subtract the top number from the bottom number in a

subtraction problem.

- Students misread mathematical signs or may forget to use decimals when necessary.
- Students may miss a step in solving a problem such as they forget to add the carried number in an addition problem.
- Failure to shift mind set from one problem type to another.
- The students are unable to read their own numbers.
- Students are frequently unable to recall basic math facts.
- Students are unaware when their responses are unreasonable and they may have trouble in solving word problems.
- Students may have difficulty with the meanings of key mathematical terms such as regroup, minus.

#### **Identification and Assessment Program:-**

The model for the DIAL project planned for the assessment of the following areas: Sensory, Motor, Affective, Social, Conceptual, Language (communication).

Sensory - Children were screened for visual acuity and auditory acuity. If visual or auditory defects were suspected from the screening tests, the child was referred for a professional visual or hearing examination.

Motor - Children were screened for both gross motor and fine motor development. Gross motor tests include walking a balance beam, throwing, catching, jumping and skipping. Fine motor tests included matching 10 designs, cutting, copying.

Affective - The child's affective level- anxiety, emotional stability, attention, focus and task persistence was assessed on an observational rating check list that the operators filled out.

Social - The DIAL project used the same check list for social behaviors that was used for affective behaviors.

Conceptual - Tests included duplicating a learning task of sorting, identifying six colors and identifying given concepts on pictures.

Language - Children were tested in the skills of receiving and expressing language, including articulating words, repeating a series of numbers given verbally by the operator, description about pictures.

#### **Assessment Program in School:-**

The phases of the total evaluation within the school are : An identification process to detect pupils who may be Learning Disabled.

The actual diagnosis of children who have been identified in the screening test.

The decisions about appropriate services and instructional method.

In the first phase of the school evaluation, several methods can be employed to identify children who may have Learning Disabilities. Classroom teachers may be asked to make referrals of suspected children or the school may use some test for screening of all pupils or teachers may be asked to complete a behavior rating scale to rate characteristics of all suspected pupils are identified, the actual selection of pupils for the program is made with a more intensive diagnosis (Phase two). Phase three includes administrative decisions about placements and instructional decisions about teaching.

Identification                      Diagnosis                      Placement & Instruction

Other sources for obtaining data for identification-

- Case history
- Interview
- Clinical observation
- Testing

In practice, these methods are not separated but are often accomplished simultaneously.

Characteristics of Learning Disabled Children-

Children with Learning Disabilities have normal intelligence and are in regular schools. They manifest the following characteristics-

Cognitive characteristics - On psychological testing these children may have an I.Q. of 85 and above. They are not mentally retarded and are neither hearing impaired nor visually impaired.

Academic characteristics - In classroom performance children with Learning Disabilities show poorer achievement in reading, writing and doing math, compared to the class average.

Behavioral characteristics - They show hyperactivity, difficulty in being attentive and learning when the teacher is teaching, clumsiness and motor in coordination.

Socio-Emotional characteristics - They have difficulty in initiating and maintaining relationship with their peers and difficulty in establishing relations with teachers and other adults.

Some other characteristics:-

Poor and uneven Academic Performance- A child with learning disability may show inconsistency in performance across subject areas and at different examining situations. They may be extremely good in language and may fail miserably in math.

Information Processing- Children with learning disabilities show significant discrepancies within or between the basic information processing modalities and or in behavioral central skills. They may experience difficulties at all or any one stage of information processing viz. input process and output. Student with learning disability may experience a breakdown at any point in the sequence.

Perception-It has been traditionally held those students who have problems in learning to read exhibit difficulties in three specific areas-

Visual Discrimination-Their visual discrimination difficulty includes distinguishing between b & d, m & w, p & q, no & on, saw and was and so on.

Visual Sequencing-In involves an inability to remember the left to right order of letters in a word. (e.g. - had-had, who-hwo, girl-gril, least-laest).

Visual Memory-The student is unable to develop a constant visual image that can be retrieved accurately and at will.

**Social Perception and social behavior-** They show more negative and inappropriate types of social behavior. These behavioral problems interfere with their relationship with peers, teachers and parents. These children are often misunderstood by their parents and teachers. They asked that if you can do well in mathematics why you are having trouble writing a social studies paper.

**Conclusion:-**

It can be concluded that learning disability is a very critical problem which refers to a heterogeneous group of disorders that affect reading, writing, reasoning or mathematical abilities. But through proper identification and assessment procedure we can diagnose these children and by providing educational facilities and proper attention learning disability can be minimized or remediable.

**Suggestions:-**

The children with learning disability have poor fine motor control, poor visual discrimination and memory so manipulative exercises can be used to strengthen muscles, like cutting, modeling, clay games.

Spelling errors are quite common among learning disabled children. Therefore a systematic work study techniques is used in the following sequence- look at the word-say the word-say the word-look at the word-cover the word-write the word-check your spelling-repeat.

Use graph paper for alignment difficulties. Colored chalks, markings are helpful for attention to cues.

For learning disabled children a mnemonic device is a very effective teaching strategy. It is a technique for putting difficult to remember facts into an accessible form.

Cooperative learning is a teaching strategy that involves students of varying ability levels working together to solve a problem, this strategy help students with learning disabilities.

**References:-**

1. Kirk Samuel A., James J. Gallagher, Nicholas J. Anastasiow and Mary Ruth Coleman, Educating Exceptional Children, XI Ed. Houghton Mifflin Company Boston, New York.2006. Page No.115-117,144-145.
2. Learner Janet w., Children with learning Disabilities, II Ed. Houghton Mifflin Company. Boston, New York. 1976. Page No.5, 14-15, 31-32, 72-73.
3. Rajput J. S. (Ed.), Learning Disability, Encyclopedia of Indian Education, National Council of Educational Research and Training. Vol-II. 2004. Page No.992-995