USING AAC STRATEGIES TO SUPPORT LANGUAGE & SOCIAL DEVELOPMENT IN EARLY INTERVENTION SETTINGS

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AAC REFRESHER Terms & Concepts

AAC IS...

Augmentative & Alternative Communication
Augmentative Communication
AugCom

defined as: "an umbrella term that encompasses the communication methods used to supplement or replace speech or writing for those with impairments in the production or comprehension of spoken or written language" - wikipedia, 2017

Includes No tech, Low tech, and High tech

AAC technology falls under the larger umbrella of "Assistive Technology"
NO TECH AAC

These options involve no technology of any kind, but rather rely solely on the human body.

- **Gestures** (general or personalized, symbolic or non-symbolic)
- **Pointing**
- **Attention-gaining signals** (e.g., tongue clicks, vocalizations, tapping shoulder, raising hand)
- **Signing** (ASL, SEL)
- **Facial expressions**
- **Finger spelling**

LOW TECH AAC

- **Picture board/Communication board**
- **Communication book**
- **“PECS” book**
- **Writing and drawing** (pen & paper, Boogie Board)

**Voice output switches**

(e.g., Big Mack, Step by Step)

**Static display communicator**

(e.g., Communication Builder, Tech Speak, and some equivalent communication apps (e.g., Tap Speak Button, Tap Speak Sequence))

HIGH TECH AAC

- **Mobile devices/apps**
  - Windows, Android, and/or iOS

**Dedicated speech generating devices (SGDs)**

- Tobii Dynavox
- Prentke-Romich Company (PRC)
- Ablenet
- Saltillo
AAC IS THE BRIDGE

It isn’t the goal
Just like a walker, compression garment, pencil grip, or speaking valve
AAC is the tool that helps us build a bridge to language and communication

WHO NEEDS AAC?
- Non-verbal
- Limited verbal
- Reduced intelligibility
- Restricted communication functions
- Poor receptive language skills
- Prominent use of echolalia
- Challenging behaviors

individuals with "complex communication needs"

who else?

WHY USE AAC?
- Takes fleeting auditory information and makes it "stand still"
- Sets the context for communication
- Supports literacy development
- Assists with word retrieval
- Provides an additional model for verbal imitation
- Repairs communication breakdowns
- Provides a "voice" that can be received by a wide range of partners

why not – you have nothing to lose (& everything to gain)!
COMMON MYTHS STILL FLOATING AROUND

Myth 1: AAC is a “last resort” in speech-language intervention.
Myth 2: AAC hinders or stops further speech development.
Myth 3: Children must have a certain set of skills to be able to benefit from AAC.
Myth 4: Speech-generating AAC devices are only for children with intact cognition.
Myth 5: Children have to be a certain age to be able to benefit from AAC.
Myth 6: There is a representational hierarchy of symbols from objects to written words (traditional orthography).

Romski & Sevick (2005)

RESEARCH HAS DEBUNKED THEM ALL!

Two essential literature reviews that pull this evidence together:


THE TRUTH AS WE NOW KNOW IT

- AAC is an evidenced based, first line intervention strategy for language intervention in young children.
- AAC does not hinder the development of speech at the very beginning stages of language acquisition.
- There are NO pre-requisites to communication and therefore, NO pre-requisites to AAC (including high tech, SGD!)!
- There is NOT a hierarchy of symbols that we need to follow

Romski & Sevick (2005)
I WOULD ADD THESE MYTHS TO THE LIST

- Students must use PECS first before they are given access to a robust system
- Students must learn how to fully attend before they can access a robust system
- Students must learn operational skills before a communication system can be effective
- Students must use a system without any partner support in order for it to be effective
- Students must use only one modality to communicate or they will get confused or lazy

RESEARCH SHOWS MANY BENEFITS OF AAC IN EI

The works of Janice Lighth & Kathy Drager at Penn State University—among others—reveal that appropriate AAC intervention results in gains in skills, including:

- increased turn-taking
- growth in requesting and commenting
- increased receptive and expressive vocabulary
- expanded utterance length
- emergence of grammar and early literacy skills

and all of this at no risk to speech development!

WHAT CAN GET IN THE WAY?

- “He won’t look at pictures”
- “She doesn’t know how to point”
- “He just ‘stims’ when I give him [a device, PEC symbol etc…]”
- “She can’t discriminate objects yet”
- “He’s cognitively low”
- “She isn’t motivated by much”
- “He is not intentional”
- “She isn’t ready for pictures”
WHAT DRIVES US TO COMMUNICATE?

Video: Zero to Three, Language and Communication

Let’s call some out!

A RELATIONSHIP-BASED LENS

RELATIONSHIP-BASED INTERVENTIONS

Focus on a child’s ability to form positive and meaningful relationships with others.

