

This 2022 The Bridge School launched its first annual Summer Institute. The topic of this weeklong institute was CVI and AAC, so as part of our partnership with Dr. Christine Roman-Lantzy, internationally known expert on Cortical Visual Impairment (CVI), we put together a strong comprehensive program for professionals and families.

We believe in the importance of an Interprofessional Collaborative Practice Approach, which is of special importance when working with children who have CVI and use Augmentative and Alternative Communication (AAC), so for this institute we had 40 professionals ranging from Teachers of the Visually Impaired, Speech and Language Pathologist, Special Education Teachers, Psychologists, Occupational Therapists and Assistive Technologists who conformed interprofessional teams that worked with 10 students who have CVI and use AAC.

This interprofessional practice and collaborative work could be seen in the variety of areas of specialty of our speakers, while highlighting the high caliber, professionalism, dedication and expertise of each one of them. This year, we were honored to have the participation of the following speakers:



Aileen Arai has been a Special Educator for 27 years. She has been designing and supporting staff in implementing strategies that support students, parents, districts, and all members of a student's educational team in the development of curriculum within the Common Core State Standards for students with significant physical impairments who use AAC systems. Since 2012 she has been addressing intervention strategies and assessments as they relate to Cortical Visual Impairment protocols and tools developed by Dr. Christine Roman-Lantzy. She received The Perkins-Roman CVI Range Endorsement

from The Perkins School for the Blind, an authorization that supports her evaluating a student's CVI for purposes of ongoing intervention.



Christine Roman-Lantzy is The former Director of Pediatric View in Pittsburgh Pennsylvania. She was the first CVI Project Leader for The American Printing House for the Blind. Christine provides workshops and consultations through CVI Resources and has had the honor to be invited to all parts of The United States and many countries outside The U.S. She is the author of *Cortical Visual Impairment: An Approach to Assessment and Intervention (2007, 2018)* which won The Bledsoe Award in 2008, and *Cortical Visual Impairment: Advanced Principles (2019)*. She

taught at The University of Pittsburgh and Marshall University Graduate College for a total of 17 years.

Christine Wright-Ott is an internationally known Occupational Therapist who specializes in research and development of assistive technology for children with complex communication needs and severe physical disabilities. She has been a consultant at The Bridge School for over 15 years where she integrated self-initiated mobility into the educational curriculum.

Christine was the principal investigator and designer of the KidWalk, Gobot and MiniBot Projects, while working at the former Rehabilitation Engineering Center at Stanford. She

has worked at California Children's Service, Children's Hospital at Stanford and West Valley College High Tech Center. She is a frequent lecturer at international and national conferences and local universities. She has authored the chapter "Mobility" in previous and now the 7th Edition of the book, Occupational Therapy for Children.



Elisa Kingsbury is a Speech and language pathologist with over 25 years of experience providing school-based AAC services. Collaborated with and learned from children, families, and professionals at The Bridge School and in Berkeley, Alameda and Mt Diablo Unified School Districts. In her 19 years at Bridge School, she worked in the Elementary, Transition and Research programs and helped to develop the Preschool program adapting the Language-Focused Curriculum from the Language Acquisition Preschool at the University of Kansas.

Providing children with access to play, movement and language has been a joy for her. Working with a team to improve a child's communication outcomes and enhance their quality of life has been the most meaningful work she could imagine.



Gabriela Berlanga, is a Speech and Language Pathologist and is the founder and consultor for CATIC in Mexico city, current Associate Executive Director at the Bridge School and Vice-President for Conferences at ISAAC (The International Society for Augmentative and Alternative Communication).

Founder and member of the North American Alliance for Communication Access. Consultant for the Special Education Technology Department @prende of the Ministry of Education in Mexico.

She has collaborated with Dr. Christine Roman-Lantzy since 2011 as part of CATIC's International Collaboration Program run by Dr. Sarah Blackstone.



