Making Connections & Supporting the EI Team
Housekeeping

Mute

Chat window for questions OR raise your virtual hand

Today’s objectives

All slides paired with verbal descriptions

Recorded

Resources at the end!
Today’s webinar and content contributors

Presenter: Jaime Pack-Adair, MA, cTSVI

Contributors: Caitlin Covert, OTD, OTR/L

Jillian Salasek, cTVI
Presentation Objectives

● Collaboration Ideas, Tips and Techniques
● Overview of CVI, ONH, other ocular visual impairments
● Effect of vision on development
● Resources to Share with Team Members
● Division of Exceptional Children
● VEIPD.org
Collaborating with Team Members
Teaming and Collaboration

According the the Division of Exceptional Children (DEC), there are recommended practices for Teaming and Collaboration.

The practices “include strategies for interaction and sharing knowledge and expertise in ways that are respectful, supportive, enhance capacity, and are culturally sensitive”

https://www.dec-sped.org/dec-recommended-practices
DEC Recommended Practices

TC 1. Practitioners representing multiple disciplines and families work together as a team to plan and implement supports and services to meet the unique needs of each child and family.

TC 2.

Practitioners and families work together as a team to systematically and regularly exchange expertises, knowledge, and information to build team capacity and jointly solve problems, plan and implement interventions.
Sharing the Perspective of VI

- When a child has vision impairment it impacts **all** aspects of development. As a TVI, we are to support the team in all areas.
- Not all providers are familiar with working with children with visual impairments so explaining how the vision impacts the child is a very important part of our job!
- We don’t necessarily come in with activities to do when we are supporting as joint visitors. We want to support the team to adapt/modify the things that other providers may be working on with the child’s vision in mind.
Working with a Translator
Working through Language Barriers via Translator
Meet with the Interpreter and family ahead of time

Provide Interpreter with written copy

Follow a set schedule for each visit

Communicate the schedule/routine for visits

Allow time for translation

Learn a few key words in the family’s home language

http://veipd.org/earlyintervention/2014/02/04/tips-for-working-with-interpreters/
Cortical visual impairment (CVI) is a term used to describe visual impairment that occurs due to brain injury. CVI differs from other types of visual impairment which are due to physical problems with the eyes. CVI is caused by damage to the visual centers of the brain, which interferes with communication between the brain and the eyes. The eyes are able to see, but the brain is not interpreting what is being seen.

10 Typical Characteristics

3 Phases

A study conducted by Dr. Roman-Lantzy found that, in a select group of children who had highly motivated parents, 97% went from Phase I to Phase III in an average of 3.7 years.

https://littlebearsees.org/what-is-cvi/
CVI- Collaborating during a visit

Phase 1- Early Phase 2

- CVI children need to work on vision when they are not having to worry about anything else!
- As a child progresses up in the Phases this may improve but always should be considered when working with a child with CVI.
- Consider breaking session into parts. 15 minutes debriefing, 20 minutes PT/OT (with vision support) and then 15 or so minutes working on a visual skill, 10 minute wrap up.
Phase 1- Phase 2 Continued

Development:
If working on physical skills: sitting, tummy time, or rolling do not expect the child to have a lot of visual attention

Application:
Don’t ask them to sit and visually attend to a new toy.

Collaboration:
PT and TVI work together. The PT coaches the family on sitting techniques, the TVI provides visual attention and information input.

Use a familiar toy, Back lighting/Spotlighting, blackboards to block stimuli, when working on harder physical skills.
ONH- Brain Based

Optic nerve hypoplasia (ONH) is a congenital disorder characterized by underdevelopment (hypoplasia) of the optic nerves. The optic nerves transmit impulses from the nerve-rich membranes lining the retina of the eye to the brain. Most people with ONH have abnormal eye movements (nystagmus) and vision can range from no light perception to good functional vision, or even full vision in one eye.

