



## Vision Therapy of Vermont

"change that lasts a lifetime"

**SIGHT** is what most people are born with.

**VISION** is a sequential learning process that begins from the moment we open our eyes at birth.

**Vision** is a complicated sequential learning process of using the eyes together, understanding and integrating what has been seen with information obtained through the senses and prior knowledge. Vision consists of sequential areas of developmental processes, which in combination contribute to one's visual abilities.

**Sequential vision development** precedes all other learning, much as large motor skills precede small motor skills development. Unless and until movement patterns become automatic, all other thinking is more difficult. Students or children who have difficulty understanding direction words such as up, down, right, left, beside, etc., most probably have not mastered those terms in relation to their own bodies. This is only one example of how vision development or lack of, can affect the learning process. Integration of the visual system is crucial to the development of the whole child. It becomes the main way to guide all learning. (75%-90%)

**Vision health** has to be verified beyond the basic Snellen chart which only tests individual eye acuity at a distance of 20 feet. A complete visual efficiency evaluation by an optometrist OD tells us if the eyes are teaming, tracking and focusing correctly.

**Visual training (vision therapy)** is a form of neurological training or rehabilitation that involves specifically prescribed procedures addressing the diagnosed vision condition. In some cases, visual training is the **only available** and effective treatment option for these conditions.

**Major medical insurance** plans generally provide coverage for a diagnosed vision condition. Visual training addresses treatment of a diagnosed vision condition, not educational problems such as learning disabilities, dyslexia etc.

**The medical and science community understands** that the human brain is capable of tremendous recovery and retraining. The visual system is neurologically directly connected to the brain. Not only are the eyes physically attached to the brain but also the same tissue as the brain itself.

**Visual training is a specialized branch of optometric.** It can be described as "physical therapy" for the eyes and the brain. Visual training is a form of neurological training or rehabilitation, helping the subject's brain to use the eyes to receive

information accurately and effectively, to develop greater comprehension and functionality to react appropriately.

**Visual Training sessions** involve procedures that change the brain in a physiological way. Visual training trains or retrains the entire visual system, which includes the eyes, visual pathway and the brain. This retraining improves eye alignment, eye movements, focusing abilities and eye teaming.

**Like walking, and talking, vision is learned.** Any disruption of the sequential development of the visual system results in impairment. These vision developmental impairments however, many times go unnoticed by parents, guardians, teachers and educators. It is generally accepted that children develop at different rates. This would have to include the visual system as well. Any child with a developmental delay faced with the rigorous pressures and standardization of today's learning environment are unlikely to reach their greatest potential.

**The human vision system developed** during our hunting and gathering past. Most of school work equates to what is termed "near work." This work is performed at the Harmon distance (from elbow to wrist), anywhere from 12" – 20" depending on age and size. It is only in the last 50-75 years that such great demands have been placed on the human visual system in the way of "near work."

**Reading, writing, computer and entertainment media** all are performed at close distance, often long periods of time and are non 3 dimensional. This puts an unnatural stress on the visual system, impedes natural sequential development and places demands on the visual system it is not designed for.

**The complexity of the visual system affects** the learning process in many ways. Visual information processing includes identification, discrimination, spatial awareness and integration of visual information with other senses. Too often, student character, motivation, ability and behavior are labeled without realizing that the person is coping in their world through their impaired visual system.

**Today's student faces a highly competitive** and demanding form of standardization. In everything: sports, reading, music, social-skills a healthy and functional visual system is paramount to success. It is only prudent of any educator to ensure that the vision condition of today's child or student is without problems. **"20/20 is not enough".**

#### MISSION STATEMENT

**To empower people who struggle with vision problems,  
Through vision therapy.  
By creating change that lasts a lifetime.**

**In fig. 1**, we see properly aligned binocular vision with eyes teaming together. Any lack of eye teaming can result in numerous vision deficiencies.

Examples are: eye strain, poor or no depth perception, lack of 3D, double or blurred vision, headaches, motion sickness.

