



# My Choice Kentucky:

## What is AAC and who can benefit from it?

### **AAC is short for Augmentative and Alternative Communication.**

Communication devices, systems, strategies and tools that replace or support natural speech are known as augmentative and alternative communication (AAC). These tools support a person who has difficulties communicating using speech.

The purpose of an AAC is to provide the person with a form of communication so they can express their needs and wants, participate in making their own life choices and express their opinions, and make and maintain relationships. For these reasons AAC devices can benefit a variety of populations such as:

- Children and adults with brain injuries that impair speech either temporarily or permanently
- Children and adults with congenital conditions such as cerebral palsy
- Children and adults on the autism spectrum, who can benefit in terms of speech, emotional and social development by using an AAC
- Children and adults with dual sensory impairments, including blindness

### **A History of AAC**

The first papers that focused on AAC intervention were published in the 1950's. They discussed experiences in using communication charts with people with physical disabilities (e.g., Feallock, 1958; Goldberg & Fenton, 1960).

While speech-language pathologists and occupational therapists were among the first to disseminate their AAC work, professionals from many backgrounds contributed to its growth. In the early days, some of the strongest contributors to the field of AAC were rehabilitation engineers.

One of the first wearable AAC devices came out in the early 1970's. The Talking Brooch (Newell, 1973) was an alphabetic display that was attached to one's clothing. When users typed on a portable keyboard their message was displayed on The Talking Brooch.

Alternative access was available as early as 1963, with the Patient Operated Selector Mechanism (POSM or POSSUM, Maling & Clarkson, 1963) which allowed users to control a typewriter with a sip and puff switch. The Patient Initiated Lightspot Operated Typewriter (PILOT) used light pointers to activate photoelectric cells for access. There were more options available for switch scanning in the 1970's, and the early 1980's brought control by eye movement (Eye Typer by Sentient Systems, which later became Dynavox). These and other AT devices were detailed in the book *Aids for the Severely Handicapped* (Copeland, 1974).

Some contemporary devices used by nonverbal are augmentative and alternative communication (AAC) devices are cheaper, more user-friendly, and more readily available than ever. No longer relegated to the restrictive domain of uber-expensive and hard-to-use medical hardware, today's AAC technology is designed for any speech language pathologist to use.

Chances are you've been introduced to AAC devices in your master's program and during your clinical experiences, but if you haven't yet had the opportunity to make use of one of these devices with patients, you probably still have lots of questions. And you better know your stuff since the responsibility of finding the one that best fits their needs, their budget, and their technical aptitude is likely to fall to you. Not to mention that you'll be training your patients on tracking their progress.

There's a huge variety of options, but most fall into one of three categories:

1. Single-meaning pictures (one picture=one word) – These systems are the simplest of all devices. They don't require literacy, although the pictures may need to be taught to the user.
2. Alphabet-based systems (spelling and letter codes) – These systems do require a certain basic level of literacy to use.
3. Semantic compaction (multi-meaning icons) – These systems involve short series (usually just 1-2) symbols per word, and training is required.

Many of today's AAC devices use a combination of the three.

To come up with our list of the top 10 AAC devices, we first considered ease of use – basic functionality and design – and then narrowed down the list to include a variety of systems at assorted price points. After a careful review of the options on the market, we came up with our favorite, presented to you on the following page, in no particular order...

**Read the list on the following page.**

## 1. Pocket Go-Talk 5-Level Communication Device

**Price:** About \$190

**Why We Love It:** It easily fits into the hand for on-the-go use.

This is a great device for on-the-go, and it's sturdy enough to take bumps and falls. It easily fits into the hand, and can just as easily slip into a pocket. It also comes with a lanyard, so it can be worn around the neck. Plus, it has a loud microphone, so even when out in public areas, others can easily hear it.

Just six buttons on this device (with five message options on each button) makes it easy for younger children to use. Simply insert the desired picture overlays into the front position on the device and record the desired word or message. Photos familiar to the user can also be inserted, which may add a degree of motivation.



## 2. The MegaBee Assisted Communication and Writing Tablet

**Price:** About \$1,800

**Why We Love It:** Allows users who lack muscle control to communicate using just their eyes.

This AAC device is designed specifically for users who, due to ALS, a traumatic brain injury, stroke, ALS, muscular dystrophy, etc. are unable to use most of their body's voluntary muscles.

The device is actually held by the listener who looks through the opening in the center of the device to view the direction of the user's eye movements. A series of colored buttons allows the listener to push them as the user moves his or her eyes, first at one of six colored blocks, and then at a specific color (representing a letter) within that block. The goal is to spell out what the user wants to say onto the LCD screen.