Other possible characteristics of ONH:

Hormonal insufficiencies: thyroid, growth hormone, pituitary, adrenal, antidiuretic hormone (ADH)

Absence of Corpus Callosum

Difficulties with sensory input, feeding, emotional regulation, communication

http://www.tsbvi.edu/seehear/spring99/opticnerve.htm
ONH-Collaboration during visits

Development:

Provide a multi-sensory approach to activities with each team member addressing area of expertise

Application:

A child with ONH often has other conditions that need to be considered:

a. A child who is easily distracted, frustrated, disorganized, and impulsive may be helped by predictable physical environments, dependable daily routines, and limited distractions.

b. Slowing the pace of activities and providing predictable transition routines may help reduce resistant and irritable behavior.

c. Offering frequent snacks to children diagnosed with hypoglycemia may be helpful.
ONH Continued

Collaboration:

Feeding problems:

Parents and professionals need to agree on recommended strategies to create a positive feeding experience.

OT- Positioning and sensory, TVI- Avoiding the Good Fairy Syndrome

Overall Therapeutic Activities:

TVI can share information about Hand under Hand

*Support all the team members in understanding Hand under Hand instruction, most therapist have heard of Hand over Hand, but it is very invasive for these children.

https://www.tsbvi.edu/technology/534-hatton-functional-vision/5564-session-3-handout-f-optic-nerve-hypoplasia
Ocular - Eye Abnormalities

- **Refractive Errors:** Myopia (nearsighted), Hypermetropia (farsighted), astigmatism
- **Strabismus:** Esotropia (turning in), Exotropia (turning out), amblyopia (lazy eye)
- **Cataracts:** clouding of the lens
- **Glaucoma:** pressure on optic nerve
Impact on Development

“Children who are sighted learn concepts and gain experience through incidental learning, the observation of event and interactions in their environments. Students with visual impairments need to be systematically, sequentially, and concretely taught through hands-on-experiences. “


*When an infant is visually impaired, vision may not be able to act as a motivator or reinforcer.
Impact on Development

Vision is main motivator for movement and exploration:

- Participate in less tummy time
- Fear of movement
- Limited exploration of objects and environment
- Impacts overall motor and sensory development
Impact on Development

- Lack of vision as a motivator compounded with other motor impairments or multiple disabilities results in under-development of proprioceptive and vestibular sensory systems.

- Vestibular + Proprioceptive systems are important for developing muscle tone and strength.

- Leads to delayed gross motor milestones:
  - Less time crawling or do not crawl.

- Leads to delayed fine motor milestones:
  - Core strength and upper extremity stability are impacted by lack of crawling and other delayed gross motor skills.
  - Impacts play, self-help, and classroom skills.
Developmental Assessments

The Oregon Project for Visually Impaired & Blind Preschool Children: Skills Inventory:
Checklist arranged in developmental sequence from birth to six years. Skill areas include cognitive, language, compensatory, self-help, fine motor, and gross motor.

Callier Azusa Scale:
A developmental scale for deaf-blind and severely/profoundly disabled persons. Composed of 18 subscales in: motor development, perceptual development, daily living skills, cognition, communication and language, and social development.

Functional Vision Assessment:
Child’s range of visual function; determines how much usable vision a student has to perform visual tasks; and identifies priorities and strategies for intervention.

CVI Range Assessment:
Used to investigate the extent of the effect of the 10 characteristic behaviors associated with CVI.
Defining Roles and Responsibilities in E.I.

Our goals as an Early Intervention TVI’s……..

1. Provide educational and emotional support to families of a child with a visual impairment.

2. Assess, monitor, and maximize functional vision so that each child can reach his/her greatest potential in the sighted world.

3. Teach compensatory strategies to compensate for vision loss, Expanded Core Curriculum.

4. Monitor overall development while anticipating common hurdles facing infants and toddlers with visual impairments.

5. Provide a means for families to connect and to share experiences through parent group meetings and through facilitation of appropriate contacts.

