Addressing Challenges to Success With Students Who Use Augmentative and Alternative Communication in the School Setting

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Treating students who use augmentative and alternative communication (AAC) in the schools is both a highly challenging and highly rewarding endeavor. Helping students with limited communication skills become more effective communicators is a time-intensive process that requires the efforts of many individuals. Parents, teachers, physical and occupational therapists, speech-language pathologists (SLPs), vision specialists, and others rely on one another's expertise to develop a system that is most appropriate for the student. The end prize far exceeds any trouble or pain: providing a means of communication for a student who previously struggled to be heard.

As an SLP with considerable background in augmentative and alternative communication, I travel throughout the Chicago Public School system evaluating students for candidacy to use AAC devices. In making recommendations, designing appropriate system setups, and training teams to integrate the equipment into a child's curriculum, I constantly encounter challenges. The students vary in chronological and cognitive ages. Unique needs and abilities arise with each new referral. There are, however, some underlying issues that contribute to the degree of success a child who uses AAC, regardless of age or cognitive ability, has in communicating effectively in school. These important issues include the interaction of the team, expanding use of the device beyond the "wants and needs box," and the amount of access and exposure a student has to language in the use of the device.

Behind every good AAC user is a strong team of people supporting the use of the device. The most effective teams have several key elements. The first key element is regular communication to discuss progress and challenges, to troubleshoot, and problem solve in a multidisciplinary format. While this may seem obvious, in an age of high caseloads, big classes, and many other demands on professionals' time, it is frequently an element that is overlooked. Soto, Muller, Hunt, and Goetz (2001) completed a study in which they conducted multidisciplinary focus groups comprising professionals and family members of students who use AAC in general education classrooms. Participants in that study emphasized collaborative teaming as a key ingredient to success.

In my experience, the most effective communication occurs across several different forums. For example, there may be a meeting monthly to discuss successes and areas of need and achieve solutions to problems. In between the meetings, however, teams need to communicate and share progress. E-mail has created a viable forum for this communication, because it does not require all members to be in the same room and can reach several people at once. Designating a few key people to design and program the communication system will help to keep the system uniform and organized. If one person does all the programming, the burden is often too great. Yet, if there are many programmers, the system has a tendency to become disorganized and the format of the pages programmed varies and can be confusing to the child. Designating individuals who either have background in language learning and language use or are very familiar with the student will increase the relevance and appropriateness of the programming. The individuals designated to program will need to maintain close contact with one another and with other members of the team to ensure vocabulary is programmed consistently and that appropriate vocabulary is available on the student's device.

While team communication is one large aspect of helping a student who uses AAC succeed, there are several additional components to helping students achieve success in the classroom. Team members need to have respect for all other members of the team, regardless of job titles within the workplace. All members have valuable input and should have their opinions heard. When all members of the team have input into the child's system, a student will be more likely to use the device throughout the day, which is the end goal. In a survey of general education teachers with students who use AAC included in their classrooms, team members of specific importance to the success of the student include the classroom or individual assistant, the SLP, and the assistive technology consultants. These key professionals provide information about the individual student, the device itself, and strategies on setting up and using the device that are invaluable to the success of the student and the team (Kent-Walsh & Light, 2003). It is the responsibility of the team to understand the curriculum and to provide opportunities for the student to use the device within the curriculum. Additionally, teams need to train communication partners, including other staff members

and students, in how to communicate with a student that uses a device. When others feel more comfortable with the student using the device, more opportunities for social interaction will arise.

A second aspect of successful use of AAC in the schools has to do with vocabulary selection for the device. An issue encountered frequently is the use of the device as the "wants and needs" box. Many children who use augmentative communication devices are able to use the devices well to make requests. However, the devices frequently do not have the vocabulary to complete other language functions. The students also lack the experience in using a variety of communication functions, including commenting and providing information. When a team needs additional support because the device is "no longer working for the student," one of the primary issues is typically the vocabulary on the device. The device frequently has options for the student to make requests and is void of options for other communicative functions, such as questions, protests, comments, or social vocabulary. However, because the student is able to use gestures or telegraphic speech to be able to ask for the things they need, they do not rely on the device. Once the device is programmed with more functional vocabulary and the student is shown how to use it appropriately, the student is more likely to use the device.

For students beginning the process of using AAC, one study suggests that in addition to teaching requesting, teaching students to reject can be just as powerful. Sigafoos and colleagues (2004) emphasize that replacing inappropriate methods of rejection, such as crying and tantrums, is an appropriate goal to improve the functional communication of early communicators. In this article, the authors delineate specific steps to teach rejection and give a case study to demonstrate the implementation of these steps. As students gain mastery of making requests, rejections, and comments through use of AAC, they can expand further their repertoires of communication skills. One suggestion to expand the use of the student's communicative repertoire is to teach the student to ask "partner-focused questions" (Light, Binger, Agate, & Ramsey, 1999, p. 242). Individuals who were taught to ask these questions, as well as their teams, reported they felt they were better communicators, and their social interactions with others were more frequent and longer lasting (Light, Binger, Agate & Ramsey, 1999). Specific procedures and strategies for teaching this skill are discussed in this article. Additionally, the personality and preferences of the child should always be considered. Whenever possible, a student should be instrumental in choosing vocabulary for the device, as he or she will adopt the system as a voice.