Skills in all areas are inter-related and learned through relationships involving emotionally meaningful exchanges.

“Boxed” Approaches include:
- Early Start Denver Model (ESDM) – Autism
- Gentle Teaching
- Relationship Development Intervention (RDI)
- DIR Model
- What are some others?
SUMMARY OF THE DIR MODEL

Developmental individual-difference Relationship-based model (DIR)

Created by child psychiatrists Stanley Greenspan, M.D. and Serena Wieder, PhD

Floortime falls under this model

Developmental – follows continuum of normal development

Individual Difference – considers the unique ways in which children process information and respond to sensations (sensory processing, motor planning)

Relationship-based – build skills from the foundation of positive relationships that facilitate emotionally meaningful interactions

STAGES OF EMOTIONAL DEVELOPMENT

1 – REGULATION & INTEREST IN THE WORLD

Birth to about 3 months

Begin to transfer inner sensations (e.g., gas) to the outside world

Develop a desire to look, listen, pay attention to the outside world

Further enticed by caregiver responses and interactions

FOCUS AT THIS STAGE:

To develop SHARED ATTENTION

(Greenspan, S. & Wieder, S., Engaging Autism... 2009)
2 - ENGAGING & RELATING

By 2-5 months of age
Begin to express preference for caregivers (over other stimuli)
Begin to differentiate between pleasure obtained by interacting with others and interacting with inanimate objects

FOCUS AT THIS STAGE:
To develop a desire to be part of a relationship

(Greenspan, S. & Wieder, S., Engaging Autism... 2009)

3 - INTENTIONALITY & TWO-WAY COMMUNICATION

By 6 months of age
Begin to transition emotions into signals for communication

Sealed when caregivers read and respond to baby's signals

Back and forth emotional signaling or two-way communication

Signaling becomes purposeful through this shaping process

Differentiated facial expressions, vocalizations, gestures

FOCUS AT THIS STAGE:
To develop intentionality & interactive communication

(Greenspan, S. & Wieder, S., Engaging Autism... 2009)

4 - SOCIAL PROBLEM SOLVING, MOOD REGULATION, & SENSE OF SELF

Between 9 and 18 months of age

Use two-way communication to solve problems

Shared Social problem-solving emerges, sequencing steps to achieve a result leading eventually to sequencing words

Modulating intense feelings and emerging negotiation

“Super Sense” Recognizing patterns in emotional expressions

FOCUS AT THIS STAGE: Finding new ways to solve problems & recognizing social-emotional patterns

(Greenspan, S. & Wieder, S., Engaging Autism... 2009)
5-CREATING SYMBOLS AND USING WORDS & IDEAS

By 18 months of age
Complex emotional signaling occurs first

Making connections between images and emotions to give them meaning
Language arises because images acquire meaning through many emotionally relevant experiences and exchanges

FOCUS AT THIS STAGE: To develop language

(Greenspan, S. & Wieder, S., Engaging Autism... 2009)

6-EMOTIONAL THINKING, LOGIC, & A SENSE OF REALITY

By 2.5 years old
Increased ability to connect symbols together logically

Linking ideas together
- E.g., Why?
- How one event leads to another
- How ideas operate across time e.g., good now, treat later
- How ideas operate across space (mom is not here, but close by)
- Explanations for emotions (I feel bad because__)

Connect internal experiences with external experiences and distinguish the two

FOCUS: Making more complex connections

(Greenspan, S. & Wieder, S., Engaging Autism... 2009)

REFERENCE

Engaging Autism: Using the Floortime Approach to Help Children Relate, Communicate, and Think, by Stanley Greenspan, MD, Serena Wieder, PhD, 2009

Training in DIR/Floortime http://www.icdl.com/courses

Other Books by Greenspan
- https://www.amazon.com/Stanley-I.-Greenspan/e/B000APK0UA
- The First Idea
DEVELOPMENT OF RECEPTIVE COMMUNICATION

BY 3-6 MONTHS

By 3 months:
- Turns head towards sound or voice
- Quiets or smiles in response to sound or voice
- Shows interest in faces
- Makes eye contact

By 6 months:
- Reacts to sudden noises or sounds
- Listens and responds when spoken to (such as by smiling)
- Notices toys that make sounds

References: Pathways.org and KidSense

BY 6-12 MONTHS

Attends to sounds and voices
- Recognizes facial expressions and tones of voice and can distinguish between familiar and unfamiliar tone of voice
- Recognizes names of a few objects and familiar words
- Looks at familiar objects and people when named
- Pays attention to where you are looking and pointing

References: Pathways.org and KidSense
BY 12-24 MONTHS

Responds to familiar requests (e.g. come here) with gestures and eventually without
Responds to his own name
Understands “no”
Understands gestures (e.g. wave for ‘bye’)
Recognizes names of even more objects (about 50 words by 15 months of age)
Can understand one key word in a question (e.g. Where’s your nose?)
Responds to yes/no questions such as through head shake/huddle

References: [Pathways.org](http://Pathways.org) and [KidSense](http://KidSense)

BY 24-36 MONTHS – THE BIG BOOM!

