

Specific Learning Disability(SLD)

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**Definition "Specific learning disability" means a condition within the individual affecting learning relative to potential**

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A specific learning disability is manifested by an interference with the acquisition, organization, storage, retrieval, manipulation, or expression of information so that the individual does not learn at an adequate rate when provided with the usual developmental opportunities and instruction from a regular school environment

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A specific learning disability is demonstrated primarily in academic functioning, but may also affect self-esteem, career development, and life adjustment skills.

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A specific learning disability may occur with, but cannot be primarily the result of: vision, hearing, or motor impairment; mental impairment; emotional disorders; or environmental, cultural, economic influences; or a history of an inconsistent educational program

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**AETIOLOGY**

The causes of learning difficulties have not yet been determined. Most research suggests that for most LD individuals, something affected the brain during pregnancy. Minimal brain damage, maturational delay, genetics, biochemical factors, foetal development, medical factors such as allergies, recurrent ear infections, and other general factors such as culture, socio-economic level and education have been suggested as possible causes.

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There is probably no one cause. The current view is that there is a biological-neurological aetiology and how the disorder is manifested is influenced by psychological and social factors. Moreover, secondary social (peer & family relationships) and emotional factors (poor self-concept) may further accentuate the learning difficulty, and failure at school or in life tends to be cumulative and progressive.

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Data from brain imaging and **QEEG**

(Quantitative EEG is the measurement, using digital

technology) studies, has shown the

temporal and parietal lobes to be implicated in reading, spelling and comprehension difficulties, while the basal ganglia is implicated in co-ordination (**dyspraxia**) difficulties such as handwriting, using scissors etc

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### **Common Characteristics in Individuals with Learning Disabilities**

**Reading and spelling problems.**

**Weak oral language including:**

**Inability to tell a joke**

**Inability to understand cause and effect.**

**Unable to respond to explanations given in language i.e., they learn better when shown**

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**Weak reading comprehension - inability to recall what they have read**

**Need to re-ask questions that have already been answered**

**Unable to grasp the main idea or inferences from TV shows although they may get a few details**

**Inability to abstract - missing the point and taking information literally**

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**Weak expressive language including: inability to express themselves; lack the ability to gesture; may be verbal but their verbalisations are scattered and difficult to follow (ramble on without getting to the point)**

**Weak writing skills - poor organisation, unfocused, sees only parts and not the whole  
Messy handwriting/avoidance of written tasks  
Delayed speech or language**

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**Poor organisational skills in daily living  
Loses attention quickly in conversations or lectures**

**Poor concentration - easily distracted or fatigued**

**Impulsivity**

**Weak auditory memory and poor at following directions**

**Difficulty remembering multiplication tables or other rote memory tasks  
Difficulties with mental arithmetic**

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**Poor self-esteem/lack of confidence**  
**Depression/mood changes**  
**Weak sense of time - immediate and historic**  
**Weak sense of direction**  
**Confusion with right and left**  
**Poor at judging size and distance**  
**Behavioural problems - acting out/withdrawing**

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**Poor sequencing ability - difficulty ordering information, not knowing where to start solving a problem and/or not knowing where, when or how to ask for help**  
**Confusion when presented with multiple pieces of information**  
**Misinterprets actions or intentions of others**  
**Slow in processing information - slow reaction time, takes a long time reading, writing, talking, thinking**

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**Lack of changes in facial expression - does not show emotion**  
**Perseverates - repetitive, resists changes in routines**  
**Poor coordination - gross and fine motor**  
**Poor peer relationships - difficulty relating in interpersonal relationships; has few friends; often in fights**  
**Difficulty making decisions**

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**All individuals exhibit some of these behaviours at some stage. The presence of one or two may not be significant, but a cluster of these behaviours requires further assessment. No two LD individuals are the same and therefore should not be compared. Individuals with LD's are often of average or above average intelligence, yet they seem unable to learn or make sufficient progress in school, careers or business.**

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**IMPACT OF LEARNING DISABILITIES**  
**Learning Disabilities are life-long and pervasive. They affect academic, social and family life, self esteem and employment opportunities. The resultant stress they experience leaves them feeling tired, unmotivated and overwhelmed.**

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**Dysgraphia**  
**An individual with dysgraphia has a difficult time with the physical task of forming letters and words using a pen and paper and has difficulty producing legible handwriting.**

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### **Dyscalculia**

A person with Dyscalculia has difficulty understanding and using math concepts and symbols

### **Dyslexia**

An individual with dyslexia may mix up letters within words and sentences while reading. He may have difficulty spelling words correctly while writing. Letter reversals are common. Some individuals with dyslexia have a difficult time with navigating and route finding tasks as they are easily confused by directions and spatial information such as left and right.

### **Dyspraxia**

A person with dyspraxia may mix up words and sentences while talking. There is often a discrepancy between language comprehension and language production.

### **Non-verbal Learning Disorder**

Poor motor coordination, visual-spatial organization and/or a lack of social skills may characterize non-verbal learning disorders.



THANK YOU