

# MYTH

It is necessary to use low tech AAC tools or techniques before using a high tech communication device\*.

# TRUE OR FALSE:

#### **False**

Let me begin by asking a question. Do we ask typically developing toddlers to point to pictures before they begin to use their voices to communicate? The answer is, "No." Babies communicate with their voices well before they can ever point to a picture. They cry to get our attention. They take their turn in conversation by cooing. Even when they do begin to point to objects and pictures, pointing is often accompanied by vocalizations and/or word approximations. These children know the power of communicating using their voices well before they are able to produce clear words and are developing the ability to communicate using multiple communication methods (e.g., pointing, facial expression, speech) simultaneously.

Is it necessary for children or adults with complex communication needs to develop communication and language skills in the absence of voice? In other words, is it necessary for them to show competence with low tech AAC before providing a communication device?

Some people liken learning to use AAC to learning to ride a bike. Children start by riding on toys and then move to tricycles, bicycles with training wheels, and then regular bikes. Do individuals with complex communication needs start with gestures and then move to photographs, simple pictures, a communication board with a small number of choices, a communication book and then to a communication device? Must they start with a "simple" communication device before being exposed to a more robust device? The progression of skills we see in some areas (e.g., riding a bike) could support the myth that a progression of no tech to low tech to high tech exists. Surely an individual should show the ability to use "simpler" forms of communication before being given access to more robust communication device, right?

Or, perhaps the provision of AAC is more like learning to walk. We always have the fully functional "equipment" (i.e., our legs) but the way in which we use it increases in complexity as our skills and experience increase (e.g., crawling, standing, walking, running). Could an individual with complex communication needs benefit from having a communication device with content that supports successful communication both now and as language skills and needs develop in the future? Let's explore the benefits of taking this approach with AAC.

## What are the benefits of high tech communication devices?

van de Sandt-Koenderman (2004) proposes that, for people with aphasia, using a high tech communication device in addition to other forms of communication has several advantages over low-tech supports alone. The benefits include:

- High tech communication devices can be personalized more easily because they can be changed instantaneously rather than needing to
  find and print the right symbols or text. Up-to-date and personalized systems are more likely to be used than systems that either do not have
  current information or are very general.
- High tech communication devices can be prepared ahead of time and saved for later use. This can be particularly important when composing
  messages takes longer than would be practical in live settings.
- High tech communication devices can produce speech output which can be used as a cue for the individual's own speech
  or can supplement that speech. Some high tech systems allow individuals to record their own speech which can be used in
  multiple situations.
- High tech communication devices may be more motivating than low tech communication books. The range of messages available on the communication device can help to support communicative independence.

\*Definition: AAC includes unaided communication techniques (e.g., pointing, gestures), low technology aids (e.g., communication books and boards) and high technology communication devices (e.g., devices and computers that have voice output also known as speech generating devices or SGDs).

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Additional benefits of high tech communication devices relate to people with aphasia and other diagnoses.

- High tech communication devices combine several communication functions into one act. For example, using the communication device to say "your shoe is untied" serves to both gain attention and communicate the message (Schepis, et. al, 1996). Combining these functions makes successful communication more likely.
- Voice output provides a model for speech output to the AAC user (Blischak, 2003). Provision of a model is not the primary purpose of AAC but it is certainly a benefit.
- Voice output increases an individual's ability to interact with less familiar communication partners who may not understand what his pictures, written words, gestures, or other forms of communication mean.
- High tech communication devices allow individuals to communicate with those who are not in the immediate vicinity (e.g., more than two
  to three feet away, in another room, on the phone) via loud speech, an alarm recording, and, in some instances, sending a text message or
  email.

### Does use of a communication device eliminate use of other methods of communication?

Now that we are aware of some of the benefits of voice output to the individual with complex communication needs, let us return to the use of communication devices and low tech AAC.

In the previous section, we referred to "using a high tech communication device in addition to other forms of communication." That was purposeful as use of a high tech communication device, low tech AAC, speech, gestures, facial expression, pointing and other forms of communication are parts that make up a whole communication system (Beukelman & Mirenda, 2005). High tech communication devices and low tech tools and techniques can and should be used together. Like tools in a tool belt, we use the one that is most appropriate for the situation (e.g., gesturing rather than talking during a ceremony). Skilled AAC users share that they choose their communication method based on the situation (e.g., using an alphabet board with familiar partners and communication device with less familiar partners). Low technology tools are considered a vital back up to a communication device for those times when the device cannot be used (e.g., by the pool, in the tub) or when it is not available (e.g., not charged, in for repair). As noted by van de Sandt- Koenderman (2004),

"After reviewing the state of the art in computerized communication aids for persons with aphasia, it has become clear that every aid will be used in combination with other low-tech AAC strategies and, of course (if possible) with speaking."

It also seems clear that individuals with other diagnoses resulting in complex communication needs will also use multiple forms of communication.

## **Summary**

So, we revisit our myth as a question. Is it necessary for individuals with complex communication needs to use low-tech AAC tools or techniques before using a communication device? The answer is "no." The provision of AAC tools and techniques is not an ordered list. It is a series of decisions made and revisited regularly based on the individual's current and future skills and needs. The provision of AAC tools and techniques—especially robust tools and techniques—provides opportunities to teach and foster successful communication both now and as language skills and needs develop in the future.

### References

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