

# learning

## What Are Learning Disabilities?

Learning disabilities are problems that affect the brain's ability to receive, process, analyze, or store information.

These problems can make it difficult for a student to learn as quickly as someone who isn't affected by learning disabilities.

#### LEARNING DISABILITIES





National Joint Committee on Learning Disabilities (NJCLD)

1980's

NJCLD: A heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasonin g or mathematical abilities.

These disorders are intrinsic to the individual and presumed to be due to Central Nervous System Dysfunction.

### Concept of LD (2000):

Strong converging evidence supports the validity of the concept of specific learning disabilities (SLD). This evidence is particularly impressive because it converges across different indicators and methodologies. The central concept of SLD involves disorders of learning and cognition that are intrinsic to the individual. SLD are specific in the sense that these disorders each significantly affect a relatively narrow range of academic and performance outcomes...

...SLD may occur in combination with other disabling conditions, but they are not due primarily to other conditions, such as intellectual disability, behavioral disturbance, lack of opportunities to learn, or primary sensory deficits."



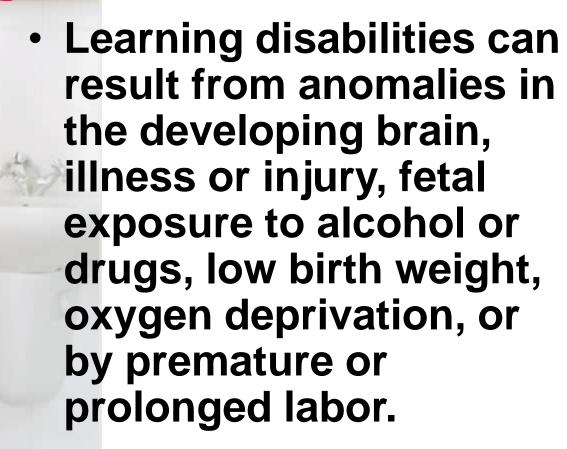
#### Heredity

 Learning disabilities often run in the family. Children with learning disabilities are likely to have

parents or other relatives with

difficulties.

## Problems During Pregnancy And Birth



#### Accidents After Birth

Learning disabilities can also be caused by head injuries, malnutrition, or by toxic posure (such as heavy metals or pesticides).

#### INCIDENT RATE:

Estimated 15 % of the U.S. population
 \* 6 % to 8 % of school age population

# Characteristics of Learning Difficulties



Slow reading rate

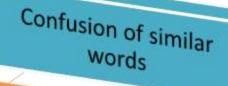
Problems remembering math facts

Difficulty finding important points or main ideas

Problems with reasoning and abstract concepts

Problems understanding what is read

Difficulty recalling arithmetic operations



Poor note-taking and outlining skill

Confusion or reversal of numbers or math symbols

Letter reversals

Difficulty remembering what is read

Difficulties beginning and sticking with study

Poor organization and management of time

Frequent spelling errors

 Overly large handwriting

Inability to complete assignments in time allowed

Difficulty with sentence structure or poor grammar

Poor memory for recalling material

Slow writing rate

Difficulty following directions

Learning disabilities are often identified by psychiatrists, school psychologists, clinical psychologists, and neuropsychologists through a combination of intelligence testing, academic achievement testing, classroom performance, and social interaction and aptitude. Other areas of assessment may include perception, cognition, memory, attention, and language abilities. The resulting information is used to determine whether a child's academic performance is commensurate with his or her cognitive ability.

 Generally accepted estimates of its prevalence in school age children range from 3% to 9% but may run as high as 20% to 25%. Reading disability accounts for nearly 75% of referrals for learning disability, which the United States department of Education has estimated that 5% of all school children are referred for learning disabilities.

Among children with reading disability, classroom teachers have reported a relatively high prevalence of the signs of vision disorders including, facial grimacing, squinting, head tilting, eye rubbing and unusually close working distance. If a level of reading success is not achieved, the quality of life for the individual as well as society as a whole is diminished.

