Vision & Learning News

for professionals and educators

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February…when the winter doldrums bring kids back to the eye doctor

Why are February and March busy times for eye care professionals? Perhaps because not much else is going on! Optometrists will see countless children for their annual eye examinations as families update kids' glasses prescriptions. What could be more important for school than good vision?

Eye doctors know that children rarely report vision problems, but some parents and teachers do not! How often will a parent be shocked that her child can't read the eye doctor's chart, especially when there were no complaints? If parents don't seek regular eye examinations for their children, how many kids will have blurry vision without anyone realizing? Did you know that school screenings miss more vision problems than they detect? The College of Optometrists in Vision Development promotes awareness of the critical link between vision and learning. Learn more at www.covd.org

Eye on Research: What causes Reading Problems?

At the Vision & Learning Center, we advocate a multidisciplinary approach to learning difficulties, recognizing the importance of phonological skills and the central role of reading teachers in the educational system. But how many teachers know about eye tracking problems? In fact, when remedial efforts don't produce the expected results, a functional vision problem is often involved. Researchers in Australia go a step further, arguing that MOST reading difficulties—including deficiencies in phonological awareness—stem from problems in visual processing. Symptoms of treatable vision problems such as convergence insufficiency include loss of place in text, skipping words or lines, use of a finger to keep place, close working distance to books, and confusion of words with similar appearances (this, then, there, these, those). Educators may have heard the term "eye tracking," but many are unaware that these visual problems are treatable.

Trends in Cognitive Sciences

Abstract: Dyslexia—a deficit in visuo-spatial attention, not in phonological processing
Developmental dyslexia affects up to 10 per cent of the population and it is important to understand its causes. It is widely assumed that phonological deficits, that is, deficits in how words are sounded out, cause the reading difficulties in dyslexia. However, there is emerging evidence that phonological problems and the reading impairment both arise from poor visual (i.e., orthographic) coding. We argue that attentional mechanisms controlled by the dorsal visual stream help in serial scanning of letters and any deficits in this process will cause a cascade of effects, including impairments in visual processing of graphemes, their translation into phonemes and the development of phonemic awareness. This view of dyslexia localizes the core deficit within the visual system and paves the way for new strategies for early diagnosis and treatment. Vidyasagar TR, Pammer K. Trends Cogn Sci. 2010 Feb;14(2):57-63.

Success Story

Katie skipped lines when reading, and sometimes she had to re-read to understand. She was a good student, but her parents knew that she wasn't performing to her potential. Why did homework and reading assignments take her longer to complete than many other children?

Katie's family found the answer at a free workshop at the Ross Library in Lock Haven given by Dr. Myers. When her family optometrist, Dr. Jodi Duda of Brandt Eyecare in Lock Haven, confirmed the problem, the family immediately brought Katie to Muncy for testing. Katie had an eye tracking problem and mild form of convergence insufficiency.

When Katie's vision therapist visited the school to answer questions about Katie's vision, one teacher exclaimed, "What did you do to her? She's like a different kid!" Katie's grades have climbed and so has her confidence. Her mother says, "Katie can read orally for longer periods of time. She can read without using her finger to keep place. She does not lose her place now." -Susanne Strouse, Lock Haven, PA

112 S. Main St., Muncy, PA
www.pavisionlearningcenter.com
(570) 546-4885

Marcus Myers, O.D.
Vision Therapy & Rehabilitation
Residency Certification

Email your suggestions
and comments to:
visionandlearningcenter@gmail.com

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Convergence insufficiency (CI) may cause intermittent double vision with near tasks such as reading. Words may seem to move, swim, or float on the page. Loss of place in text, use of a finger to avoid skipping lines or words, and need to re-read for comprehension are common. Symptoms may worsen later in the day or with prolonged reading. Children with CI rarely report vision problems, however. Doesn't everyone see that way? Some will respond positively to the demonstration above.