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Beyond Speech: The Importance of Multi-modal Communication for Individuals with Low-Incidence Disabilities

by Kathryn R. Bak

Children with low-incidence disabilities, even those children who use natural speech, often have problems communicating effectively. Studies have shown that instructing children in many different communication modalities improves their use of speech.

As a result, we now realize that a variety of appropriate communication modes are useful for more comprehensive communication systems. By considering children's individual strengths and needs along with the tasks across home, school, and community environments, a variety of communication methods can be recommended. This multi-modal approach is needed in order to meet an individual's range of expressive communication needs.

Augmentative Communication as a Function of Language

The ability to communicate is essential for basic human interaction. Many children and youth with low-incidence disabilities are unable to communicate effectively using natural speech alone. In order for them to become more proficient communicators, different means of communication should be considered. Many special educators and related service providers recognize this need and work towards teaching students how to communicate more effectively using other modes of communication. This may include signing or using an augmentative and alternative communication (AAC) device or communication display.

The term "AAC" is used to describe communication methods other than

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speech. These methods include, but are not limited to, computers with speech output, gestures, sign language, facial expressions, and picture boards (Glennen & DeCoste,1997). When speech is not present, the need for alternative methods of communication should be evident.

What happens in the case of students who speak, but whose speech does not adequately meet their communication needs? Should AAC be used with these individuals? There are many students who use natural speech as their primary method of communication. If they are unintelligible, speech alone cannot meet their communicative needs.

When parents, teachers, and others view natural speech and AAC as an either/or decision, the student's success in communication attempts is limited (Beukelman, 1997). Unfortunately, the "either/or" viewpoint is still common when educators and parents do not have knowledge or training in AAC.

Too often the ability to communicate is confused with the ability to express oneself through the use of speech. Parents and professionals need to look beyond speech and focus on the overall ability to communicate. This does not mean giving up on speech. Providing other means of communication can allow an individual to begin experiencing successful communication attempts while still working on improved speech intelligibility.

As attitudes and laws have changed, the consideration of AAC has increased. The reauthorization of the Individuals with Disabilities Act (IDEA) requires that assistive technology be considered when developing the Individualized Education Plan (IEP) for a student. AAC falls under the broad umbrella of assistive technology and should therefore be considered for all students who receive special education services. This leaves teams with a difficult task to complete.

How can a group of people with varying knowledge and expertise be expected to come up with the single best way for a student to communicate? The answer is simply that they cannot. There is not a single best method of communication to be chosen. Teams need to look instead to a multi-modal approach in order to meet a student's needs across different environments.

Assistive Technology Evaluation Frameworks

Joy Zabala designed a framework as a way to guide teams through the assistive technology decision-making process. Because her framework looks at the Student, the Environment, the Task, and the appropriate Tools, it is often referred to as the SETT framework. By using the SETT framework or a similar tool, teams can consider the student's strengths and needs in the setting of a specific task in order to come up with a range of solutions to barriers (Zabala, 1995).

Communication modalities, which are appropriate in one situation, may not be as effective in others. For people trained in assistive technology or AAC evaluation, it is not difficult to see how different needs and situations require different communication modes. It is unlikely that a high tech voice output communication device would be used for swimming class. The device may be appropriate for the student, but not well suited to the particular environment or

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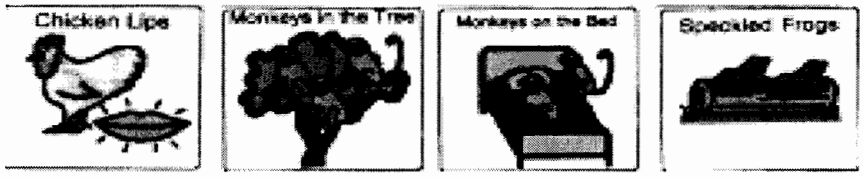

Image 1: Examples of picture communication symbols

probable tasks. That same device may, however, be appropriate for the individual to use when shopping in the mall. The individual needing AAC support to communicate has not changed, but the environment and the tasks are significantly different.

Going through a step-by-step process of examining students and what they will need to do improves the chances of appropriate communication methods being in place. This decision making process also supports teams in coming up with a back-up communication plan for a student to use if the primary communication mode is not successful.

Image 2: Using this photograph of a dog would probably help a peer to understand that a student has something to say about his dog.

Sometimes a little extra support provides enough information that previously unintelligible speech can be understood. For example, if a student who relies on speech is unintelligible to an unfamiliar listener, signing or gesturing may help clarify the message. Perhaps a picture graphic symbol would be useful to give the listener a general idea of what the student is trying to communicate. Picture communication symbols (PCS) adapted from Mayer-Johnson's Boardmaker (Mayer-Johnson, 2001) could be used to communicate preference for a certain song or rhyme.

