Bridge School AAC Conference Reaches Out Globally

By Harvey Pressman

2017 AAC by the Bay Conference, March 23-25, 2017

In the field of educating children who rely on AAC, the Bridge School in Hillsborough, California, might best be viewed as an island of innovation in a sea of sameness. Founded some thirty years ago by rocker Neil Young and his ex-wife Pegi Young, the school has benefited enormously from the proceeds of an annual "Bridge School Concert" that has brought in millions of extra dollars to help defray the expenses of a school that is constantly experimenting and innovating in the provision of education services and supports to young children with severe physical disabilities, as well as significant communication impairments. So, it should come as no surprise that the Bridge Schools' biennial "AAC By the Bay" conference in March 2017, featured an all-star cast (including Sarah Blackstone, Vicki Casella, Pat Mirenda, Chris Roman-Lantzy, Charity Rowland, Krista Wilkinson and Christine Wright-Ott) and a host of valuable new ideas, not the least of which was the way the conference was organized to reach around the world.

The conference was held at the international headquarters of CISCO Corporation, which enabled Bridge to take advantage of some of the most modern facilities and equipment in the world to reach across

the seas, and enable participants from thirty-seven locations in eight countries to participate in real time, ask questions, and make comments. Several far-off and off-site locations, such as Singapore, Ireland and Argentina, were able to structure immediate follow-up conference variations in their own locales.

Beyond the innovative conference delivery system, the audiences around the world were able to gain access to reports on a host of innovative practices, updates on important new research, and myth shattering and thought-provoking presentations from the likes of Pat Mirenda (University of British Columbia), world renowned Cortical Vision Impairment expert Christine Roman-Lantzy, Krista Wilkinson (Penn State University) and international consultant Christine Wright-Ott, whose seminal experiments in hands-free upright mobility for children no longer permanently confined to a wheelchair is enabling students at Bridge School to experience a radically new way of navigating their environment.

Many of the conference presentations were also organized in a unique dual format where by a prominent expert in an area (*e.g.,* Christine Roman-Lantzy on Cortical Visual Impairment) made a presentation that was immediately followed by a presentation by Bridge School staff describing and showing videos of the application of these ideas with real kids in real classroom situations. Well over half of the

students at the Bridge School are dealing with CVI, although it has not always been properly diagnosed before they enter school.

Another example of the "dual" format involved Christine Wright-Ott's presentation on the benefits of and challenges of providing upright, hand-free mobility to children who would otherwise be confined to a wheelchair, followed by a description of practical applications well beyond the classroom (in the garden, on the soccer field, even at a skating rink). The many benefits of hands-free mobility for children with severe physical disabilities and AAC needs have yet to be fully chronicled, but they clearly extend well beyond the education and communication support to areas like physical and mental health, socialization, recreation, playground activities with peers.

***etc*. (For more specifics see Christine's "*Mobility Matters: Imbedding Hands-free Locomotion Experiences into the Preschool and Elementary Curricula for Students with Severe Speech and Motor Impairment: The Bridge School Experience*" @** Mobility Matters, Imbedding Hands-free Locomotion Experiences into the Preschool and Elementary Curricula for Students with Severe Speech and Motor Impairment: The Bridge School Experience by Christine Wright-Ott [PDF, 4.71MB]

A similar combination of presentations focused on Charity Rowland's Communication Matrix. Rowland's presentation on *Developing the Communication Matrix to Answer the Question: What CAN They Do*? was followed by a Bridge School staff presentation on *The Communication Matrix: Using the Results to Promote Progress. (*See Communication Matrix Update" @ https://www.youtube.com/watch?v=dR1FdcxmK54

These dual presentations were sandwiched between Sarah Blackstone's introductory presentation of the Bridge School Lifetime

Achievement Award to Michael Williams and Pat Mirenda's two-part series on autism and communication. Williams, for over ten years, wrote and edited the newsletter *Alternatively Speaking*, all of the past copies of which are now available on line @

http://www.augcominc.com/newsletters/?fuseaction=newsletters&C=AS (For Michael's comments on *Discovering Communication,* go to https://www.youtube.com/watch?v=j_htMRRuOS8 , and for his view of himself as a "Multi-Modal Man" and his ten-minute presentation on the *Social Networks* video on the same topic, check out the video @ https://www.attainmentcompany.com/social-networks-dvd and/or see his essay from *Alternatively Speaking* @ http://www.augcominc.com/newsletters/index.cfm/newsletter_15.pdf

The "grand finale" featured a two part presentation by Pat Mirenda on *Taking the Initiative: Supporting Spontaneous Communication in Learners with Autism Spectrum Disorder*, detailing, *inter alia*, the many instructional errors speech pathologists make during PECS implementation.

