PECS: Beyond the Snack Table*

by Michael Pointer Mace and Hilary Baldi

A BIA director recently observed a client, Max, in a pre-school classroom specifically designed for children with communicative disorders. Some students were learning sign language, some students were learning to use Picture Exchange Communication System (PECS) and some children were learning computerized communication systems. The classroom was obviously a well-oiled machine. Circle time ended with a rousing rendition of "Old McDonald" and each child was given a transition card that led him to his individual schedule. At his schedule, Max found a photograph that led him to pick up his PECS books at his cubby and then to sit down at the snack table. Max knew the routine well and had a photograph of a gummie bear in hand by the time his teacher sat down with a tray of goodies. Goldfish, raisins and juice were enjoyed by all, and the children made many requests, some using sign language, some using PECS, and one child using a computer.

It was time to go home. Again, each child was excused from snack by being given a transition card from his teacher. They each checked their individual schedules, deposited their communication systems in their cubbies and were greeted at the door by their parent. It had been a good day for Max. His transitions had been independent and he had happily requested several handfuls of goldfish, fruit gummies and two cups of juice at snack. As Max sprang into his mother's arms, the BIA director eagerly waited to tell Max's mother of his success. Max's mother, however, did not look ready for the good news. The BIA director asked what was wrong. "Today is Wednesday," she said in a hushed tone. "On Wednesday we take a right at the stop light, not a left. When we don't turn left.....it's pretty tough."

The director had worked long enough with Max to know what 'pretty tough' meant and that the only thing that probably made it manageable was the fact that he was in a car seat. "It's amazing how well Max knows San Francisco. It's not at every stop light that he wants to turn left. It's just this stop light." The BIA director asked her where they were going. "On Wednesdays we have to turn right and go to Max's occupational therapy appointment." "What about the rest of the week?" "The rest of the week we turn left and go to McDonalds." Max's Program Director wondered, "Could this problem be solved by teaching Max to use his PECS book beyond the snack table?

Often, for children with autism, visual communication systems such as PECS take off smoothly at the snack table and then stall out as soon as the child changes environments. What is actually happening at that table? The most obvious answer is that children have a strong desire to communicate at snack time. But what else is going on?

Let's consider the context of the snack table environment further. Snack consists of a table and chairs, snack food placed slightly out of reach, and a small book of pictures/drawings which represent the objects in view. These elements are present each time, and strongly linked to the setting. This context seldom differs to any large degree. Considering this, should we reasonably expect a student to seek out his communication system to express himself if communicating through his communication system is not associated with that physical context?

Why would he, if communicating through his visual communication system is not associated with that context?

Recognizing the challenge children with ASD face generalizing one skill to multiple settings, we shouldn't expect this leap to occur without facilitation. What is necessary then, is to establish the skill of communicating through visuals in multiple settings. Let's take a closer look at Max and his desire to navigate his route home from school.

With initial cueing from his mother, Max spent a week retrieving an icon (one golden arch) of McDonalds from a binder of photos and icons created specifically for the car. Max handed the icon to his mother and she then placed it on a Velcro strip mounted to the back of the driver's seat. Immediately to the right of it was a picture of Max's front door. Max and his mother drove directly to McDonalds, and then home. After a week of practice it was time for the dreaded Wednesday right-hand turn. Max darted into the car and grabbed the binder containing a variety of family destinations. He flipped through the binder looking for the icon representing McDonald's which he happily handed to his mother. "Sorry Max," said his mother. We're going to have to wait for McDonalds." A squeak of disappointment came from Max as he began to comprehend that McDonalds might not be in his immediate future. His eyes brightened a bit, however, as his mother put the picture of McDonalds up on the piece of Velcro directly in front of him. Then to the left of the McDonalds icon she placed a photograph of Max's occupational therapist, Sue. "First we're going to go see Sue," said his mother pointing to her picture. "Then we can go to McDonald's." His mother pointed to the golden arches. "French Fries!" said Max. His mother then retrieved the picture of their front door and placed it to the right of the McDonald's icon. "Yes" said Max's mother, "french fries, and then we are going home, but first Sue." "Sue," agreed Max. Max's mother buckled him in, turned on the car and headed to the dreaded stoplight. While they waited for the light to turn green Max made one last attempt. "French fries?" he asked. "Sue," said his mother definitively and turned the car to the right. Max looked to the photographs Velcro-ed to the seat in front of him. "Sue," Max sighed, and resigned himself to the rest of the trip. Max had now learned to associate communicating through visuals with the physical context of trips in the car.

