Low-Tech AAC:
Rediscovering Classroom Options

By Hannah Sites and Jamie Hayhurst-Marshall

Currently, the American Speech-Language-Hearing Association (ASHA) indicates that studies have found between eight and 12 people per 1,000 experience severe communication disorders, impairing their oral communication and requiring AAC (Castrogiovanni, 2008). Augmentative and alternative communication (AAC) may be used to assist individuals with communication disorders. It is not part of our mission to promote any one AAC device over another. Each of the examples for the following three categories is a small sample of the vast options that are available. Selection for specific AAC devices should be assessed on an individualized basis, based on the strengths and abilities of each student. AAC is grouped into three subgroups: no-tech, low-tech or high-tech.

No-tech AAC consists of sign language, gestures and communication boards. Trifold display boards, bi-fold communication choice folders, portable choice/display boards, portable object communicators, fabric flip charts, magnetic language and communication boards, communication notebooks and communication visual aids/aprons are a few examples of no-tech AAC, but not all the available options.

Low-tech AAC refers to digitized communication devices that store recorded messages and are retrieved by pushing a switch or button. Examples of low-tech AAC devices include, but are not limited to, leveled communication builders, 32-message communicators, Hip-Talk and Hip Talk Plus, Go-Talk 9+, switches, advanced auditory communicators and visually impaired communicators.

High-tech AAC encompasses a wide range of computerized devices featuring synthesized speech and multiple access methods. A sampling of high-tech AAC examples may include: DynaWrite, LightWriter, M3, V/Vmax, SpringBoard/SpringBoard Lite, Vantage/Vantage Lite, ECO-14, SpeakOut and ChatPC/ ChatPC-Silk.

It is important to note that AAC devices enhance and foster oral communication, not stifle it. When using an AAC device, individuals who have some speech should NOT stop using their residual speech because AAC is not a replacement for speech, but rather a reinforcement. An AAC system's primary purpose is to help facilitate individuals' communication in the most efficient and effect way possible for partic-ipation in their daily lives. Children who have limitations in expressing themselves with oral communication are at risk for language delays, which negatively impact learning, social participation and quality of life. Using an AAC device will help to build phonological awareness promoting functional language and communication necessary for literacy development.

When exploring AAC options for school children, advocates should consider the student's individual needs for educational growth and

Fabric Flip Chart

Bi-Fold Communication Choice Folder

Communication Notebook

Examples of No-tech AAC.

inclusion in the classroom. At times, AAC devices are selected for students based purely on advanced technology without taking their personal strengths, weaknesses and preferences into consideration. In fact, some schools report an increase in spending for such high-tech devices. Sounds positive for students, right? But there is a decrease in the physical use of these items.

For an AAC device to be successful, it must be versatile, appealing and easy to operate. When environmental demands exceed individuals' capacities, a disability can severely limit a person from accomplishing a task. AAC devices decrease communicational demands and increase one's capacity for overcoming difficult situations. However, sometimes high-tech AAC devices are too complicated. Students may abandon their device because they do not understand how to operate it. When the demands needed for operation are greater than our capacity of knowledge about the device, students become frustrated. Students are not alone in their frustration with a complicated high-tech AAC device. A lack of support for prior education and training for SLPs and teachers is one of the most damaging factors for implementing high-tech AAC devices. Being labeled a nuisance or distraction to the classroom structure, the high-tech AAC device goes into a closet and its intended student is without any form of successful and useful communication. Because many high-tech AAC devices can be complex and overwhelming, low-tech AAC devices may serve as a permanent solution or learning system while in transition to a high-tech system.

During a transitional period using low-tech AAC devices, students are given the opportunity to continue learning in an inclusive classroom environment while discovering how to effectively operate an AAC system (Light, Page, Curran and Pitkin, 2007). The high cost of high-tech devices is a significant obstacle for many users. Some students have progressive disabilities and will benefit from an AAC device that has great versatility and available at a low cost, so supplemental AAC options can be afforded as time progresses. Fatigue presents another factor for consideration. Despite the reason for abandonment or rejection of high-tech AAC devices, if students ignore or refuse their devices, they are without an effective means for

communication, which limits social interactions with peers and teachers in general education classrooms.

When considering a low-tech AAC device, there is a world of possibilities for personalization without the worry of cost. To personalize a device, it is important to consider the age, personality, interests and individual preferences of each student the AAC device will be designed for. When children are given the opportunity to explore and create their own AAC devices, their preferences and priorities are slightly different from adults' and manufacturers'. Through vivid color schemes and characterization (naming their device), children emphasize concepts, such as "fun," which encourages all children to interact (Light, Page, Curran and Pitkin, 2007). Allowing students to pick the theme of their low-tech AAC device using popular themes, such as movies, music, TV, sports or famous

people, allows students to express themselves and participate with peers who have similar interests (Light, Page, Curran and Pitkin, 2007). Developing low-tech AAC devices allows students to actively engage in positive environments, therefore enhancing self-esteem. When AAC devices are highly flexible, they are able to adapt and grow with students' needs and abilities.

SLPs and teachers should actively integrate students using low-tech AAC into school activities. Communication boards or displays and communication books are examples of low-tech AAC devices that are easy and inexpensive to make. Provide time for all students in the classroom to develop their own low-tech AAC device and encourage them to use it throughout school activities. While desensitizing fellow students, it will lessen the stigma of using an AAC device in the classroom and help students become successful communication partners with students who use AAC devices every day. The most important point to consider is the student. SLPs must work together with teachers and families as a collaborative team, whose primary responsibility is the student's abilities and preferences. Success of any AAC device is based on the impact it has on the student's quality of life.

Students who use AAC devices constantly require reevaluation of their changing strengths, abilities and environments. With the money spent on one high-tech AAC device, a variety of low-tech AAC devices could be created or purchased to better accommodate students' infinite school interactions and activities at a lower cost. Because there is a wide range of low-tech AAC devices available, SLPs, teachers and students should strive to receive as much exposure to as many low-tech AAC devices as possible. Many low-tech AAC devices can be made out of supplies from craft stores, while others are bought as readymade systems. Each state offers an Assistive Technology Project that may also be able to help with the selection of devices. These Projects allow SLPs, teachers and students the opportunity to experiment, explore and have fun learning about what device(s) optimize students' communication abilities in a variety of environments.

RESOURCES

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32-Message Communicator

Cheap Talk 4

Go Talk 9+

Examples of Low-tech AAC.

M³

SpeakOut

SpringBoard Lite

Examples of High-tech AAC.