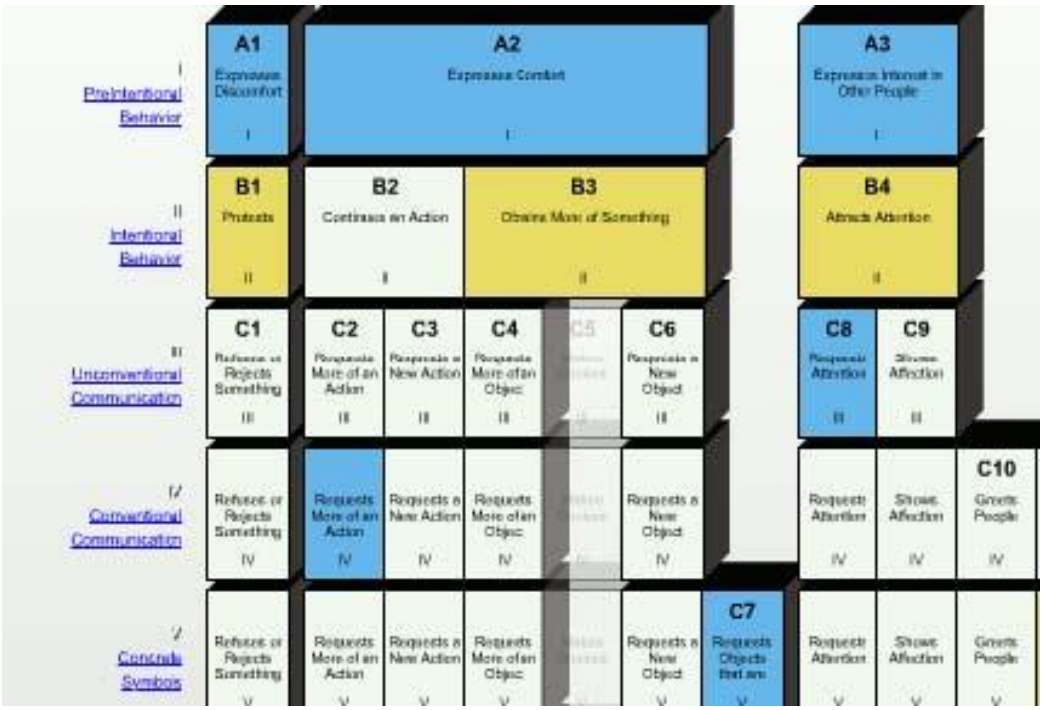
Other presentations included:

Charity Rowland: ***Developing the Communication Matrix to Answer the Question: What CAN They Do?***

This session presented the story of the Communication Matrix - its foundations and its evolution into the current complex web site that is used around the world. The Communication Matrix is a free assessment tool created to help families and professionals easily understand the communication status, progress, and unique needs of anyone functioning at the early stages of communication or using forms of communication other than speaking or writing. It is available in multiple languages, and can be used online in English, Spanish, Czech, Dutch, Chinese (traditional), Russian, Korean and Vietnamese. The Matrix was developed to fill a gap in assessment practices. The emphasis of existing assessments at the time was strictly on spoken communication, and there was no means to document the many ways that someone without speech could communicate using other means. Since 1990, there have been a series of grant-supported improvements to the web site which were designed to allow parents and professionals to administer the assessment online. A current grant underwrites the development of a virtual community of practice for professionals and nonprofessionals who support individuals with complex communication needs.

The Communication Matrix helps speech-language pathologists and educators document early-developing expressive communication modes in children with complex communication needs, organizing expressive communication into seven levels (from pre-intentional behavior to conventional language use), and across four main reasons to communicate: refusing, obtaining, social interaction and seeking information. Professionals can order print copies

from: http://www.designtolearn.comLink. There is also a free online tool designed to be filled out with parents; this version has specific questions to guide parents and familiar partners as they describe the child's expressive communication. (*A short video describing the communication matrix is available on the Matrix home page at: https://communicationmatrix.org/ The site also includes an opportunity to try the Matrix (https://communicationmatrix.org/Account/Register) and to view valuable data about specific disorders, in a section called "Shared Science.")*



Karen Natoci: ***The Communication Matrix: Using the Results to Promote Progress***

