UNC Frank Porter Graham Child Development Institute
Autism Focused Intervention Resources & Modules
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---Overview of Content---

1. **Table of AAC Contents**: This list details the specific augmentative and alternative communication (AAC) module pages.

2. **A Case for AAC**: A description of the AAC and why it should be used with learners with autism.

3. **Basics of AAC (Lesson 1)**: Describes AAC and how it can be used with learners with autism, as well as who can use AAC and its evidence-base from the 2020 NCAEP EBP Report (Steinbrenner et al., 2020).

4. **Planning for AAC (Lesson 2)**: Provides concrete steps and examples of how to plan for using AAC.

5. **Using AAC (Lesson 3)**: Provides concrete steps and scenarios of how practitioners and family members can use AAC.

6. **Monitoring AAC (Lesson 4)**: Provides steps for monitoring the use of AAC, such as collecting data and determining next steps for the learner with autism.

7. **Glossary**: This glossary contains key terms that apply specifically to this evidence-based practice.

8. **References**: This list details the specific references used for developing this AAC module in numerical order.
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Expressive communication is one’s ability to communicate thoughts and feelings through words, gestures, or facial expressions. Augmentative and alternative communication provides alternate means of expressive communication when the learner has limited words or verbal communication to increase student communication, socialization, and engagement while reducing interfering behaviors.

Suggested Citation:

Lesson 1: Basics of AAC

After this lesson, you will be able to:

- Describe AAC
- Identify with what ages and settings AAC can be used
- Identify instructional outcomes supported by research that AAC can be used to address

Time to complete: Approximately 20 minutes
What is AAC?

Augmentative and alternative communication (AAC) are interventions that use a system of communication that is not verbal/vocal including aided and unaided communication systems. Methods of teaching AAC use are also included in this practice (e.g., Aided Language Modeling) and may include other EBPs such as prompting, reinforcement, visual supports, and peer-based instruction and intervention.

Communication systems include:

- **Unaided communication systems** do not use any materials or technology, only a motion of your body (e.g., sign language and gestures).
- **Aided communication systems** use some type of material or device. They include low-tech systems (e.g., exchanging objects/pictures or pointing to letters) and extend to mid-tech (e.g., battery powered speech output switches) and high-tech systems like speech-generating devices (SGDs) and applications that allow other devices (e.g., phones, tablets) to serve as SGDs.

According to American Speech-Language-Hearing Association (ASHA):

- There is no specific age or pre-requisite for using AAC. Children with known delays/disorders of expressive communication may start using low-tech AAC strategies like signing in infancy. Other children may start using AAC when it becomes clear that they are unable to use spoken language, are not attempting to communicate as expected, or have very limited spoken language.
- Early use of AAC can support the development of natural speech and language and can increase vocabulary for young children.
- AAC use with preschool children has been associated with longer utterances and development of grammar.
- AAC use can lead to increases in receptive vocabulary in young children.

**QUICK TIP:**
References for this module are located in the Resources & Tools section.

**QUICK TIP:**
PECS® (Picture Exchange Communication System) has its own AFIRM module that can be accessed here: [https://afirm.fpg.unc.edu/picture-exchange-communication-system](https://afirm.fpg.unc.edu/picture-exchange-communication-system). Visit the Pyramid Educational Consultants, Inc. website: [www.pecsusa.com](http://www.pecsusa.com) for information on PECS® resources and training.

**Augmentative and Alternative Communication (AAC):**

- Unaided communication systems: Do not use any materials or technology, only a motion of your body (e.g., sign language and gestures).
Conventional gestures: Communicative gestures used and understood by most members of a social group. In the United States, these include actions such as shoulder shrugging, head nodding/shaking, pointing, thumbs up/down, and high fives.

American Sign Language (ASL): A complete natural language comprised of facial expressions and hand/finger movements with the same linguistic characteristics of spoken language, often used by the deaf/hard of hearing community.

Informal sign use (e.g., “Baby signing”): A set of simple hand gestures and movements designed to enhance communication for children who do not use much or any spoken language. May contain single word signs from ASL but not grammatical aspects of that language. May also include gestures that are unique and only understood by the child and their common communication partners.

- Low-tech aided communication systems: Aided systems that use some type of material or device. They include low-tech systems (e.g., exchanging objects/pictures or pointing to letters) and extend to mid-tech and high-tech speech-generating devices (SGDs) and applications that allow other devices (i.e., phones, tablets) to serve as SGDs.
  - Picture Exchange Communication System (PECS) – a formal evidence-based system of augmentative communication using picture exchange of standard images that represent words. See https://pecsusa.com/pecs/ and AFIRM PECS module.
  - Communication books & boards: Object choice board, choice board using photographs of objects/events, communication book using photographs, simple communication board using photographs, or complex communication book using symbols and letters.

- Speech-Generating Aided Communication Systems: Aided systems use some type of material or device. They include low-tech systems (e.g., exchanging objects/pictures or pointing to letters) and extend to mid-tech and high-tech speech-generating devices (SGDs) and applications that allow other devices (i.e., phones, tablets) to serve as SGDs.
AAC Goals

Communication is a basic human right that is essential for student success in academic and non-academic settings. Properly selected AAC devices can support a variety of student goals.

Goals that can be addressed by using AAC include:

- Increase communication\(^{10-15}\)
  - Requesting (desired objects/activities)
  - Protesting (undesired objects/activities, an action by someone else)
  - Commenting on activities/events of interest
- Increase social participation and engagement\(^{10, 16-21}\)
  - Greeting teachers and peers
  - Requesting a turn
  - Taking a turn
  - Asking for materials from a peer
- Increase engagement in academic/pre-academic tasks\(^{22-23}\)
  - Requesting more of an activity
  - Answering a question
  - Asking for clarification
  - Participating in classroom routines
- Increase play skills\(^{10, 14, 24}\)
  - Using symbolic play skills
- Increase vocabulary acquisition\(^{14}\)
  - Applying core academic vocabulary during class activities
  - Learning new concepts/vocabulary during book reading activities
  - Practicing social vocabulary in settings like recess, group work, and lunch
- Reduce interfering behaviors\(^{25}\)
  - Expressing feelings without interfering behaviors
  - Requesting a break or calming activity

By using a speech-generating application on the tablet, the learner is able to communicate with their friend about their weekend.
How Can AAC Help Learners?