Follows 2 part instructions (e.g. Go to your room and get your shoes)
Points to main body parts, clothing items, toys and food when asked
Understands What and Where questions
Shows an interest in pictures
Points to familiar objects and people in pictures
Demonstrates understanding of a wider variety of semantic and grammatical categories, including: action words, position, size, quantity and other modifiers, pronouns, plurals, possessive forms
Understanding new words quickly

References: [Pathways.org](http://Pathways.org) and [KidSense](http://KidSense)

BY 3-4 YEARS

Follows 3 part instructions (e.g. point to the cat, the dog and the monkey)
Understands longer, more complex sentences
Understands even more semantic and grammatical categories
Understands Who questions

References: [Pathways.org](http://Pathways.org) and [KidSense](http://KidSense)
BY 4-5 YEARS

Follows the meaning of others’ conversations
Vocabulary is continuing to expand
Can generally understand color and shape words (e.g. red, square)
Can sort objects into simple categories (e.g. animals, food)
Understands How questions

References: Pathways.org and KidSense

DEVELOPMENT OF NON-SYMBOLIC COMMUNICATION

Non-Symbolic Communication
- Does not use symbols (words or signs)
- Does not have a shared meaning for others
- Not always unintentional
  - Gestures, vocalizations, intonation, facial expressions, body movements/proximity, eye gaze, “behavior”
- Can range from unconventional to conventional

Symbolic Communication
- Uses symbols
  - Manual sign, spoken or written words, pictures, objects
  - Involves a shared meaning between the sender and the receiver
  - Most often dependent upon intentionality
Unconventional
Not commonly used by larger culture
- Often idiosyncratic
Less obvious meaning
Less “socially acceptable”
- Likely non-symbolic
  - Challenging behavior, body movements, closing eyes or “looking up” to signal “no”

Conventional
Commonly used by others in the individual’s culture
Obvious/clear meaning
Socially acceptable
- Usually symbolic, but can also be non-symbolic
  - Common gestures, facial expressions

BIRTH TO 3 MONTHS
- Non-volitional AND non-intentional
  - Represents general “state” (hungry, tired, etc.)
  - Includes body movements, facial expressions, sounds/cries
  - Interpreted by caregiver and responded to accordingly

CDC Website: Developmental Milestones

BY 3-8 MONTHS
- Volitional BUT non-intentional
  - Emerging “needs/wants” continue to require interpretation from caregivers
  - Includes body movements, facial expressions, eye gaze
  - *Intentionality is shaped* through caregiver responsiveness

CDC Website: Developmental Milestones
BY 6-12 MONTHS

- Intentional communication emerges (by about 6 months)
- "Unconventional", non-symbolic modes used
- Include body movements, vocalizations, facial expressions, early gestures


CDC Website: Developmental Milestones

BY 12-18 MONTHS

- "Conventional" non-symbolic modes emerge
- Includes pointing, nodding/shaking head, giving/showing, social gestures, changes in intonation, joint attention


CDC Website: Developmental Milestones

INTENTIONAL COMMUNICATION

Child demonstrates a communicative signal with clear, goal-oriented purpose.

Children who intentionally communicate non-symbolically will learn a symbol based system more readily (see, Rowland and Schweigert, 2000, work on Tangible Symbols)

Intentionality best indicator of eventual success with symbols!

Intentional communication is shaped, you don’t just have it

Snell, Rowland
HOW DO WE SHAPE INTENTIONALITY?

EARLY LANGUAGE DEVELOPMENT

BASIC EXPRESSIVE MILESTONES

Babbles and take vocal turns by 6-12 months
First word usually by around 1 year (12-14 months)
Acquire new words on a daily basis after the first year (9-13 words per day)
Two-word combinations usually emerge by around 2 years
A word for almost everything by 3 years and using 3-4 word phrases
A full range of communication functions by 3 years
Using sentences of 4 or more words by age 4 years

NIH Web Resource
BETWEEN 12 - 24 MONTHS

- Uses at least 50 words
- Consistently imitates words and actions
- Begins to use two word phrases

References: Pathways.org and KidSense

BY 24-36 MONTHS

- Speak in 2-3 word sentences
- Talks about present events
- Uses Regular Plurals, Articles - 'a' and 'the'
- Progressive -ing; Pronouns - 'you', 'me', 'mine'
- Regular Past Tense; Possessive 's' - e.g. "Daddy's car"
- Asks What and Where Questions

