

Dyslexia

FACT SHEET



COLORADO
Department of Education

Dyslexia affects about 15 to 20 percent of the population, making it the most commonly diagnosed learning disability. Although dyslexia impacts many of our students, it remains one of the least understood disabilities. This document provides a high-

level overview of dyslexia for Colorado educators and parents, focusing on what dyslexia is, how it impacts our students, what to look for and basic instructional implications.

Dyslexia is Brain-Based

Brain imaging studies have shown brain differences between people with and without dyslexia. These differences occur in areas of the brain involved with key reading skills. For individuals with dyslexia, areas of the brain involving reading may not function in the same ways that they do in individuals without dyslexia.

Key Features of Dyslexia

Individuals with dyslexia often have difficulty with phonological processing, spelling and/or rapid naming.

Key Features:

- **Slow inaccurate or labored oral reading** (lack of reading fluency)
- **Difficulty with phonological processing** is the inability to effectively decode letters into blended sounds to form words. A fundamental phonological processing problem may “block” access to other more advanced aspects of reading, such as word identification and comprehension.
- **Difficulty with spelling** may be recognized as an inability to efficiently write the letters comprising words from memory. Increased time needed to spell words and spelling errors may be apparent.
- **Difficulty with rapid naming** may be evident when it is increasingly difficult to quickly retrieve the speech sounds and the correct letter order patterns required to be an efficient reader or speller.

FACTS

Dyslexia affects the brain areas associated with detection and processing of speech sounds and their corresponding letters.

These letter-sound linkages are fundamental to reading. When these brain regions do not function efficiently to make these connections, reading development is affected.

Dyslexia can be inherited. Dyslexia has genetic and environmental contributions. Children who have family members with dyslexia are more likely to be affected by the disorder.

Dyslexia is invisible. Identification of dyslexia requires assessment and evaluation. On the surface students with dyslexia are difficult to identify. At times, what may appear as lack of effort or avoidance of reading task may in fact be fatigue due to challenges processing information differently than their peers.

Dyslexia has a range of severity. Difficulties due to dyslexia are on a continuum from mild to severe. Mildly impacted students may compensate for their inability to accurately read, leading to a later or missed identification as compared to more severely impacted students.

Dyslexia is often present in combination with other learning challenges, commonly referred to as co-morbidity. Co-morbidity occurs when two or more learning challenges are identified in an individual. Associated learning challenges are not all reading related. An example of a common co-morbid challenge is attention difficulties like attention deficit disorder (ADD) and attention-deficit/hyperactivity disorder (ADHD). Attention-deficit/hyperactivity disorder impacts up to 25 percent of those identified with dyslexia.



Prevailing Myths Around Dyslexia:

More than ever the causes of dyslexia are well known but a few myths still persist. Dyslexia is related to reading difficulties, not difficulties that arise from intellectual functioning.

FIVE COMMON
MYTHS ABOUT DYSLEXIA
<https://u.org/1nJZcyd>

MYTH: Dyslexia is a visual problem.

FACT: Dyslexia is associated with brain-based phonological impairments; as such it is more of a language problem rather than a visual problem. Dyslexia is not associated with letter or number reversals.

MYTH: Those with dyslexia cannot learn to read.

FACT: Most individuals with dyslexia learn to read. Those with dyslexia typically require explicit instructional support and find reading to be significantly difficult.

MYTH: Dyslexia impacts intellect, or imaginative, emotional functioning of an individual.

FACT: The reading impairments associated with dyslexia are unexpected in that individuals with dyslexia generally demonstrate typical intellectual functioning and developmental growth. In non-reading areas, the abilities of those with dyslexia mirror those without dyslexia.

Screening for risk factors for reading difficulty is critical

- Early identification of risk factors for reading disabilities, including dyslexia, significantly impacts outcomes for students. In Colorado, the Reading To Ensure Academic Development (READ) Act legislation requires universal screening in grades K-3 to identify students at risk of reading difficulty.
- If those at risk for dyslexia are not identified and supported in an appropriate and timely manner, there is an increased risk that they can develop anxiety, depression and/or behavioral challenges.
- Not all students identified with dyslexia will require intensive services such as an IEP through special education. However, classroom supports and accommodations are often necessary for the student to fully benefit from classroom and supplemental instruction.

LEARN ABOUT
THE READ ACT
<https://bit.ly/2ys03ze>

Instruction for those who struggle with reading, including those with dyslexia should take into account:

- Like all students, individuals with dyslexia require evidence-based instruction in all five components of reading: phonemic awareness, phonics, fluency, vocabulary and comprehension, as well as writing and spelling. However, individuals with dyslexia require instruction with greater intensity and duration than typically developing readers and writers.
- Individuals with dyslexia require multi-sensory instruction that addresses core deficits in phonological processing as well as explicitly teaches the structure of the English language.
- Helpful classroom accommodations for those with dyslexia include: assistive technology (e.g. utilizing voice to print embedded tools), time extensions and audio books, just to name a few.
- Individuals with dyslexia need help understanding their personal learning strengths and challenges and how to advocate for support and accommodations to ensure optimal learning.
- Because instruction is a complex undertaking, teachers who provide instruction and remediation should be highly trained and supervised in the use of proven evidence-based instructional practices.

MORE ABOUT
ACCOMMODATIONS
<https://bit.ly/2MGVsfl>

For additional resources and more information visit the Colorado Dyslexia webpage:
<https://www.cde.state.co.us/coloradoliteracy/dyslexia>

For questions, email: dyslexia@cde.state.co.us



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