Overview

In 2014, the Down Syndrome Connection of the Bay Area (DSCBA) implemented the second year of its Communication Readiness Program (CRP), which works one-on-one with young children to prepare them to enter the school system. Last year we served 10 children through the intensive summer CRP. Activities took place at Baldwin Elementary School, which allowed for a larger space and classroom than at the DSCBA headquarters.

As with 2013, this year’s CRP consisted of daily (Monday through Thursday) instruction from 9 to 12 with Fridays reserved for teacher and parents meetings, planning, and preparation. DSCBA took some lessons from the previous year’s pilot program, and also underwent transitions in terms of staffing resources.

This year, CRP focused strongly on school-readiness for children ages 4 to 7 with Down syndrome, such as following directions, taking turns, and how to listen and participate in a group. Alternative and Augmentative Communication (AAC) also remained a major focus. AAC tools and systems are critical to children at this age who are non-verbal as they allow them to express basic needs (thereby reducing frustration and ensuing behavior problems), as well as increase socialization and participation with peers in a classroom setting.

In addition to having two more pupils than the prior year, we also had two dually-diagnosed children with Down syndrome and Autism. These changes resulted in changing classroom dynamics. We had excellent volunteer support this year, in the form of education majors and recent graduates in Speech and Language Pathology and Education.
Activities Conducted

CRP is made up of two important components: (1) the intensive seven-week summer school, which includes pre- and post-assessments regarding communication and school readiness, one-on-one and group AAC training and use, literacy and communication-building, socialization, and school readiness; and (2) post-summer following up and consultation with each child’s education team. Follow up and consultation includes the following:

- Compilation of a personalized transition binder for each child to be shared with his or her parents and education team, which includes a summary of the assessments, class activities, progress toward communication and other goals, recommendations for going forward, and specific tools such as curriculum adaptations, communication devices, etc. Details of program findings are discussed and strategies are offered to assist with each child’s individual school readiness and communication needs.
- On going consultation on various topics is provided to each school district team, such as programming of devices, modification of materials, and behavior.
- Schools are provided full access to our AAC and research-based curriculum lending library, offering an opportunity to test and trial these systems and adaptations during the school year.
- We continue to facilitate ongoing communication between home and school.
- Finally, we provide DS101 training to each IEP team, and throughout the school year through our Down Syndrome Education Alliance we deliver topic specific workshops specific for educator teams and parents.

Outcomes Achieved

All of the participants in CRP improved in their abilities to implement fine motor tasks, participate in a group, pay attention and focus, and communicate with both teachers and peers. Each student has unique strengths and challenges, and these have been detailed in personalized “School Readiness Reports” on each child, which have been provided to and discussed with parents, teachers, aids, and others in the child’s education team.

The use of Augmentative and Alternative Communication (AAC), was measured through pre and post tests for each CRP participant. We found overall that every participant (all 10) in CRP increased their use of AAC to communicate and nearly all (9 out of 10) increased their use of “joint attention acts” (acts such as relaying information, commenting, and requesting information using symbolic linguistic skills) as a result of the program. The full results are described below.

AAC Use

The graphs below illustrate the relative frequency of specific communicative means (i.e. augmentative alternative communication...
and functions (i.e. joint attention acts) used by the participants in the Communication Readiness Program (CRP) in pre and post intervention. The data was collected using the Communication Sampling and Analysis (CSA) (Buzolich, Russell, Lunger-Bergh, & McCloskey, 2011) “an assessment tool designed for infants, toddlers, and children with multiple physical, sensory, speech, and/or cognitive/linguistic challenges. CSA provides speech/language pathologists an objective (clinical) measure for observing and analyzing communicative behavior in the natural setting. Twenty-five communication acts were sampled for each participant and the occurrence of AAC use and joint attention acts were further analyzed. A communication Act is a nonverbal, vocal, verbal behavior or AAC System use that occurs in an interactive setting, is directed toward a partner, and serves a communicative function. (Adapted from Wetherby & Prizant, 1990).

The first graph titled ‘AAC Use’ reflects information regarding communication means, or how the individual was communicating. It specifically exhibits the frequency at which augmentative alternative communication (AAC) was utilized by the participants. The authors of The CSA adopted the ASHA (1991) definition of AAC as “Use of symbols (pictures/words), aid (physical object/device), strategies (indicate from a field of choices) and techniques (gestures, directly selects, scans). Activates a message on a speech generating device, points to a symbol on a manual board, points to a picture mounted on a wall, gazes at a symbol given a choice of two symbols, picks up a miniature toilet and gives it to a person to request bathroom.” (Buzolich, Russell, Lunger-Bergh, & McCloskey, 2011). The percentage of AAC increased in 10/10 participants following the CRP program. AAC was not available to and/or utilized by 2/10 participants in the environments when baseline CSA Sampling was conducted.

The second graph titled Joint Attention Acts reflects information about communication function, or why the individual was communicating. Joint attention acts direct another’s attention for the purposes of sharing the focus on an entity or event. These acts include relaying information, commenting, and requesting information. Symbolic linguistic skills are required to relay these types of messages. The percentage of joint attention acts increased in 9/10 participants following the CRP program.

“A Once she understands what the task requires of her, Ainsley can work independently. She is a strong visual learner and does best when instruction is supported with visual information. She enjoys listening to books read aloud and has excellent participation in activities when motivated. Ainsley has a strong sense of self, and should be allowed to make choices throughout her school day to increase her motivation to participate.”
From these visual representations, we can conclude post CRP intervention AAC was utilized with more frequency for all of the participants. The use of joint attention communication acts increased for 9/10 participants. It is hypothesized the availability to symbolic language through the use of AAC enabled students to relay information, comment, and request information. Other factors which may have contributed to the increase of joint attention acts may include various partner strategies and teaching methods such as the use of open-ended questions, establishing routines, engineering the environment, scripting, and descriptive teaching.

Staff & Volunteers

Chris Alreck holds a BA in Psychology from Hawaii Pacific University and has worked with children with Autism Spectrum Disorders, Down syndrome, and ADHD. He is seeking to obtain a Special Education teaching credential.

Karen Baca has 30 years of experience with AAC and has worked in the field of disabilities as a paraprofessional, program specialist, art teacher, education specialist, job placement specialist, and many other roles.

Carrie Balick is a nationally-licensed and state-certified Speech Language Pathologist (SLP). She has worked as an AAC specialist for Mount Diablo Unified School District since 2007.

Kathy Miles has been a preschool teacher for 18 years and has been a reading teacher at the DSCBA for several years. She holds a BA in Human Development and a Master Teaching Certificate.

Taylor Niles holds a BA in Communicative Disorders and a Spanish minor from the University of Redlands, and has worked as a Special Services Assistant in the Lafayette Unified School District.

Sasha Woodward holds an MA in Communication Sciences and Disorders from San Jose State University. She is an AAC Specialist for Mount Diablo Unified School District.


Thank You!

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“Leah is very social and friendly, and likes to interact with both staff and peers. She is very empathetic to peers and staff, and likes to be a helper. She enjoys listening to books read aloud and has excellent participation in activities. She recognizes the authority of the teacher and responds well to verbal redirection when off task.”

“One of the biggest benefits from the programs has come from the resulting meetings with school staff and their willingness to implement many of the recommendations made by the CRP staff.”