References: Pathways.org and KidSense

BY 4 YEARS

- Speak in 3-4 word sentences
- Tell what they are doing
- Tell the function or use of an object
- Begins to talk about past events
- Use Auxiliary 's'; Pronouns 'he/she'; Connector 'and'; 3rd Person Singular - e.g. "He wants the ball"; "It eats grass"; "She reads books"
- Contracted Negative - e.g. "isn't", "doesn't", "haven't"
- Shouldn't, Contracted Copula - e.g. "He's happy"
- Past Participle - e.g. "It's broken"
- Ask Why, When and How questions

References: Pathways.org and KidSense
BY 5 YEARS

Speaks in 4-5 word sentences
Talks about past and future events
Uses Pronouns 'his, her, theirs'; Comparative –er and Superlative –est; 'is' vs 'are' – e.g. “The monkey is eating a banana” vs “The monkeys are eating the bananas”; Past Tense “to be” – e.g. “I was running” and “They were running”; Connector “because” – e.g. The boy was crying because he fell over and hurt his knee; Adverb –ly – e.g. quickly, slowly, quietly; Irregular Plurals – e.g. mice, men
Asks meanings of words

RATE OF TYPICAL LANGUAGE LEARNING FOR VERBAL CHILDREN AGES 1.5 – 6 YEARS

An average of 9 words per day (Templin, 1957)
Around 10 words per day (Aitchison, 1994)
12 words per day (Chomsky, 1988)
13 words per day (Miller and Gildea, 1987)

AVERAGE EXPRESSIVE VOCABULARY SIZE

2 year old 500 words
3 year old over 1,000 words
5 year old up to 3,000 words

(Smith, 1973; McNamara 1982)

what percentage of our kids with complex communication needs leave EI with a vocabulary (spoken, pictured, signed) that even approaches these numbers?
COMMUNICATIVE FUNCTIONS

Pre-Intentional Behavior, Intentional Behavior, and Unconventional Communication Stages:
- Functions: Refuse, Obtain, Social Interaction

Conventional Communication, Concrete Symbols, Abstract Symbols, and Language Stages:
- Functions: (all of the above functions) AND Information Exchange

The Pont? Our early/emerging communicators do more and are capable of learning to do more than requesting items

BREAKDOWN OF FUNCTIONS

to REFUSE (simplest to complex)
- Expresses Discomfort
- Protests
- Refuses, rejects

to OBTAIN (simplest to complex)
- Expresses comfort
- Continues action
- Obtains more of something
- Requests more action
- Requests new action
- Requests more object
- Makes choices
- Requests new object
- Requests absent object

The Online Communication Matrix
BREAKDOWN OF FUNCTIONS

for SOCIAL INTERACTION
- Expresses interest in people
- Attracts attention
- Requests attention
- Shows affection
- Greets people
- Offers or shares
- Directs attention
- Polite social forms

for INFORMATION EXCHANGE
- Answers yes/no questions
- Adds questions
- Names things or people
- Makes comments

NORMAL LANGUAGE DEVELOPMENT & AAC

Using normal language development to inform AAC decision making is the best roadmap we have. These articles are a must read.

- Normal Language Development, Generative Language, and AAC ~ Gail Van Tatenhove, SLP
- The Importance Of Merging A Normal Language Development Model with AAC Service Delivery ~ collection by Jennifer Kent-Walsh, PhD, SLP & Cathy Binger, PhD, SLP

PROGRESSION

Communication and Language Development Board Overview
(Binger, PDF)

Kent-Walsh & Binger emphasize two major points:
1. Typically developing children learn complex language very young.
2. Although the domains start out developing successively,
LET’S RECAP

- Normal development is our best guide in AAC assessment and intervention
- Relationships and emotionally meaningful interactions are essential to communication and language development
- Social-emotional development is progressive and can be supported alongside communication intervention to maximize these interactions
- Non-symbolic communication is an essential piece of overall communication development, intentionality, and eventual language
- We will use AAC to bridge the communication gap between the child’s current abilities and the communication demands at the next stage

WHAT IS “APPROPRIATE” INTERVENTION WITH AAC?

Janice Light and colleagues outline a general intervention framework that is useful to follow and adheres closely to typical language development guidelines for young communicators:

- Provide access to appropriate tools for communication
- Teach language and communication skills using supportive interaction strategies
- Provide children with meaningful communication opportunities across partners and environments (parents, educators etc…)

See full intervention guidelines, supporting videos, and research outcomes at: AAC and EI @ Penn State University
www.aackids.psu.edu

LET’S EXPLORE HOW...

