

## Understanding the connection between semantics and dyslexia:



*Did you know... the core deficit in dyslexia is a problem accessing and processing the individual sounds of spoken language?*

Dyslexia seems like a reading disability because it affects readings so substantially, but the origins of dyslexia impact many areas of one's ability to understand, access, use, and manipulate the sounds that form words.

*Did you know... with careful attention, we can recognize when a child has difficulty accessing, using, and manipulating sounds in spoken language?*

Children who have difficulty with sound processing often have speech & language difficulties early on and/or word retrieval difficulties later on. When deficits are noted in the areas of word finding and expressive vocabulary ability, SLPs recognize that these may be concerns for dyslexia.

*Did you know... dyslexia makes it more difficult for someone to remember names and words?*

Many times, people with dyslexia have a general idea of what the name or word is, but the difficulty is accessing, using, and sequencing the sounds for the desired word. In effect, this makes it difficult to remember and recall many vocabulary words, even though the word may have the necessary semantic connections. This can mean that a child receptively understands or remembers a word, but struggles more to expressively access, use, and produce the word or name.

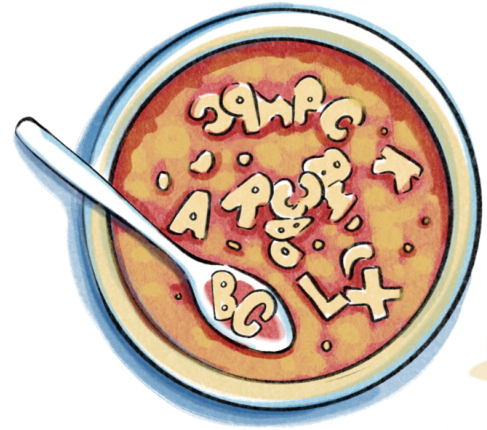
*Did you know... dyslexic readers have to use less efficient pathways to figure out a word's meaning?*

This takes much longer and consumes much more energy compared to the energy it takes a non-dyslexic person to read for meaning or read to learn. Highly -abled dyslexic readers often require accommodations for increased time, so they have the necessary time to decode and process the meaning of words, phrases, and sentences.

SLPs\* recognize the implications of semantic deficits. Many SLPs already screen and treat the semantic areas that are being impacted by the core deficits inherent in a diagnosis of dyslexia.

SLPs recognize and incorporate semantic goals that may be markers for a diagnosis of dyslexia, such as goals related to:

- Convergent and divergent naming
- Defining, explaining, expressing function
- Naming parts of a whole
- Descriptive naming tasks
- Synonyms and antonyms, homophones



By understanding how dyslexia impacts semantic processing, Speech-Language Pathologists can more effectively help students connect the orthographic and semantic properties of words.

Consider connecting print and spoken forms to allow readers to more readily access a words meaning.

Consider incorporating print and kinesthetic modalities when semantically targeting words through activities that target:

- Category & relationship naming
- Listing items in a category or by a characteristic
- Comparing and contrasting
- Naming what does not belong
- Sorting items
- Identifying associations
- Multiple meaning words
- Similar sounding words
- Synonyms and antonyms
- Parts of a whole
- Vocabulary learning

## Semantic Truths & Considerations:

**Truth:** Text in children's books contains more rare words than oral language.

**Consider** the effects on semantic progressing when a struggling reader encounters a new word in written text.

**Truth:** The more a word is practiced, the more readily the meaning of the word will be accessed

**Consider** the effects on timing, energy, and comprehension when a reader struggles to access the semantic properties of a written word

**Check out this trusted resource :** The Gaab Lab is a multidisciplinary team of researchers at Boston Children's Hospital's Laboratories of Cognitive Neuroscience; this resource has endless amounts of valuable resources for pre-markers of developmental dyslexia in the pre reading brains of infants of preschoolers. <https://www.qaablab.com>

## References

Birsh, J. R. (2011). Multisensory teaching of basic language skills. Baltimore: Paul H. Brookes Pub. Co.

Moats, L. C. (2020). Speech to Print: Language Essentials for Teachers (3rd ed.) Baltimore, MD: Brookes. ISBN# 978-1681253305

Shaywitz, S. (2003). Overcoming Dyslexia: A new and completeness-based program for reading

Wolf, M. (2008). Proust and the squid: The story and science of the reading brain. Cambridge: Icon.



# Dyslexia & Semantics\*

## Implications for Educational Based Speech-Language Pathologists

Megan Cawfield MS, CCC-SLP/C-SLDI

<https://www.virtualmilestoneacademy.com/>

\*Semantics- the meaning of a word, phrase, sentence, or text