AAC uses **visual supports** to make abstract social and communication concepts more concrete for learners with autism. Most learners with autism are visual learners, meaning that visual supports make the process of taking in auditory information, processing it, and formulating a response much more accessible to them.

AAC also **reduces the social pressure** to verbally formulate a response to a communication partner by providing voice output. AAC gives the learner a way to respond to a communication partner or get their needs met without requiring eye contact, gestures, and verbal output, all of which can be unpleasant or challenging for some learners with autism.

AAC can **serve as a communication model** for children who are developing verbal speech. Repeated models of expressive communication may support the learner’s verbal speech development. Repeated models of symbols to support verbal communication may increase receptive understanding of language and teach the learner the power of communicating.

AAC **can motivate learners** with autism to communicate. The sensory input from pushing a button, seeing visual displays, and hearing voice output may be more motivating than traditional verbal communication. The technology used in AAC devices may also be motivating to learners with autism, many of whom are drawn to this type of learning platform.

Finally, it **may be socially beneficial** for the student to use an AAC device because learners without autism may also find this technology appealing and be motivated to interact with the learner with autism.
How is AAC Being Used?

This practice, **led by** a speech-language pathologist or assistive technology specialist, can be used by a variety of professionals, including teachers, special educators, therapists, paraprofessionals, and early interventionists in educational and community-based environments. Parents and family members also can use this practice in the home.

Listen to how three different professionals use this evidence-based practice (AAC) in their settings.

**AUDIO: Preschool Teacher**

**Audio Transcript**

“Rex showed a lot of interest in our morning circle time, but often to the point that he became completely dysregulated. He jumped, yelled, and ran his body into the other children as they took their turns. The SLP helped us set up his AAC switches to use during circle time. They were easy to set up, and Rex understood them quickly! He loved being able to greet the class, sing parts of our circle time songs, and answer some morning questions along with his peers. Having his own way to communicate gave Rex a reason to stay on his carpet square and give the other students the space they needed without reducing Rex’s enthusiasm for circle time!”

**AUDIO: Elementary School Teacher**

**Audio Transcript**

“Naiya really struggled to participate in play with the other students. She played by herself during specials and recess and was missing out on learning from her peers. Sometimes she would grab things from peers and got very upset if she didn’t get what she wanted. Her AAC device gave her a voice to participate in less structured parts of the school day. She’s now able to request a turn with games from other students. She even asks for art materials and takes turns on the slide now. I love seeing other students include her more in play now that she does not take things from them.”
AUDIO: Middle School Teacher
Audio Transcript
“Since Tobi is not a verbal communicator, we were having a hard time engaging him in group class activities. We knew he was comprehending the science curriculum from his homework and test scores, but during group work, he mostly disengaged and spun his pencil around on the desk as the other students talked. We tried having him write down his responses, but he could not write quickly enough to keep up with peer conversation and quickly lost interest. Tobi’s speech-generating device allowed him to type his responses to the group and contribute to discussion. The other kids think the device is really cool and ask him more questions now.”
Evidence-base for AAC

The National Clearinghouse on Autism Evidence and Practice (NCAEP) reviewed literature from 1990 to 2017 and reported their findings in 2020.26

This practice is a focused intervention that meets the evidence-based practice criteria with 47 single case design studies. This practice has been effective for early intervention (0-2 years), preschoolers (3-5 years), elementary school learners (6-11 years), middle school learners (12-14 years), and high schoolers (15-18 years) with autism. Studies included in the 2020 EBP report26 detail how this practice can be used to effectively address the following outcomes for a target goal/behavior/skill: academic/pre-academic, challenging/interfering behavior, communication, joint attention, motor, play, and social.

In the table below, the instructional outcomes identified by the evidence base are shown by age of participants.

<table>
<thead>
<tr>
<th></th>
<th>Early Intervention 0-2 years</th>
<th>Preschool 3-5 years</th>
<th>Elementary 6-11 years</th>
<th>Middle 12-14 years</th>
<th>High 15-18 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavior</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Joint Attention</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Play</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td>Yes</td>
</tr>
</tbody>
</table>
Lesson 2: Plan for AAC

After this lesson, you will be able to:

- Collect information to see if an AAC assessment is needed
- Conduct an AAC assessment
- Prepare team members to use an AAC device
- Plan opportunities for the student to use their AAC device

Time to complete: Approximately 30 minutes
Determine if an Assessment for AAC is Needed

It can be hard to know if a learner needs an AAC assessment. If you are working with a learner who is not yet verbally communicating or has limited spoken language, using AAC might be appropriate. A first step is to assess the learner's AAC needs.

Ask yourself the following questions:

- Is the learner making little progress toward communication goals during academic or social parts of the school day?
- Is the learner showing frustration or other interfering behaviors when there are communication demands placed on them during the school day?
- Do the learner's teachers, family, and/or peers have a hard time understanding the learner's current communication or spoken language?
- Does the learner seem interested in participating in activities or communicating with others but lack the language to do so effectively?
- Does the learner show little engagement in daily activities or seem withdrawn?
- Has the learner's family mentioned communication concerns or the desire for the student to have more effective communication?
- Does the learner seem to have matured beyond their current AAC system?

If you answered yes to any of these questions, then the learner may need a more thorough assessment with your school speech-language pathologist or assistive technology specialist.
Conduct AAC Assessment

If you determine that AAC might be an appropriate practice, the next step is conducting an assessment to identify the learner's present level of communication and the best AAC device for their skills and goals. Remember, it takes a team, including a speech-language pathologist and/or assistive technology specialist, a special education teacher, general education teacher (if applicable) and family members to conduct a formal AAC assessment. An Occupational or Physical Therapist may also be important members of the team if there are motor challenges. Generally, AAC assessments fall under the scope of practice for school speech-language pathologists, and they will take the lead in this process.