Visible

...because the technology is only the tip of the iceberg!
LOOK FOR “RED FLAG” INDICATORS

The presence of these indicates AAC from the start:
- Diagnosis and background/history
- Gaps in receptive and expressive abilities
- Challenging behaviors
- Of a certain age and not communicating effectively, nonverbal, limited verbal, etc.
- Reliance on communication partners

Avoid a “wait and see” approach

REMINDER: WHO NEEDS AAC?

° Non-verbal
° Limited verbal
° Reduced intelligibility
° Restricted communication functions
° Poor receptive language skills
° Prominent use of echolalia
° Challenging behaviors

ADD TO YOUR ASSESSMENT to guide AAC intervention
EARLY SPECIAL EDUCATORS HAVE A UNIQUE CHALLENGE

Children in general education enter pre-school with in tact, conversational communication skills
- The educator can focus on supporting academic learning needs, establishing foundational academic skills, and enhancing vocabulary and communication skills, not establishing them.

Children in special education enter pre-school with limited conventional communication skills
- These children are learning functional communication and language skills in tandem with academic skills.
- The educator and education team must now juggle support of academic learning, teaching foundational academic skills, and establishing functional communication.
- The absence of solid communication and language skills can be an additional learning barrier.

SCREENING TOOL

Communication Success Screening Tool

What type of communicator is this child?

CAN AAC BE A “BRIDGE”?
CONTINUUM OF COMMUNICATION INDEPENDENCE

(based on work by Patricia Dowden, PhD, CCC-SLP, University of Washington)

Emerging | Context-Dependent | Independent
---|---|---
No reliable means of active, symbolic communication | Able to convey anything to anyone in any context

EMERGING COMMUNICATOR

Patricia Dowden, PhD, CCC-SLP, University of Washington

"an individual who does not have a RELIABLE method of EXPRESSIVE communication through SYMBOLIC means"

- Relies on non-symbolic communication
- Is limited to familiar partners
- Is limited to topics in the "here and now"
- Might be trying AAC, but performance is inconsistent

Communication IS happening and IS intentional, but may not be obvious independent of cognitive ability, receptive language, or long-term potential

AN EMERGING COMMUNICATOR...

- Uses facial expression, body language, gestures, and/or behaviors (either socially appropriate or challenging) to communicate
- May be starting to use clear and simple symbols (especially in motivating or preferred activities)
- May show some variability in both understanding and expression from day-to-day or activity-to-activity
- Relies on communication partner to be a successful communicator

Reference: Dynavox Accelerated Learning Modules, An Introduction to the Dynamic AAC Goal Grid
CONTEXT-DEPENDENT COMMUNICATOR

"an individual who has SYMBOLIC communication that is RELIABLE, but is limited to specific CONTEXTS or PARTNERS"

Limited
In terms of vocabulary,
- To certain contexts, and/or
- To familiar partners

independent of cognitive ability, receptive language, or long-term potential

A CONTEXT–DEPENDENT COMMUNICATOR...

- Understands general conversations and directions as well as same age peers
- Uses symbols and objects spontaneously to communicate basic needs and wants
- Beginning to combine 2 or more symbols to create longer and/or more complex messages
- Communicates best in routines regarding familiar topics and, in some cases, with the support of communication partners
- Developing literacy skills (e.g. letter names and sounds, site words, spelling of simple words)

Reference: Dynavox Accelerated Learning Modules, An Introduction to the Dynamic AAC Goal Grid

INDEPENDENT COMMUNICATOR

"the ability to communicate anything on any topic to anyone in any context" this is independent of VEBRAL ability

Communication Bill of Rights
ASSESSMENT PLANNING

Use the individual’s "communication category" rather than age or perceived cognition to drive assessment and intervention with AAC.

Our intervention will move to shape each communicator toward:
- MORE conventional forms
- MORE symbolic forms
- MORE communicative independence

The AAC System will be the tools & strategies we use to shape...

GENERAL ASSESSMENT QUESTIONS

COMMUNICATION MEANS:
COMMUNICATION FUNCTIONS:
CONTEXTS:
ENGAGEMENT: (Strengths & Challenges)
PARTNERS:
ACCESS BARRIERS:

ASSESSMENT PLAN FOR EMERGING COMMUNICATOR

1. Obtain communication/language sample
   a. Early communication profile
      - joint attention
      - social turn-taking skills ("circles of communication")
      - regulation skills (emotional/sensory)
      - play skills
      - screen for potential access barriers
   b. Outline of communicative means & functions present
2. Probe areas for further assessment or referral
3. Develop smart IEP/IFSP goals
4. Feature matching
5. Trial AAC tools across settings
COMMUNICATION/LANGUAGE SAMPLE

During play interaction and/or natural routines/activities
- Live and/or review of family videos

Supplement with caregiver interview

If needed/desired, use one or more of these tools to guide you:
- Checklist for Communicative Functions and Means (FREE)
- Online Communication Matrix (FREE - Charity Rowland)
- Functional Communication Questionnaire (FREE-in handouts)
- Functional Communication Profile ($)

Visit the Resource tab of the NWACS website under “AAC Assessment for more resources.

