

Dyslexia Definition

Most current definition: Dyslexia is a specific learning disability that is neurological in origin. It is characterized by difficulties with accurate and/or fluent word recognition and 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 growth of vocabulary and background knowledge.

- *Adopted by the IDA Board, November 2002.*

- *This definition is also used by the National Institutes of Child Health and Human Development (NICHD), 2002.*

Let's break it down:

Specific learning disability – research has indicated specific cognitive characteristics related to dyslexia.

...that is neurological in origin – dyslexia results from differences in how the brain processes information. Specifically, functional brain imaging has demonstrated a failure of the left hemisphere posterior brain systems to function properly during reading.

More information:

- http://www.sfn.org/skins/main/pdf/brss/BRSS_Dyslexia.pdf
- <http://www.ncsall.net/?id=278>

It is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities – students with dyslexia will demonstrate difficulties identifying real words (word recognition) and pronouncing nonsense words (decoding); the student's ability to read fluently is also a major characteristic as well as difficulty with spelling. This is in contrast to the popularly held belief that the major characteristic is the reversal of letters, words and numbers.

These difficulties typically result from a deficit in the phonological component of language – making the connection between oral language and the letters/sounds that represent language in written form requires an awareness that all words can be decomposed into phonologic segments (i.e., the word bat can be broken down into three phonemes or individual sounds – b, a, and t). Research findings have been consistent in confirming that in young school-age children as well as in adolescents, a deficit in phonology is the strongest and most specific finding related to dyslexia.

That is often unexpected in relation to other cognitive abilities – unexpected in relation to the student's: oral language skills, the ability to learn in the absence of print, intellectual functioning, or strong math skills in comparison to reading skills.

...and the provision of effective classroom instruction – if the child has been identified as at-risk for reading failure in kindergarten and first grade, have they been provided with effective instruction in order to develop proficient early reading skills? The lack of response to scientifically informed instruction is one factor that differentiates severe reading deficits from reading failure resulting from inadequate instruction. Early intervention is critical...students who receive appropriate instruction show changes in how their brain processes the information so that it resembles that of non disabled readers. Research has found that effective early interventions have the capability of

reducing the expected incidence of reading failure from 18% of the school age population to 1 – 5%.

Secondary consequences may include problems in reading comprehension and reduced reading experience that can impede growth of vocabulary and background knowledge – because students with reading difficulties typically do not read the same amount as non disabled readers, it may impact their vocabulary development as well as their exposure to information learned by reading.

[Source: A Definition of Dyslexia by G. Reid Lyon, Sally E. Shaywitz and Bennett A. Shaywitz; Annuals of Dyslexia, Volume 53, 2003]

A few quick facts about dyslexia:

- The word dyslexia comes from the Greek language and means poor language.
- Dyslexia is a life-long status, however, its impact can change at different stages in a person's life.
- Dyslexia is not due to either lack of intelligence or a desire to learn; with appropriate teaching methods dyslexics can learn successfully.
- Early identification and treatment is the key to helping dyslexics achieve in school and in life.

(Source: The International Dyslexia Association)