The device also features a shorthand option, so the user and listener can come up with a personal set of abbreviations for their most commonly used terms. For those with low cognitive or literacy skills, the MegaBee also operates in a picture mode, with the listener placing picture labels in the appropriate areas.

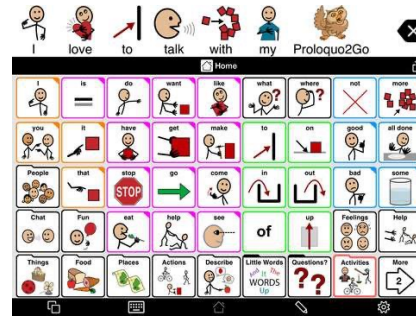


### 3. Proloquo2Go

**Price:** \$189

**Why We Love It:** Because it works with the iPad, a separate AAC device isn't necessary.

AAC devices are not always device, but often apps that come with the iPad, like Proloquo2Go, designed for children who have difficulty speaking. It provides text-to-speech voices, clear symbols, and a vocabulary of more than 7,000 items.



### 4. Enabling Devices Tactile Symbol Communicator

**Price:** About \$500

**Why We Love It:** The tactile buttons accommodate visually impaired users.

This portable symbol communicator, which can store up to 36 messages, has a total of six removable tactile symbols that allow the user to push a button to relay a message. As a tactile symbol communicator, it is perfect for users who are blind or visually impaired. We like this device because it offers six levels of communication, with six messages per level. When setting up this device, it provides up to six seconds of record time per message.



### 5. GOTALK 9+

**Price:** About \$175

**Why We Love It:** It's affordable and practical.

This device wins for its affordability. At under \$200, the GOTALK 9+ is lightweight and durable and has a 45-message capacity, five recording levels, and a nine-minute recording time. The user simply presses the appropriate message key that corresponds with a picture.



## 6. FAB Frenchay Alphabet Board

**Price:** About \$188

**Why We Love It:** The rugged design makes it ideal for a variety of settings, including nursing homes, daycare facilities, schools, critical care units, etc.

This device is rugged and practical, featuring an anti-bacterial rubber base and washable keyboard protector. The standard alpha-numeric keyboard design allows literate non-verbal users to easily choose the letters and numbers they want, while the listener looks at the keys and spells out the word. Each key features a depression that makes choosing a key easier for the user. It also comes in a smaller, pocket size for on-the-go use. It may be the ideal addition to electronic AAC devices for on-the-go or emergency situations.



## 7. Lightwriter SL40

**Price:** \$7,000

**Why We Love It:** The dual-display screen allows for a natural, face-to-face dialogue.

This device is for those who are literate but unable to easily communicate through speech. The device is small, lightweight, and easy to transport, and the dual screen enables the user to type the message while the listener is sitting in a natural position for easy dialogue. It also includes a text-to-speech feature when communicating with others in the room. We also love the SIM card feature, which allows users to send text message to friends and family.

Additional features of the Lightwriter include a notebook feature, built-in buzzers to summon attention, alarms to remind the user of important events, and a built-in remote control for the television.



## 8. Gooshy Step Talk Communicator

**Price:** About \$250

**Why We Love It:** It's colorful design with lights, vibration, and music provides motivation.

The Gooshy Step Talker Communicator features a series of pre-recorded messages. The moon-shaped, jelly-filled button has floating stars in it, encouraging the user to press it to communicate. The user presses the communicator for the first message, twice for the second message, etc. Depending on the recorded messages, the device can be designed for a variety of tasks, such as multiplication, memorization, directions, sequencing, etc.



## 9. Big Talk Assistive Technology Communicator

**Price:** About \$215

**Why We Love It:** The large target makes it easy for users with limited muscle control.

This device consists of a large, colorful button that can be activated with a slight touch by the user. A single message of up to 20 seconds can be stored. Plus, an external capability switch allows the device to be used as a switch to activate other devices. Use several to create a system of communication.



## 10. GoTalk Express 32 – Advanced Communication Aid

**Price:** About \$570

**Why We Love It:** Allows non-literate users to press multiple picture keys to create sentences

This laptop device features a grid of pictures that allow users to combine them to form sentences. It features two methods of operation: standard and express. When the standard method is chosen, the user simply presses a message key and the device speaks the word. When the express method is chosen, the user can press multiple message keys to create a sentence.



Some of the other features of this device include a shoulder strap for easy carrying, a rugged design with carrying handle, and LED lights for visual prompts.

For more information, visit [www.mychoiceky.org/toolkit](http://www.mychoiceky.org/toolkit)

