

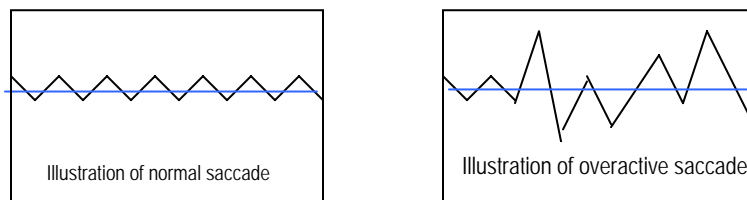
STRUGGLING READERS AND INVOLUNTARY EYE MOVEMENT

SITUATION

Teachers frequently encounter readers that skip words, skip lines or, in more severe cases, say things like “the words are moving on the page” (this is known as “pattern glare”). These students are struggling to control their ‘fields of vision’. Such situations are typically not rooted in intellectual capability; rather, they can be a physical issue.

BACKGROUND

All humans have a normal function called a *saccade* (suh-**kahd**), which is involuntary eye movement that is part of the brain’s ‘locator’ mechanism. Readers who struggle with moving their eyes smoothly from point to point are, in many cases, experiencing what might be termed ‘overactive’ saccades. In these cases, erratic and large amplitude eye movements instead of controlled, small amplitude movements occur. This causes readers’ eyes to jump around the page, causing word/line skipping and pattern glare.



Control of field of vision: normal versus overactive saccades

Stated in basic terms, the brain takes in information through the visual processing system and then attempts to organize the visual stimuli (i.e., pattern recognition). Individual pieces of visual stimuli are coded into visual patterns that depend on ‘smooth’ eye control to maintain and then interpret those patterns. If the patterns are broken up, then the brain has difficulty analyzing and organizing the input into usable information and subsequently into learning. Poor fluency, in this case caused by overactive saccades, typically translates into poor comprehension.

When readers are provided with a method to better control their fields of vision, their brains and muscles learn the smoother, more tightly modulated left-to-right, top-to-bottom eye movements that are required for improved fluency and comprehension.

SOLUTION

SEE-N-READ™ Reading Tools (patent pending) are research-based and classroom tested. SEE-N-READ’s clear reading window (ReadBar™) helps the reader’s eyes focus on the appropriate line of text while the surrounding transparent shaded area suppresses distractions on the page without hiding the context. The shaded area is transparent for two reasons:

- 1.) the shaded area after the ReadBar™ allows readers to use peripheral vision (another part of the brain’s ‘locator’ mechanism) to see the next line coming and smoothly transition from line to line without stopping [preserving patterns and meaning] and
- 2.) The shaded area above the ReadBar™ enables users to re-read text to enhance comprehension without losing their place on the page.

For more details and research supporting SEE-N-READ™ Reading Tools, please go to www.see-n-read.com