- Self-esteem and peer relationships also are negatively influenced. Personal and financial strains are placed on parental resources and equanimity. It can have a profound and lasting impact on family functions and relationships. This makes reading disability a vital public health issue.
- The ability to read is crucial to function effectively to any degree in our society. All demographic groups whether broken down by occupation, ethnic origin, race, gender, and educational level read to varying degrees for information, political awareness, social development and entertainment.

 Children who have difficulty learning to read fall behind their peers and do not reach their full social and economic potential. Although reading for meaning may be considered a psycholinguistic achievement of multicomponent and highly complex behaviors involving many cognitive processes, the initial phases of reading are visual.

#### TYPES:

- 1. Dyslexia
- 2. Dysgraphia
- 3. Dyscalcula
- 4. Dyspraxia



#### 1. Dyslexia

People with dyslexia usually have trouble making the connections between letters and sounds and with spelling and recognizing words.

#### People with dyslexia often experience other symptoms. These may include:

- Failure to fully understand what others are saying
- Difficulty organizing written and spoken language
- Delayed ability to speak
- ■Poor self-expression (for example, saying "thing" or "stuff" for words not recalled)
- Difficulty learning new vocabulary, either through reading or hearing
- Trouble learning foreign languages
- Slowness in learning songs and rhymes
- Slow reading as well as giving up on longer reading tasks
- Difficulty understanding questions and following directions
- Poor spelling
- Difficulty recalling numbers in sequence (for example, telephone numbers and addresses)
- Trouble distinguishing left from right

#### 2. Dysgraphia

Dysgraphia is characterized by problems with writing. This disorder may cause a child to be tense and awkward when holding a pen or pencil, even to the extent of contorting his or her body. A child with very poor handwriting that he or she does not outgrow may have dysgraphia.

#### Other signs of this condition may include:

- A strong dislike of writing and/or drawing
- Problems with grammar
- Trouble writing down ideas
- A quick loss of energy and interest while writing
- Trouble writing down thoughts in a logical sequence
- Saying words out loud while writing
- Leaving words unfinished or omitting them when writing sentences

#### 3. Dyscalculia

Signs of this disability include problems understanding basic arithmetic concepts, such as fractions, number lines, and positive and negative numbers.

#### Other symptoms may include:

- Difficulty with math-related word problems
- Trouble making change in cash transactions
- Messiness in putting math problems on paper
- ■Trouble recognizing logical information sequences (for example, steps in math problems)
- Trouble with understanding the time sequence of events
- Difficulty with verbally describing math processes

#### 4. Dyspraxia

A person with dyspraxia has problems with motor tasks, such as hand-eye coordination, that can interfere with learning.

#### Some other symptoms of this condition include:

- Problems organizing oneself and one's things
- Breaking things
- ■Trouble with tasks that require hand-eye coordination, such as coloring within the lines, assembling puzzles, and cutting precisely
- Poor balance
- Sensitivity to loud and/or repetitive noises, such as the ticking of a clock
- Sensitivity to touch, including irritation over bothersomefeeling clothing



# DIAGNOSIS

#### **IQ-Achievement Discrepancy**

 Learning disabilities are often identified by psychiatrists, school psychologists, clinical psychologists, counseling psychologists and neuropsychologists through a combination of intelligence testing, academic achievement testing, classroom performance, and social interaction and aptitude. Other areas of assessment may include perception, cognition, memory, attention, and language abilities. The resulting information is used to determine whether a child's academic performance is commensurate with his or her cognitive ability. If a child's cognitive ability is much higher than his or her academic performance, the student is often diagnosed with a learning disability. The DSM-IV and many school systems and government programs diagnose learning disabilities in this way (DSM-IV uses the term "disorder" rather than "disability".)

