it’s a matter of learning what works in teaching students with deafness and autism

By Lee Ann Bradley, Brandi Krakowski, and Ann Thiessen

The development of language and literacy is the foundation for all other learning: That’s our guiding philosophy at the Iowa School for the Deaf (ISD). At ISD, we believe that intensive, highly structured early intervention and education work best to support cognitive and communication development in our students.

However, little research exists on the needs of students with both autism and deafness. Thus, for ISD students with this combination of conditions, we draw on best practices related to deafness as well as those that apply to autism when we do our planning.

**When Signing Isn’t Enough**

Teachers at ISD who work with students with autism consider it vital that we use sign language. However, “through the air” communication can sometimes be ineffective, especially when unproductive behaviors occur and escalate. In such cases, we’ve found that using a companion communication method such as the Picture Exchange Communication System, or PECS (Frost & Bondy, 2002), helps a student calm down and refocus so that learning can continue.

PECS facilitates expressive communication through pictures that teachers and students use together to help students express their wants and needs. For example, a student can use PECS at snack time to communicate which of the various food options he or she prefers. The primary goal is to help children initiate communication.

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Building Structure Into the Day

We’ve found that incorporating TEACCH (Treatment and Education of Autistic and Related Communication-Handicapped Children) techniques throughout the school day gives our students with autism the structure they need in order to learn. TEACCH is North Carolina’s statewide program serving people with autism spectrum disorder and their families (Division TEACCH, 2006; Mesibov & Howley, 2003). Among others, the principles of Structured Teaching, a component of TEACCH, include structuring the physical environment, as well as using visual supports to make the sequence of daily activities predictable and understandable and to make individual tasks understandable (Mesibov & Howley, 2003).

For example, some of our students have individual work areas. Here, work tasks are defined clearly so that students know what is expected of them in addition to what happens after the work is completed. Work tasks are placed in clearly labeled baskets, boxes, or folders so that students can see the work that needs to be done. These tasks are set up so that the individual student independently takes the correct box, completes the work at his or her work area, and returns the box to the designated area. A picture cue then tells the student what he or she needs to do next. In our experience, organizing students’ space in this way helps them understand expectations and promotes independence.

Many of our students with autism benefit from a visual schedule that helps them organize, predict, and transition among activities throughout the school day. If pictures or photographs are too abstract for a student, visual schedules can be adapted by means of tangible objects—that is, three-dimensional objects that have a clear relationship to actual activities. Examples of tangible objects include a straw or plastic spoon to indicate snack time, a cup to represent drink, or a minibook to stand for the library. Miniature items, such as dollhouse furnishings, can be used to represent locations throughout the school or home.

It can be helpful for the student to participate in the creation or discussion of the schedule each morning. Developing a routine to acknowledge each transition is also important—for example, crossing off or checking off what was completed.
turning a picture over, or putting the completed activity in a special box or envelope to show that it has been finished. Sometimes it helps to start preparing a student for schedule changes—field trips, fire drills, even a substitute teacher—a day in advance.

**Teachers and students can develop and use schedules in different ways:**
- A single schedule can be used for an entire class.
- An individual schedule can be attached near a student’s desk.
- Schedules can be carried from room to room.

**Making Choices More Visual Can Make Choosing Easier**

Often, a signed presentation of choices isn’t enough for our students. They may not attend to the whole message or may not be able to retain the message. To counter these and other unproductive behaviors, we often use choice boards. The primary purpose of a choice board is to present a concrete, visual display of options. This helps students begin to make choices about their activities, especially during free time or other less structured periods. Choice boards give teachers the opportunity to teach appropriate requesting behavior, broaden the range of choices available to a student, and improve communication.

When we use visual displays such as choice boards, students pay more attention, are more motivated to communicate, receive immediate reinforcement, and experience an opportunity to control what they get. They have time to see all the possibilities, think about their decision, and check the options as often as necessary before making the decision.

**Taking Students Beyond Imitation When Teaching Social Skills**

We’ve learned that we need to teach social skills directly to our students with a combination of deafness and autism. This may be because people with autism have difficulty with imitation. By structuring their play and other leisure activities, we give students the opportunity to practice communication and social skills such as turn taking and waiting. This kind of practice requires the adult working with a student to organize the needed materials, model the skills to be taught, and prompt appropriate use of these skills. For example, with young children, routine scripts can be implemented for toys. These scripts can involve recreating the face of a Mr. Potato Head toy from a picture model, building a simple block structure from a model, or using a dump truck to pick up and drop off items. Over time, it is important to incorporate turn taking into the routine, first with adults, then with other students.

**There Are Lots of Tools Out There—Use What Works!**

We’ve found that using a variety of strategies enhances the acquisition of language and communication skills in children with both autism and deafness. Sign language, gestures, speech, facial expression, body language, mime, pictures, PECS (as appropriate), written words, and fngerspelling are all effective tools for presenting this strategy to work. An added benefit is that this comprehensive approach can address the needs of all simultaneously—both children who are deaf or hard of hearing and children with a combination of autism and deafness.

Even though limited resources are available to guide our work with students who have a combination of deafness and autism, we’re making the most of the situation by blending common sense, proven teaching strategies for students who are deaf or hard of hearing, and the expertise of a variety of other educational fields. Trial and error is important, too—at ISD, even as we teach, each of our students teaches us something new.

**References**

