

VI Times

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MN Regions 5 & 7 Vision - O&M Staff
Barb Lhotka, Editor



Vision-O&M Staff

The purpose of a newsletter is to provide specialized information to parents and teachers of students with vision impairments. We hope to send regular newsletters that will cover topics of interest that are informative and create a base of knowledge that will assist our students with their on-going success!

Low Vision

The term "low vision" is often used to describe a vision loss that is distorted in some manner. With low vision, objects may not be clearly seen because of their size, color, contrast, or location in the visual field. The child will not be aware that they see things differently than their parents or peers—because they experience their unique vision on a daily basis and do not necessarily know what "better vision" is all about!

It is not unusual for a child with low vision to be most aware of what is closest to him/her. Until instructed on how to scan the environment for additional information, the child will be limited in collecting visual information for decision making.

Using low vision for near, intermediate, and distance tasks is evaluated to maximize the child's visual ability. This has been a part of your child's Functional Vision Assessment completed by the teacher for vision impaired and the orientation and mobility specialist.

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Upcoming Events

- ◆ Parent-Child Institute June 17-18, 2011
- ◆ Sports Camp July 12-16, 2011
- ◆ Lake Carlos September 29-30a, 2011

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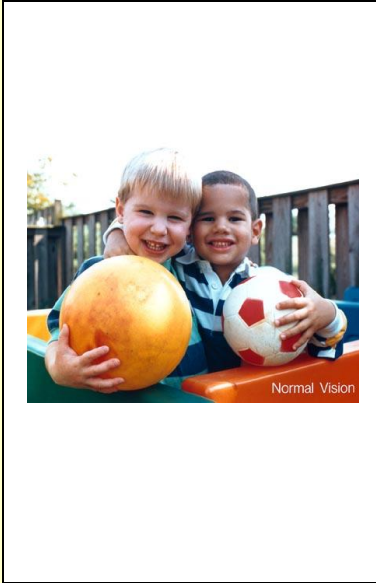
Diane Grundyson, O&M

Glen Hoppe, TBVI

Is All Low Vision the Same?

No, all low vision is not the same. Every child experiences differences in the quantity and quality of the low vision they have. Some children also experience variability in the low vision they experience—depending on the time of day, lighting, fatigue, etc.

large circles of illumination around a light source.



Typical 20/20 visual acuity with full visual field.

Low vision as the result of an interference in the flow of light from the front of the eye to the back of the eye causes a completely different impact on vision than visual field losses. Some of the strategies may be similar, but the way the child sees is very different. Low vision occurs when, even with the best correction the child’s visual acuity remains at a level between 20/60 and 20/200.

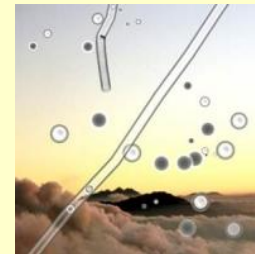


Loss of Contrast—When detail is lost due to the inability to distinguish between the different hues of brightness.



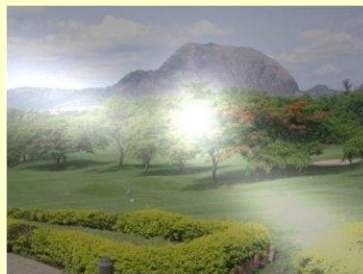
Blurry Vision—a refractive error may be present and may or may not be able to be corrected with corrective lenses (glasses or contacts).

Floaters—Areas of “floating” spots that take away visual field.



Glare—The low vision condition is strongly affected by light that interferes with clear vision. Glare is can be a problem in bright light, reflected light, at night from light “pools”, and from imperfections in the eye itself.

Retinal Detachment—Field loss due to a tear in the lining of the back of the eye.



Glaucoma—Pressure in the eye kills the optic nerve and creates areas of “blind spots”.

Halos—When halos appear they are



Glare

Glare is one of the most interfering environmental features for a child with low vision. Glare is caused by the reflection of light from a surface. It can occur under any lighting conditions (except total darkness).

There are two common types of glare:

Discomfort Glare—light that “because of its intensity, misdirection, or exposure time causes discomfort or fatigue” (Brilliant, 1999, p. 272). It makes tasks more difficult to perform and it may take longer to complete a task when there is discomfort glare.

