

Using Alternative Communication to Promote Meaningful Language Development for Young Children with Autism Spectrum Disorder

Marci Laurel, MA, CCC-SLP
Amy Jurgensen, MS, SLPCF

University of New Mexico
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Objectives

Participants will be able to:

1. Discuss the benefits of using an alternative communication system for young children with ASD
2. Address common concerns about using alternative communication
3. Define meaningful communication
4. Describe several alternative systems
5. Discuss benefits of using picture exchange

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Who is Here?



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What is Alternative Communication?

Alternative ways of communicating include the use of:

- gestures
- sign language
- picture symbols
- speech generating devices



Remember: Children will use many ways of communicating and it is of utmost importance to respect and acknowledge all communication attempts

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Why an Alternative Communication System?

When children not able to communicate effectively we often see an impact on the development of social and language skills as well as behavior and learning



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Consider an Alternative Communication System for Young Children Who:

- Have not developed a functional communication system
- Show limited ability to use speech to initiate communication
- Lack intelligible speech
- Have a limited ability to communicate with a variety of partners

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Remember FUNCTIONAL speech means...

...that the child can use speech easily and consistently to express their thoughts, wants and/or needs



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Initiate * Spontaneous * Interaction

Communication systems should focus on a child's growing ability to:

- *Initiate* communication
- Use communication *spontaneously*
- Communicate within an *interaction* with a variety of people in a variety of situations



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Concerns about the Effect on Verbal Language Development

It is not unusual for parents and/or other team members to be concerned that the use of alternative communication will limit the child's development of verbal language



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Verbal Language Development

- In fact, research has shown that the use of alternative communication systems often *increase* the use of verbalizations
- Most importantly there is no evidence that the use of alternative communication gets in the way of a child's development of speech

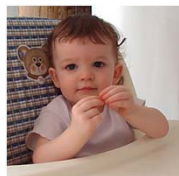
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Keeping the Focus on Meaningful Communication



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“The ability to speak, sign or label and point to a picture does not ensure that communication will occur”
(Janzen, 1996)



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Has Communication Occurred?

- Communication is defined as an exchange of information
- Communication involves sending a message to someone else or responding to a message that someone has sent to you

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Think about how the same gesture, picture or word could be interpreted as either communication or not

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Is this communication?


How can you tell?



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Is this communication?


How can you tell?



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Is this communication?


How can you tell?



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Sending a Message

It is very important in early learning that the child understand that his/her communication is directed toward another person



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Give to Get!

Often when children are struggling with the development of communication, they are most easily able to learn to request something that they want because the outcome of their communication is so clear -- receiving what they wanted!



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- As it is easiest to understand communication to "get something good" early communication systems need to focus on teaching spontaneous requests directed to another person
- This will ensure that the effort to send a message to another person provides powerful and natural reinforcement



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Choosing a System: General Guidelines

- A communication system needs to be useful to the child, that is - the child is able to understand that the use of a symbol has a desired effect
- The desired effect (purpose for communication) might be to request objects and activities, to get help or information, to initiate a social interaction, to comment on something, or to show or share something of interest

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**What Types of Systems Have
You Tried?**

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Sign Language

- Many children with Autism Spectrum Disorders have been taught to understand and/or use sign language for communication
- It has been reported that the use of sign language has been effective in facilitating communication and the development of spoken language



"Bright"

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Sign Language

Advantages:

- Does not require any external materials (e.g., paper, a computer, etc.)
- Uses touch, movement and vision (as well as auditory input when words are spoken simultaneously)
- Some adults and children appear to enjoy using sign language to communicate with each other

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Sign Language

Possible Disadvantages:

- Sign language is quite abstract and children with ASD might respond better to objects or pictured symbols
- Learning sign language can be challenging for children who have difficulty with imitation, fine motor skill and/or motor planning
- A very limited number of people understand sign language

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Visual Representation



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Real Objects

- Whole Objects
- Parts of Objects
- Associated Objects



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Pictures

- Photographs
- Realistic drawings
- Line drawings



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Using Pictures for Communication

- When using pictures, you can start with line drawings and move to a more concrete representation if needed
- Consider background information when using personal photographs
- Begin to match line drawings with objects/photos to move to a more abstract system
- Use printed words with picture symbol - adjust size over time

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What is the Picture Exchange Communication System (PECS)?

