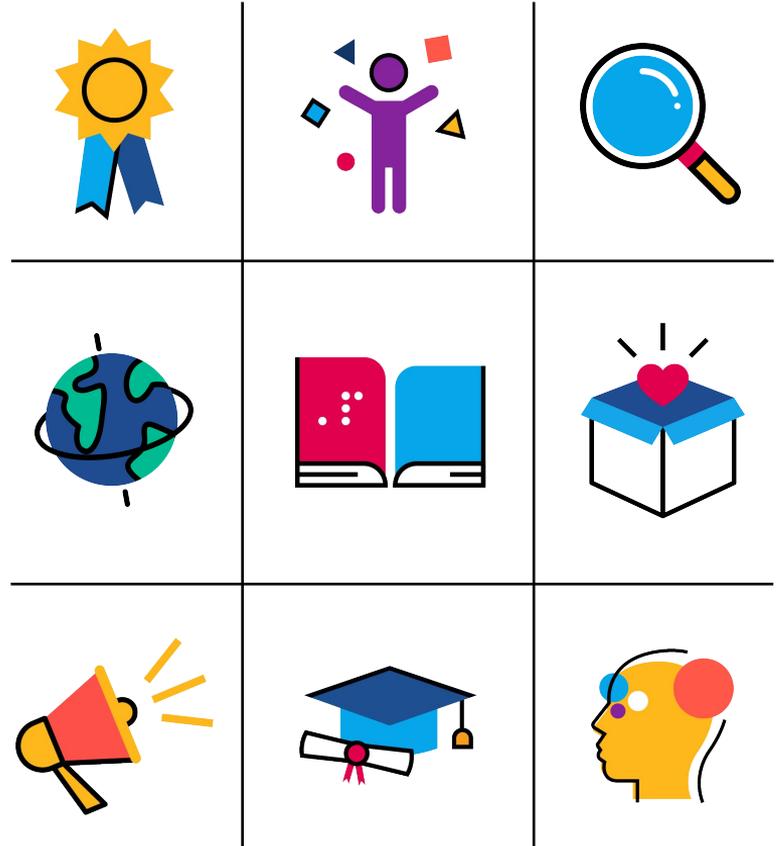


THE CVI CENTER
Perkins School for the Blind

Social Skills and Implications for Individuals with Cortical/Cerebral Visual Impairment (CVI)

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What is Cortical/Cerebral Visual Impairment (CVI)?

- CVI is the leading cause of blindness in children.
- CVI is a brain-based visual impairment caused by damage to the visual pathways or visual processing areas of the brain. Individuals with CVI often struggle with visual attention and visual recognition resulting in a lack of access for understanding the world around them. (CVI Now)
- CVI is lifelong.
- 50% of students at Perkins have CVI.

CVI Visual Behaviors

Impact of
Color

Impact of
Light

Impact of
Motion /
Impaired
Perception of
Movement

Response
Interval /
Latency for
Looking and
Understanding

Visual Field
Preference/N
eglect

Access to
People

Form
Accessibility

Visually
Guidance of
Upper Limbs

Visual
Guidance of
Lower Limbs

Sensory
Integration

Impact of
Spacing /
Object
Arrangement
/ Clutter

Visual
Attention /
Visual
Curiosity

Visual
Recognition

**Compensatory
Skills**



CVI is on the Blindness Spectrum

- Often, people attribute blindness to an ocular-based condition.
- CVI involves the brain's visual system and it is a spectrum of blindness.
- The environment has a huge impact on an individual with CVI.
- All manifestations of CVI are a big deal for the person. It's not up to sighted people to make assumptions about the extent to which a person with CVI is impacted.
- **CVI is unreliable!!**
- **CVI is LIFELONG!**

All Kids Deserve Access

- Individuals with CVI deserve the same access to the Expanded Core Curriculum (ECC), including thoughtful and methodical instruction around social skill interactions.
- A team effort must be made from a very young age to target social interaction skills across multiple settings.
- Explicit teaching or instruction should be implemented for target areas.
- Student's and their family's input and goals for social skill development should be prioritized.

What are Social Skills?

Social skills are one of the nine areas of the Expanded Core Curriculum (ECC).

- Individuals with typical sight incidentally learn about different environments, people, and interactions in their world. Individuals with Cortical/Cerebral Visual Impairment (CVI) need systematic and explicit instruction when learning social skills.
- For kids with visual impairments, it's not always easy to pick up on non-visual social cues like hand gestures or facial expressions.
 - For example, a child may need instruction of where his peers are located within a classroom or who is in the room with them. A teenager with CVI may have difficulty finding their friends in the hallway, often waiting for the initiation from others.

Why Are Social Skills Important?

