



Texas School for the Blind and Visually Impaired Outreach Programs

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Practical CVI Strategies and Technology

Pediatric Epilepsy Conference

July 2026

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What is CVI?

- Cerebral visual impairment (sometimes called cortical visual impairment or CVI) is a disorder caused by damage to the parts of the brain that process vision and/or the parts that transmit information (white matter).

What happens when you see?

- We don't see what's "out there," we see what our brains create from experiences/memory.
- We see what we expect to see.
- We use comparatively little information from the retina when we have a visual experience.
 - IF most of our visual perception is what our brains create from experiences/memory...
 - BUT these experiences/memories are not being effectively created and/or are not easily accessible due to processing interruptions...
 - THEN vision is hard work!

Neuroplasticity

- Assess: What helps the child to see? What makes it hard for them to see?
- Thoughtfully plan increasing the easy and decreasing the hard
- The brain practices seeing- neural connections are built
- Vision improves through practice

Visual Strategies

- Light: friend and foe. Be aware of light sources
- Use single color visual targets, place on a plain or black background.
- Reduce the amount of stuff
- Control sound, touch, other sensory info
- Give your child time to 'see' the object.
- Stop talking and touching
- Always remember your child may not recognize people by their face alone.

Non Visual Strategies

- Teach a social script to prompt people to talk to help aid in recognition
- Utilise a personal shopper
- Consider a cane
- Teach self-advocacy when vision is hard

Visual High Tech

- [Phone Magnifier](#)
- [Zoom and Display](#)
- [Smart Home Device Echo Show 15](#)
- [Eschenbach Optaro](#)
- [Case for Vision](#)

Non Visual High Tech

- [Smartwatch](#)
- [Smart Home Device Echo](#)
- [Smart Home Device Fire TV Stick](#)
- [Seeing AI](#)
- [Be My AI & Be My Eyes](#)
- [Ray Ban Meta Glasses](#)
- [Envision Glasses](#)

Things to Consider for Visual High Tech

- Recharging necessary for frequent camera use
- Limits with expanding picture for detail view (over-pixelate image)
- Glare on screen with outdoor viewing
- Extended screen time concerns (e.g., eye strain, sleep cycle issues)
- No-phone zone at school, work

Things to Consider for AI/Smart Devices

- Don't know long-term impact of AI

Pediatric Epilepsy Surgery Conference

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Thank you for joining us!

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Figure 7: TSBVI logo



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Figure 8: IDEAs that Work logo and OSEP disclaimer.