Disability Glare—reduces visual functioning due to a blinding or dazzling effect of light rays.

The child may experience more discomfort glare when it is a bright sunny day following a snowstorm, when lighting is extremely bright in a room, when using shiny pages in books or magazines, etc.

The child may experience more glare issues when it is a bright sunny day following a snowstorm, when lighting is extremely bright in a room, when using shiny pages in books or magazines, etc. Different times during the day may present different issues with glare. Sources of glare in the classroom may include:

- Windows
- Floors
- Desk and table tops
- Cupboards
- Hardware on devices
- Whiteboards
- Overhead projection
- Paper surfaces
- And many more

Magnification

Magnification or enlargement of the image on the retina may or may not be an important accommodation for a child with low vision. Some students with restricted visual fields have difficulty with materials that are enlarged because they can't get enough information in their field for it to make sense. Enlargement also may slow the reading rate and require more head and body movement. In other cases, magnification is essential.

There are four types of magnification:

Relative Distance Magnification—occurs when the child brings the object closer to his or her eye. This is the most common and most natural accommodation made by children with low vision. If the object is being viewed at 16 inches and the child brings it to a position 4 inches from the eye, the object will appear four times larger.

Relative Size Magnification—occurs when the object is enlarged without moving it closer. The enlargement may be a copy made on the copy machine that increases the size by 150% to make large print.

Angular Magnification—occurs when an object remains at the same distance, but an optical device or magnifier is used to make the object appear larger. See angular magnifiers to the right.

Video Magnifiers—were once called Closed Circuit Television or CCTVs. They are now powerful devices for near and distance viewing that offer electronic or video magnification to obtain a larger image and maintain a greater visual field. Contrast can be manipulated easily, too.

Angular Magnification



Video Magnifier



Topic Preview

Future issues of this newsletter will address:

- Braille
- CVI—Cortical Visual Impairment
- Early Childhood Intervention
- Living Skills
- Multiple Disabilities
- O&M—Orientation & Mobility
- Parenting
- Self-Determination & Advocacy
- Sensory Efficiency
- Social Skills
- Technology
- Transition

Featured Organization: All About Vision:

Check out the website www.allaboutvision.com/low-vision. It is a resource for information on low vision from a layman's perspective. The topics addressed include products and resources that might answer questions you have regarding low vision. Check with your child's teacher for the visually impaired if you want more information.

Low Vision Clinics & Specialists

A low vision clinic is different from the ophthalmologist visit. The ophthalmologist checks the child's vision for eye health and maintenance of the visual condition. A visit to the low vision clinic provides the family with information about devices and strategies for accommodating for the vision loss. Optical and non-optical devices will be considered and trialed for the child to see what tools are needed. The emphasis in the low vision clinic is

generally on access to environmental information.

The low vision specialist may be an ophthalmologist, optometrist, or certified low vision specialist. This person will examine the child's vision. This individual should also have certification in low vision in order to dispense optical and non-optical aids.

The key to remember is optical aids are prescribed according to need and condition—not just picked up at the local store and tried.

Travel Skills

Orientation and mobility training for children with low vision is sometimes questioned: He or she has vision and can see things in the environment, why would they need training? Well, the answer is simple: When you have low vision, you don't realize what you visually are unaware of in the world around you. Your safety can be maintained when you know what to expect or look for in the situation.

Certified orientation and mobility specialists teach children with low vision how to anticipate and interpret the visual cues around them. Some of the cues and skills taught include:

School

- Patterns and sequences for numbering rooms
- Use of contrast for locating target doors
- Cues for finding friends in the cafeteria
- Playground orientation and safety
- Bus safety

Neighborhood

- Characteristics of own home (outside)

- Use of contrast for detecting driveways
- Sidewalk travel
- Block travel
- Common landmarks in residential area
- Basic street crossings using information from
 - Vision
 - Hearing
 - Understanding the intersection

Other Travel

- Use of common colors or shapes to locate destinations (arches of McDonald's)
- Use of street signage
- Use of pedestrian signals to cross streets
- Use of assistance in new travel areas

Disclaimer

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