6. Work with the state infant toddler service coordinators to meet the individual needs of each child and family served.

*Assistance and the implementation of appropriate strategies and activities, as well as valuable support and education, is provided to the parents and caregivers.*

https://ccvi.org/early-intervention-program
Positioning and Environment for Virtual Sessions

Environment

- Have materials that are visually motivating for child ready and close by.
- Have black backboards (if available) to block out extra visual stimuli.
- The goal is to set up the environment and the position of the child and the screen so that a parent or provider can be available to facilitate or support movement if needed and/or visual skills can be worked on when child is in supported position.

- Try to find a quiet space in the house.
- Turn off household distractions such as television and music.
Environment: lighting

Avoid light gazing:

- Do not position the child facing directly into a window
- Turn off bright overhead lights

Reduce Glare:

- Avoid positioning the child with an open window behind them
- Check for glare on the screen by looking at the screen down at the child’s eye level and tilt the screen or change the child’s position until there is no glare
- Close blinds or curtains and dim overhead lights

Make sure the team understands how light impacts the child:

- Early CVI kiddo may need their back towards the window to reduce light gazing but a kiddo later in the phases might do well facing a window to help with backlighting.
- A child with ONH may be photosensitive while others may not.
Environment: lighting

Use Task Lighting:

- Use a lamp on a desk and adjust its position until there are no shadows or glare on the screen or the presented item.
- A lightbox or an ipad is a great tool to use for children who need some extra support in backlighting.
- Lighted/flashings toys may trigger seizures in some children!

CVI: The use of **SpotLIGHTing Techniques** should be considered for increasing visual attending behaviors for targets at near and intermediate ranges. This instructional strategy is simple and easy to use, and may help to increase visual attending behavior and the level of participation in activities for students who alert frequently to light. This technique should not be used if your student is sensitive to light and/or has a seizure disorder (that may be triggered by light).

https://strategytosee.com/toolbox/spotlighting-techniques/

ONH: Some children may be sensitive to light: The effects of light sensitivity can be minimized by adjusting lighting levels, wearing tinted lenses, and minimizing glare on surfaces.
Positioning of the Child

Use Supportive Positioning:

- Position with hips at the back of the chair, feet on the floor and with a table, tray, or other surface in front of the child
- If available, use an adapted activity chair, personal wheelchair or stroller that provides support to the trunk and head
- For children with low head control, the head should be supported as much as possible when working on visual skills
Positioning Props at Home

- Rolled up towels, pillows, and bean bags can be used to provide extra support to the arms, trunk, or head
- A stack of books taped together can be placed under the feet to be used as a footstool if feet don’t touch the floor while sitting in a chair
- Lap desks or empty diaper boxes are great for prop sitting so the child has something to prop up on. Brings items off the ground to help neck get in a more neutral position when playing. Can use pillows or boppy to support around the child.
Screen Positioning

- An inclined surface can help bring the screen to the child’s visual field
- Use a phone or tablet holder if available
- Use books and other at-home materials to raise the screen to student’s eye level
- Place a blackboard behind the screen to minimize distractions or position the screen so that there is a blank wall or curtain behind it or drape a neutral colored sheet over background furniture

Be aware of the child’s visual field:

- Most children with CVI do not see items placed in the lower visual field and may also have difficulty with central vision
- Bring the screen to the child’s eye level and then place it to the left or right depending on where their visual field is
Resources


*Infants and Toddlers with Visual Impairments*;  *Virginia E. Bishop, Ph.D, 1998*:

Handbook for early childhood teachers, to help them understand the possible effects of visual impairments on early learning.

Teaching Life Differently; The Expanded Core Curriculum for Babies and Young Children with Visual Impairments:JCc Greenly and Melina Doyle McCall

Concepts and activities that address the unique needs of very young children with vision impairments.

https://veipd.org/earlyintervention/2018/10/30/an_invisible_bridge/

https://www.dec-sp ed.org/dec-recommended-practices

https://www.dec-sp ed.org/covid-19

Positioning and Environment for Virtual Instruction Handout for Providers:  https://create.piktochart.com/output/46387641-my-visual