Social skills are one of the best predictors of success in school and life.

“Soft Skills”, sometimes referred to as “emotional intelligence” or “social intelligence” are just as important as mastering core academic subjects.

Soft Skills include:

- ability to get along with others
- being polite and well-mannered
- working well on a team
- able to communicate effectively
- having a positive attitude

Quote:

“Just being there—showing up regularly—is vitally important in building the basis for friendships. People who come and go have great difficulty in being seen as real members of a classroom or community. They are perceived differently and, although there may be no harmful intent, group members often interpret a fluctuating presence as a message that this person belongs elsewhere and does not require their personal investment. . . Presence is a powerful statement of belonging . . .” Pat Amos, a parent and an advocate for individuals with disabilities and their families

Barriers to Social Skills

- Attending non-neighborhood schools
- Complex communication modes
- Idiosyncratic behaviors
- Geographic isolation
- Move to a new classroom or school
- Physical presence of an adult

Individuals with multiple disabilities, visible or non visible, face barriers to social skills.



Barriers to Social Skills

Often the biggest barrier of all:

- CVI can impact incidental learning, subtle communication exchanges, and fleeting social encounters.
- This impacts all areas of development, including social skills and peer relationships.



Some Barriers for Individuals with CVI

- Difficulty with faces/facial recognition
- Difficulty perceiving and processing emotions
- Difficulty in crowds or cluttered spaces
- Difficulty processing motion
- Difficulty with visual recognition and form identification
- Visual guidance of upper and lower limbs
- Visual fields (or field loss)
- Visual spatial perception
- Visual processing delay and visual fatigue

Difficulty with Faces and Facial Recognition

- Unable to establish and maintain facial regard
- Pairing a face with a name
- Recognizing faces with changes (i.e., glasses vs no glasses)
- Establishing facial regard when other person is speaking (difficulty with sensory integration)
- Looking at mirror for self-care



Difficulty with Faces and Facial Recognition- cont.

Recommendations:

- Always provide auditory cueing when approaching.
- Introduce yourself in the beginning; “Hi Michael, it’s Sara”.
- Start with their name when directing a question or comment.
- Point out your visual attributes, such as today I’m wearing a red shirt or Mary is always wearing black glasses.
- Use a personal identifier or simple description of how you look.
- The individual should not be expected to look at your face or your direction when you are talking. It can be extremely difficult to look and listen simultaneously.
- Cue the individual to give personal space and orient themselves toward the person they are speaking with.

Prosopagnosia - Face Blindness

Prosopagnosia is a neurological disorder characterized by the inability to recognize faces.



<https://youtu.be/3-MzNPcEh6M>

Quote:

“Prosopagnosia is not only the inability to recognize faces, it can also involve experiencing faces as twisted and contorted... trying to look at people made it impossible for me to pay attention to what they were saying. If I really wanted to hear them, I had to tune out visually.” **-Nai, Adult with CVI.**



Example and Quote

Example: Omer not being able to recognize his parent at school (out of context).

“Do not tease me in front of others. If you laughed or smiled I would know it was you, Mom”

Difficulty Perceiving and Processing Emotions

- Understanding the emotions of others
- Unable to match voices with facial expressions
- Unable to respond appropriately within social situations
- Responding appropriately to a facial expression

Difficulty Perceiving and Processing Emotions - cont-

Recommendations:

- Exaggerate verbal expressions to support understanding of emotion and intent tied to facial expressions.
- Model language to help make connections about emotions (e.g. “She is laughing, I can tell she is happy.”).
- Encourage kids to validate their understanding of social situations.
- Auditory cueing to explain others’ feelings and emotions.
- Verbally tie sounds to events (i.e. if Sally is crying, use the opportunity to tie the voice to emotion. Explain the circumstances where appropriate).
- Establish a routine—use visual/tactile/auditory reminders of expectations.
- Fostering friendship can be done through structured activities, such as social groups during lunch, turn taking, reading buddies etc.

Quote:

“I missed social cues, I misinterpreted people’s reactions and I couldn’t always recognize the person that was talking to me... I often found it difficult to process what people were saying, especially if I was in a visually cluttered environment, or if there were too many people involved in the conversation.” - **Nicola McDowell, Adult with CVI**

“Until I learned about my son’s CVI, I never knew why he didn’t recognize me when I came into a room or came to pick him up at school. Why he went up to strangers thinking they were me or his dad. If I’m standing in a group of people, he’ll go up to each of us until he can find me. If I stay quiet in a room at home, he won’t know I’m there until I say something.” -**CVI Parent**

“ My son knows who the people are by looking at their shoes.” - **CVI Parent**

Difficulty with Visual Curiosity, Crowding and Clutter

- Awareness of who is speaking and which direction to look.
- Understanding who is in the room and where they are.
- Finding friends or family in crowds and busy environments.