The speech-language pathologist may ask the learner's teacher for valuable information to inform the assessment process such as:

- Reasons for referring/recommending an AAC assessment (the questions in the Assessment for AAC Checklist will be helpful to share)
- Experience communicating with the learner and seeing how the learner communicates with others (See Quick Tip 1)
- Knowledge of the learner’s family preferences and goals for the student
- Observing and reporting on the learner's communication across the school day*
- Knowledge of classroom routines where AAC may be beneficial to try
- Understanding of the learner's preferences and what motivates them during the day
- Learner’s goal development and feasibility of implementing those goals in the classroom context

QUICK TIP:
The Communication Matrix\textsuperscript{27} is a free assessment tool for beginning communicators that can assist in developing AAC goals: https://www.communicationmatrix.org/

Often, the teacher collects observational data on the learner's behavior as part of the AAC assessment process. It is helpful to collect information on the time of day, activity, communication partner, and communication behavior observed. Communication behaviors may include gestures, sounds, whining/crying, behavioral outbursts, pointing to or grabbing things, facial expressions, leading or pulling people, and spoken words.
**QUICK TIP:**
A functional behavior assessment may be most appropriate if there are challenging or interfering behaviors that you think are preceded by communication demands.

**CASE STUDY:**
This student seems to only be communicating with adults for the purpose of requesting help or things they want. There is no communication/socialization with peers, no other communicative intentions like greeting, commenting, etc., and little communication around academic tasks. The student already has some choice-making and technology skills that may help the team.

**IDENTIFY COMMUNICATION BEHAVIORS:**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Communication Partner</th>
<th>Communication Behavior Observed</th>
</tr>
</thead>
<tbody>
<tr>
<td>8AM</td>
<td>Arrival</td>
<td>☑ Teacher</td>
<td>Student approaches teacher and whines/looks uncomfortable until teacher helps to remove student’s coat.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>☑ Para</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>☑ Peer</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>☑ Other:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9:30AM</td>
<td>Gym</td>
<td>☑ Teacher</td>
<td>Student grabs jump rope from para’s hand and goes to side of the gym to dangle it over the side of the bench.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>☑ Para</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>☑ Peer</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>☑ Other:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11AM</td>
<td>Centers</td>
<td>☑ Teacher</td>
<td>Student’s train track keeps coming apart. Cries and puts track pieces in para’s lap to request help.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>☑ Para</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>☑ Peer</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>☑ Other:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12PM</td>
<td>Lunch</td>
<td>☑ Teacher</td>
<td>Student chooses food and drink when para holds up two choices of items.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>☑ Para</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>☑ Peer</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>☑ Other:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1PM</td>
<td>Reading</td>
<td>☑ Teacher</td>
<td>Student smiles during shared book reading with teacher. Grabs teacher’s hands to request more of an action/gesture that went along with story.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>☑ Para</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>☑ Peer</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>☑ Other:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1:30PM</td>
<td>Math</td>
<td>☑ Teacher</td>
<td>Student follows math computer game with teacher. Makes choices given 2 options.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>☑ Para</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>☑ Peer</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>☑ Other:</td>
<td></td>
</tr>
</tbody>
</table>
Discuss Tech and AAC Preferences

Another important part of the AAC assessment for learners is communicating with the learner’s family and determining their technology and AAC preferences. Family members are essential members of the AAC team because it is critical that AAC is used consistently in all of the learner’s communicative environments. The home environment is a primary and natural communication setting for the learner. Therefore, family/caregiver comfort and preferences must be considered during the AAC assessment for a learner.

Discuss with the family that the learner’s AAC device will accompany them home each day, to extra-curricular activities, on errands, and to visits with friends and family... everywhere the student goes! Some professionals describe it as carrying around one of the learner’s body parts because the AAC is their “voice.” For optimal success, the AAC device should fit into a family’s routines, and all family members need to feel comfortable using the learner’s AAC device. Keeping the device safe from siblings and pets is another consideration.

Whenever possible, the learner should be included in these conversations, and their preferences about their communication system should also be considered. Visual supports may help the learner indicate their feelings about various devices.

Some possible discussion topics and questions for a family meeting about AAC include:

- What are your hopes for the AAC device and your child’s communication? Can we set some goals together and work on them both at home and at school?
- Who is with the child most while they are at home? What types of activities does the child participate in outside of school? Who would be the best person to be trained to program the device for home use? Who interacts with the child and will need basic training on what to expect?
- What kinds of technology do you use in your home? Who uses these devices? Who does not use them? Are there people who are more/less comfortable with
technology, and how can we make sure all of them can communicate with the child?

- Do you have rules about screen time and technology use at home? Can we talk about parental controls on the device and other ways to ensure your child is not misusing the device and still following your house rules? Can we troubleshoot ways to tell the other children in your home that the AAC device is different than screen time?
- Can you think of a good place in your home to store and charge the device when it is not being used? Is this place safe from pets and other potential hazards?
- What are your biggest concerns about the AAC device? Can we troubleshoot those concerns together and come up with a plan?
Identify Available AAC Resources

It takes multiple resources for a learner to become a successful AAC user. Beyond having a strong support team, the learner may need to borrow or purchase an AAC device. This purchase may be covered by state resources or individual insurance plans.

Funding Resources

One major barrier to AAC use in schools is funding for the device and the materials to support use of the device. Fortunately, many states have technology agencies that have rental and borrowing programs. Consider partnering with a state tech-act agency or regional or state support center to obtain materials and equipment for loaner and trial periods. Speech-generating device (SGD) vendors may also have representatives in your area who are willing to loan devices and help with funding questions.

Speech-language pathologists who provide AAC services will be familiar with funding options in your area.

