



Difficulties with Reading

What mystifies many parents is where and why the reading process breaks down. Although, problems may occur in any area, decoding, comprehension, or retention, the root of most reading problems, in the view of many experts, is decoding.

Reading Facts

- o Roughly 85% of children diagnosed with learning difficulties have a primary problem with reading and related language skills.
- o Reading difficulties are neurodevelopmental in nature.
 - o Reading difficulties don't go away, but they do not mean that a student (or an adult) cannot learn or progress in school and life.
- o Most children with reading difficulties are identified in school.
- o When children's reading problems are identified early, they are more likely to learn strategies that will raise their reading to grade level.

Decoding Difficulties

Decoding is the process by which a word is broken into individual phonemes and recognized based on those phonemes. For instance, proficient decoders separate the sounds "buh," "aah," and "guh" in the word "bag." Someone who has difficulty decoding, and thus difficulty reading easily, may not hear and differentiate these phonemes. "Buh," "aah," and "guh" might be meaningless to them in relation to the word "bag" on the page.

Experts have no one explanation for this phenomenon. In some cases, it may reflect that some people simply require more time to separate sounds -- time that isn't there.

Signs of decoding difficulty:

- o trouble sounding out words and recognizing words out of context
- o confusion between letters and the sounds they represent
- o slow oral reading rate (reading word-by-word)
- o reading without expression
- o ignoring punctuation while reading



Try it yourself. Experience a decoding difficulty.

Comprehension Difficulties

Comprehension relies on mastery of decoding; children who struggle to decode find it difficult to understand and remember what has been read. Because their efforts to grasp individual words are so exhausting, they have no resources left for understanding.

Signs of comprehension difficulty:

- o confusion about the meaning of words and sentences
- o inability to connect ideas in a passage
- o omission of, or glossing over detail
- o difficulty distinguishing significant information from minor details
- o lack of concentration during reading

Retention Difficulties

Retention requires both decoding and comprehending what is written. This task relies on high level cognitive skills, including memory and the ability to group and retrieve related ideas. As students progress through grade levels, they are expected to retain more and more of what they read. From third grade on, reading to learn is central to classroom work. By high school it is an essential task.

Signs of retention difficulty:

- o trouble remembering or summarizing what is read
- o difficulty connecting what is read to prior knowledge
- o difficulty applying content of a text to personal experiences

UP CLOSE: Dyslexia Understand language the not

Problems with phonemes

Contrary to popular misconception, dyslexia is not characterized by letter reversals. It is a reading disability caused by a language-processing difficulty caused by the inability to break words into phonemes. Experts estimate that dyslexia, the most common reading difficulty, affects as many as 15 percent of all Americans.

Recent studies show a neurobiological basis for dyslexia, suggesting the potential for early diagnosis and treatment. This research describes a biological cause of the disorder: evidence that dyslexia does not reflect lack of intelligence, or attention, or effort. In addition, this research has revealed new ways of diagnosing and treating reading problems.

In one experiment, for example, scientists presented a group of children with a series of reading tasks with an increasingly difficult series of reading tasks. The researchers used brain-imaging equipment to monitor the level of activity (as indicated by the flow of oxygenated blood) in each child's brain during the tasks. In proficient readers, as the tasks grew more difficult, new regions of the brain were recruited. This recruitment traveled generally from the back of the brain to the front. In contrast, activity in poor readers occurred less in rear portions of the brain and much more in front portions of the brain than in proficient readers.

This pattern is now believed to be the "neural signature" of dyslexia. As more is learned about the meaning of this "signature," more strategies for improving reading will be developed.