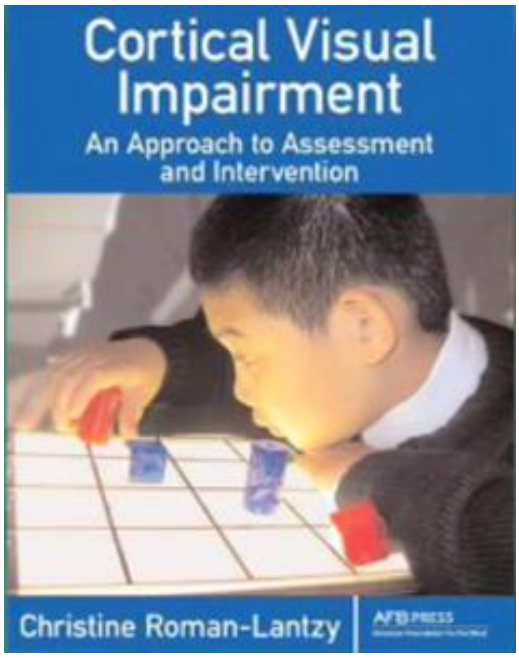
Children who present with complex communication needs (CNN) along with vision, hearing and sensory motor issues present educators and support staff with a unique challenge during an evaluation. The Communication Matrix offers a clear way from which to consider communication partner strategies for growth. Karen Natoci reviewed case examples from the Bridge School based on the results of different profiles illustrated on the Communication Matrix grid, with emphasis on emergent communication and the cohesive implementation of receptive strategies to promote the learner's advancement toward being a symbolic communicator.

Christine Roman-Lantzy: ***Cortical Visual Impairment: A Specialized Approach to Assessment & Intervention***

Although cortical visual impairment (CVI) has become the leading cause of visual impairment in children in the United States and many developed countries, practitioners in the field, including teachers of the visually impaired and other vision specialists, typically receive very little, if any, formal training in CVI at the pre-service level. This presentation provided an overview of CVI principles, using photo and video examples to illustrate key CVI concepts. Individuals with CVI present with a unique collection of visual and behavioral characteristics.

These characteristics provide the foundation for specialized assessment using the CVI Range, which determines the degree or level of functional vision. The scores derived from The CVI Range are then used to guide interventions and accommodations that are applied to meaningful routines of the day. ***(For more info, see the webcast Cortical Visual Impairment and the Evaluation of Functional Vision @***

***http://www.perkinselearning.org/videos/webcast/cortical-visual-impairment-and-evaluation-functional-vision* .This webcast features Roman-Lantzy presenting an overview of CVI and discussing the importance of early diagnosis and common diagnostic issues and providing information about the specific characteristic behaviors of CVI. The webcast also provides information regarding the evaluation of functional vision as well as interventions to improve functional vision.** *See also the* ***special edition of Perkins E Learning's webinar series, in which you can hear Roman-Lantzy talk about the Perkins-Roman CVI Range Endorsement,*. See also: *http://www.perkinselearning.org/videos/webcast/cvi-endorsement-interview-video*,)**



Aileen Arai, Caitlin Sale and Tiké DeMarco: *Integrating CVI Interventions, Strategies and Accommodations into the Instructional Program at The Bridge School*

This presentation provided practitioners and educators with strategies to support systematic implementation of accommodations developed to recruit and increase use of a student's vision for

communication, academic instruction, assessment, and accessing the environment. Cortical Visual Impairment (CVI) is a unique type of visual impairment which often co-occurs with cerebral palsy and other neurological disorders associated with severe speech and physical impairments (SSPI) and complex communication needs (CCN). Little is understood about how to best support the specific visual needs of students with SSPI and CVI who rely on AAC for daily communication needs and participation in academics and literacy instruction. To maximize the participation of these students, The Bridge School has developed interventions, strategies and accommodations based on The CVI Range, an assessment tool which provides rich descriptive information about a student's visual abilities and characteristics.

These interventions are embedded within classroom activities and based upon student considerations, teaching considerations, environmental considerations, and individual AAC and AT tools and strategies. These accommodations lead to changing expectations for students their vision during instruction, all ultimately support vocabulary and language acquisition, increase effective use of all AAC modalities, and support the development of literacy skills.