- Low-tech AAC systems are usually created by the SLP with input from other team members. Low-tech devices do not typically need funding and are not covered by insurance or other state technology providers.
- High-tech AAC systems (specifically, speech-generating devices) are considered durable medical equipment (DME) and may be covered by insurance. Medicaid typically covers these devices with some exceptions. The student's speech-language pathologist will be responsible for submitting funding requests and determining insurance coverage.
  - Tablets, applications (apps), and computers are considered nondurable, nondedicated devices, and private insurance companies' coverage for these devices varies. Devices that are considered useful for someone without a severe communication impairment generally are not covered.
- If the learner's IEP indicates the need for an AAC device, the school system may cover the cost of the device. In this case, the school is the owner of the device and may restrict use of the device outside of the school setting (e.g., not allowing the device to go home during summer or winter breaks). Individual school system policies vary, so it is important to inquire about any restrictions on device use should the school provide the learner's AAC device.

Relevant laws and policies impacting AAC users include:

- The Assistive Technology Act: The Assistive Technology Act (AT Act) of 2004\textsuperscript{35}, provides support efforts to increase access to, and acquisition of, assistive technology devices and services in each state. This includes state financing; device reutilization; device demonstrations and device lending. Find your state's AT Act program at the National Assistive Technology Act Technical Assistance and Training...
(AT3) Center - Program Directory. For more information about the AT Act go to National Assistive Technology Act Technical Assistance and Training (AT3) Center - AT Act Information.

- Individuals with Disabilities Education Act of 2004 (IDEA 2004): IDEA\textsuperscript{36} specifies that special education should enable students to access, participate in, and demonstrate progress with respect to the general education curriculum. Assistive technology is specifically mentioned and defined in IDEA as any item, piece of equipment, or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain, or improve the functional capabilities of a child with a disability.

- The Affordable Care Act: The Affordable Care Act (ACA)\textsuperscript{37} of 2010 prohibits disability-based discrimination in insurance policies for essential health benefits, which often includes SGDs.

**QUICK TIP:**
Search for Assistive Technology Programs, device loans and demos, and funding opportunities by state at: [https://www.at3center.net/stateprogram](https://www.at3center.net/stateprogram)
Select EBPs for Teaching Use of the AAC System

A new AAC user will need your emotional support as well as a combination of evidence-based practices when learning to use their AAC system.

Consider the following EBPs when planning to use an AAC system with the learner:

- **Modeling (MD)**-The learner will need their communication partner to model use of their AAC system when initially learning to use the device, when new vocabulary is added, and when the device is used in a new setting. This can be done live by the communication partner.

- **Peer-Based Instruction & Intervention (PBII)**-Train peers to assist the student in using their AAC system in natural settings. Peers can prompt the student, model AAC use, and/or reinforce the student with proper training.

- **Prompting (PP)**-Establish a hierarchy of least-to-most restrictive prompts to use the AAC system. An example may be to: wait 5 seconds, point to the device, wait 5 seconds, tap the device with your finger, wait five seconds, say “use your words.” This will be particularly important when the student is just starting to use the system or when they need to use it in a new context or with a new communication partner.

- **Reinforcement (R+)**-While some aspects of AAC system use may be naturally reinforced (e.g., the student makes a choice or request and then gets what they want), others may need additional reinforcement (e.g., initiating social interactions or answering academic questions). Plan how to reward/motivate AAC use in all contexts by creating a reinforcement schedule.

- **Time Delay (TD)**-Decrease dependence on prompts to communicate using the AAC system by gradually increasing the time elapsed before giving the student a prompt.

- **Video Modeling (VM)**-Some students may also like to watch themselves or other students model using the device via a video model. A point-of-view video model may also be an appropriate strategy in some communicative contexts.

- **Visual Supports (VS)**-Use visual supports to prompt the student to use their AAC system with minimal instructor intrusion. Visual supports can be placed on the student’s desk, in a binder, or handed to them to support AAC use. Visual supports can also provide scripts for social settings and help to structure play routines for the student.
Plan Opportunities for Learner to use AAC

Carefully review the learner’s daily activities and social interactions to plan opportunities for them to use their AAC system. The school speech-language pathologist or assistive technology specialist will partner with you in this planning process, but your knowledge of the learner’s daily routines will be important.

One way to plan opportunities for AAC use is to start with the purpose of communication (or communicative function) of the learner’s goal and think of times during the day when they can practice that skill naturally. It may also be helpful to observe how other learners communicate at different times of the day when setting the learner’s goals and programming their device. Note that your initial observations and the examples in this module are just a starting point. The more you think about the learner’s communication and pay attention to daily activities, you will discover additional opportunities to target the goal throughout the entire school day. The goal is for AAC learning and opportunities to be happening all day, every day.

Communication Function

- Greeting
  - Greeting the teacher when the student arrives in the morning
  - Greeting the class as part of a morning circle routine
  - Greeting the teacher upon arrival to each class
  - Greeting peers when sitting down to small group work activities
- Requesting
  - Requesting help during times the student usually becomes frustrated
  - Requesting more of a preferred activity
  - Requesting a turn playing at recess
  - Requesting materials during class
  - Requesting a break during times the student is usually overwhelmed
- Initiating conversation
  - At recess
  - In the cafeteria
  - During a “lunch bunch”, club, or smaller social group
  - During group work
- Making choices
  - Choosing materials to complete assignments
  - Choosing lunch items
  - Choosing a partner to work with
  - Choosing which assignment to complete first
- Responding to questions
  - During group work
- During one-on-one work with a teacher or para
- During lunch
- During a small social group, club, or “special” class like art or music
- Playing with a peer
  - During centers
  - During informal arrival activities in the morning
  - During recess
  - During a small group or club time