**In fig. 2**, a condition is shown where the eyes do not have the ability to direct their line of sight at one point. The shown condition would be an extreme case and is obvious to the observer. This condition however, is not always obvious and requires testing.

**In fig. 3**, a condition is shown where the eyes lack the ability to converge the two lines of sight at one point. This condition is the leading cause of eyestrain, blurry vision, double vision and headaches.

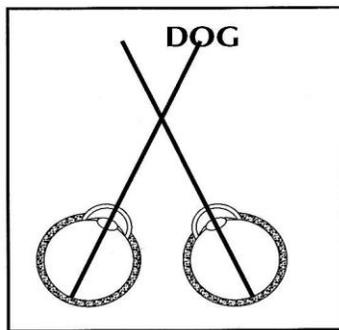


Figure 2 -Convergence Excess

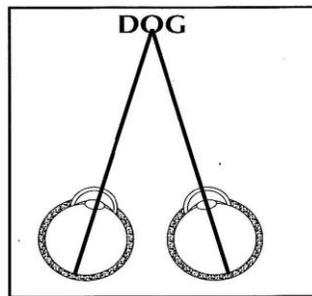


Figure 1 - Properly Aligned Binocular Vision

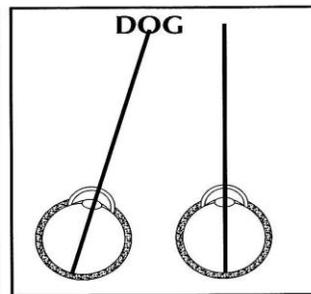


Figure 3 - Convergence Insufficiency

The vision condition shown in these diagrams is only one of many. **Diagnosed vision conditions can only be given after a visual efficiency evaluation given by an Optometrist.**

### Common Clues that warrant testing:

- ❖ Low self-esteem
- ❖ Complaints of headaches
- ❖ Watery/teary eyes doing near work
- ❖ Slow reading
- ❖ Rereading
- ❖ Skipping words or lines
- ❖ Reversing words/ letters past grade 2
- ❖ Poor comprehension
- ❖ Blurred or double vision
- ❖ Accident prone, clumsiness or unusual awkwardness
- ❖ Frustration or poor effort
- ❖ Avoiding reading or any near work
- ❖ Using finger to follow a line of print
- ❖ Short attention span
- ❖ Holding material too closely
- ❖ Covering an eye to read
- ❖ Difficulty copying from the board
- ❖ Poor handwriting
- ❖ Complaints of blurred, double or moving print
- ❖ Tilting head while reading or near work
- ❖ Difficulty completing homework within an average time
- ❖ Squinting, frowning or rubbing eyes doing near work

**Glossary of optometric terms:**

**SIGHT:** is the ability to focus the eyes in order to see something

**VISION:** the process of interpreting what is seen in order to make sense of it.

**VISUAL TRAINING/ VISION TRAINING/ VISUAL THERAPY/ VISION THERAPY:** procedures to improve visual skills such as eye teaming, (binocularity or two eyed vision), depth perception, focusing, eye movements (tracking) and "eye-hand" or "vision-body" coordination.

**ACCOMMODATION (focusing):** the eyes ability to adjust focus on objects at various distances.

**STRABISMUS (crossed eyes):** a disorder of vision in which both eyes cannot focus on the same spot at the same time.

**AMBLYOPIA (lazy eye):** impaired vision without any apparent change within the eye itself.

**BINOCULAR:** using two eyes together as a team (two eyes seeing one image).

**STEREO VISION:** is good binocular vision where two eyes see one three-dimensional image. (depth perception)

**BIOCULAR:** using eyes equally but individually (each eye seeing a different image).

**CONVERGING:** two eyes being directed towards the same point in space.

**DIVERGING:** a change in the vision angle from near to far.

**EYE TEAMING:** Eyes joining in a common task.

**EYE MOVEMENTS:** the process and ability of accurate movement.

**EYE TRACKING:** the course led by the eyes.

25 Crossroad  
Waterbury, VT 05676

802-310-9692

[www.visiontherapyofvermont.com](http://www.visiontherapyofvermont.com)  
info@visiontherapyofvermont.com