The Enos family has a genuine love for the Bay Area. Anna and Joey proudly have deep family roots in the Bay Area that go back generations. After commuting for two years, the family recently moved from Oakland to San Mateo to be closer to the Bridge School. Anna majored in fine arts at UC Santa Cruz, and the year Sammy was born, Joey received his Masters of Fine Arts from UC Berkeley. With a background in art and music, Sammy's parents have always incorporated these modalities into all aspects of Sammy's life. His diagnosis of cerebral palsy and CVI made communication and education challenging. Yet, through his intense and early love for music and books, it was clear Sammy had an undeniable need to communicate and learn. At age 3, Sammy received an early intervention evaluation from AAC Specialist Judith Lunger-Bergh and reached out to the Bridge School. With the curriculum focus, specialization in AAC and CVI, the family knew that The Bridge School was the school Sammy needed to reach

his full potential. Sammy has been at The Bridge School for three years. He is thriving in this fun, creative, and engaging environment.



Lynn Elko is first and foremost a Mom. Her daughter, Emma, 20, began to benefit from CVI adaptations and interventions at age 15. After learning how profoundly CVI impacts everything in a child's world and witnessing Emma's life change after implanting intentional, strategic CVI interventions, Lynn became a fierce advocate for children with CVI and supporting their needs.

In previous iterations of her life, she was a VP of Production for an educational professional development company, working with organizations such as NASSP, NAESP

and the Joseph P. Kennedy Jr. Foundation, and a social entrepreneur for which she received her Chamber's Businessperson of the Year award. She, along with 2 other CVI Moms, was honored with the Hall of Fame award in 2019 from the Pediatric Cortical Visual Impairment Society for spearheading the development of the PCVIS.vision website.

When Emma's life and medical needs are not shifting their family's axis, Emma and Lynn's collaborative efforts to make learning, life and communication accessible to her through a CVI adapted, custom AAC system can be found at See CVI, Speak AAC (@seeCVIspeakAAC).



Matt Tietjen is a certified teacher of students with visual impairments and an education consultant for the Bureau of Education and Services for the Blind (BESB).

He is a CVI specialist who has completed the 2 year CVI Leadership Institute as well as the Perkins-Roman CVI Endorsement.

He is a nationally and internationally recognized speaker.



Rebecca Matthews is a Speech Language Pathologist at The Bridge School. Received her M.S. In Speech Language and Hearing Sciences from San Francisco State University where she was a member of the Project Building Bridges grant specializing in AAC. Did her school internship at The Bridge School and continued as a Clinical Fellow and eventually fully licensed SLP.

She works in the elementary classroom where she is a member of an interdisciplinary team and co teach alongside the special educator.



Sarah Blackstone is a world recognized SLP and AAC specialist.

Past president and fellow of ISAAC (The International Society for Augmentative and Alternative Communication).

Member of the Board of Directors of The Bridge School.

Director, CVI/AAC Project at The Bridge School.

Author: Social Networks: A Communication Inventory for Individuals with CCN and their Community Partners, Patient Provider Communication: Roles for SLPs and other Health-care

professionals. "Retired": Augmentative Communication Inc., AAC-RERC, Berkeley Unified School District, Kennedy Institute/Johns Hopkins Medical School, Pittsburgh Rehabilitation Center.



Tara McCarty is a licensed speech language pathologist who worked in school-based settings for 7 years before returning to Penn State University to pursue doctoral studies. Tara's current research focuses on augmentative and alternative communication (AAC) design and intervention solutions for children with communication needs and cortical visual impairment (CVI).



Dr. Vicki Casella has been involved in the education of children and adults with special needs for over 55years. Her professional experience includes classroom and clinical teaching, public and private school administration, and university teaching and administration. She has taught at the University of Alabama, the University of Nevada, Reno, and San Francisco State University. While a professor in the Special Education Department at San Francisco State University, Dr. Casella initiated the first adaptive technology academic courses in the United States. Her areas of expertise were focused in teacher preparation in deaf/hard of hearing,

learning and multiple disabilities and she was the Director of the Deaf and Hearing-Impaired Program. For the past 18 years she has served as the Executive Director of The Bridge School, a special school dedicated to ensuring that children with severe physical impairments and complex communication needs develop the education and communication the skills they need to become active participants in their communities and that the effective strategies employed at The Bridge School are disseminated throughout the national and international community.