**IDENTIFY TIMES TO USE AAC SYSTEM:**

<table>
<thead>
<tr>
<th>Communication Function</th>
<th>Setting/Activity</th>
<th>Communication Partner(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greeting</td>
<td>Arrival to class</td>
<td>Teacher</td>
</tr>
<tr>
<td>Greeting</td>
<td>Morning circle time, “hello song”</td>
<td>Classmates</td>
</tr>
<tr>
<td>Greeting</td>
<td>Small reading group</td>
<td>Peer group members</td>
</tr>
<tr>
<td>Requesting help</td>
<td>When trying to open snack bags</td>
<td>Paraprofessional/aide</td>
</tr>
<tr>
<td>Requesting more</td>
<td>When putting cars down the track</td>
<td>Paraprofessional/aide</td>
</tr>
<tr>
<td>Requesting a turn</td>
<td>When sliding at recess</td>
<td>Peers</td>
</tr>
<tr>
<td>Initiating conversation</td>
<td>In the cafeteria</td>
<td>Peers</td>
</tr>
<tr>
<td>Making choices</td>
<td>Selecting a science partner</td>
<td>Peer</td>
</tr>
<tr>
<td>Making choices</td>
<td>Selecting which math activity to</td>
<td>Paraprofessional/aide</td>
</tr>
<tr>
<td></td>
<td>do first</td>
<td></td>
</tr>
<tr>
<td>Responding to questions</td>
<td>During one-on-one reading</td>
<td>Teacher</td>
</tr>
<tr>
<td></td>
<td>comprehension work</td>
<td></td>
</tr>
<tr>
<td>Initiating conversation</td>
<td>During group work</td>
<td>Peers</td>
</tr>
<tr>
<td>Playing with a peer</td>
<td>During recess</td>
<td>Peer</td>
</tr>
</tbody>
</table>
Identify and Train Team Members

When the AAC system is ready for use and programmed with the appropriate vocabulary, the next step is to train the learner and their communication partners on use of the device. The school speech-language pathologist or assistive technology specialist will take the lead on training additional communication partners. The first people to be trained will be the learner's regular communication partners including their team members, and of course, the learner themselves.

Training of communication partners is important to the success of AAC device usage. Without proper training, communication partners of AAC users are more likely to dominate conversation and overlook the learner's communication attempts (e.g.,38,39).

According to the American Speech-Language-Hearing Association (ASHA), communication partner training facilitates effective communication and incorporates instruction in the following skills:

- Using active listening strategies
- Increasing wait time for conversational turn-taking
- Using augmented input to facilitate communication (e.g., visual and environmental cues)
- Helping the user take advantage of rate enhancement features
- Understanding the technical aspects of high-tech devices (e.g., turning the device on and off; charging and storing the device; programming; and troubleshooting)

Another role special education teachers may have is identifying other team members to train and setting up the school environment for success by preparing everyone at school who interacts with the student to support use of the AAC device.

Here are some tips:

- Special education teachers may want to review any classroom, district, or school rules about technology use and ensure that administrators and other teachers know not to discipline the student’s use of AAC. This may be particularly important if the learner is using a tablet or device that looks like commonly misused technology. It is critical that the learner's device never be taken away as a punishment, as this would be taking away the learner’s voice.

- It is also important to prepare other students in the class that a student will have a communication device. They may need some explanation to understand why this student gets an exception to classroom technology rules. It is important that the other students see the device as their classmate's voice, rather than special treatment.
• It is critical that other teachers and staff who work with the student know the basics of how to use the learner’s device and what to expect when communicating with the student using the device.

• Add core vocabulary words to the device that may be used by the learner frequently and across many classes and settings (e.g., more, less, same, different, some, all), rather than fringe vocabulary words that may only appear on a vocabulary list for a particular topic in one class (e.g., cartography, colonialism, sedimentary).

• School staff such as cafeteria workers, crossing guards, and janitors may also appreciate some notice about the learner’s use of an AAC device. In many cases, it would be appropriate for the learner to work on greeting, requesting, and other communication goals with these staff members.

• Special education teachers can collaborate with the school speech-language pathologist, assistive technology specialist, and/or autism specialist to plan the device training and team communication about the device. One or all of these specialists will have the expertise and experience to train you and your team.
Prepare Materials

Once an AAC system is selected for a learner, the team including the special education teacher, speech-language pathologist, and/or assistive technology specialist prepare materials that the learner will need.

Materials may include:

**Low-tech systems:**
- Selecting objects or printing symbols or photographs used on switches or in communication books
- Selecting the format for a communication book (binder, folder, etc.)
- Organizing a communication book, boards, or switches such that the correct vocabulary is available to the student for each class and activity during their day

**High-tech devices:**
- Device cases and screen protectors
- Tracking applications in case the device is lost
- Program the device and/or select and program an application on the device
- Vocabulary selection and organization to meet the student’s needs throughout the day

**Other evidence-based strategy materials:**
- Visual supports to remind the student to use their device or instructional reminders
- Prompting hierarchies
- Reinforcement schedules and materials?
- Time delay materials

Make sure you have checked the student’s AAC system and that it is programmed (if a high-tech device). You will also need your data collection form, prompting hierarchy, and reinforcers.

**QUICK TIP:**
Remember to match the visual supports used in the student’s AAC system (objects, photographs, symbols, written words, written phrases, or sentences) to the student’s comprehension level. See visual supports module for more information about this, if needed.
Lesson 3: Using AAC

After this lesson, you will be able to:
- Teach the learner to use their AAC device as part of a team
- Understand formalized AAC approaches
- Reinforce the student for using their AAC device
- Ensure consistent device usage

Time to complete: Approximately 30 minutes
Teach the Learner to Use the AAC System

The speech-language pathologist and/or assistive technology specialist will take the lead in determining strategies to teach the learner to use their AAC system. The whole team should collaborate to ensure the AAC system teaching is used consistently in the classroom and across the school day.

Recall the settings and communication partners in each setting that you planned for in the previous section of this module. Now, you will use these data as teaching environments to target learner communication goals by their function using the learner’s AAC system.

