

LEARNING DISABILITY

LEARNING DISABILITY Means a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations, including conditions such as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental and developmental

Disorders not included—term does not include learning problems that are primarily the result of visual, hearing or motor disabilities, of mental retardation, emotional disturbance or environmental, cultural or economic disadvantage.

Characteristics of Learning Disability

The following is a list of conceptual deficits often noted in students with a learning disability: Does not make connections in similar learning concepts. E.g., $5+3=8$ becomes an unknown when asked what $3+5$ equals.

Has difficulty comparing things or classifying and sorting items according to a specific criteria Time concepts present—difficulty, before, after, tomorrow, last week, etc.

Often does not get jokes or ideas in humorous situations Creativity and imagination is usually limited Often slow to respond

Difficult time predicting what may happen next, or answering comprehension type questions. Comments are often off track Difficulty thinking in a logical or sequential manner.

Difficulty with number concepts Often requires a great deal of clarification and one to one support

Some Types of Learning Disabilities – Specific Learning Disorders

Some types of learning disabilities are more specifically defined by education-based labels such as reading, writing, language, and math. These more specified types of learning disabilities are categorized as follows:

Dyslexia A reading disability (the student has trouble reading written words fluently, out loud).
dyslexia video

Sign and symptoms of Dyslexia Difficulty learning the alphabet Commonly very poor in spelling, spell words inconsistently, but in highly phonetic words People with dyslexia may also reverse the order of two letters especially when the final, incorrect, word looks similar to the intended word.

Dysgraphia A writing disability (the student has difficulty with forming letters and legibility).

Sign and symptoms of Dysgraphia Cramping of fingers while writing short entries Odd wrist, arm, body, or paper orientations—such as creating an L shape with your arm Excessive erasures Inconsistent form and size of letters, or unfinished letters Misuse of lines and margins Having a hard time translating ideas to writing, sometimes using the wrong words altogether May feel pain while writing

Dyscalculia A math disability (the student struggles with math problems and concepts).

Dyscalculia Video

Sign and symptoms of Dyscalculia Frequent difficulties with arithmetic Difficulty with everyday tasks like reading analog clocks Inability to comprehend financial planning or budgeting, sometimes even at a basic level; for example estimating the cost of the items in a shopping basket or balancing a checkbook Difficulty with multiplication tables, and subtraction tables, addition tables, division tables, mental arithmetic, etc.

Dyspraxia A motor coordination disability (also known as Sensory Integration Disorder).

Sign and symptoms of Dyspraxia Adults with dyspraxia may have difficulty carrying out tasks such as driving, cooking, and household chores or grooming. Children with dyspraxia may be late in reaching developmental milestones, such as rolling over, sitting, standing and walking. They may frequently fall over, and when older may avoid PE and swimming lessons at school or any other sporting activity.

Dysphasia—A language disability (the student has difficulty with reading comprehension). The majority of symptoms will be language related, including: Difficulty remembering words—Difficulty naming objects and/or people—Difficulty speaking in complete and /or meaningful sentences—Difficulty speaking in any fashion—Difficulty reading or writing—Difficulty expressing thoughts and feelings—Difficulty understanding spoken language

Aphasia—A language disability (the student has difficulty understanding spoken language).

Sign and symptoms of Aphasia: inability to comprehend language; inability to pronounce, not due to muscle paralysis or weakness; inability to speak spontaneously; inability to form words— inability to name objects

Central Auditory Processing Disorder—A sensory disability related to processing sounds .

Sign and symptoms of Central Auditory Processing Disorder—have trouble paying attention to and remembering information presented orally, and may cope better with visually acquired information; have problems carrying out multi-step directions given orally; need to hear only one direction at a time—have poor listening skills; need more time to process information—have low academic performance; have behavior problems—have language difficulties (e.g., they confuse syllable sequences and have problems developing vocabulary and understanding language)—have difficulty with reading, comprehension, spelling, and vocabulary

Visual Processing Disorder—A sensory disability related to processing images.

Some symptoms of Visual Processing Disorder—Mixing up letters (i.e. 'd' and 'b')—Mixing up words by changing letters around (i.e. 'saw' and 'was')—After reads a story they cannot always tell the detail what the story was about.—Skipping words, letters or paragraphs when reading.—Learner would get headaches during and after reading.

Non-Verbal Learning Disorder—A visual-spatial disability related to body control.

Sign and symptoms of Non-Verbal Learning Disorder—delay in understanding or using spoken language;—difficulty understanding simple instructions;—lengthy pauses before naming objects and colors; limited awareness or interest in books;—difficulty coloring or drawing;—short attention span (won't sit through one storybook).—difficulty understanding and following instructions;—trouble remembering what someone just told them;—lacking motor coordination when walking, playing sports, holding a pencil or trying to tie a shoelace;—frequently losing or misplacing homework, schoolbooks or other items;—unable to understand the concept of time (confused by the difference between "yesterday," "today," and "tomorrow.")

Causes and Risk Factors of LD—The causes for learning disabilities are not well understood, and sometimes there is no apparent cause for a learning disability. However, some causes of learning disability include:

Heredity—Learning disabilities often run in the family. Children with learning disabilities are likely to have parents or other relatives with similar difficulties.

Problems during pregnancy and birth—Learning disabilities can result from anomalies in the developing brain, illness or injury, fetal exposure to alcohol or drugs, low birthweight, oxygen deprivation, or by premature or prolonged labor.

Accidents after birth—Learning disabilities can also be caused by head injuries, malnutrition, or by toxic exposure (such as heavy metals or pesticides).