#### Response to Intervention (RTI)

Much current research has focused on a treatment-oriented diagnostic process known as response to intervention (RTI). Researcher recommendations for implementing such a model include early screening for all students, placing those students who are having difficulty into research-based early intervention programs, rather than waiting until they meet diagnostic criteria. Their performance can be closely monitored to determine whether increasingly intense intervention results in adequate progress. hose who respond will not require further intervention. Those who do not respond adequately to regular classroom instruction (often called "Tier 1 instruction") and a more intensive intervention (often called "Tier 2" intervention) are considered "no responders." These students can then be referred for further assistance through special education, in which case they are often identified with a learning disability. Some models of RTI include a third tier of intervention before a child is identified as having a learning disability.



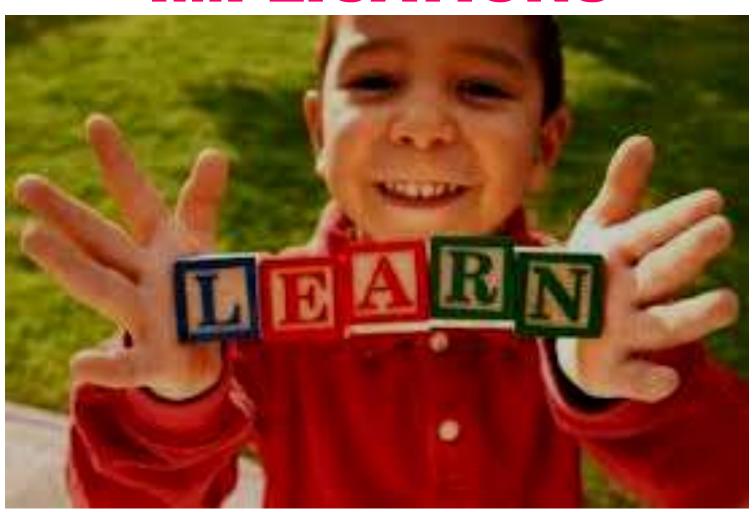
 Many normed assessments can be used in evaluating skills in the primary academic domains: reading, including word recognition, fluency, and comprehension; mathematics, including computation and problem solving; and written expression, including handwriting, spelling and composition.  The most commonly used comprehensive achievement tests include the Woodcock-Johnson III (WJ III), Wechsler Individual Achievement Test II (WIAT II), the Wide Range Achievement Test III (WRAT III), and the Stanford Achievement Test-10th edition. These tests include measures of many academic domains that are reliable in identifying areas of difficulty.

In the reading domain, there are also specialized tests that can be used to obtain details about specific reading deficits. Assessments that measure multiple domains of reading include Gray's Diagnostic Reading Tests-2nd edition (GDRT II) and the Stanford Diagnostic Reading Assessment. Assessments that measure reading sub skills include the Gray Oral Reading Test IV – Fourth Edition (GORT IV), Gray Silent Reading Test, Comprehensive Test of Phonological **Processing (CTOPP), Tests of Oral Reading and Comprehension** Skills (TORCS), Test of Reading Comprehension 3 (TORC-3), Test of Word Reading Efficiency (TOWRE), and the Test of Reading Fluency. A more comprehensive list of reading assessments may be obtained from the Southwest Educational Development Laboratory

 The purpose of assessment is to determine what is needed for intervention, which also requires consideration of contextual variables and whether there are comorbid disorders that must also be identified and treated, such as behavioral issues or language delays.



# **EDUCATIONAL IMPLICATIONS**



The student's perceptual problems may require a different presentation of learning material. For example, a visual learner will have difficulty learning from a lecture, which requires auditory skills. A notetaker or individual tutoring, both of which may be supplied by the DSS, may be required. On the other hand, a student who has difficulty with written symbols may need to use a reader or tape-recorder. A student whose ability to concentrate is hampered by auditory or visual distractions in the classroom, may require a secluded space to take tests or to do written work.

