CORTICAL VISUAL IMPAIRMENT (CVI)

Cortical Visual Impairment is a condition that indicates that the visual systems of the brain do not consistently understand or interpret what the eye sees. Individuals with CVI have difficulty processing visual information. It is important to remember that vision is learned. Students with CVI should receive periodic functional vision assessments to document progress along the continuum.

CHARACTERISTICS OF CORTICAL VISUAL IMPAIRMENT:

- Short visual attention span
- Visual functioning is highly variable
- Require longer processing time
- Often a tendency to light gaze
- Expect fluctuation in vision due to fatigue, stress, illness
- Familiar items and people part of daily routine are "seen" easier
- Many students with CVI may be able to use their peripheral vision more effectively than their central vision
- Color vision is usually preserved in children with CVI, especially yellows, oranges and/or reds (this is a relatively simple neurological task compared to shape discrimination)
- Vision may be better when either the target or the student is moving
- Most students with CVI have problems differentiating between foreground and background information
- Spatial confusion is common
- Students with CVI appear to have difficulty seeing objects or pictures placed close together (crowding effect), but can identify the objects when they are spaced further apart
- Students with CVI can be compared to sighted individuals who are looking at an incomplete drawing
- Some student are <u>very sensitive to bright lights</u>

PRESENTATION OF MATERIALS:

- **Seating** and/or **positioning** of the student is very important so that they can benefit from what residual sight they have. Good positioning for the student with physical challenges helps them to direct their energy into "seeing/processing visual information" versus directing energy toward maintaining and/or strengthening good body positioning.
- Tell the student what they are seeing; **verbal** and **tactile cueing** can help provide perceptual organization and, develop concepts to complete the picture. **Tell** the student what they are seeing and have the student **touch** what they are seeing.

- Present visual materials in a **simple**, **consistent** and **predictable format**. The student with CVI will see **familiar objects** better than unfamiliar ones.
- Students with CVI can make more sense out of what they are seeing if it is in **context**.
- Keep the visual **stimulus simple** (avoiding items with lots of detailed patterns).
- Avoid "**visual overloading**" (e.g. one object at a time or several that are well spaced apart).
- Keep work area free of **clutter**.
- **Moving objects** are often seen better, versus stationary objects.
- Utilizing persons, objects and events that are intrinsically important and rewarding to the student will provide motivation to associate information with an experience and will provide a basis of understanding.
- Provide **contrast** between object and background (e.g. white on black or blue on yellow).
- Use **bright primary colors** (red and yellow attract attention).
- Natural **lighting** diffuses light and enhances contrast.
- Position the student with their **back to the window** and natural light coming from behind them onto the object.
- Avoid **glare** caused by reflective surfaces.
- Present materials at **eye level**.
- **Size:** If the visual display is too large the student may only see fragmented parts of the whole.
- Present objects at **close viewing** distance, e.g. 12-18 inches.
- Provide additional **processing time**.
- **Highlight** the area you want to focus on.

INTERNET RESOURCES

Texas School for the Blind (many links) http://www.tsbvi.edu

Technology Guide to Assist Students with Visual Impairments
http://ww.setbc.org/special/virg/

Vision Products/Resources http://www.blind.net/bcompany.html

Support Organizations http://www.cnib.ca/

Other http://ww.tsbvi.edu/Education/books.htm

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