Brain Damage or Dysfunction—Some professionals believe that all children with learning disabilities suffer from some type of brain injury or dysfunction of the central nervous system.

Biochemical Imbalance—It was once theorized that biochemical disturbances within a child's body caused learning disabilities. For example, Feingold (1975, 1976) claimed that artificial colorings and flavorings in many of the foods children eat can cause learning disability and

Environmental Factors—Although very difficult to document as primary causes of learning disabilities, environmental factors—particularly impoverished living conditions early in a child's life and poor instruction—probably contribute to the achievement deficit experienced by many children in this special education category. The tendency for learning disabilities to run in families suggests a correlation between environmental influences on children's early development and subsequent-

achievement in school. Evidence for this relationship can be found in longitudinal research such as that conducted by Hartand Risley (1995), who found that infants and toddlers who received infrequent communication exchanges with their parents were more likely to show deficits in vocabulary, language use, and intellectual development before entering school.

Diagnosis IQ-Achievement Discrepancy Learning disabilities are often identified by psychiatrists, school psychologists, clinical psychologists, and neuropsychologists through a combination of intelligence testing, academic achievement testing, classroom performance, 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 incommensurate with his or her cognitive ability.

The IQ-achievement discrepancy model assesses whether there is a significant difference between a student's scores on a test of general intelligence (e.g., an IQ test such as the WISC-IV) and scores obtained on an achievement test (e.g., the Woodcock Johnson Achievement Test). The

IQ-achievement discrepancy model is the approach traditionally used to identify children with learning disabilities. If a student's score on the IQ test is at least two standard deviations (30 points) higher than his or her scores on an achievement test, the student is described as having a significant discrepancy between IQ and achievement and, therefore, as having a learning disability.

Response to Intervention (RTI) Response to Intervention is an alternative method, other than IQ tests, for identifying learning disabilities. Introduced in the reauthorization of IDEA in 2004, Response to Intervention is a 3-tiered process that provides academic support to needy students before referring for special education evaluation.

Students are first informally evaluated or referred by teachers or parents for the need for additional, small group, scientifically-based instruction. After a few weeks of careful data-keeping, needs are reevaluated and more intensive instruction provided. The 3rd tier allows for one-to-one instruction and a referral to special education services.

Assessment 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 behavioural issues or language delays.

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 Grays Diagnostic Reading Tests—2nd edition (GDRTII) 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.

Treatment and Intervention Interventions Include: **Mastery model:** • Learners work at their own level of mastery. • Practice • Gain fundamental skills before moving onto the next level

Direct Instruction: • Highly structured, intensive instruction • Scripted lesson plans • Rapid-paced interaction between teacher and students • Correcting mistakes immediately • Frequent progress assessments **Classroom adjustments:** • Special seating assignments • Quiet environment

Special equipment: • Word processors with spell checkers and dictionaries • Talking calculators • Books on tape • Computer-based activities **Classroom assistants:** • Note-takers • Readers • Proofreaders • Scribes

Special Education: • Prescribed hours in a resource room • Enrolment in a special school for learning disabled students • Individual Education Plan (IEP) • Educational therapy

Famous person with Learning Disability
dyslexic video

Leonardo da Vinci Little is known about Da Vinci's early life, but he's considered to have had learning disabilities including dyslexia and ADD. His journals were mostly written in mirror-image cursive and are known to have many spelling errors. He received an informal education in Latin, geometry and mathematics but did not show any particular signs of aptitude. Da Vinci overcame his learning disabilities by focusing his thoughts into creating art and developing ideas. He even conceptualized a helicopter which was not feasible during his lifetime.. Pablo Picasso Pablo Picasso, born in 1881 in Spain, was a painter, draughtsman, and sculptor. He is one of the best-known figures in 20th century art. It has been said that Picasso had difficulties reading the orientation of the letters and therefore was labeled as dyslexic. It's also believed that he was showing symptoms of ADHD. School was very difficult for him, he lacked discipline and disliked formal instruction.

Alexander Graham Bell Invented the telephone, but struggled with traditional schooling. It's believed that he had some form of learning disability, possibly dyslexia.

Whoopi Goldberg Whoopi Goldberg born Caryn Elaine Johnson is an outstanding American comedian, actress, singer-songwriter, political activist, and talk show host. Whoopi was really struggling in school, she had a lot of problems reading and because of that was called "slow", "dumb" and "retarded". She even dropped out of school at the age of 17. Whoopi knew that was neither slow nor dumb, but was facing a problem that wasn't well defined. Finally as an adult discovered that she was dyslexic and with the help of a teacher learned the proper strategies to overcome her disability. Despite her dyslexia, Whoopi Goldberg became an incredibly successful entertainer. She has been awarded an Oscar, an Emmy, a Tony, and a Grammy.

Tom Cruise- a very successful actor. Thomas Cruise Mapother IV, better known as Tom Cruise- was born July 3, 1962 in Syracuse, New York. He's the son of Mary Lee Pfeiffer, a special education teacher, and Thomas Cruise Mapother III, an electrical engineer. Like his mother, Tom Cruise suffered from dyslexia and as he explains was really struggling in school: "When I was about 7 years old, I had been labeled dyslexic. I'd try to concentrate on what I was reading, then I'd get to the end of the page and have very little memory of anything I'd read. I would go blank, feel anxious, nervous, bored, frustrated, dumb. I would get angry. My legs would actually hurt when I was studying. My head ached. All through school and well into my career, I felt like I had a secret. When I'd go to a new school, I wouldn't want the other kids to know about my learning disability, but then I'd be sent off to remedial reading."