Difficulty with Visual Curiosity, Crowding and Clutter

Recommendations:

- Sitting near the source of instruction or presentations.
- When running group instruction, verbalize directions and content outloud.
- Provide verbal information during social situations.
- Explicit explanation of distance social interactions.
- Inform student who is in the room and what they are doing.

Difficulty Processing Motion

- Noticing or understanding interactive gestures such as a wave, high fives.
- Being in a group game, playground activities.
- Noticing or recognizing people coming toward them.
- Understanding sign language and gestures.



Difficulty Processing Motion

Recommendations:

- Before offering a handshake, high-five, or alternative gestural greeting, inform them you are doing so.
- Hand under hand support for sign language or gestures
- Explicit explanations of events or social interactions at distances

Quotes:

“I can’t see pedestrians moving. I’m quite likely to bump into them. Or suddenly there’s a person in my face and I’m still walking and I have no idea what to do to avoid them, so it can be very stressful to even just walk along a sidewalk.”- Student with CVI

“My son thinks I’m trying to be funny when I’m upset. He is not able to see my facial expressions and body language to show that my tone of voice means I am sad or upset. We have to do a lot of direct teaching around emotions and feelings.”- Mom of a child with CVI.

Visual Recognition and Form Identification

- Difficulty recognizing an object, person, or place.
- Limited access to social stories and social situations.
- Connecting 2D social situations in real life.
- An individual with CVI might only recognize a character on a TV show by the music that's associated with them. (i.e. Mickey Mouse)
- Difficulty recognizing people in photographs.

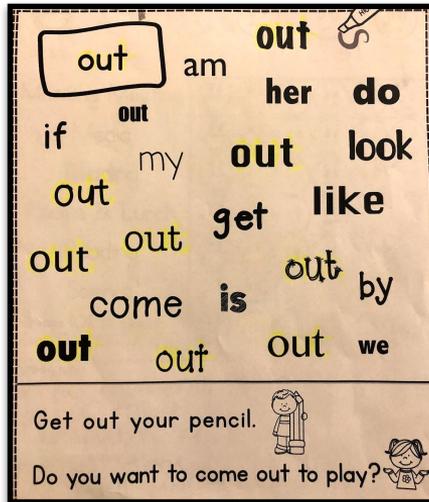
Visual Recognition and Form Identification Cont.

Recommendations:

- Provide an auditory cue or verbal confirmation that you are who the child believes you to be.
- Avoid use of photographs as sole means of identification during instruction for kids who do not understand two dimensional images.
- Support strategies to elicit voice cues and to promote social engagement (asking who is around, asking others to introduce themselves).

Quote from a Student with CVI

“When I read [print] it feels like my eyes are being pulled out from their centers. I have a hard time reading long passages because my eyes get tired after about two paragraphs.”



Difficulty with Motor Tasks that Involve Hand-Eye Use and Foot-Eye Coordination

Difficulties with navigation can cause social anxiety, low confidence levels, and embarrassment.

- Navigation challenges; tripping and frequent falls, overstepping or under stepping when approaching changes in depth
- Recognition of the space between others and themselves
- Difficulty with self care
- Increase self-awareness and social anxiety (children in wheelchairs, children who need support with their navigation)

Difficulty with Motor Tasks that Involve Hand-Eye Use and Foot-Eye Coordination Con't

Recommendations:

- Teaching strategies to support the student in self advocacy. For example: Asking an adult for support to safely navigate.
- Keep floor surfaces clear.
- Encourage use of handrails, cane or sighted-guide when navigating new areas with changes in incline (stairs etc.).
- Provide reminders for changes in incline/decline.
- Collaboration with teams to provide opportunities to support independence with self care tasks (Orientation and Mobility, Occupational Therapy, etc).

Quotes

“Dinner is a messy affair at our house. My son either knocks over his drink or puts the cup too close to the edge and it falls off. We’re used to it!” - **Parent of a Child with CVI**

“Navigating steps, sidewalks, patterned surfaces, and patterned carpets is almost impossible for me if I don’t use a cane. Patterned carpets are a nightmare.”

-**Dagbjört, adult with CVI**

Difficulty with Visual Field

- Difficulty when approached by others in their impacted visual field.
 - Difficulties can be heightened when situations are:
 - Visually cluttered
 - Too distant
 - Unfamiliar
 - Multiple sensory inputs
 - Lack of context clues or verbal descriptions

Difficulty with Visual Field

Recommendations:

- Approach the student from their better field of vision.
- During instruction, position yourself in the better field of vision.
- Seat peers in the student's better field of vision.
- Keep seating consistent.

