Integrating Vision with Communication - An Example for Early PHASE II CVI

1. Use the results of the CVI Range to guide intervention (Roman-Lantzy, CVI Approach to Assessment and Intervention, 2018)
    • Ask team members if anybody has the endorsement to do a CVI Range Assessment
    • If not, consider a virtual assessment from Dr. Lantzy, info found at www.cviconnect.co
2. Remember that this is a TEAM process that takes place over time
    • Watch videos and discuss SLP role with CVI interventions and collaboration
    • USSAAC webinar by Christine Roman Lantzy: LINK
    • PerkinsLearning webinar by Jenna Friedman: LINK
3. Phase II = "Integrating Vision with Function" (Blackstone & Lantzy, CVI Applications, 2018)
    • Control sensory input when learning (wear black, use simple backgrounds, reduce noise)
    • Start by building familiarity with 3D objects, in preferred visual field, with preferred colors
    • Use movement to get attention, may include shiny borders
    • Encourage reliable YES NO and other body language for expression
    • Use partner-assisted auditory scanning (with branching). See Tip #6 2018 www.aacintervention.com for more ideas regarding PODD and auditory + visual scan
    • Partners can hold a card with a list of items to control vocabulary
    • Use a simple voice output device to provide a voice output message she can activate
    • Use a tablet to engage vision with light and movement, keeping in mind that learning what a picture represents takes time (sometimes a long time) and active engagement.


The simple voice output device shown on the left (ProxPad) has been adapted to reduce visual clutter. Depending on the ability to visually fixate and touch an item, adding reflective Mylar tape may be necessary to draw attention to the active area. This device requires use of a card to activate the message and was selected as a tool for this individua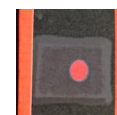l because she likes reaching and touching. The APH Tactile Connections card on the right activates the message "who?" On the back of the card, we can add the auditory scanning branch of names. The partner lists the names in order, giving time for her to think about what she is listening for. We are looking for YES NO responses using body language (as well as other body expression).

If she indicates herself, we can replace the "who" card with the one that says her name. Beware of visual complexity when the CVI Range Score indicates Phase II. This card may need to be modified for a less visually complex option, likely replacing this one with the first letter or her whole name, using Glow Coloring or maybe raised puffy paint. Images and photos of people can be hard to learn to visually integrate. Looking is not the same as understanding what you are looking at. Opportunities to practice saying her name may involve turn-taking with another person. Keeping the "who" card handy can assist her in learning the names of other people (when offered through auditory scanning).
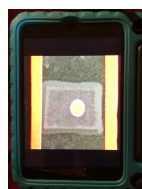

Take advantage of the backlight of the iPad to engage in activities with light and sound. Again, it may be necessary to add reflective tape to the edges of the iPad rather than this case to draw visual attention to the tablet itself. Remember to use her preferred visual field. When finished with an activity, open the photo app and show a picture or a video using one of the cards. I suggested using a card with a red period and saying "the end, we are finished" before putting away the iPad. This card is not intended to be a branching card, but rather a way to indicate, "That's all I have to say about that."

Integrating Vision with Communication - A Later PHASE II CVI Example

1. Use the results of the CVI Range to guide intervention (Roman-Lantzy, 2018)
2. Appropriate individualized interventions and familiarity with Tactile symbols and books has led to more functional vision and improved scores on the CVI Range for this student.
3. Phase II = Integrating Vision with Function (Blackstone & Roman-Lantzy, 2018)
   - Student looks at or reaches for an object, activating the "what" visual stream
   - Control sensory input (wear black when possible, use simple backgrounds, reduce noise)
   - Use familiar 3D objects, in preferred visual field to support teaching abstract symbol/word associations. (Scoring as Phase II on the Range is indicative of trouble with 2D images.)
   - We acknowledge her verbal reliable YES NO in response to images or symbols
   - Use partner-assisted auditory scanning (with branching) plus vision as this skill improves
   - Partners can model switch scanning on a tablet, starting with auditory cues and building in vision. This student uses switch-activated games and stories on a computer.
   - Use a tablet to engage vision with a back light. Use high saturation and low complexity to teach symbols and branching. This student has an iPad Pro 12" with GoTalkNOW app.
   - When moving to an eye gaze communication device, be careful to maintain availability of a robust communication system, with core words, categories and alphabet options.
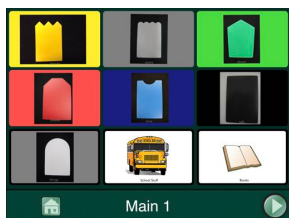
The iPad on the left is showing a "People" page (GoTalkNOW) and has been adapted to use color for navigation. We also created many books, both in PowerPoint and with these APH Tactile manipulatives.
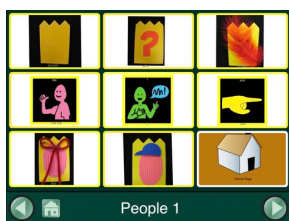
Opportunities to practice saying her name has involved turn-taking with another person. Keeping the "who" card handy assisted her in learning the names of other people (when offered through auditory scanning) as she learns a representation for each word. Some students will be able to recognize faces and some will be able to move directly to text. Using yellow as the category can facilitate understanding by using auditory plus visual cues. We need to be consistent in our auditory prompts when acting as a scanner (partner-assisted scanning).

We need to build awareness for navigational branching to provide independent exploration and novel utterance generation. Note that the second screen capture above includes introduction to reduced complexity highly color saturated Mayer-Johnson Picture Communication Symbols for some of the core words. Other individuals may be able to use text rather than symbols.

Keep in mind that a robust communication system may include a combination of body language (no tech), light tech (symbol book) and high tech (with backlit screen). A familiar partner will most likely be the primary facilitator (or co-conspirator).
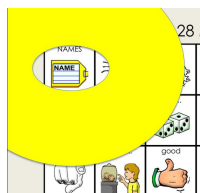
Take advantage of the back light of the iPad to engage in activities with personally meaningful use of light and sound. Use electronic books to engage in activities that encourage comparative thought (http://cvi.bridgeschool.org/interventions/elementary/english-language-arts-ela/). When possible, combine comparative thought with images, beginning with those that have reduced complexity and high color saturation. Remember to use her preferred visual field.

We use occluders to draw attention to a specific area, low tech (black) and high tech (preferred colors). We can work towards visual fixation and engagement with symbols/images on a screen. We can consider trials with an eye gaze AAC device as her visual function improves.