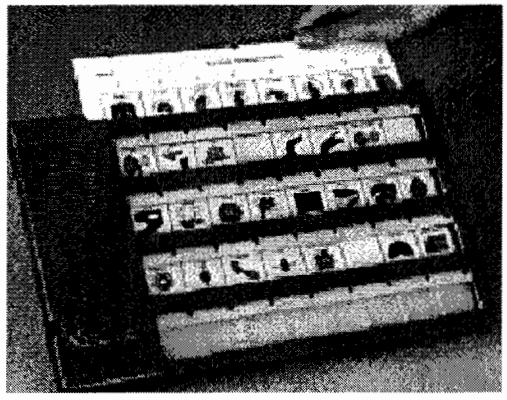

Image3: Pictured is the Holly.com E-lite, one of many AAC devices that meets the team criteria.

A Case Example

Kevin is in a first grade class all morning and in a special education classroom in the afternoon. Kevin has autism and although he has some speech, it is not always sufficient to meet his communication needs. When trying to find what communication system would work for Kevin, his team used the SETT framework and took into account the various settings he is in throughout the day.

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Kevin is able to use natural speech to express when he needs to use the bathroom, wants more to eat or drink, or needs help getting school supplies such as crayons or glue. Since he can use speech in these situations, that was the primary communication mode recommended by the team for those situations.

Because the students in the first grade class would not all be able to see a communication board during whole class activities, a voice output device was suggested for him to use for many activities. During "opening circle", the class talks about the calendar, the weather, and the schedule for the day. In order to allow Kevin a chance to participate, a voice output communication device with 32 messages and multiple overlays was recommended. His teacher programs in the vocabulary Kevin will need to participate in circle activities. This overlay would be one of many available for Kevin to use throughout the school day.

Kevin remains in one place during circle time so he does not have to carry the device with him from one place to another. At recess time this device is not practical to use on the playground. Kevin's team recommended that he try an Ablenet TalkTrac for the time he is on the playground (Ablenet, 2001). This device is a small, four-message voice output communication device that can be worn around the wrist like a watch. It could contain a few messages specific to Kevin's needs on the playground, such as asking for a turn.

The team would continue to make recommendations using the SETT framework and their knowledge of Kevin and his abilities. Kevin would be encouraged to use any method he had available to express himself. While natural speech would be a desired method, the focus would be on successful communication rather than focusing solely on natural speech.

The Communication Continuum

Musselwhite and St. Louis (1998) note that pure examples of vocal or augmented communication are uncommon. They view communication on a continuum from totally augmented communication on one end to totally vocal communication at the other end. Since vocal communication is the standard communication mode used by individuals without disabilities, teams should try to find communicative methods that are as close to the vocal end of the continuum as appropriate for the student and the particular situation.

An individual does not remain stationary on the continuum, but moves constantly according to need. Even individuals without disabilities employ augmentative strategies to add meaning or to clarify the spoken word. Individuals with low-incidence disabilities often have a breakdown in communication. This can frequently place them in a situation in which they will need to use another method of communication instead of, or in addition to, natural speech.

Importance of Planning Multi-modal Communication

Once the fears that AAC will hinder an individual from increasing natural speech abilities are put aside, the benefit of introducing such methods come into

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play. This includes consideration of students who are often overlooked as AAC candidates because they use natural speech. Why use AAC, especially if a student already has some speech?

Bodine and Beukelman (1991) provide a few guidelines for when AAC should be considered. Their recommendation is that any individual who is unable to meet his or her communication needs should be considered for AAC support. While this may seem to be common sense, too often parents and professionals put off the training that could better enable students to adequately convey what they wish to express.

Beukelman and Mirenda (1992) speculate that if an AAC system is not in place for students by the first grade, they won't be active participants in the general education curriculum. If students with low incidence disabilities are going to have access to the general education curriculum as part of a free and appropriate public education (FAPE), it is essential for teams to introduce the use of AAC as early as possible. Now that there is a greater availability of more affordable devices, access to AAC is not the barrier it once was. Parents and professionals are exploring the use of AAC use at an earlier age. As these young children grow, studies can be done to show the effect that this early intervention has on students with low incidence disabilities.

Increased access to AAC and continued advances in technology will likely lead to the development of new instructional strategies. New studies will be done to determine how students with low incidence disabilities can better take advantage of available AAC resources. Regardless of the types of advances that are made, the SETT framework can provide a sound process for teams to use when considering options to meet an individual's communication needs.

Conclusion

The idea of using several different methods to communicate should become a seamless process initiated by educators and parents when dealing with the communication needs of individuals with low-incidence disabilities. Most people communicate using a variety of methods in combinations. This leads to efficiency and enrichment of meaning (Iacono, Mirenda, & Beukelman,1993). Facial expressions, body language, gestures, speech, and non-speech sounds are all ways in which an individual can convey a message. A glare from across a crowded room can say more to a person than the spoken word; a facial expression can betray a lie.

Individuals with disabilities need to be instructed how to use non-speech methods to convey meaning, including both unaided and aided modes of communication. Unaided techniques do not require external support. Gestures, pointing, signing, and non-speech sounds would fall in this category. Aided techniques need some external device. Communication displays and voice output devices are common examples of this category. Augmentative and Alternative Communication can include techniques in both of these categories.

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