



AAC MYTHS REVEALED

MYTH:

Introduction and use of AAC* will keep an individual from using or developing his or her natural speech.

TRUE OR FALSE:

False

Speech is a very familiar means of communication. We are thrilled when we hear a child's first word and look forward to hearing him express his wants, needs, feelings and thoughts. We anticipate him learning and becoming a competent communicator saying what he wants, when he wants to whom he wants. Many times, we take speech for granted.

Sometimes, however, speech does not develop as we might expect. Perhaps a child's speech is very hard to understand. Or, maybe some understandable speech develops but, for a variety of reasons, it is not enough to meet an individual's communication needs.

In another situation, an adult who previously had typical speech skills is impacted by a life changing event such as a brain injury or stroke. We hope she will be able to express herself as she did before but, at least initially, that does not seem to be happening using her speech alone.

It is in these circumstances when introduction of AAC is suggested.

In conversations with family members, caregivers, teachers, and others over the years, we have heard the following concerns expressed:

- Use of AAC will keep an individual from talking
- Introduction of AAC means we have given up on speech
- AAC will become a crutch and the individual will no longer try to speak. He will take the easy way out and use AAC.
- This individual is too young for AAC or it is too early in her recovery process for AAC. We need to give her more time to use her speech before introducing AAC.

While we can certainly understand these concerns, AAC will not keep an individual from using or developing natural speech.

How do we know that AAC will not keep an individual from using or developing natural speech?

Several leading researchers have looked at this same question. Family members and professionals have also shared their insights. Let's review this information.

- Millar, Light & Schlosser (2006) reviewed previously published studies that, among other criteria, presented data on "*speech production before, during and after AAC intervention.*" This review revealed that participants demonstrated the following:
 - Increases in speech production—89%
 - No change in speech production—11%
 - Decreases in speech production—0%
- Schlosser & Wendt (2008) reviewed previously published studies describing the "*effects of AAC on speech production in children with autism or pervasive developmental disorder-not otherwise specified.*" They reported that a majority of studies revealed increases in speech production and "*none...reported a decline.*"
- Hux et al. (2006) found that evidence supporting the use of AAC to enhance speech production for people with traumatic brain injury (TBI) exists. In addition to enhancing speech, AAC often supplemented it. That is, AAC was used in combination with natural speech.
- Finally, Hux et al. (2010) found that the best conversational outcome came when a person with aphasia used both her speech and AAC as opposed to wither form of communication individually. It is important to note that the communication board used in this study was shared by the communication partner and the person with aphasia.

***Definition:** Augmentative and alternative communication (AAC) refers to communication tools and techniques used individually or in combination to supplement communication for people who have difficulty communicating through speech or writing. 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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Research Results: These studies and research reviews indicate that AAC does not impede production of speech. To the contrary, it either works in conjunction with or has a positive effect on speech production.

This concept has been further supported over the years by report and observation of families, caregivers and professionals as well as anecdotal reports from researchers such as Ronski, Sevcik and Pate (1988). It was recently cited as an evidence-based strategy to utilize with young children who are not imitating speech as a means of facilitating natural speech development (DeThorne et al., 2009). In addition, Fager, Doyle, and Krantounis (2007) wrote, "AAC is an evolving and dynamic process with recovering individuals that complements as well as facilitates treatment. AAC can be an essential tool for treatment as well as a mechanism to bridge the individual into functional communication. It is important to consider AAC as a part of treatment rather than an alternative or last resort" (p. 145).

Why does AAC tend to have a positive impact on speech production?

Schlosser & Wendt (2008) state the following: "Although improvements in speech production per se are not a primary goal of AAC interventions, such outcomes do represent a welcomed bonus to AAC intervention efforts."

Why does this bonus occur? Blischak, Lombardino & Dyson (2003) grouped the "possible reasons that AAC use overall and SGD use, in particular, may promote natural speech production" as follows:

- **Communication Effects**—Both children and adults demonstrate improved participation in conversation as well as the creation of longer messages when using AAC.
- **Motor Effects**—the presence of a communication device can result in "reduced physical demands" and decreased "pressure to speak."
- **Acoustic Effects**—the immediate production of speech by the SGD provides a consistent speech model as well as strengthens the association between the word and symbol.
- Hux et al. (1994) propose a fourth reason AAC may promote natural speech production: **Scaffolding Effects**—Instead of using an AAC system to show or speak messages directly to the communication partner, individuals with aphasia may use the AAC system as a cue to recall specific words and support a more complete conversation using their natural speech.

How much improvement in speech should we expect and how quickly?

According to Millar, Light & Schlosser (2006), speech gains in the studies they reviewed were "modest." They went on to indicate that improvement in speech production occurred immediately in some individuals while in 21% there was a "lag between the onset of AAC intervention and evidence of gains in speech production."

Schlosser & Wendt (2008) noted that for individuals with autism gain in speech production "may vary across individuals." They went on to note that the amount of improvement may vary as well from "small in magnitude" to "large gains" but what characteristics impact gains in speech are not yet fully known.

As we might expect, there does not appear to be a hard and fast rule regarding how much or how quickly improvement in speech production may occur (or if it will occur) following introduction of AAC. However, Schlosser & Wendt (2008) point out that the "potential for lack of natural speech production gains...does not negate the value of AAC interventions."

How do natural speech and AAC work together?

Speech and AAC are not mutually exclusive. In fact, we all use multiple forms of communication on a daily basis. We talk, point, wave, and use facial expression and body language. We make decisions about what method of communication we use based on the environment, our communication partner and the message.

The individual who uses AAC is no different. AAC, speech, pointing, gestures, facial expression and body language co-exist as part of his multi-modal communication system. Just as we do, he needs to make decisions about which mode of communication to use based on the environment, communication partner and message. More can be found on the subject of "Multiple Communication Methods" in DynaVox's Implementation Toolkit.

If AAC is introduced, will it always be a part of an individual's communication system?

As we just mentioned, individuals with functional speech use forms of AAC on a daily basis (e.g., gesturing, pointing to objects or pictures in the environment). Therefore, the answer is "yes." AAC will be a part of the individual's communication system throughout his/her life. The variable is what kind of AAC, how frequently and in what situations it is used. With improvements in the quality of speech production, we may see an individual use of AAC with unfamiliar communication partners only, on the phone or to repair communication breakdown.

An important note must be made here. Frequently, familiar communication partners may say, "He doesn't need AAC. I understand him." or "She uses it at therapy because we understand her here at home." These beliefs result in limited use of AAC and may negatively affect the learning curve. Until an AAC user is proficient (competent) in communicating with AAC, use of it needs to be encouraged in all environments by all communication partners.

What are the truths about AAC and speech?

- AAC will NOT keep someone from developing or using natural speech.
- AAC tends to have a positive effect on speech production and has been recommended as a treatment method for development of natural speech.
- Gains in speech production following introduction of AAC vary from individual-to-individual.
- AAC is part of an individual's overall communication system that includes natural speech.
- AAC enhances an individual's ability to communicate effectively and independently.

References

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