COMMUNICATION/LANGUAGE SAMPLE

WHAT IS IT?
The process of identifying the communication functions that are present and the ways in which they are being expressed (means)

PURPOSES:
1. To create a communication dictionary
2. To identify communicative behaviors that can be shaped
3. To "code" the behavior to serve a new communication function
4. To gain additional information about the child’s early communication profile

COMMUNICATION SAMPLE - BRADLEY

Context:__________________________

<table>
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<tr>
<th>What does the child do?</th>
<th>Means</th>
<th>What does it mean?</th>
<th>Function</th>
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## ENGAGEMENT/JOINT ATTENTION?

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<th>Challenges</th>
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## PLAY SKILLS

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## PARTNER?

What does the partner do that supports or inhibits the child’s communication?
- recognizing communication behaviors
- interpreting
- responding
- “bringing the fun”

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CONTEXTS?
Preference Assessment:

How does the environment seem to support or inhibit this child's communication?

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OTHER PROFILE ITEMS

Attention-gaining:

Turn-taking:

Regulation:

Potential Access Barriers:

ASSESSMENT PLAN FOR CONTEXT-DEPENDENT COMMUNICATOR

1. Obtain communication/language sample
   - a. Outline of communicative means & functions present
2. Probe areas for further testing or referral
3. Develop smart IEP/IFSP goals
4. Feature matching
5. AAC tools for trial in across settings
COMMUNICATION
SAMPLE-ALEX

Context: ____________________________

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ENGAGEMENT/JOINT
ATTENTION?

Strengths | Challenges
-----------|-------------
Call some out | Call some out

PLAY SKILLS

Present | Not Present
--------|------------
Call some out | Call some out
PARTNER?
What does the partner do that supports or inhibits the child’s communication?
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CONTEXTS?
Preference Assessment:
How does the environment seem to support or inhibit this child’s communication?

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<th>Supports (+)</th>
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OTHER PROFILE ITEMS
Attention-gaining:
Turn-taking:
Regulation:
Potential Access Barriers:
CREATE A COMMUNICATION DICTIONARY/INVENTORY

Purposes:
1. To provide less familiar partners with information about how the child is currently communicating.
2. To provide a consistent partner response for maximizing non-symmetric communication.
3. To give you a starting place for words to choose for a first, symbolic vocabulary.

HOW TO MAKE A COMMUNICATION DICTIONARY

• Observe (remember your Communication/Language sample)
• Make note of the behavior/signal and your interpretation of meaning
• Observe more
  - "Were you right?"
  - Great! Now write it down!
• Spreadsheet: BEHAVIOR-MEANING-RESPONSE
• And share it with EVERYONE!~
• Make this a part of AAC system
  - travels with the child
  - a work in progress

PROBE FOR REFERRAL NEEDS

Start trialing a system in your hands that fits the child’s needs to some degree as you reach out for referrals for a more comprehensive AAC assessment
- waiting lists are long
- providers are limited

Join the outside AAC assessment if possible

Provide a summary for families to share with AAC assessment provider regarding the systems you have tried and the results thus far
- Think about including specific questions you have and/or arranging a phone meeting with the provider to discuss the areas you are unsure of
DEVELOPING S.M.A.R.T. GOALS

S.M.A.R.T.
Specific, Measurable, Achievable, Realistic/Relevant and Timed

Resources for goal writing can be found at these great links:
- How I Do It: Writing IEP Goals for Students Who Use AAC
- PrAACtical AAC Goals That Matter
- Setting Specific Goals for Communication Device Trials
- AAC Goal Setting Template Sheet

GENERAL GOAL TIPS

- Family’s goal(s) (hopes) for COMMUNICATION (Long-term goal)
- Ask yourself: What is the communicative outcome we want to achieve short-term (within the next 3-6 months)?
- Write a S.M.A.R.T. objective that focuses on the communicative outcome and includes the AAC system (tools and strategies)
  - Specific communication behavior to be measured
  - Measurable: Amount, Frequency, Level of Support
  - Achievable: Can this be met in the treatment period you have set as the short-term timeframe?
  - Realistic/Relevant: Is this goal appropriate for the child’s stage? Is it relevant priority within their communicative needs and the family’s goals?
  - Timed: Specific time frame in which the goal is expected to be met
- Include the prompts, cues, and support/teaching strategies to be used to achieve the goal as a subset of your goal of somewhere in your plan