The student whose written work appears careless may not be able to communicate effectively in writing. Examples abound of scientists, mathematicians, and others who have poor reading and writing skills due to learning disabilities. Oral examinations and reports would provide more valid evaluations of what these students have learned. Or the student might use a

typewriter or word-processor.



Although a learning disability cannot be "cured", its impact can be lessened through instructional intervention and compensatory strategies. Possible Modifications for Students with Learning Disabilities may be necessary.

Some of these, as listed on the SMC student "Recommended Accommodations" form, might include:

Alternative Assignment(s) [i.e. project, paper, demonstration, presentation, etc.]

**Books on tape** 

**Testing Accommodations** 

**Test-proctoring by DSS** 

**Extended time for tests.** 

Test to be read to the student.

Test to be dictated into tape recorder for transcription Use of a word processor, language master and/or spell-check

#### **Accommodations**

- Typically, a higher education institution requires that a student with a
  disability register with the office that provides support services for
  students with disabilities, in order to receive accommodations. It is the
  student's responsibility to request services in a timely manner. These
  offices confirm the student's disability and eligibility for services and
  accommodations. A course instructor typically receives a letter from this
  office detailing recommended accommodations for a student. The student
  with a disability is responsible for meeting all course requirements using
  only approved accommodations.
- The goal is to give the student with a disability equal access to the learning environment. Individualized accommodations are not designed to give the student an advantage over other students, to alter a fundamental aspect of the course, nor to weaken academic rigor.
- A specific learning disability is unique to the individual and can be manifested in a variety of ways. Therefore, accommodations for a specific student must be tailored to the individual. The following are examples of classroom, assignment, and examination accommodations that may be recommended for a student with a learning disability. When in doubt about how to assist a student, work with the student privately or contact the campus office that provides support services for students with disabilities.

### **Classroom and Assignment Accommodations**

- You may be asked to
- assist the student in finding effective peer note-takers from the class. Alternatively, you could provide the student with a copy of your lecture notes or outline.
- allow the student to tape record lectures.
- allow the student additional time to complete in-class assignments, particularly writing assignments.
- provide feedback and assist the student in planning the workflow of assignments. This is especially important with large writing assignments. It may be helpful to break the larger assignment into smaller components with opportunities for draft feedback.
- provide assistance with proofreading written work.

#### **Examination Accommodations**

- You may be asked to allow the student with a learning disability
- extended exam time, typically time and one half to double time.
- to take exams in a room with reduced distractions.
- the assistance of a reader, scribe, or word processor for exams.
- the option of an oral exam.
- to use spelling and grammar assistive devices for essay exams.
- to use a calculator for exams.
- to use scratch paper during exams.