Remember from the planning section of this module that there are many established evidence-based practices that can support students learning to use their AAC devices to communicate. Now, you will use the EBPs that you selected to support the learner’s goals using their AAC system.
Understand Formalized AAC Teaching Approaches

We recommend that you first use the EBPs listed in the previous section to support learners’ use of AAC. Speech-language pathologists may use the following formalized AAC teaching approaches. To learn about common AAC teaching strategies that may be implemented by your school speech-language pathologist, click on the names of the strategies/approaches.

Note that some of these approaches are not recognized evidence-based practices but are commonly used and may have some research evidence to support them. The descriptions are only to familiarize you with common AAC teaching approaches, they are not endorsed by AFIRM or the American Speech-Language Hearing Association (ASHA).

Caution: There are no miracle treatments for AAC! Every few years a new treatment comes out promising to “cure” students who use AAC and claiming that previously minimally verbal students can miraculously communicate lengthy messages. Most of these treatments are some version of Facilitated Communication (FC) or Rapid Prompting Method (RPM), techniques where a facilitator guides a student to select letters or images on a board or keyboard. The messages produced from this technique have been proven to come from the facilitator rather than the student. These methods have been discredited and should never be used.

**AAC Teaching Strategies**

- **Language Acquisition Through Motor Planning (LAMP)**-Teaches the learner to independently select words and build sentences on a voice output AAC device using consistent motor plans to access vocabulary.

- **Core Vocabulary Approach**-Teaches the learner an initial set of core vocabulary. This core set consists of common words used by most people across contexts. This approach also promotes vocabulary used by typically communicating peers and any additional words needed by the learner, based on input from family members, teachers, and peers. As more words are added to the AAC display, words from the initial set remain in the same location to minimize demands on memory and motor planning. For more information and free core vocabulary resources see: http://www.project-core.com/communication-systems/. Geist, Erickson, Greer, & Hatch (2021) found support for this approach with students with autism.

- **Augmented Input (also called Aided Language Modeling)**-A receptive language training approach in which the communication partner provides spoken words along with AAC symbols during communication tasks (partner points to the AAC symbols while simultaneously talking). Sennott, Light, & McNaughton (2016) conducted a review of this approach and found it effective for learner linguistic gains in pragmatics, semantics, syntax, and morphology.
• Functional Communication Training-An approach that focuses on basic communication skills like expressing wants and needs for the AAC learner. It involves development of functional communication skills, including expressing wants and needs, gaining attention, indicating preferences, and protesting. For example, individuals can be taught to make requests by using symbols, objects, or words to indicate desired objects or actions\textsuperscript{42}.

• Pragmatic Organization Dynamic Display (PODD)-A system of organizing and selecting words or symbol vocabulary on a low-tech or high-tech AAC system, so that individuals with complex communication needs and their communication partners can communicate more easily. The aim is to provide vocabulary for continuous communication all the time, across a range of different topics, using a variety of messages.

• Total Communication (TC)-A holistic approach to communication that promotes the use of all modes of communication, including sign language, spoken language, gestures, facial expression, and environmental cues such as pictures and sounds. Although TC is most commonly associated with approaches to educating children who are deaf or hard of hearing\textsuperscript{43} it has also been used with other populations, such as individuals with autism\textsuperscript{44}.
Reinforce the Learner

Though some communication goals have natural reinforcers (e.g., when making choices or requesting objects, the student immediately gets what they want after communicating), many are less motivating and may need some reinforcement. Though the learner is using AAC, the need for reinforcement is similar to other learners with autism who use spoken language. For example, a learner with autism may be naturally reinforced to comment and question their peers about their preferred science topic but may need more tangible and structured reinforcement to answer questions during math.

Remember the basic rules of reinforcement:

- Be consistent with the schedule of reinforcement.
- Remind the student what they are working toward before starting the task.
- Provide reinforcement immediately when the student uses the target skill (or after the token reinforcement goal is reached).

  *Note: this means you must always have the reinforcers ready when you implement AAC!*
- Vary the types of reinforcers used. Examples include:
  - High fives
  - Social praise (e.g., great job using your device to ask for help!)
  - Stickers
  - Time doing a preferred activity
  - Access to a favorite object

**CASE STUDY:**

Ciara is a second-grader with autism using a speech-generating AAC application on an iPad to communicate. Though Ciara is doing well with using her device for her communication goals across settings, she has discovered that she can make her peers laugh during class by activating silly words or phases on her device. Although hearing her peers laugh is naturally reinforcing, this is an inappropriate use of her AAC device. Her speech-language pathologist suggested a token reinforcement system for Ciara where she receives unicorn stickers for each 2-minute class interval that she uses her device appropriately (without class disruption). Ciara's teacher also decided to reinforce Ciara's peers in the class for not laughing or engaging with Ciara when she used her device inappropriately. The class earns a 5-
minute game or open joke telling time at the end of the class period if everyone stays on-task during instructional time.

**QUICK TIP:**
For more information on implementing reinforcement, see the R+ Module.
Ensure Consistent Use of AAC Across Settings

As previously stated, it is essential that the AAC system travels with the student wherever they go and is used across contexts.

A few suggestions for this:

- Make sure that the device is portable for the student and has a handle or strap that can be easily transported with the student’s other belongings.
- Talk to the teachers and staff in the student’s other settings (special classes, lunch, and recess supervisors, after care providers) about how the device will travel with the learner during the day, prompting the learner to use it at appropriate times, and making sure the device is safely transported to the next location.
- Make sure that the device is not taken away from the learner if communication partners perceive it as being misused.
- Consider if the device will fit into the student’s backpack and communicate with the student’s family about where to find the device when the student arrives home from school.
- Talk to the student’s family about where they will store the device, making sure that the device does not stay in a hot/cold car for extended periods.
- Make a plan for a student who rides the bus to ensure the device stays with the student for communicating but does not get left behind.
Lesson 4: Monitoring AAC

After this lesson, you will be able to:
- Collect and analyze data on the target goal/behavior/skill
- Monitor use of AAC across settings
- Determine next steps based on learner progress

Time to complete: Approximately 20 minutes
Collect and Analyze Data

You will need to collect and analyze data on the student’s use of AAC by goal.