A third critical component to successful use of an augmentative communication system is the access to and development of language skills. Incorporating language-based messages and providing both the access to core vocabulary and the opportunity to use core vocabulary is imperative to the success of students using AAC. When a child initially begins to use an AAC device, the focus is primarily on communication. Often, language development is not a concern until the student has become proficient in using the device to communicate, but does not have the ability to compose novel messages. Well-intentioned professionals frantically attempt to premeditate all the vocabulary a student will need, frequently in single sentence messages, such as "I like to go to the zoo." However, when the student wants to tell someone that he/she went to the zoo last weekend, this message becomes irrelevant, and the child is unable to communicate his/her true intentions.

If we provide the student with both the vocabulary and training to communicate in novel ways, we are empowering them and decreasing some of the burden on the professional team members to pre-plan and pre-program everything the child will need to say. I have found it effective to give a student access to single-sentence messages, such as "I need help," to promote the speed of communication, particularly in social situations and in emergency situations. However, if a student has the cognitive and linguistic abilities, there should be a balance with vocabulary that will allow the student to compose novel messages.

Organizing communication systems to provide both communication and language learning opportunities can be challenging. A study by Fallon, Light, and Achenback (2003) indicates that young children, ages 4 and 5, tend to organize vocabulary through schematic organization (such as situational events). For instance, a child might pair the words "pizza" and "yummy" together, as they would be paired to describe eating pizza. Children also tend to organize words in groups of 2-5. Students may initially benefit from vocabulary organized in a schematic format and be encouraged, through direct instruction, to develop language skills within this format. Eventually, the goal is to transition students from event-based organization to taxonomic organization (categorical) to promote use of more complex language structures. Companies that manufacture communication devices have started to place more of an emphasis on providing access to both types of communication to promote speed of communication and novelty of messages.

Children who use AAC develop language differently from children who communicate verbally. Frequently, difficulties in language use become evident. In addition to having limited access to language to

experiment with and learn to use, some of these children have motor impairments that affect their play and mobility (Blockberger & Sutton, 2003). Kelford Smith, Thurston, Light, Parnes, and O'Keefe (1989) speculated that individuals who use AAC may have difficulty with grammar structure due to their dependence on telegraphic speech to improve speed and efficiency during face-to-face conversation. Fortunately, preliminary studies by Lund and Light (2003) indicate that direct instruction to improve grammatical use can yield improvement, even in adults. They indicate that because improving grammar in adulthood can be a very time intensive process, instruction to improve grammar in children who use AAC should begin early in the language learning process.

Both Lund and Light (2003) and Fallon and colleagues (2003) advocate for the use of Vygotsky-based language learning principles. These principles rely on scaffolding and working within the child's "zone of proximal development" to achieve success in teaching both semantic organization of an AAC system and in grammar instruction. Scaffolding is a common strategy in language intervention, where the instructor provides enough support to make the child successful, then gradually fades and eventually eliminates the support. From personal experience, many SLPs frequently use this strategy to help children improve spoken language ability. Applying the same strategies in working with students who rely on AAC can be effective.

Students who rely on AAC for communication present great challenges, but also present great rewards when they meet their goals. Through a team-based approach, students are more likely to succeed, as the systems they use are developed holistically and used across their school days. With consideration of language development and expanding communication skills beyond wants and needs, students will become more competent communicators and more competent participants in the educational process.

References

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Continuing Education Questions

1. Effective AAC usage in the schools is facilitated by

a. an experienced AAC consultant.

b. regular communication among all team members.

c. fewer children on the caseload.

d. one individual who can do all the programming.

2. Scaffolding is

a. a teaching strategy that can be applied in teaching a variety of skills including improving use of an AAC device.

b. a technique that is unique to the treatment of verbal students.

c. a complex structure used in building repair.

d. used solely in treatment of students using AAC devices.

3. A critical component of successful AAC use in schools is

a. using the augmentative communication device to make requests.

b. using gestures to ask for items not on the augmentative communication device.

c. using vocabulary the teacher recommends

d. teaching the student vocabulary for a variety of communication functions.

4. When should a student who uses AAC be taught grammatical skills?

a. Once the student has mastered use of the device and can focus on the grammar instead of the device operation

b. When the student is an adult and needs more mature language skills

c. Incorporate grammatical skills from the beginning of device use and expanded as the student progresses

d. This should not be a consideration in working with a student who uses AAC