- Built on successful exchanges and social interactions
- Child initiated
- Picture based



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Advantages to PECS

- Often stimulates verbal language
- Helps child learn to direct communication to another person
- Can be used in a variety of settings
- Avoids teaching prompt dependency
- A low-tech method of communication

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Few Prerequisites

A child can begin to use PECS before they have learned to imitate actions, look toward another person or sit quietly in a chair - the child first learns to approach another person and deliver a message

Note: While the term picture is being used during this presentation, real objects or other symbols can also be used in teaching the exchange

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PECS is Low Tech, Requiring:

- Picture symbol set
- Lamination Supplies (if possible)
- Velcro
- Binder
- Motivators



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PECS - Always Remember:

- The child starts the communication
- Motivators need to be strong at the start of the learning
- The "prompter" is always silent
- The amount of physical assistance is reduced as soon as possible
- It is essential for a child to have multiple opportunities to practice the exchange
- Don't advance too fast
- Keep adult verbal language simple

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PECS Phase One: Initiating Communication, Mastering the Exchange

- Teaches a physically assisted exchange
- Child learns to pick up a picture of something they want and place it in the hand of a communication partner
- Child receives what they want (reinforcer)

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PECS Phase One

- Physical prompts (e.g., hand-over-hand) are faded as soon as possible
- The communication partner's open-hand prompt is faded next
- Use a variety of communication partners when possible
- Use a variety of reinforcers
- Child does not discrimination between pictures at this stage of learning
- At the end of this phase of learning, child can see something that he/she wants and independently pick up a picture of the item, reach toward the communication partner and put the picture into that person's hand

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PECS Phase Two

- Expanding the use of pictures, increasing persistence and independence
 - Number and variety of reinforcers is increased
 - Distance is increased
 - Communication partner starts to move away from the child so that the child has to move a distance to get the message across
 - The pictures are moved a distance from the child so that the child has to move a distance to get the symbol
 - Peers can be introduced as communication partners

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PECS Phase Two

- Can be taught in a very playful way as the child learns to seek out their communication partner and access that person's attention
- Discrimination between pictures is also not a part of this phase (only one picture is available at a time)
- At the end of this phase of learning, child is able to independently go to his/her communication book, pull off the picture, go to the communication partner, get the attention of the partner and put the picture into the partner's hand

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Later Learning with PECS

- Child starts to learn to discriminate between two pictures
- As the child is able to discriminate between two pictures, more pictures are added
- Multiple word phrases are added using a sentence strip
- Child learns to answer questions and comment using pictures

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Considering an Augmentative Communication Device

- Proponents of starting with the Picture Exchange Communication System recommend beginning to apply picture symbols to voice output devices if the child has learned to communicate with picture symbols but has not shown progress in verbalizing for communication
- Is equipment being used to support functional communication?

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- Determining the most efficient AAC device for a child is a complex process that requires input from specialists
- Considerations for devices include
 - Mobility ("Can this child easily carry this device with him?")
 - Complexity ("Can this device interface with the internet?")
 - Accessibility ("Can the child use this device, considering his fine motor skills?")
 - Flexibility ("Can this device be modified as this child develops his communication skills?")

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Where to Refer?

- **Albuquerque**
 - Christina Brown, MA, CCC-SLP
Christina Brown & Associates
 - Email: cbrown@christinabrownandassociates.com
 - Phone: 505 883-3787
 - Sandra Nettleton, PhD, CCC-SLP
UNM Department of Speech and Hearing Sciences
 - Email: sandynet@unm.edu
 - Phone: 505 277-4453



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Where to Refer?

- **Santa Fe**
 - Kindra Davis, MS, CCC-SLP
 - Lifespan Therapy Services
 - lifespantherapy@juno.com
 - (505) 954-9940
- **Outside Albuquerque**
 - Desiree Stone, MS, CCC-SLP/ATP
 - slpdesiree@yahoo.com
 - (505) 250-8552

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REMEMBER ☺

Whatever form of communication a child is using, the emphasis should be on...

Using this Communication to Send a Message to Another Person

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Resources:

- Collet-Klingenberg, L. (2008). Overview of Picture Exchange Communication System (PECS) for children and youth with autism spectrum disorders. Madison, WI: National Professional Development Institute on ASD, The Waisman Center, The University of Wisconsin.
- Bondy, A. & Frost, L. (2001). A Picture's Worth: PECS and Other Visual Communication Strategies in Autism. Bethesda, MD: Woodbine House.
- Janzen, J.E. (1996). Understanding the Nature of Autism. San Antonio, TX: Therapy Skill Builders.
- Frost, L. & Bondy, A. (2002). PECS: The Picture Exchange Communication System. Newark, DE: Pyramid Educational Consultants, Inc.
- Sundberg, M. & Partington, J. (1998). Teaching Language to Children with Autism or Other Developmental Disabilities. Pleasant Hill, CA: Behavior Analysts, Inc.
- Fransone, E., & Collet-Klingenberg, L. (2008). Overview of speech generating devices for children and youth with autism spectrum disorders. Madison, WI: The National Professional Development Center on Autism Spectrum Disorders, Waisman Center, The University of Wisconsin.

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THANK YOU

Marci Laurel
mlaurel@salud.unm.edu
(505) 272-9015

Amy Jurgensen
ajurgensen@salud.unm.edu
(505) 272-5211

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