

LEARNING DISORDER AND DISABILITY

The terms “learning disorder” (used by the medical community) and “specific learning disability” (used by the schools) refer to a neurodevelopmental problem in which a child of normal intellectual potential (that is, a child does not have an Intellectual Disability) is encountering unusual difficulty with their academic functioning that cannot be explained by inadequate educational opportunity or emotional or sensory disabilities. These problems can become apparent at any point in a child’s development and may have different symptoms at different ages.

Although most people think about learning disabilities in terms of deficits in specific academic skills (reading, mathematics), children with these learning problems often experience difficulties in a variety of aspects of their functioning (language, communication, social-emotional, behavior) and these will vary from child to child and depend on many factors. They may also affect different aspects of an academic skill. For example, some children may have difficulty learning to decode words, whereas others may be able to decode words but have difficulty understanding what they read. Developing a good treatment plan, therefore, requires a detailed appreciation of each child’s individual needs.

Causes

Learning disabilities are caused by something affecting the development of the brain. This may occur before birth (prenatally), during birth, or in early childhood. Learning disabilities can be caused by any one of a variety of factors, or by a combination. Sometimes the specific cause is not known. Possible causes include the following:

- An inherited condition, meaning that certain genes passed from the parents affected the brain development, for example Fragile X
- Chromosome abnormalities such as Down’s syndrome or Turner syndrome
- Complications during birth resulting in a lack of oxygen to the brain
- A very premature birth
- Low birth weight
- Mother’s illness during pregnancy
- The mother drinking during pregnancy, for example Foetal Alcohol Syndrome

- A debilitating illness or injury in early childhood affecting brain development, for example a road traffic accident or child abuse
- Contact with damaging material (like radiation)
- Neglect, and/or a lack of mental stimulation early in life
- Some people with learning disabilities have additional physical disabilities and/or sensory impairments

Signs and Symptoms

1. At Preschool age:

- Problems pronouncing words
- Trouble finding the right word
- Difficulty rhyming
- Trouble learning the alphabet, numbers, colors, shapes, days of the week
- Difficulty following directions or learning routines
- Difficulty controlling crayons, pencils, and scissors, or coloring within the lines
- Trouble with buttons, zippers, snaps, learning to tie shoes

2. From ages 5-9 years

- Trouble learning the connection between letters and sounds
- Unable to blend sounds to make words
- Confuses basic words when reading
- Slow to learn new skills
- Consistently misspells words and makes frequent errors
- Trouble learning basic math concepts
- Difficulty telling time and remembering sequences

3. From ages 10-13 years

- Difficulty with reading comprehension or math skills
- Trouble with open-ended test questions and word problems
- Dislikes reading and writing; avoids reading aloud
- Poor handwriting

- Poor organizational skills (bedroom, homework, desk is messy and disorganized)
- Trouble following classroom discussions and expressing thoughts aloud
- Spells the same word differently in a single document

Most Common Types

1. Dyslexia

Dyslexia is perhaps the best known learning disability. It is a learning disorder that impedes the student's ability to read and comprehend a text. There are a variety of ways in which this disability can be manifested. Some people struggle with phonemic awareness, which means they fail to recognize the way words break down according to sound. Similar problems can occur with phonological processing, wherein students cannot distinguish between similar word sounds. Other issues relate generally to fluency, spelling, comprehension and more. Students may experience one reading issue or multiple issues when struggling with dyslexia.

2. ADHD

Attention Deficit/Hyperactivity Disorder has affected several children at some point. While there is some debate as to whether or not ADHD is a learning disability in the most technical sense, there is no doubt that it is a common learning impediment. Students who have ADHD have difficulty paying attention and staying on task. These students can be easily distracted and often have difficulty in traditional school settings. Experts link ADHD with the structure of the brain, and there is evidence that ADHD may have a genetic component as well. Unlike typical learning disabilities, which need instructional interventions, ADHD can be successfully treated with medications and behavioral therapies.

3. Dyscalculia

Math is another major area of concern when it comes to learning disabilities. While difficulty with reading can affect a student's ability in math, some students also suffer from dyscalculia, which is a disorder that specifically affects one's math capabilities. Dyscalculia can range from an inability to order numbers correctly and extend to limited strategies for problem solving. Students with math disorders may have trouble performing basic math calculations, or they may have difficulty with concepts like time, measurement or estimation.

4. Dysgraphia

While reading disabilities receive the most attention, writing disabilities can be equally difficult to overcome. These disabilities are known as dysgraphia. Dysgraphia can be related to the physical act of writing. These students often cannot hold a pencil correctly, and their posture may be tense while trying to write. This leads them to tire easily, causing discouragement that further inhibits progress. Dysgraphia can also refer to difficulty with written expression. With this type of disability, students have trouble organizing their thoughts coherently. Their writing may be redundant or have obvious omissions that affect the quality and readability of the text. Dysgraphia may also cause students to struggle with basic sentence structure and grammatical awareness.

5. Processing Deficits

Learning disabilities are also connected to processing deficits. When students have a processing deficit, they have trouble making sense of sensory data. This makes it hard for students to perform in a traditional classroom without instructional supports. These deficits are most often auditory or visual, and they can make it hard for students to distinguish and remember important information that is needed to succeed.

These five learning disabilities can manifest with varying degrees of severity, and some students may struggle with more than one. By understanding these disabilities, it is possible to find workable solutions so that every student can succeed in the classroom.

Tests and Diagnosis

When evaluations are conducted, the evaluators are usually experts in several fields including education, speech and language, audiology, and psychology. By conducting a series of tests, evaluations, and interviews, they are working to understand what stands between your child and academic success. Findings from these evaluations may reveal any of a number of issues, ranging from hearing loss or low vision to difficulties with focus, use of language, or reading. Fortunately, there are tools and techniques for managing almost any learning-related disability — but until the issue has been diagnosed, there's not a much anyone can do.

Diagnosing a learning disability in public schools requires several types of tests. Common tests used to diagnose a learning disability include intelligence tests, achievement tests, visual-motor integration, and language testing.

Types of specialists who may be able to test for and diagnose learning disabilities include:

1. Clinical psychologists

2. School psychologists
3. Child psychiatrists
4. Educational psychologists
5. Developmental psychologists
6. Neuropsychologist
7. Psychometrist (They administer and score neuropsychological, psychological, personality and academic tests for patients with mild to severe traumatic brain injury, neurological diseases, psychological health issues or learning disabilities, or for psychological or neuropsychological research.)
8. Occupational therapist (tests sensory disorders that can lead to learning problems)
9. Speech and language therapist