GENERAL GOALS FOR EMERGING COMMUNICATORS

1. Establish intentionality/initiation (if not already present)
2. Maximize use of non-symbolic communication
3. Establish a reliable symbolic system
   - Start with communication dictionary
   - Establish a “first vocabulary” from this dictionary
4. Teach connections between existing signal (non-symbolic) and it’s symbolic representation (spoken, signed, pictured word)
   - How? MODELING! MODELING MORE MODELING! **We will talk about this A LOT later!**
   - Creating ongoing opportunities to use (attempt) their new symbols
5. Establish engagement and buy-in
ESTABLISH RELIABLE SYMBOLIC SYSTEM

Start with communication dictionary
Establish a “first vocabulary” from this dictionary
Teach connections between existing signal (non-symbolic) and it’s symbolic representation (word)
- MODELING
- MODELING
- MORE MODELING
Creating MANY opportunities to use their new symbols

These points are true, regardless of the AAC system you have chosen to trial

WE ACHIEVE BUY IN...

By modeling the language that goes along with the client’s message
By educating the team on the goals and focus (receptive/modeling & creating opportunities for initial use)
By following the individual’s lead
Being honest
- Communication is messy
- This takes a long time
- Help the team notice the little triumphs along the way

SAMPLE GOALS-EMERGING COMMUNICATOR

Family goal: We want Bradley to better communicate his wants and needs so that he isn’t so frustrated.

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<th>OUTCOME</th>
<th>S.M.A.R.T. OBJECTIVE</th>
<th>TEACHING/SUPPORT PROMPTS/CUES</th>
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GENERAL GOALS FOR CONTEXT-DEPENDENT COMMUNICATORS

1. Maximize the communication they are already using
   - Spoken or pictured communication, nonsymbolic signals that remain
2. Grow the symbolic system that is established to include
   - More contexts
   - More words/functions
   - More partners
   - Grammar
   - Early literacy skills
3. Checking back in on engagement & buy in

MAXIMIZING CURRENT COMMUNICATION

Same as for emerging communicators
May step in with more communication partner training here
Providing even more opportunities across many more activities/environments
Practicing with less skilled/less familiar partners
   - Peers
Word combinations with existing vocabulary
New communication functions with existing vocabulary

HOW MIGHT AIDED LANGUAGE MODELING LOOK?

Modeling one more word beyond what the communicator is already using
   - Verbalizing a complete utterance, may only visually model key words
Wider range of vocabulary
   - Verbs
   - Modifiers
   - Negatives
   - Question words
   - Pronouns
JANICE LIGHT-SKILL AREAS

At context-dependent level, our focus is on:
- Linguistic Skills
- Social Skills

We introduce the VERY BEGINNING of:
- Operational Skills
- Strategic Skills

But not for all individual-case specific

We need to take care not to require operational competency before linguistic and social competency

SMART PARTNERS are still a part of the communication process for some of these individuals to help with these higher (operational, strategic) level skills

Rocky Bay Positive AAC tion Handout on competency areas

GROW THE SYSTEM

As the child moves toward a context-dependent communicator...

- Follow normal language development guidelines to progress the child’s language
- Content, form, use

- Make more vocabulary available within the system
- Social interactions are driven by an established single word vocabulary
- Variety - nouns, verbs, modifiers
- Quantity - at least 50 words

- MODEL word combinations
- Model navigation on the system
- Model the Oops! moments and communication repair
- Use companion activities for TEACHING vocabulary meaning and use
  - Books
  - Theme activities

- First 50 core words!

SAMPLE GOALS-CONTEXT-DEPENDENT COMMUNICATOR

Family’s Goal: We want Alex to communicate using more words and sentences and to develop grammar.

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35
OTHER GOALS RELEVANT TO RELATED SKILLS THAT SUPPORT AAC SUCCESS

- Increase joint attention/Attention to aided language modeling
- Increase engagement/extend interactions (circles of communication)
- Expand play skills
- Improving sensory-emotional regulation and impulse control
- Improving motor planning/Strength (in collaboration with your motor team members, OT/PT)

SAMPLE GOALS FOR ENGAGEMENT

To increase engagement, Bradley will participate in 3 familiar and preferred social routines for 5 exchanges, given minimum prompts, by the end of this reporting period.
- Minimum prompts:
  - Support strategies:

To increase engagement, Bradley will shift his gaze to a communication partner’s face when a preferred routine is paused. 5 times across 3 activities, given minimum prompts, by the end of this reporting period.
- Minimum prompts:
  - Support strategies:

SAMPLE GOALS FOR JOINT

To expand joint attention skills, Bradley will shift his gaze 5 times toward a partner’s actions during 3 preferred play routines, given maximum, multimodal prompts, by the end of this reporting period.
- Maximum, multimodal prompts:
  - Support strategies:

To expand joint attention skills, Bradley will independently, visually attend to 10 aided language models in clinic and home settings, provided with PECS when initiating requests using gestures, by the end of this reporting period.
- Prompt/cue hierarchy:
  - Support Strategies:

To improve receptive and expressive communication through joint attention, Alex will visually attend to both aided language models (5 single words and 5 two-word phrases provided on his communication device during 3 preferred play activities or routines, given minimum prompts, by the end of this reporting period.
- Minimum prompts:
  - Support Strategies:
CHOOSING AN AAC SYSTEM

ISN'T SIGN LANGUAGE THE BEST AAC FOR EARLY INTERVENTION?

