

## What is dyslexia?

The student who struggles with reading and spelling often puzzles teachers and parents. This student receives the same classroom instruction that benefits most children, but continues to struggle with some or all of the many facets of reading and spelling. This student may have dyslexia.

The International Dyslexia Association [IDA] and the National Institutes of Health adopted the following definition in 2003:

Dyslexia is a specific learning disability that is neurobiological in origin. It is characterized by poor spelling and decoding abilities. These difficulties typically result from a deficit in the phonological component of language that is often unexpected in relation to other cognitive abilities and the provision of effective classroom instruction. Secondary consequences may include problems in reading comprehension and reduced reading experience that can impede the growth of vocabulary and background knowledge. (Lyon, Shaywitz, and Shaywitz, 2003)

## What are the National Statistics on dyslexia?

- Fifteen to twenty percent of the population is affected by dyslexia. Dyslexia exists on a continuum of severity, from poor spelling to a total inability to read. (The National Institutes of Health)
- Individuals may inherit the genetic links for dyslexia, and at least half of the identified cases of dyslexia have a genetic predisposition for this disorder of learning. (Pennington, Shaywitz, Olsen)
- Research supports the essential role of early identification and appropriate instruction in preventing and alleviating the symptoms of dyslexia. (Torgesen, Foorman, Wise)
- Unremediated dyslexia is associated with documented functional brain differences visible in imaging studies. These differences may be “normalized” if instruction is effective. (IDA, NIH)
- Children with a family history and/or early history of speech and language delays are at high risk.

## What are the common characteristics of dyslexia?

- Difficulty acquiring and using oral and written language
- Difficulty in phonological awareness, including segmenting, blending and manipulating sounds in words
- Difficulty mastering the alphabetic principle and basic decoding skills (mapping sounds to letters)
- Slow, inaccurate, or labored oral reading (lack of reading fluency)
- Difficulty acquiring age appropriate sight word recognition skills
- Difficulty learning to spell accurately
- Oral language skills often stronger than written language skills
- Difficulty learning and retaining multi-syllabic vocabulary required for mastery of academic content
- Limited reading comprehension due to weak decoding, word recognition and fluency skills

## What instruction is appropriate for dyslexia?

- Individuals with dyslexia require direct, explicit and systematic instruction in both oral and written language
- Even if a student’s problem is not so severe as to require special education, classroom supports and accommodations are often necessary for the student to benefit fully from classroom and supplemental instruction
- Explicit instruction in the code of written language (the letter-sound system) is critical
- Structured, multi-sensory delivery of language content is characteristic of effective programs
- Individuals with dyslexia may require instruction of greater intensity and duration than typically developing readers and writers
- Individuals with dyslexia require research-based instruction in all five components of reading (phonemic awareness, phonics, fluency, vocabulary and comprehension) as well as writing and spelling
- Because instruction is a complex undertaking, teachers who provide instruction and remediation should be trained and supervised in the use of the program or approach selected.

## How does dyslexia fit in an RTI model?

According to the Colorado Department of Education’s Practitioner’s Guide to Implementation: “RTI is a comprehensive system of tiered interventions for addressing the full range of student needs” (p.1). <http://www.cde.state.co.us/cdegen/downloads/RtIGuide.pdf> Inherent in this model is the idea that research based instruction will be used, students’ progress will be continually monitored, and individual strengths and needs will be addressed. Since dyslexia exists on a continuum of severity, each student’s needs will be served by a varying degree of intensity required to produce increased academic outcomes.

The RTI model is predicated on:

- High quality standards-based instruction
- Evidenced based materials
- Universal screening of all students
- Continuous progress monitoring
- Problem solving and instructional decision making

The intent of this model is that each student has access to instruction of sufficient intensity to ensure adequate progress.

## What are the implications for long term management of dyslexia?

Dyslexia is a life-long characteristic. Students respond to instruction in varying degrees. But, most students continue to need support and/or accommodations with writing, study skills, reading lengthy assignments, foreign language learning, and mathematical computation skills even if remediation of basic reading skills is successful. Parents, students, and teachers should have access to current, research-based information about dyslexia and related learning problems to aid in decision making and the management of students’ academic careers.

## Where can I find more resources on this subject?

### Websites:

- The International Dyslexia Association-Rocky Mountain branch: <http://www.dyslexia-rmbida.org/>
- The International Dyslexia Association: <http://www.interdys.org/>
- Florida Center for Reading Research: <http://www.fcrr.org/>
- Great Schools: <http://www.greatschools.net/>
- National Center for Learning Disabilities: <http://www.nclld.org/>
- National Research Center for Learning Disabilities: <http://www.nrclld.org/>

### Books:

- Colorado Department of Education – Response to Intervention (RTI): A Practitioner’s Guide to Implementation, 2008.
- Brown-Chidsey, Rachel & Steege, Mark W. Response to Intervention – Principles and Strategies for Effective Practice. New York, NY: Guilford Press, 2005.
- Hosp, Michelle; Hosp, John; & Howell, Kenneth: The ABCs of CBM – A Practical Guide to Curriculum-Based Measurement. New York, NY: Guilford Press, 2007.
- Moats, Louisa and Hall, Susan: Parenting the Struggling Reader. New York, NY: Broadway Books, 2002.
- Moats, Louisa and Dakin, Karen: Basic Facts about Dyslexia and Other Reading Problems. Baltimore, MD: IDA, 2008.
- Richards, Regina: The Source for Dyslexia and Dysgraphia. E. Moline, IL: Linguisticsystems, 1999.
- Shaywitz, Dr. Sally: Overcoming Dyslexia: A New and Complete Science-Based Program for Reading Problems at Any Level. New York, NY: Random House, 2003.
- Torgesen, Joseph: FCRR Technical Report #8: Dyslexia: A Brief for Educators, Parents, and Legislators in Florida
- Wolf, Maryanne. Proust and the Squid: The Story and Science of the Reading Brain. New York, NY: Harper, 2007.