TAKE AWAY PACKAGE

Name of student: Thomas Dinnell

Parents: Stacey and Gregory Dinnell

Interprofessional Collaborative Team:

Bridget Emery, ECSE Lacey Burchett, OT., AT. Lindsey Cheng, SLP. Wendy Quach, Ph.D., CCC-SLP Parveena Singh, student Yusa Liu, student

Dates:

June 12th – 17th 2022

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Disclaimer:

This document was created by the student's assigned interprofessional team at The Bridge School Summer Institute CVI/AAC. The team had access to the supervision of our Institute's presenters when requested, however as our staff was not part of the entire process, The Bridge School does not endorse the content of the information presented in this document.

COMMUNICATION FORMS AND FUNTIONS

Communication Forms and Functions: Interview & Observational Worksheet

Informant Parents - Stacey & Greg Date Monday, June 13, 2022 Child's Name: Thomas Dinnell

Communicative Function	Sample Context	What child says/does	How communication partners respond	
Request attention	Adult gives attention to another person	Vocalizes, whine - after partner responds, he'll try again or continue to vocalize	Offer choice - "help"	
Request affection	Adult approaches child when hurt	Cries when requesting for affection when sad	Responds contingently	
Request assistance	Child needs help with task	Vocalize, turns toward partner	Wait to respond, he'll try again	
Request information	Child sees something or someone new	Looks at new item (e.g., horse)	Describe or provide more info	
Request permission	Child wants to go outside	Uses AAC/Talker to say "Go", if his hand is stuck r device is not set up, whine	Acknowledge and respond to request	
Request peer interaction	Child sees another child using a favorite toy	Limited peer interactions		
Request adult interaction	Tickle child and then pause	Adult assistant - family category	Changing pages for him	
Request food or object	Wants object out of reach	responding to options from parents	Acknowledge and respond to request	
Refusal	Offer him something he doesn't like	Ignore, won't engage	Acknowledge and respond to request	
Protest	Needs to participate in task & doesn't want to	Vocalize/whine, turn away from array	Reduce demand of act	
Cessation	Wants to be finished with meal or task	Shut down When not heard, "stop"on talker (stop now) "Go" next activity	Acknowledge and respond to request	
Greetings	a familiar person arrives or is leaving	Doesn't want to perform greeting "Hello " on talker - used for Sesame Street	Acknowledge and respond	
Affirmation	Ask him if he wants a favorite food.	Smiles, turns toward partner, looks up	Acknowledge and respond	
Comment: object	Sees an interesting person or object	Laughs, smiles (for familiar act)	Interpret action, descriptive talking (e.g., I see you smilling, you like it)	
Comment: action	Sees an interesting action	Laughs, smiles (turns around house, rough play)	Acknowledge and respond	
Comment: mistake	Child accidentally spills or drops something	Eye roll, in response to 20 questions Grimmace	Acknowledge and respond	
Express humor	Adult laughs at something funny	Laughs at big motion, rough house	Laugh with him	

(Based on Quill; 1995; form compiled by Mary Hunt-Berg; Ph. D.; CCC-SLP)
Forms and Functions Adapted by Mary Hunt-Berg from the work of Amy Weatherby (1995) and Kathleen Quill (1995) The Bridge School. AAC/CVI Summer Institute. (2022). The Bridge School.

Express confusion	Child is given an unfamiliar task	Shuts down	Acknowledge and respond
Express fear	Child hears something frightening	Surprised face and then sad cry	Acknowledge and respond with cuddle
Express frustration	Child is having difficulty with a task.	Eye roll, whine, shuts down (puts his head down)	Acknowledge and respond
Express anger	Child has to stop doing favorite activity.	Vocalizes (stronger whine)	
Express happiness	Child is doing a favorite activity	Laugh, vocalize	Acknowledge and respond
Express sadness	Child experiences something sad.	Cries, whines	Acknowledge and respond
Non-interactive comments	Utterances to direct own actions; echoed or routinized/habitual utterances to self		