Subsequently, Max's intervention team and family identified other times throughout Max's day where association between an activity/event and communicating through visuals could be firmly established. Within the classroom, Max was taught to use color icons (attached to the easel) to request paint colors. At recess, photos of recess equipment (e.g., balls, trikes, bubbles, helicopters, water tray) were mounted on the door to the shed containing these items. At home, Max requested bath time toys from a strip of photos mounted next to the tub. For outings on foot, another small book, containing photos of preferred destinations, mounted near the door created another context in which Max could come to anticipate and rely on his communication system. However, with all this success, Max had still not made the leap to using his communication book in novel situations (activities/events not repeatedly associated with his communication system).

A few months later, Max's BIA director was back on one of his regular visits to the classroom. It was clear that over the past several months Max had begun to use his communication system in a more spontaneous and effective way. During circle time, about halfway through attendance, Max jumped up from his seat and ran towards his cubby. With great enthusiasm he retrieved his communication book and pulled out a photograph of his classmate, Mary. "Mary," said Max as he handed it to his teacher. "Mary's not here today, Max." Max seemed to understand and sat back down in circle, still holding onto his communication book.

Later the director recounted the circle time scenario with Max's mom, commenting about how far he had come with his communication system in just a few months, and congratulating the family on their support of Max's use of the system. "Well," replied Max's mom, "it was actually Max's classmate, Mary, who helped us shift some of our own perspectives on using this system." "We met Mary and her family a year ago." she said, "She has a hearing impairment, not autism, and has been successfully learning sign language. One big difference we noticed between our family and Mary's family is that with sign, the family expected to use it. No one expects only the child to learn sign language. Mary gets to see her brother using sign, and Mary's parents try the best they can to use sign when they are talking to each other in front of her. So, we started using the icons too! We set up our own communication books and used the location specific systems as well. When we all really started trying to communicate with Max using pictures, that's when he started knocking people over to get to his PECS book."

Max is now surrounded by visual communicators and associates pictures with nearly all of the communicative exchanges that he experiences. His visual communication system is no longer specific to one particular physical context, such as the snack table. Now, the reminders to Max that he can communicate are all around him. With practice, creativity, and a fresh perspective, Max and his family made this leap together.

*for information about PECS see www.pecs.com

RDI VS. ABA?

"Are Relationship-Based Intervention and Applied Behavior Analysis Mutually Exclusive?"

Teaching Children with Autism by Koegel & Koegel (the originators of Pivotal Response Training) although they might note that Eric's tutor was using his existing behavior (applying band-aids) to expand his repertoire of behaviors.

Teachers who use relationship-based interventions would also note points of overlap with their activities, but different from those the skill-based intervention teachers would find. Learning to play "Ambulance" does not appear in Stanley Greenspan's The Child with Special Needs, although he would have noted the creation of several circles of communication. Steven Gutstein does not mention "Ambulance" in Relationship Development Intervention with Young Children, but he might note Eric's use of social referencing and the high affect the tutor used in order to make the game so engaging.

In "Children with Autism Experience Trouble with Both Objects and People" *, the authors cite A.N. Leontiev's comment that objects "are the crystallization of human activities." ** We shared this quote with Eric's father to explain that in addition to continuing to work on teaching Eric skills such as block building (so that he could join the children in the preschool construction area), and pretend play sequences (so that he could join the children in the drama area), we wanted to use Eric's interests with specific objects to create more interactions. These interactions (albeit, initially scripted) would become increasingly sophisticated and eventually require more and more novel language, thought, and actions. First, Eric would master the interactions with his tutors and his family. Then he would work on them with a peer during playdates, and finally within the pre-school play yard as the "real test." Objects found in every pre-school – Play-Doh, blocks and plastic food – once given a social context, would serve as Eric's tickets to interactions with his classmates.

Over the next year, Eric learned games such as "McDonalds", "fire fighter", "car wash", and "worm ice cream parlor". These activities did not come from a BIA manual but were created specifically for Eric as an outgrowth of his interests in cars, bugs and french fries. Eric practiced using a child's real life social currency (i.e., toys!) as tools for communication and play. His social interactions with his classmates required less and less support from adults as the year went on. After all, every preschooler will claim multiple injuries when the "ambulance driver" is handing out Elmo Band-Aids!

