

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 the means of communication with which we are most familiar. 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 being a competent communicator saying what he wants, when he wants to whom he wants. When an individual has experienced a life changing event such as a brain injury or stroke, we hope that she will be able to express herself as she did before. There are times, however, when speech is not developing or is not functional to meet an individual's communication needs for various reasons. It is in these circumstances when introduction of AAC is suggested.

The suggested introduction of AAC often results in families, caregivers, teachers and others expressing the following concerns (University of Nebraska-Lincoln's AAC Connecting Young Kids [YAACK] website):

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- Use of AAC will keep the individual from talking.
- Introduction of AAC means we have given up on speech.
- AAC will become a crutch. The individual will not work on speech. 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 of a chance 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?

Let's review available research as well as anecdotal information from families and professionals.

*Definitions

Augmentative-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 (e.g., communication books and boards) and high technology AAC (e.g., devices and computers that have voice output also known as speech generating devices—SGD's).

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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.”

These reviews of research indicate that AAC does not impede production of speech but appears to have a positive effect on speech production. This conception 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).

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

Before exploring this, let us reiterate the purpose of AAC intervention. Schlosser & Wendt (2008) state the following:

It is understood that the primary aim of AAC intervention is to facilitate a child’s communicative competence through the use of multiple communication modalities that are by their very nature supplementing (“augmentative”) or replacing (“alternative”) natural speech (Light, Beukelman, & Reichle, 2003). Thus, 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.

Though the statement above focuses on the communicative competence of children, this statement is equally true for adults. Beukelman, Garrett & Yorkston (2007) suggest that the “lead” for their chapter introducing AAC services for adults with chronic medical conditions could be, “Adults who are experiencing chronic medical conditions use assistive technology to participate in life situations and to stay connected with the world around them.” This, like the quote from Schlosser & Wendt reinforces that the purpose of AAC (a type of Assistive Technology) is first and foremost to build communicative competence to interact in the world.

Why then does this “bonus” (so-called by Schlosser & Wendt) of increased speech production occur? Blischak, Lombardino & Dyson (2003) discussed some “possible reasons that AAC use overall and SGD use, in particular, may promote natural speech production” based on available research. Effects were grouped as follows:

- Communication Effects—increases in the individual’s participation in interaction “including opportunities, turns, messages, and functions” , and length of utterance.
- Motor Effects—“reduced physical demands” and decreased “pressure to speak”

- Acoustic Effects—“immediate output” from the SGD (speech output when a message is selected), increased “consistency/quality of speech models”, coupling of graphic symbols with speech output, “development of internal phonology*”

We now understand that AAC does not impede an individual’s use of speech and have explored some of the factors that may contribute to increases in speech production following introduction of AAC and specifically SGD’s.

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.” However, they asserted that gains in speech production must be considered based on the skills of the individuals prior to introduction of AAC. 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?

All of us use multi-modal communication systems on a daily basis. We talk, point, wave, use facial expression and body language. We make decisions about what method of communication to 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/her multi-modal communication system. Just as we do, he/she needs to make decisions about which mode of communication to use based on the environment, communication partner and message. More can be found on this subject in the “Tools for AAC Users” Learning Path in DynaVox’s Implementation Toolkit.

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

Those of us with functional speech use forms of AAC on a daily basis (e.g., gesturing, pointing

*Definitions

Internal Phonology—Phonology is the study of speech sounds in language, how they are organized and used. Our internal phonology allows us to segment words and sentences in languages known to us; thus, understand and learn language. Blischak et. al. (2003) that evidence did not exist at the time regarding the “role of speech output in the development of internal phonology.” However, Loncke et. al. presented results of a study at the American Speech Language & Hearing Convention 2008 suggesting that auditory feedback from an SGD “may have an effect on internal phonological reinforcement:” and “strengthens the phonological component of the AAC user.”

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 _____ because we understand her here.”

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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What is AAC. International Society on Augmentative and Alternative Communication, http://www.isaac-online.org/en/aac/what_is.html