

## VISION AND LEARNING

Research has demonstrated that vision is a contributing factor to an individual's ability to attend and respond to classroom instruction. A major portion of what we learn is taken in through the visual system.

There are many aspects of vision which might affect an individual's abilities to attend and respond to teacher instruction. It is well known that nearsightedness, farsightedness, and astigmatism, all of which can result in blurred vision or eye strain, relate to performance in the classroom. However, individuals may have focusing problems which do not allow them to rapidly change focus from book to chalkboard and vice versa. They may have difficulty using both eyes together. This dysfunction can require excess effort to overcome and may interfere with visual information processing. Also, an individual may have difficulty controlling eye movements. This could result in loss of place when reading, frequent guessing of words, need for the use of the finger to maintain one's place, or other more subtle difficulties.

Visual information processing problems may result in children being overwhelmed the day they start school. The academic curriculum is designed on the assumption that children possess certain visual information processing abilities, as well as other skills, at certain chronological ages. In other words, is the child visually ready for school? The child who has not developed the required level of skill may have difficulty from "day one". These difficulties might manifest themselves as problems in reading, writing, mathematics, spelling, thinking, sports endeavors, playground activities, and even the social relationships children have with their siblings and peers.

Individuals manifesting visual problems associated with learning problems may benefit from the use of lenses and prisms for both the prevention and remediation of these visual problems. Other visual problems might best be remediated by optometric vision therapy. This includes the application of lenses and prisms in conjunction with procedures to provide the individual with strategies which will aid in the development of adequate visual performance.

There are numerous research and clinical studies demonstrating the effectiveness of optometric vision therapy for treating problems in the functioning of the visual system. There are also numerous case reports supporting specific diagnoses and treatment plans. Studies have also demonstrated visual deficiencies and visual information processing deficits in older individuals, supporting the fact that children do not simply outgrow these deficits.

Members of the College of Optometrists in Vision Development (COVD) have post graduate education in vision and learning. Fellows of the College are certified in the diagnosis and treatment of learning related vision problems. For further information contact COVD or consult with your COVD optometrist.

This informational paper was produced by the College of Optometrists in Vision Development, which board certifies qualified optometric physicians in vision therapy. For further information, see our website, [www.covd.org](http://www.covd.org). WP6 Rev 1/2/08 ©2008