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CVI RANGE SCORE

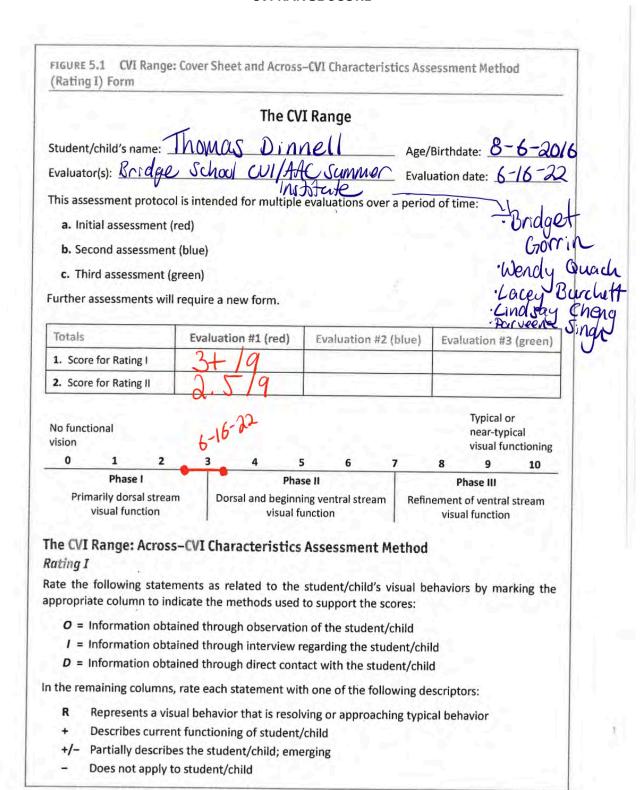


FIGURE 5.1

CVI Range 1–2: Student functions with minimal visual response

0	1	D	R	+	+/-	04	
			R				May localize, but no appropriate fixations on objects or faces
			R				Consistently attentive to lights or perhaps ceiling fans
			R				Prolonged periods of latency in visual tasks
			R				Responds only in strictly controlled environments
			R				Objects viewed are a single color
1				+			Objects viewed have movement and/or shiny or reflective properties
	19			+			Visually attends in near space only
			R				No blink in response to touch or visual threat
	1. 1		B		VII		No regard of the human face

CVI Range 3-4: Student functions with more consistent visual response

0	1	D	R	+	+/-	-	
				+			Visually fixates when the environment is controlled
		1.1		+	Ê		Less attracted to lights; can be redirected
				+		7 4	Latency slightly decreases after periods of consistent viewing
				+			May look at novel objects if they share characteristics of familiar objects
					+/-		Blinks in response to touch and/or visual threat, but the responses may be latent and/or inconsistent
			-	+			Has a "favorite" color
				+			Shows strong visual field preferences
	7				1/-		May notice moving objects at 2 to 3 feet
				+			Look and touch completed as separate events

(continued on next page)

The CVI Range: Within-CVI Characteristics Assessment Method

Determine the level of CVI present in the 10 categories below and add to obtain total score. Rate the following CVI categories as related to the student/child's visual behaviors by circling the appropriate number (the CVI Progress Chart may be useful as a scoring guide):

- O Full effect of the characteristic is present
- .25 Behavior on this characteristic has begun to change or improve
- .5 The characteristic is affecting visual functioning approximately half the time
- .75 Occasional effect of the characteristic; response is nearly like that of individuals the same age
 - 1 Resolving, approaching typical, or response is the same as others of the same age

1. Color preference Comments:	0	.25	.5	.75	1
2. Need for movement Comments:	0	.25	.5	.75	1
3. Visual latency Comments:	0	.25	.5	.75	1
4. Visual field preferences Comments:	0	.25	.5	.75	1
5. Difficulties with visual complexity Comments:	0	.25	.5	.75	1
6. Need for light Comments:	0	.25	.5	.75	1
7. Difficulty with distance viewing Comments:	()→	.25	.5	.75	1
8. Atypical visual reflexes Comments:	0	.25	.5	.75	1
9. Difficulty with visual novelty Comments:	0	.25	.5	.75	1
O. Absence of visually guided reach Comments:	(i)	.25	.5	.75	1