What may come first for the neuro-typical infants - a reciprocal game of smile or the playful social referencing between parent, child, and a noisy rubber duck- is rarely seen in the developmental path of the child with ASD. The tendency is to shy away from, or avoid, the complex and ever changing social and physical world. This ultimately leads to a different developmental path which often includes intense focus on self regulation (constant seeking out of motion, texture, etc.) or the physical aspects of the environment (a set of objects). Whether one sees the remedy as beginning the path anew with a focus on establishing the elemental reciprocal gaze and referencing, or as joining the child on her unique path through her existing interest and skills, in the end the intent is one and the same: to form a bend in the road that ultimately leads to an intersection with the highway of life and love.

So, to answer the question Eric's father raised; from our perspective relationship-based and skill-based interventions are not mutually exclusive. We see every interaction, whether it be while working on increasing a child's vocabulary or playing a game of hide-n-seek, as an opportunity to form a unique relationship with each child based on trust, reciprocity, and the shared enjoyment of relating. -**Mike Pointer Mace & Hilary Baldi**

"Children with Autism Experience Difficulty with Both Objects and People", (1999). Williams, E., Costall, A., and Reddy, V. *Journal of Autism and Developmental Disorders*, Vol. 29, No. 5, pp. 367-378

**Leontiev, A.N. (1981). Problems of the development of mind Moscow Press, 1981

RDI VS. ABA?

"Are Relationship-Based Intervention and Applied Behavior Analysis Mutually Exclusive?"

The father of a three and a half year old boy with autism was on the phone with a BIA director discussing his son's curriculum. He was pleased with all of the progress that Eric (not his real name) had made in his first six months of intervention. It hadn't been easy fitting in school, speech, OT, and social opportunities. Eric's father had worked the phones daily to recruit new playdates by connecting with the parents of Eric's classmates, promising car pools, good snacks, fun times and above all, free childcare. He was tenacious and, on average, he arranged three to four playdates a week.

Recently, however, Eric's father was wondering if it was enough. He had been hearing a great deal recently about the importance of using a "relationship based approach" (such as RDI). He said something that stuck in our minds: "We want to work on relationships, too."

In our 15 years in the field of early intervention for children with ASD (Autism Spectrum Disorders), we've seen a lot of methodologies come and go. We've borrowed from the ones that worked and weathered the ones that didn't. Increasingly, those teaching methods that remain have formed "camps" based on their understanding of ASD and how to best help these children. BIA continues to align its approach with that of ABA methodologies (aka 'skill based interventions'), despite the ebb and flow in their popularity.

Methodologies that fall into the category of 'skill-based interventions' perceive ASD as a disorder of social relatedness resulting from delays in all areas of development and suggest, consequently, that intervention should target all areas of development. The recognized skill-based approaches include Applied Behavior Analysis, Discrete Trial Training, Pivotal Response Training and visually structured teaching (à la TEACCH).

The methodologies of 'relationship-based approaches' are based on the premise that social relatedness itself is the core deficit of autism and should be the area of development targeted in intervention. Commonly recognized 'relationship based interventions' include, Steven Gutstein's "Relationship Development Intervention" (RDI) and Stanley Greenspan's "Floortime."

So where would we begin to respond to Eric's father's question about "working on relationships too?" Of course he wanted to work on Eric's ability to connect with others. One of the great pleasures of parenthood is watching your child make friends of their own. The more we thought about it, it seemed that Eric's father was alluding to a question that is seldom discussed: "Are relationship-based interventions and skill-based interventions mutually exclusive?".

Eric's program, as designed by BIA, included activities addressing each area of development. One of Eric's favorite activities is called "Ambulance". The scenario usually goes like this: Eric's tutor feigns a horrible fall, dramatically writhes in pain on the floor, and calls an ambulance. Eric drives his cardboard ambulance quickly to the scene, gets his medical kit, and begins applying band-aids to his tutor's wounds. After several band-aids are applied, his tutor happily thanks Eric the ambulance driver. Then, with much drama, his tutor falls again! Embedded in the activity are a myriad of skills such as; non-verbal social-communication (e.g., pointing to where a band-aid was needed, expression of pain or happiness), verbal communication (e.g., eliciting questions such as 'where are you hurt?'), and cognitive skills (e.g., sequencing of events, pretend play skills).

It's difficult to describe into which camp 'Ambulance' would fall. Since Eric's family contacted BIA as an ABA provider, Eric's dad assumed that all activities designed by BIA must be "ABA activities," including playing "Ambulance". In fact, the activity "Ambulance" does not appear in O. Ivar Lovaas's most recent Teaching Individuals with Developmental Delays, although Lovaas might note that Eric used information-seeking skills (e.g., asking "where does it hurt?"). Similarly, it does not appear in