Some important things to monitor are:
1. the number of opportunities to communicate,
2. who the communication partner is – specifically, peers or adults, and
3. how much support the student needs to use the device.

Case Study:
Cora is a preschooler with autism in an inclusive classroom with a mix of students with and without IEPs. Her speech-language pathologist has recently completed an AAC assessment and recommended use of a GoTalk 4+, which is a voice output device. You have identified settings and communication partners throughout Cora’s school day where she will be given opportunities to work on her goal of making choices from an array of 4 selection pictures on her AAC device.

Specifically, Cora’s goals are to:
(1) choose a repeated phrase to say during reading,
(2) choose her activity during centers,
(3) choose her materials during art,
(4) choose her sides during lunch,
(5) and choose a peer to play with during recess.

You and the other members of Cora’s team have agreed to use prompting, modeling, and natural reinforcement to teach Cora to use her AAC system to make choices. Initially, her teachers and aides will be her communication partner, but as Cora learns to use her device more independently, her peers will be trained to prompt and reinforce her communication as well.

First, the communication partner will model use of the device by saying “I want…”, make a selection on the device, and immediately give themselves the selection.

Her prompting hierarchy is:
(1) Put AAC system in front of her and say “your turn”
(2) Wait 10 seconds
(3) Use pointer finger to circle the four choices on the device
(4) Wait 10 seconds
(5) Say, “Cora, make a choice”
(6) Wait 10 seconds
(7) Use hand-over-hand to assist Cora in selecting one of the choices

Reinforcement – immediately give Cora her selection, whether it was prompted or not.

### MONITORING DATA:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Communication Partner</th>
<th>Choice Opportunities (Tally each opportunity)</th>
<th>Support/Prompts Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td>☑ Teacher ☐ Para ☐ Peer ☐ Other:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Centers</td>
<td>☑ Teacher ☐ Para ☐ Peer ☐ Other:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Art</td>
<td>☐ Teacher ☑ Para ☐ Peer ☐ Other:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lunch</td>
<td>☐ Teacher ☑ Para ☐ Peer ☐ Other:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recess/Free play</td>
<td>☐ Teacher ☑ Para ☐ Peer ☐ Other:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Prompt Key:** V = Verbal; G = Gestural; M = Model; P = Physical; I = No prompts needed/Independent; 0 = No response

### Case Study:

Dante is a middle schooler with autism. He has been successfully using his high-tech speech-output AAC system to communicate with teachers during structured academic tasks, but he has not yet contributed to peer discussions in academic or social settings.

The team has set a goal of having Dante make comments during naturally occurring peer interactions during his school day.
You and Dante’s other team members have decided to use peer-based instruction and intervention, visual supports, prompting, and reinforcement to support Dante’s AAC goal.

First, you train Dante’s peers to prompt him if he does not make comments after about 5 minutes of peer interaction. They are trained to say, “Dante, what do you think?”, wait 15 seconds for Dante to formulate a response on his device, and then reinforce him with social praise or fist bumps if he responds.

You create visual support “scripts” for comments that Dante may want to make in each peer setting. These are taped to the top of his device for reference during peer interactions.

### MONITORING DATA:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Communication Partner</th>
<th>Comment Opportunities (Tally each opportunity)</th>
<th>Support/Prompts Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morning game time</td>
<td>□ Teacher ✓ Peer □ Para □ Other:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Science</td>
<td>□ Teacher ✓ Peer □ Para □ Other:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Art</td>
<td>□ Teacher ✓ Peer □ Para □ Other:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lunch</td>
<td>□ Teacher ✓ Peer □ Para □ Other:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recess</td>
<td>□ Teacher ✓ Peer □ Para □ Other:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Prompt Key:** V = Verbal; G = Gestural; M = Model; P = Physical; I = No prompts needed/Independent; 0 = No response
Monitor Use of the AAC System Across Settings

As previously stated, it is critical that the AAC system is available to the student at all times and used consistently throughout their day. You can collect this information from the learner's family, peers, other teachers, or the student themselves.

Here are some ideas for gathering this information:
- Email or text the learner's family and other teachers to check in about AAC use
- Attach a sticky note to the learner's AAC system where the family or teachers can write you a quick note about how AAC use is going
- Schedule a consistent meeting via phone, Zoom, or in person to check in. This can be informal such as checking in with the parent during drop off or pick up once weekly.
- Use a data collection form

CASE STUDY:
You may notice times of the day or communication partners that may need some troubleshooting. For instance, the student may need a way to carry their AAC device to gym class on their back or around their neck or to have it kept in a designated part of the gym. Grandmother may need more training to feel comfortable with the device.

Regardless of how you decide to collect data on AAC progress, it is important to continuously collect and review the data with the learner’s AAC team.

You may want to use self-reflection when discussing collected data.

<table>
<thead>
<tr>
<th>Setting</th>
<th>AAC Used?</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gym</td>
<td>🔴 No</td>
<td>Left device in classroom</td>
</tr>
<tr>
<td>Art</td>
<td>🔴 Yes</td>
<td>Student requested materials from peer</td>
</tr>
<tr>
<td>Dismissal</td>
<td>🔴 Yes</td>
<td>Student said goodbye to paraprofessional using device</td>
</tr>
<tr>
<td>Grandmother’s house</td>
<td>🔴 Yes</td>
<td>Grandmother said she forgot how to turn device on, left device in backpack</td>
</tr>
<tr>
<td>Home</td>
<td>🔴 Yes</td>
<td>Student used device to answer homework questions with dad</td>
</tr>
</tbody>
</table>
Questions to help encourage reflection include:

- How do you think that went?
- Did you encounter any challenges implementing AAC or other EBP strategies?
- At which points did you see strategies working?
- What could you have done differently?
- Did you feel comfortable implementing the AAC strategies?
- Did the learner respond positively to reinforcers?
- Did the learner seem to enjoy the activities?
Troubleshoot Issues

Use the data you have collected to troubleshoot issues and plan next steps for the learner’s communication goals. Your data from the classroom context may be particularly helpful for the learner's speech-language pathologist as they plan to increase the learner's communication demands by providing more vocabulary on their device, adding and programming pages or screens to their device, and increasing the number of choices displayed on the system at a time.

