Autism and Behavior

AAC SUPPORTS AND STRATEGIES

RETHINKING AUTISM: EMBRACING NEURODIVERSITY WITH ASSISTIVE TECHNOLOGY RESOURCE SERIES

Assistive technology (AT) can provide vital support in various areas for autistic students, particularly in enhancing communication and addressing sensory needs. These technologies range from simple tools to complex devices, tailored to meet specific needs and improve overall quality of life. These tools may include communication supports such as augmentative and alternative communication (AAC) systems, visual supports, and sensory supports that help individuals regulate their sensory input. These combined approaches play a crucial role in helping individuals express themselves effectively and navigate their environments more comfortably.

For students who exhibit interfering behaviors and have intermittent, unreliable, or insufficient speech, teaching the use of AAC can be transformative. AAC systems enable students to communicate effectively through means other than behaviors that may interfere with engagement and

learning. Providing training and support for both users and their communication partners enhances the effective use of these tools.

It is important to recognize that individuals use communication for various purposes, and not all of them are anticipated by educators. However, functions like protesting and asking for help are essential for self-advocacy and self-determination. When a student's self-advocacy is respected and acknowledged by honoring all communication attempts, educators and caregivers can empower students. This recognition fosters a positive communication environment and reinforces the value of self-expression. Providing and explicitly teaching the necessary tools and vocabulary to support self-advocacy often directly correlates with a decrease in behaviors that may interfere with engagement and learning.

Many students who use AAC require multiple modalities throughout their day. A comprehensive AAC system includes various modalities and can adapt to changing needs and contexts. Offering diverse options within their environment allows individuals to choose the method that best suits their immediate needs. Having access to a consistent, effective mode of communication can aid in reducing the use of behaviors that interfere

with engagement and learning. Providing training and support for both users and their communication partners is essential to ensure successful use of the AAC systems.

SOLUTIONS TO COMMON PROBLEMS WHICH ENSURE THE SAFETY AND FUNCTIONALITY OF AAC SYSTEMS:
» Observing closely and acknowledging all attempts at communication
» Laminating or using tear-resistant paper for paper-based supports
» Securing devices to desks with industrial-strength Velcro, suction table mounts, or straps
» Utilizing durable protective cases and screen protectors
» Providing a rapid-access AAC option such as "I have something to say" prompts communication partners to offer the full AAC device

> **"What makes communication successful for me is when I can use the method that works best for me in the moment, and when the other person just accepts that method"** (Donaldson, et al, 2021).

AUGMENTATIVE AND ALTERNATIVE COMMUNICATION OPTIONS	
Type of AAC System	**Description of AAC System with Examples**
No-tech	No-tech systems are a method of communication that utilizes the body to convey a message without the use of extra materials. Examples include: » gestures and body language, » sign language, and » eye gaze.
Light-tech	Rapid access/paper-based, light-tech systems do not need electricity or batteries and can be used quickly in a variety of settings. Examples include: » core boards, » alphabet boards, » activity-based/vocabulary-specific boards, » lists, » photo albums, » Picture Exchange Communication System (PECS), » photos or icons, » eye gaze boards, » tangible objects, and » written text.
Mid-tech	Mid-tech AAC systems have a power source (usually a battery) and produce a message when a button is pressed. Examples include: » single message switches, » sequence switches, » randomizer switches, and » single overlay displays with a limited number of pre-programmed messages.
High-tech	High-tech AAC systems require a power source (typically electrical) and allow for storing and retrieving of pre-stored messages, which can be used alone or in combination to produce robust communication. Examples include » dedicated speech-generating devices, and » tablets with speech-generating app for communication.

EXAMPLES OF AAC USE FOR STUDENTS WITH COMMUNICATION AND REGULATION NEEDS

Setting Up the Environment

» Make core boards, choice boards, activity-based boards, or vocabulary boards available to students to encourage their spontaneous requests in the absence of problem behaviors.

