



Thinking that an iPad or other iDevice may be the solution for a child who is not talking because of a severe communication disorder? Augmentative and Alternative Communication (AAC) is the field of assistive technology that helps to mitigate complex communication needs for children with autism, cerebral palsy, Angelman Syndrome, Down Syndrome, and a variety of development disabilities.

Here are a few of several basic principles ICAN™ Talk Clinics use for matching a child with an AAC solution.

Language first, technology second!

People promoting solutions or asking questions that focus first on an iDevice are placing a higher value on the technology than the language software. A comprehensive evaluation of the child's speech, language, communication and cognitive-linguistic skills is needed to match the child with the most appropriate language configuration with a plan for building language competence. The iPad is not the language solution, but only the hardware that will provide access to the language software – the primary consideration and component for a child to reach fullest potential.

Bad things happen when vocabulary exceeds the number of locations on a display!

The typically developing 3 year old child has an expressive vocabulary of over 1,000 words. This means that if a language evaluation shows that a child has comprehension skills roughly equivalent to a 3 year old, then the vocabulary on the AAC system should provide access to that of their peers. The challenge is on how to organize vocabulary to avoid having to change displays and search for the words you want to use.

Ease of use at first encounter frequently doesn't lead to effective long term use!

This human factors principle is fundamental to any type of technology. If you can immediately use a device then most likely that is the extent of the effectiveness you'll achieve. The goal of AAC is to optimize communication. When introduced to an iPad a child may be able to use an application to select or produce some messages to indicate basic needs and wants. They may operate some educational software too. HOWEVER, language acquisition is complex and includes building vocabulary, grammar and social language skills.

FEATURE MATCHING FOR AAC iDEVICES

The primary components of any AAC solution ALL are based on LANGUAGE and apply to iPads and other iDevices. The three primary language components are related to: 1) how language is represented; 2) how words are selected and organized; 3) how messages are generated or constructed to talk.

AAC Language Representation Methods

Although hundreds of devices are on the market and many communication software programs are being authored by individuals with various backgrounds and AAC experience, only three (3) methods are available on applications to represent and generate language regardless of the native language of the AAC speaker. The three methods are:

- Alphabet-based methods
- Single-meaning graphic symbols
- Multiple-meaning graphic symbols (*patented as Semantic Compaction™ or Minspeak™*)

You need to know which method or methods are supported by an application. Performance differences exist among these methods along with the achievable outcomes for each.

Core & Extended Vocabulary

The words we use everyday across all our conversations are called core words. Core vocabulary is composed of a relatively small number of words that are used for 80% of what we say. Extended vocabulary refers to the thousands of words specific to any topic, situation or person. A child may achieve limited functional communication using extended vocabulary, but core words are needed to achieve effective language competence.

Spontaneous Novel Utterance Generation (SNUG) & Prestored Messages

SNUG allows for growth in vocabulary, grammar and fluency skills. Preprogrammed messages are helpful for routine and immediate utterances that frequently occur in the daily and social environments of an AAC speaker.

AAC INSTITUTE RESOURCES

Self-Study Program (SSP)*

Our Internet-based self-study program courses will help to build your knowledge and skills in making evidence-based decisions when selecting an AAC solution. The following three courses are good places to start to show you the basics about AAC and how to judge the value of the full range of AAC options:

- Introduction to AAC
- Language-Based Approach to AAC Assessment & Intervention
- AAC Symbols and Language Representation Methods

*Free Continuing Education Units (CEUs) are available.

Parents' Corner Monthly Columns

Parents with children who rely on AAC often find themselves in isolated situations, disconnected from other families. These monthly columns, written by a parent with children who use AAC, show the complex language issues affecting decisions that will lead to children reaching their highest potential.

Directory of Local Resources

Our resource allows site visitors to obtain information on individuals who are willing to act as a resource to others relative to AAC. Those listed in the directory are AAC/AT specialists, SLPs, OTs, teachers, engineers, people who use AAC, family members, and more.

AAC Institute Products & Publications

Considering AAC Language Representation Methods (LRMs): Our tool facilitates the discussion around defining and comparing the 3 AAC LRMs. The flipbook presents the benefits and challenges of each method including graphics to explain principles.

IEP Resources: Suggestions and Samples for Students who use AAC: Written by a parent, this booklet provides excellent examples of goals and objectives related to improving language competence when a child is using AAC technology.

Email evidence@aacinstitute.org to get your copy:

- AAction Points: *AAC for Beginners*
- *Achieving Success in AAC: Assessment and Intervention*
- *The AAC Road Trip to Fluency*
- Evidence used to support this AAction Point.

Visit the link to our website and ICAN™ Talk Clinics:

<http://www.aacinstitute.org>



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Advice from ICAN™ Talk Clinicians

We strongly recommend that parents consider who is giving them information about getting an iPad or other iDevice for their child. The sales person at a computer store, that includes Geniuses and Geeks, ethically should not recommend AAC applications. No matter how good their intentions may be to help, they do NOT have AAC training or knowledge about specific disabilities and communication disorders.

A number of parents are telling us that they have become disillusioned with the iDevice they purchased for their child. Rather than the iDevice supporting communication, the iDevice is being used to play games and music, and is being used more by the sibling(s) and the parents. Consequently, although the iDevice continues to be used educationally and recreationally, it turned out NOT to be an AAC solution.

Parents need to consider that an iDevice is NOT considered durable medical equipment or a Speech Generating Device (SGD) that can be funded by insurance. iDevice hardware may be appropriate for an immediate need and to fill in the gap while the comprehensive AAC assessment and funding processes are being completed.

School district administrators may recommend an iDevice as a solution to meet IEP goals. Again, educational software may be installed on the iDevice as an appropriate accommodation to access the curriculum and achieve IEP goals. However, the AAC team, including the parents, needs to select the AAC technology that will optimize communication after trying SGDs and comparing the performance among the options.

Can you talk with the software installed on the iDevice? If you cannot generate the utterances you expect from your child, your child may have equal difficulty.