Some data issues and ways to troubleshoot include:

- Learner is only communicating when prompted
  - Use time delay to reduce prompt reliance.
  - Interpret the learner’s nonverbal communication and use modeling to demonstrate use of the device. For example, teacher says, “I see you reaching. You want that. Here’s how you can tell me.” This method teaches the learner the power of their communication.
  - Model symbolic representations throughout the school day to increase receptive understanding. For example, the teacher may model bead patterns during math and say which beads are the same/different as the one before while pointing to the words on the learner’s device to make this abstract concept symbolically represented.

- Learner is only communicating in one context
  - Think of what is so motivating in that context and see if it can transfer to another setting.
  - Increase use of reinforcement for communicating in other settings.
  - Check in with teachers in other contexts to make sure they are using and reinforcing AAC.

- Learner is only communicating with adults
  - Train peers to prompt and reinforce the student for communicating.

- Learner is refusing to use their device
  - Reduce the number of word choices displayed. Simplify the demands placed on the student.
  - Use motivating reinforcers.
  - Monitor other reasons why the student may resist the device – think about sensory components like how heavy it is, what sounds it makes, etc.

- Communication device is not working
  - Make sure the device is charged and all software is updated.
  - Power down the device for a few minutes and try again.
  - Call the tech support specialist for the device or the local device representative.

- Learner is using the device for purposes other than communication
Use reinforcement or other EBPs to promote appropriate use of the device for communicating.
Determine Next Steps

Collecting data will help team members decide about the effectiveness of using this practice and whether the learner with autism is making progress. If a learner is making progress based upon data collected, team members should continue to use the selected strategies.

What if the learner with autism is not showing progress with AAC?

If team members determine that the learner is not making progress, consider the following:

- Is the target goal/behavior/skill well defined?
- Is the target goal/behavior/skill measurable and observable?
- Has enough time been devoted to using this practice (frequency, intensity, and/or duration)?
- Is the behavior targeted during appropriate routines and activities?
- Is this practice appropriate or a 'good fit' for the target behavior?
- Has the team been consistently demonstrating and modeling symbol use on the device so that the learner sees how the device may be valuable to them?
- Are there distractions holding the learner's attention?
- Are the strategies for this practice addressing the target behavior?
- Was this practice implemented with fidelity (see Implementation Checklist)?
- Were other selected practices implemented with fidelity?
- Does the learner need additional supports?
- Are the selected reinforcers preferred or motivating items/activities for the learner?

If these issues have been addressed and the learner with autism continues not to show progress, consider selecting a different evidence-based practice to use with the learner with autism.
References


Glossary

**Augmentative and alternative communication (AAC)**
interventions that use a system of communication that is not verbal/vocal including aided and unaided communication systems

**Augmented Input (Aided Language Modeling)**
a receptive language training approach in which the communication partner provides spoken words along with AAC symbols during communication tasks

**Baseline data**
information gathered from multiple sources to better understand the target behavior, before using an intervention or practice; data collected on current performance level prior to implementation of intervention

**Core Vocabulary Approach**
an AAC teaching strategy that uses a board with commonly used vocabulary words that can be applied across settings

**Expressive Communication**
one's ability to communicate thoughts and feelings through words, gestures, or facial expressions

**Functional Behavior Assessment**
an evidence-based practice used to assist a team in understanding the function or purpose of a specific interfering behavior

**Functional Communication Training**
an approach that focuses on basic communication skills like expressing wants and needs for the AAC learner

**High-tech AAC system**
an aided-communication system or device that relies on technology such as speech-generating devices (SGDs) and applications that allow other devices (e.g., phones, tablets) to serve as SGDs

**Implementation checklist**
the specific steps needed to accurately follow an evidence-based practice
Interfering behavior
a challenging behavior that interferes with the learner's ability to learn

Language Acquisition Through Motor Planning (LAMP)
an AAC teaching strategy in which the learner selects works and builds sentences on a voice output device using consistent motor plans to access vocabulary

Low-tech AAC system
an aided-communication system, material or device that requires minimal technology such as exchanging objects/pictures or pointing to letters

Modeling
an evidence-based practice that involves the learner observing someone correctly performing a target behavior

Pragmatic Organization Dynamic Display (PODD)
a system of organizing and selecting words or symbol vocabulary on a low-tech or high-tech AAC system

Peer-mediated Intervention
an evidence-based practice in which peers receive training from an adult to deliver social initiations or instructions in a way that supports the learning goals of the learner with autism

Prompting
an evidence-based practice that will assist the learner in using specific skills; prompts can be verbal, gestural, or physical

Receptive communication
one's ability to understand thoughts and feelings expressed by others through words, gestures, or facial expressions

Reinforcement
an evidence-based practice that provides feedback that increases the use of a strategy or target behavior/skill

Speech-generating device (SGD)
a high-tech AAC option that allows a person to communicate using a computer that generates an electronic voice
Team members
includes the parents, other primary caregivers, IEP/IFSP team members, teachers, therapists, early intervention providers, and other professionals involved in providing services for the learner with autism

Time Delay
an evidence-based practice used to fade the use of prompts during instructional activities by using a brief delay between the initial instruction and any additional instructions or prompts

Total Communication (TC)
A holistic approach to communication that promotes the use of all modes of communication including sign language, spoken language, gestures, facial expression, and environmental cues such as pictures and sounds

Visual Supports
an evidence-based practice that provides concrete cues that are paired with, or used in place of, a verbal cue to provide the learner with information about a routine, activity, behavioral expectation, or skill demonstration