CVI CHARACTERISTICS OBSERVATION NOTES

CVI Characteristics – Parent Interview Notes

COLOR PREFERENCE: - favorite/highly preferred colors - multiple colors on a visual target - need for bright/saturated colors to anchor visual attention	Use highly saturated colors against high contrast surface.
NEED FOR MOVEMENT: - movement at near - movement at far - movement for complex or novel	Use movement to illicit attention when needed, especially with novel items or visually complex items.
VISUAL LATENCY: - specific length of time - latency with novel or complex targets or environments - when tired, stressed, overstimulated	Latency of 10-15 seconds. Latency decreased on left side and with familiar items and once engaged, esp. with familiar routines/activities. Latency greatest when on right side and with novel items.
VISUAL FIELD PREFERENCES: - left - right - center - upper - lower	Left and upper fields preferred. Right field also preferred. Difficulty with lower and center visual.
VISUAL COMPLEXITY: - array - target - sensory environment - faces	Array - does best with array of 1-2 items. Difficulty with complex backgrounds. Target - does best with familiar items and 3-d items. Sensory environment - decrease visual clutter and low noise
NEED FOR LIGHT - attraction to light, light gazing, "non- purposeful gaze" - light to illuminate targets - backlighting e.g. on a screen/tablet	Light to illuminate items is useful for drawing Thomas' attentivisually when needed. Backlighting for 2d items. No longer light gazing, can attend in low light indoor environments.
DISTANCE VIEWING: - near: up to 18" - 2 to 3 feet - 4-6, 6-8, 10, 10-20'	Vision best at 12-18 inches. Thomas was able to see in low light controlled environment when target was backlit and motion used when started in near range and gradually moved,
ATYPICAL VISUAL REFLEXIVES - blink to touch - blink to threat	Not blinking to threat. Inconsistent to touch.
VISUAL NOVELTY: - only able to view familiar objects - novel objects that share [specific] characteristics with familiar - need for warm-up time - difficulty with novel environments	Decreased latency with familiar items. Requires increased wait time and more movement/ lighting for novel items. Present novel items in preferred left field. Demonstrates need for warm up time with activity/items.
VISUALLY GUIDED REACH: - Look-look away-reach - Look-reach-look away - Touch first, then look - Specific examples	Currently demonstrating look- look away - reach

Chris Russell, New York Deaf-Blind Collaborative 2019 (based on The CVI Range [Roman, 2007; Rev. 2018])

VLLCP FRAMEWORK ACTIVITY -VISION, LANGUAGE, LEARNING, COMMUNICATION, PARTICIPATION-

General Student Information

Child's Name: Thomas	Date: 16 June 2022	
Phase: I II III	The CVI Range Assessment Score:	2-2.25
Feam Members: Bridget, Lindsay, Lacey, Wendy, Parveena, Tara (floater)		
Activity		
Pick 1 age-appropriate motivating activity that the child already does but concern to parents sugnessed activity: Activity: Thomas directs play		and communication
Phrases or language, or other cues used to motivate or prompt chi	Id's participation: Thomas, who do you want to play with Pete the Cat, Pooh What should do? Dance, Listen to a song, Get Dressed,	

Roman-Lantzy, C. (2019). Cortical Visual Impairment: Advanced Principles. New York: APH Press Restart Cycle
Forms and Functions Adapted by Mary Hunt-Berg from the work of Amy Weatherby (1995) and Kathleen Quill (1995) The Bridge School.
AAC/CVI Summer Institute. (2022). The Bridge School.

CI	naracteristics of the Child, Vision, Language & Commu	nication
Language and Communication	Vision	AAC-CVI Intervention
Use the Communication Forms & Functions worksheet to identify communication function to address for this activity: (example: gain attention, request more, make comments, ask questions) Requesting Object Cessation Affirmation • Function: Request Adult Interaction Refusal Current form: Body Based, Eye movement to gesture yes. Vocalization • form to be used:	Use The CVI Range Assessment to identify characteristics to be considered for this activity: (For example, including a black backgound may be beneficial but the activity may not address distance viewing.) • Color: 2-5 preferred colors, saturated • Movement: To elicit attention to materials as needed • Latency: vide wait time, be quiet after auditory cue/ques • Visual Field: Present items in left, peripheral field • Complexity of object: preferred objects, 6-12inches • Complexity of array: 2 visual choices on black bakground • Complexity of environment: quiet, dimly lit • Complexity of faces:	Communication Partner Strategies: ✓ Clothing ✓ Quiet time ✓ Consistent language salient features ✓ Other consistent language: ✓ Sensory balance: (primary mode) ✓ Visual breaks ✓ Other: Environment: ✓ Background ✓ Noise

Present 2D images on backlit surface.

LightUse flashlight to draw attention to if using objects

Distance:
12-18inches from body
Visually guided reach:
Accept tactile choice if not engaging visually
Novelty: Begin activity with preferred objects.

