#### Augmentative and Alternative Communication



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# Why We Care About Communication

"One of the biggest keys to an autistic person getting the life they want is for that autistic person to be able to express, in a way that allows the largest number of people to understand, their own desires and thoughts."

-Joel Smith

"Communication freed me from the pain of compressing the human dimension into empty silence." -Alberto Frugone

"One of the most important pieces of ammunition people have for their own self protection is the ability to ask and the ability to explain."

-Donna Williams



**Communication and Speech** 

**Devices and Technology** 

Access and Attitudes



#### Communication is a (reciprocal) dynamic process

## **Elements of Communication**

Communication is not speech

- Message
- Mode (medium of channel / transmission)
- Timing (pattern of send/receive feedback)

# **Communication and Autistic Experience**

- Sensory differences (noisy channel)
- Movement differences (apraxia/dyspraxia)
- Processing differences (message exchange too fast to process)
- Language differences (cognitive processing of certain kinds of language)

# AAC and Building Bridges

Augmentative and Alternative Communication

- Change the message encoding (from e.g., English to ASL or pictures).
- Change the mode (from e.g., speech and/or hearing to writing and/or reading).
- Change the timing (from e.g., "real time" to asynchronous).

AAC can bridge between one type of communication and another (from e.g., writing to speaking, pictures to text).

#### AAC Devices

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Message type: literacy-based, picture-based, symbolic-based



Technology type: "low tech" paper, "high tech" speech synthesis, "mid tech" recorded messages

Many options!



# Other AAC & Communication Systems

Non-device forms of AAC

- Gesture
- Body language
- Sign languages



A device is not a communication system.

Communication systems can involve any combo of devices, other forms of AAC, and typical spoken or written messages.

#### Variable Roles for AAC

- Most of the time
- Part of the time
- Situationally (e.g., when under stress, when communicating with strangers)

Most AAC users do not use a single method of communication 100% of the time.

Everyone, not just people with disabilities, use some form of AAC at some time.

Understanding Autism-Specific Needs

Technical needs: designing devices (e.g., portability--wheelchairs are rare)

Strategies for use: considering autism-specific abilities and disabilities in AAC training (e.g., avoiding assumptions about sociocultural norms)

Cognitive needs: avoiding incorrect assumptions about autism (e.g., that we all "think in pictures.")

## **Examination of Disability Bias**

- Viable AAC strategies are discounted due to incorrect assumptions about autism.
- The role of speech is over-emphasized for autism.
- AAC traditionally used with a different disability may benefit autistic users.

Improving Technology

Speech Synthesis Improvements

Application of New Technology

- Incorporate current advances into AAC products
- Develop new technology for AAC devices
- Develop more affordable devices

#### **Evaluation and Inclusion**

# Evaluate AAC Devices and Therapies

- Existing
- •New

Include Autistic People in Development Process

- •We know what works and doesn't work--ask us!
- Success of technology depends on end-user involvement in development.

#### Access to Communications is a Civil Right

It is the position of the American Speech-Language-Hearing Association (ASHA) that communication is the essence of human life and that all people have the right to communicate to the fullest extent possible. No individuals should be denied this right, irrespective of the type and/or severity of communication, linguistic, social, cognitive, motor, sensory, perceptual, and/or other disability(ies) they may present.

-American Speech-Language-Hearing Association

- Access to communication is a civil right.
- Communication accommodations (e.g., use of an AAC device or ASL) is covered under the Americans with Disabilities Act and similar laws.
   Eccus on speech may deprive autistic people of
- Focus on speech may deprive autistic people of their right to communicate.

# **Cost Barriers to Access**

- Device costs
- Picture or language library costs
- Evaluation and training costs
- Ability to demo a device before committing to purchase may be limited
- Insurance not typically helpful

#### **Attitudinal Barriers to Access**

- Inappropriate emphasis on speech rather than communication
- Social stigma associated with disability

## **Other Barriers to Access**

Limited access to devices
Lack of understanding of disability accommodations

# Evaluating Service Delivery and Therapy

- Service delivery systems
- Therapy that focuses on AAC
- Therapy that focuses on communication
- Therapy that actively involves communication partners

# Summary

**Devices and Technology** 

- Understanding technology needs
- Improving technology to meet those needs
- Increasing communication between developers and end users

#### Access and Attitudes

- Understanding access barriers
- Removing access barriers
- Involving communication partners and the community

#### There Are Many Ways to Communicate

In some cases, an autistic person may want to speak. If that's so, then they should be given every opportunity to learn. However, a lot of us have other ways of communicating. With a keyboard to type on, I feel a lot more free than I do talking or being expected to talk when I can't communicate adequately that way. There are other times when I can't use language at all, and I am having a really hard time finding assistive technology to deal with that. But the fact that I am having a hard time finding that technology doesn't mean I shouldn't.

I have a right to communicate in whatever means is possible for me to communicate...And not only do I have that right, but I have the right to choose what means of communication is appropriate for me...

-A.M. Baggs

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-Joel Smith



I would not have been able to give you this presentation today without AAC.

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