Krista Wilkinson: ***Improving the design of visual communication supports for individuals with intellectual and developmental disabilities: Applications of eye tracking technologies***

Wilkinson described what elements of AAC displays attract attention, and which distract from efficient search in individuals with Down syndrome, intellectual disability of unknown origin, autism spectrum disorder (ASD), and nondisabled peers. She provided

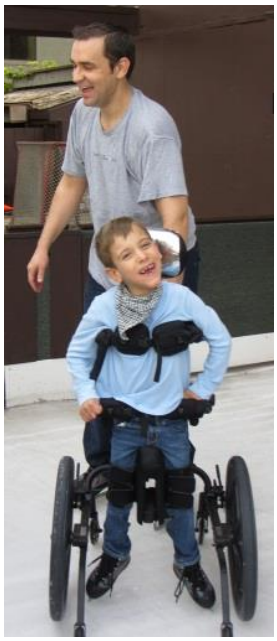
illustrations of how eye-tracking analysis can reveal patterns of visual attention to AAC displays in individuals with significant communication and intellectual disabilities, who are difficult to test using traditional experimental tasks and methods. One body of clinical practice often implemented with individuals with intellectual and developmental disabilities involves aided AAC. Most of these systems involve visual displays containing written words, icons, or other visual-graphic symbols. The intent of these systems is to offer a supplemental means of communication to individuals with disabilities whose speech is not adequate to meet their receptive and/or expressive communication needs.

Wilkinson noted that aided AAC relies on a visual modality. Consequently, it is critical that individuals who use AAC be able to perceive or process the visually-presented information; otherwise, the system will not be used effectively. Yet AAC display design and the ways that individuals process this visual information has received little research attention, nor is there much information about visual processing in individuals with significant intellectual disabilities. This gap means that many displays that are intended to promote communication may be confusing or sub-optimal for the individuals who they are intended to benefit.

Wilkinson uses a variety of techniques, including tools of neuroscience, to examine visual attention and processing related to clinically relevant questions of communication intervention in individuals with significant intellectual disabilities who are traditionally difficult to study. In her recent work, she has applied eye tracking technology to reveal otherwise inaccessible information about visual attention to visual communication supports that in turn can inform

design of AAC systems. (For background on the research base of Wilkinson''s presentation, please see: Krista M. Wilkinson and William J. McIlvane. "Perceptual Factors Influence Visual Search for Meaningful Symbols In Individuals with Intellectual Disabilities and Down Syndrome or Autism Spectrum Disorders, *Am J Intellect Dev Disabil. 2013 Sep; 118(5): 353–364.* See also *http://onwardstate.com/2016/02/08/study-aims-to-improve-communication-for-children-with-down-syndrome/)*

Christine Wright-Ott and Fei Luo: *Mobility Matters: Students with Speech and Physical Impairment use Hands Free Support Walkers to Explore, Discover, Learn and Participate in School Activities*



This presentation described an element of the Bridge School program from 2006 to 2015 in which 29 students (22 boys and 7 girls, 3-10 years) participated in self-initiated mobility experiences through the use of hands-free support walkers and thematic activities embedded into the curriculum in ways that contribute to the foundation of learning and development. Students who participated in this program demonstrated a positive increase in peer interaction, engagement, self-initiation, problem solving, physical motor control, and use of the upper extremities. The speakers discussed a theoretical framework based on current research and longitudinal observations of

students participating in the self-initiated mobility experience, along with a variety of techniques, activities and devices for imbedding self-initiated mobility into curricular activities and environments. A range of considerations used to select a child's support walker to maximize fit, function and access were shared through slides and videos.

Pat Mirenda, *Taking the Initiative: Supporting Spontaneous Communication in Learners with Autism Spectrum Disorder (Part 1)*

Despite widespread use of the Picture Exchange Communication System (PECS), many minimally verbal students with autism fail to initiate even basic requests in the absence of adult directives. In many cases, this lack of spontaneity is the result of instructional errors during PECS implementation. The first part of this session identified the most common of these errors and offered suggestions for remediation.

Pat Mirenda, *Taking the Initiative: Supporting Spontaneous Communication in Learners with Autism Spectrum Disorder (Part 2)*

The second part of Mirenda's session discussed the need to move "beyond PECS" in order to provide opportunities for students who rely

on AAC to initiate messages through the use of core and fringe vocabulary displays. (For insights into Pat's current body of work, see her 2014 presentation from UBC on "Sensory" Interventions for Individuals with ASD" @ https://www.youtube.com/watch?v=kWwUm8gEa60 and https://www.youtube.com/watch?v=6Yh5og9wAss and, for an example of the myth-busting perspective she shared with the AAC By the Bay participants, see her 2013 video, "Stop Hurting Kids," @ https://www.youtube.com/watch?v=kWwUm8gEa60.)

The *bad* news for most readers of this newsletter around the world is that you missed this groundbreaking conference, which featured valuable and practical information about important new directions in AAC. The *good* news is that the Bridge School is already planning an initiative that would enable people from around the world to gain access to archived video recordings of some of the best material from the conference. Stay tuned to the Bridge School web site (https://www.bridgeschool.org/) for info on how and when. The Bridge School site is also already a valuable resource for lots of useful material, as, for example, in the section on *Communicative Competence*. http://communication.bridgeschool.org/index

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