» Provide activity-specific vocabulary on a single overlay display to allow for safe requests.

» Use tangible objects or large, single pictures for requesting if the student has a visual impairment.

» If turn-taking is stressful to the student, encourage the student to communicate my turn/your turn within an activity or while playing with a peer using two single switches, a pre-programmed single overlay, or a high-tech device.

» Model and explicitly teach requesting a break when the student is calm and able to learn new skills.

» Ensure that the opportunity to request a break remains highly accessible to the student using the modality that is most efficient for them (e.g., a gesture, single visual, switch, or a high-tech device).

» Teach and model various ways a student can reject items if they are communicating their displeasure through interfering behaviors (e.g., using gestures, single visuals, single switches, or high-tech devices).

» Consider mounting single switches in different environments to assist with transitions.

Explaining in "To-Do" Terms

» Use a sequence switch to name the steps in an activity to help the student follow directions.

» Allow the student to communicate classroom rules to peers, such as during morning meetings, in a "to-do" format using a single switch, pre-programmed single overlay display or high-tech device.

» Use a pre-programmed overlay display or high-tech device to communicate various "to-do" rules for the classroom. For example, the student line leader can communicate "walking feet" to his friends to ask them to line up behind him.

Positive Reinforcement

» Utilize positive gestures such as a "thumbs up" or "high five" as a reinforcement for appropriate behaviors.

» Provide choices for reinforcement items. Have choice boards available to the student to request reinforcement items paired with a token board (see below). Choice boards can be rapid access, mid-, or high-tech.

» Reinforce desired actions by modeling "I like" statements on an AAC system (e.g., "I like your walking feet").

EXAMPLES OF AAC USE FOR STUDENTS WITH COMMUNICATION AND REGULATION NEEDS	
Disruptive Behaviors	

» Ensure student access to visuals or communication systems for requesting the need for a break. Gestures, like raising a hand to signal "stop," are always available for communicating wants and needs.
» Decrease language and increase visual support when the student is escalating.
» Remind students of previously taught communication skills by silently modeling or offering the AAC system.
» Use a simple visual to communicate the desired behavior when disruptive behaviors occur.
» Highlight positive behavior with visuals once appropriate behaviors return.
» Keep language processing demands low as students calm down. For example, when a student sits down in their chair, show them the visual for "sit," give them a thumbs-up gesture, and smile.

Multiple Step Prompting	
Say	Model the desired communication by using spoken words, visuals, a switch, or a communication device. For example, if the student appears to need a break, say "Do you need a break?" while modeling it on the communication system. Allow the student the opportunity to request it.
Model	If the student does not respond, gesture toward the communication system and model possible responses relative to the situation like "break," "stop," or "wait."
Wait	Wait time is very important. Give the student time to process and communicate their needs without providing additional input. You may need to bring attention to the communication system multiple times before the student responds and/or allow time for the student to explore the device before making a selection.
Do/Model Again	If needed, guide the student to the break area while consistently using AAC during each step of the prompting. Reduce language demands if the student's frustration is increasing.

This series of resources explores how assistive technology (AT) can be used to support autistic students and reduce behaviors that may interfere with engagement and learning, with the goal of enhancing independence and participating in their education. The handouts in this series include:
❑ Autism and Behavior: A Neuro-Affirming Approach Using Assistive Technology
❑ Autism and Behavior: AAC Supports and Strategies
❑ Autism and Behavior: Visual Supports and Strategies
❑ Autism and Behavior: Sensory Supports and Strategies

REFERENCES

❏ Donaldson, Amy L., et al. "'Everyone deserves AAC': Preliminary study of the experiences of speaking autistic adults who use augmentative and alternative communication." *Perspectives of the ASHA Special Interest Groups*, vol. 6, no. 2, 28 Apr. 2021, pp. 315–326, https://doi.org/10.1044/2021_persp-20-00220.