Introduce novel objects when routine of activity is more familiar

Communication Tools Plan how child will express these functions? For example, activate a switch to play a message	Strategies and Accommodations to Support Communication using AAC Tools (add pictures)
No Tech (body-based) Facial Expression for Yes respon	Yes/No questions when unable to access mid/high tech
Low-tech(non-electronic): Objects and pictures of real objection of script for Activity	Script for all partners to follow. Approx 10 seconds of wait time
High-tech (electronic): Future: Step scan through activity script on talker	Word Bubbling for print on device, Modeling use of talker and identifying modes of response
Supports for language comprehension Script for communication partners	

Team de-brief & refle	ect
What worked? What worked: Controlled Environment (low/no noise, natural lighting, bla What did not work? High interest material, aterials presented on black ground and one at a tip Present materials on preferred visual field, Input from parents for vocab,	
What questions came up? Look at the Communication Forms & Functions Worksheet, what functions are areas of	Did not work: Response differed with
Directing Play Requesting Affection (with toys)	Questions: How long to wait for response while scanning? Is confirming his yes/ response helpful or more confusing to Thomas?

Roman-Lantzy, C. (2019). Cortical Visual Impairment: Advanced Principles. New York: APH Press Forms and Functions Adapted by Mary Hunt-Berg from the work of Arny Weatherby (1995) and Kathleen Quill (1995) The Bridge School. AAC/CVI Summer Institute. (2022). The Bridge School.

ACTION PLAN CREATED BY THE TEAM

Objectives	How measure	Resources needed	By when	Potential Barriers	Impact	Next Steps
Create five social stories to support Thomas' communication	Parents will report when five stories have been created.	Parent and team collaboration, tactile items, adapted on both Ipad and no- tech copy, CVI accommodations	Dec 2022	Team buy-in, collaboration, schedule, lack of experience	Increased peer interaction and participation as well as help build agency	Plan what situations to create stories around
Begin process of exploring independent mobility options	Parents will report when an appointment with a professional is made	Parent and team collaboration/ support, access to resources focusing on independent mobility options	Dec 2022	Access to families/team members' Planning time	Increased independent mobility, increased participation in everyday activities, increased language	Find a service provider and create appointment
Implement CVI- AAC schedule at home and school	Parents will report when schedules will be implemented	Team buy-in/ collaboration	Dec 2022	Team buy-in, lack of school team experience	Intentional opportunities to use functional vision	Make a schedule
Begin reprogramming process of Thomas' AAC device (linking pages together; specifically category pages	Parents will report once reprogramming has been initiated	Guidance from PRC representative, home team SLP collaboration, CVI characteristics document	Dec 2022	Complex technological barriers, team buy-in, PRC rep. schedule	Incorporating use of functional vision, increased device use for language	Contact PRC representative

ACTION PLAN CREATED BY THE FAMILY

GOAL:										
Objectives	How measure	Resources needed	By when	Potential barriers	Impact	Next steps				
Create and utilize at least 3 new Social Stories for Thomas	# of Stories Written	The New Social Story Book by Carol Gray	September 2022	Time	Increasing familiarity and understanding of routine events	Incorporate more events into social stories				

Acquire and use Prone Walk walker for Thomas	Receipt of Prone Walk	Prime Engineering NuMotion	December 2022	Insurance Funding Lead Time	Increase mobile interaction and participation	Incorporate into CVI schedule
Implement Team Recommendations into AAC Device	Completed Pages	Bridge School Team Notes, AAC Resources/PRC Rep	August 2022	Learning Curve Engagement AAC Program	Improve Thomas' AAC utilization and communication	Model and allow exploration
Implement CVI schedule at home consistent with current CVI range score	Completed Schedule %Schedule Compliance	Objects, CVI friendly materials, time	August 2022	Time, Potential changes in routine	Continue to expand and develop functional vision	Incorporate additional aspects into schedule
Get CVI schedule implemented at school consistent with current CVI range score	Completed Schedule %Schedule Compliance	Teacher & Aid execution, Objects, CVI friendly materials, time	December 2022	School personnel support Potential changes in routine	Continue to expand and develop functional vision	Incorporate additional aspects into schedule