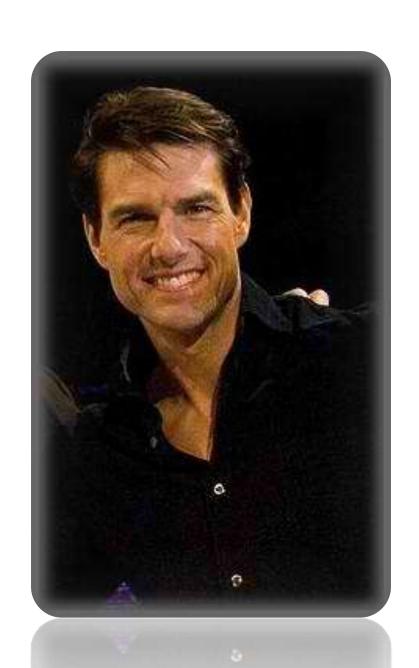


# Couple With Learning Disability

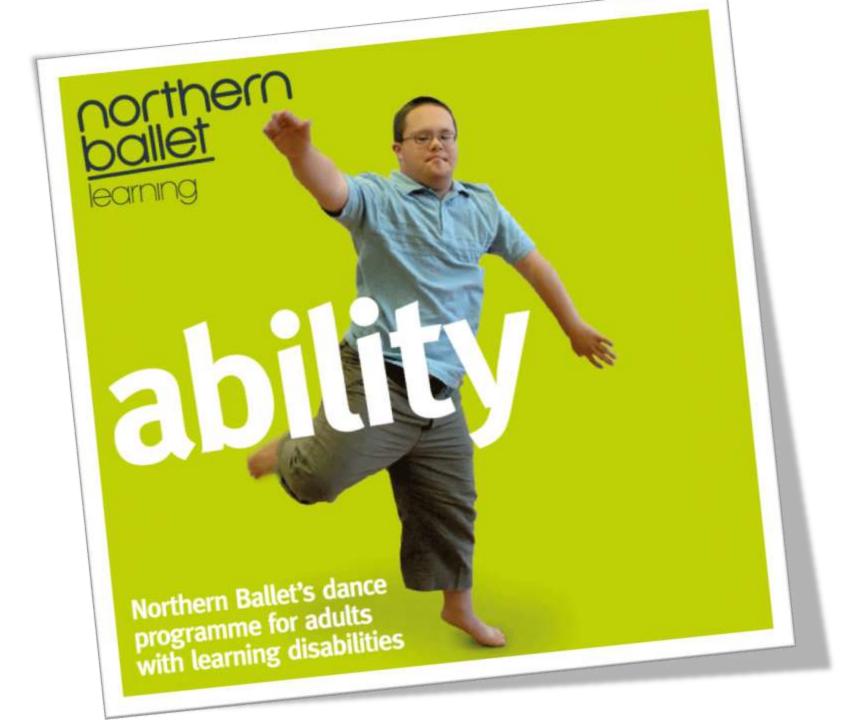








## **Tom Cruise**





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- https://www.google.com.ph/search?q=learning+disabilities&source=lnms&tbm=isch&sa=X&ei=3dbPUtu3Eo2YiAf9 g4Eg&sqi=2&ved=0CAcQ\_AUoAQ&biw=1511&bih=740&dpr=0.9#q=learning+disabilities+gif+photos&tbm=isch&i mgdii=
- http://en.wikipedia.org/wiki/Learning disability

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- <a href="https://www.google.com.ph/search?q=learning+disabilities&biw=1511&bih=740&source=univ&tbm=nws&tbo=u&sa=X&ei=9NXPUvHeElaiiAf8sYCQBw&ved=0Cl0BEKgC">https://www.google.com.ph/search?q=learning+disabilities&biw=1511&bih=740&source=univ&tbm=nws&tbo=u&sa=X&ei=9NXPUvHeElaiiAf8sYCQBw&ved=0Cl0BEKgC</a>
- <a href="http://kidshealth.org/teen/diseases">http://kidshealth.org/teen/diseases</a> conditions/learning/learning disabilities.html
- <a href="http://www.ncld.org/types-learning-disabilities/what-is-ld/what-are-learning-disabilities">http://www.ncld.org/types-learning-disabilities/what-is-ld/what-are-learning-disabilities</a>
- <a href="https://www.nichd.nih.gov/health/topics/learning/conditioninfo/pages/symptoms.aspx">https://www.nichd.nih.gov/health/topics/learning/conditioninfo/pages/symptoms.aspx</a>
- http://www.ncld.org/types-learning-disabilities
- https://www.google.com.ph/?gws\_rd=cr&ei=ltXPUv3OFI-hiAeG0IDICQ#q=what+is+learning+disabilities+
- http://www.emeraldinsight.com/books.htm?chapterid=1906706&show=pdf
- http://www.ncld.org/types-learning-disabilities/what-is-ld/history-special-education?start=1
- http://www.umsl.edu/~optomety/PupilProject/LD.html
- https://www.nichd.nih.gov/health/topics/learning/conditioninfo/pages/symptoms.aspx