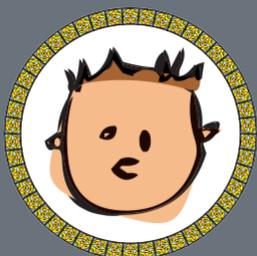
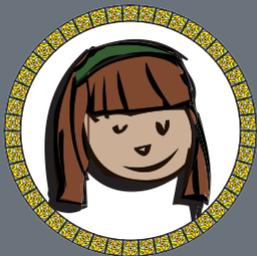


What Are Learning Disabilities?



What Are Learning Disabilities?

Learning disabilities (LDs) are very common – an estimated 5-10 percent of Canadians have LDs, and approximately 50% of students receiving special education have LDs.

However, learning disabilities are not widely understood. This confusion has much to do with the fact that LDs are very diverse and complicated disabilities. We hope that this package helps clarify the nature of LDs and how learning is affected by them.

What Are Learning Disabilities?

“Learning Disabilities” refers to a variety of disorders that affect the acquisition, retention, understanding, organization, or use of information. This information is not only academic information – LDs can affect any information: social information, physical information, and verbal information.

These disorders result from impairments in one or more psychological processes* related to learning, and affect specific areas of learning in one person, rather than all areas. People with LDs have average (or greater) abilities for thinking and reasoning.

Learning disabilities range in severity and interfere with the acquisition and use of one or more of the following important skills:

Oral language (e.g., listening, speaking, understanding)

Reading (e.g., decoding, comprehension)

Written language (e.g., spelling, written expression)

Mathematics (e.g., computation, problem solving)

Organization (e.g., planning, follow-through) **Social**

Skills (e.g., social perception, interaction)

Dyslexia and Other LDs You May Have Heard Of

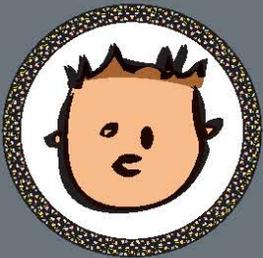
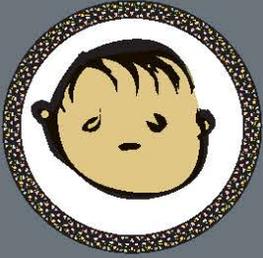
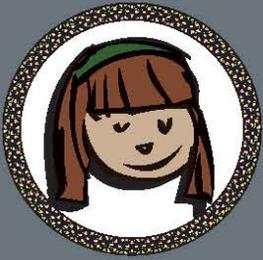
Certain specifically named learning disabilities, like dyslexia, are more widely understood than others; but as we learn more about LDs, these catch-all categories come to matter less than the specific manifestations of a person’s LDs.

Learning disabilities can appear in any number of combinations, and to greater and lesser degrees: LDs are complicated! Don’t be surprised if you find different explanations of the categories of LDs online and elsewhere. This definition was written to be wide enough to encompass this great variety.

* these processes are explained on the second page of this article



What Are Learning Disabilities?



The Psychological Processes Impaired by Learning Disabilities

Phonological Processing.

A phoneme is the smallest unit of language – a sound. The ability to understand and use phonemes is essential for developing written language skills. Students with a deficit in this area will struggle with language – written, or spoken, or read.

Memory and Attention.

The impact of deficits in this area are what you'd expect, and can affect any area of learning or life. The ability to pay attention is critical to learning. The LD can also affect short or long term memory, as well as the retrieval of information.

Processing Speed.

Processing speed refers to the ability to perform simple cognitive or perceptual tasks rapidly and efficiently. Delays in these small, simple tasks can add up to larger issues. Note that we are speaking only of speed and efficiency here, and not an inability to perform the tasks at all.

Language Processing

Language processing has several sub-elements – reception and expression, written and oral - and any aspect of these can be affected in an individual with LDs. Language processing problems can include trouble understanding vocabulary, the ways words and sentences work, and meaning conveyed in larger units of language (like stories, lectures, etc). They can also include difficulty with figurative language and nuances.

Perceptual-Motor Processing

This psychological process refers to an individual's ability to use sensory feedback to guide physical movements – what is loosely referred to as “coordination”. A deficit in this area can make it difficult to coordinate large or small movements – catching a ball while running, or copying information from the blackboard.

Visual-Spatial Processing

This psychological process refers to an individual's ability to organize visual information into meaningful patterns. Visual-spatial processing deficits can show up as problems with figure-ground discrimination – the ability to differentiate between what's printed on a page and what is the page itself – or as problems with perceiving constancy despite changes in context, or the perception of spatial relationships between objects.

Executive Functions

Executive functions allow us to plan, organize, monitor our learning and growth, and use metacognition (thinking about thinking – crucial to developing personal study strategies and become better learners). Executive functions are strongly affected by ADHD as well as LDs. Students with deficits in this area may struggle with organization, punctuality, and studying.

For more information about learning disabilities, or to read the supporting documents that informed this definition, please visit www.LDAO.ca