Quote from a Student with CVI

“It’s hard for me to get around sometimes. People cut me off in stores, especially when they come on the right side because I can’t see anything on that side. I am always surprised. I’m like, “Oh my god, where did you come from, I can’t see that?!”



Difficulty with Visual Spatial Perception

When individuals have impaired spatial perception, they can have difficulty knowing where or how to find the peers.

- Difficulty organizing visual space
- Difficulty creating a visual mental map of 3D space



Difficulty with Visual Spatial Perception

Recommendations:

- Provide support in developing means of environmental mapping and exploration (maps in accessible format such as 3D, digital etc.).
- Provide support around organizational skills.
- Provide a predictable learning environment.

Increased Response Interval and Visual Fatigue

- Difficulty making eye contact or facial regard
- Head down posture
- Difficulty responding to social situations (May have more behaviors or a harder time coping)
- Less social interaction due to visual fatigue (especially during group activities, or in busy or unfamiliar environments)

Increased Response Interval and Visual Fatigue

Recommendations:

- Ensure that the student is ready prior to instruction.
- Allow for visual breaks.
- Provide increased time for the student to respond.
- Design and accessible school day.
- Establish predictability and routine.

Quotes from Parents of Children with CVI:

“My daughter’s visual fatigue presents as instant regression. She puts her head down on her desk and when she pops back up it’s like she forgot what she was doing. We had her teacher conference today, and I took the opportunity to reiterate that she isn’t ‘misbehaving’ when she doesn’t look at the screen or the teacher, or needs a break to get up.”

“Learning has to happen in 10-15 minute bursts. Anything more than that and my daughter can’t physically hold herself together. If she has an intense session of physical activity (PT, swimming, horseback riding) that may be all she is able to do in a day because it takes ALL of her energy and effort to do that major physical activity.”

Quotes from Parents of Children with CVI:

“Visual fatigue occurs most often for my son with multi-sensory input; for example, as he’s physically exerting himself, the school gym is loud with lots of people and items moving quickly. His vision essentially turns off for a period of time.”

Compensatory Skills used to support Individuals with CVI

Compensatory access refers to how an individual with a visual impairment learns to acquire, share and process information, including the general education curriculum; access “fills the gaps” in concept learning. Compensatory access is also refers to compensatory skills.

- Auditory
- Tactile Cues and Exploration
- Context Cues
- Color Coding Strategies
- Memory
- Prediction skills

Examples of How individuals with CVI might Identify Staff and Peers

Voices

Hairstyle or
Hair Color

Location
of seating

Clothing

Footsteps

Personally
Relevant
Item

Smell

Perkins CVI Club

- Student-led group supported with adults
- The focus of the group is to educate and learn from each other
- Participants practice self-advocacy and self-determination skills
- Building life-long skills

Examples:

- A student asking for color-coding and landmarks in the building.
- A student who recently graduated asked for support from Perkins to help to train the staff at her day program about her visual impairment and how it impacts her daily.

We need to rethink what we say to individuals with CVI.

"Look at me while I'm talking."

"To listen well, I need to tune out my vision."

"Pay attention."

"There's too much on the walls, it's really noisy, and it's too hot. I'm stressed, anxious, and can't use my vision."

"Sit still."

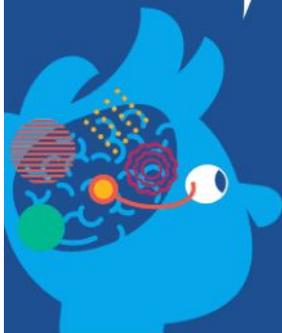
"I need to move to help process the world."

"Work with others in your group."

"I need help recognizing people and knowing where they are."

"Follow along."

"I need someone to describe what's happening around me."



CVI NOW

Image From Perkins CVI Now:
(Perkins School for the Blind, 2022)

Some strategies individuals with CVI may use to cope

- Classroom seating in the same spot
- Tendency to ‘hang out’ with same group of people
- Requesting family members or friends to wear a certain color of clothing so that they can identify them in crowds (Disney example)
- Initiating with a “hello” to hear and potentially recognize the voice of others
- Using prediction and context clues to recognize people. (i.e. It must be Mary because this is her office)

Always provide opportunities to explore and develop compensatory skills.

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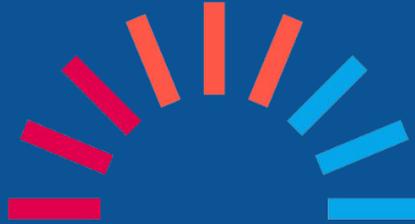
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Thank you!

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