SIGN LANGUAGE FOR HEARING CHILDREN

Research review suggests that sign language is not the best supplement to verbal speech for hearing children.

Several studies between 2012 and 2014 (and prior) comparing SGD use and manual signs for young, hearing children with developmental delays revealed:

- A stronger preference by children for SGD use
- Better long-term sustainability of the modality
- Expanded utterance length

Research review, Seattle Children’s Hospital, Cassie David, MS CTY-SLP, Marci Revelli, MS CCC-SLP. Considerations for Recommending Signs to Children without a Hearing Loss, August 2016 (unpublished)
LIMITATIONS OF A “SIGN ONLY” APPROACH

- Children do not always have the motor abilities to make exact signs
- The child is limited in who they can communicate with (must speak sign)
- If a child has a highly preferred topic, may use idiosyncratic signs that are difficult to understand across communication partners
- A child may rely on the parent as a translator
- Lack of exposure to fluent sign vocabulary due to limitations in sign knowledge of models (parents, teachers)

MORE LIMITATIONS OF A “SIGN ONLY” APPROACH

- More demand on retrieval because the array is not visible
- Manual sign shapes are not as closely matched in iconicity to their referent, which may impact ease of learning
- Increased physical response effort compared to pointing to or exchanging a picture

THE BIGGEST LIMITATION?

Lack of exposure to fluent sign vocabulary due to limitations in sign knowledge of partners/models (parents, teachers)
IF WE CHOOSE TO USE SIGN, ARE WE DOING IT RIGHT?

“For signing to be a functional language alternative to spoken communication, the child needs to be exposed to the modeling of new signs and signing combinations every day” (Glairon, 2003) – citation from bibliography provided in prior slide.

Most hearing, adult model in intervention settings know an average of 10-100 signs

This just isn't enough to model the language needed to grow a solid first vocabulary:

FEATURE MATCHING-101

"the systematic process by which a person's strengths, abilities and needs are matched to available tools and strategies" (Shane & Costello, 1994)

Feature Matching allows identification of the most appropriate AAC system before trialing or purchasing.

SETT Framework (Student, Environments, Tasks, and Tools) – Joy Zabala, Ph.D.

Visit the Resources Tab of the NWACS website under Feature Matching for more practical, clinical resources.

We should be considering a robust system in most cases.

WHAT IS A ROBUST SYSTEM?

- Has a lot of vocabulary!
  - Core (general and personal)
- Fringe
- Arranged systematically
- Considers more than the skills present now
  - words needed for modeling
- Has the capacity to grow with the child
- Has a literacy component (for now, for the future)
VERY FEW EXCEPTIONS

When might you not initially use a robust system?

- Individuals who have CVI or other vision issues
- Individuals who have significant motor challenges
- Individuals who need to develop an appropriate way to initiate communication
- In depth explanations of these exceptions is beyond the scope of today's very quick workshop!

BASIC FEATURES FOR EMERGING COMMUNICATORS

Vocabulary Selection
- Choose a variety of words that are motivating and interesting to the individual
- Use your communication sample/inventory to help you select
- Use core word lists to help you prioritize
- Word supports single word expression AND modeling of word combinations whenever possible

Access
- What is the most complex array accessible with this child's vision and motor abilities?
- With LOWEST response effort

Output
- Voice output
- Partner needs
- Visual output (e.g., message window, symbols or text only)

Physical features of the system
- Size, durability, portability, social acceptance

SYSTEMS TO TRY WITH EMERGING COMMUNICATORS

- PECS (Picture Exchange Communication System)
  - You MUST follow the protocol for PECS to work
  - PECS can be used in tandem with other, more robust systems for modeling language
  - Also has an app

- POED (Pragmatically Organized Dynamic Display)
  - Compass POED app if you want voice output, portability

- Core and fringe communication books
  - (Pixon or adapted from Pixon)

- A high-tech option that fits your feature criteria
  - (see list of some of my favorite apps under context-dependent)
PECS- 101

- Picture Exchange Communication System
- FREE online training in the CORRECT PECS Protocol at OCALI Autism Internet Modules
- PECS was designed to teach emerging communicators an effective, symbolic means of INITIATING communication with a partner
- Once we have effective initiation, we need to provide a more robust modality - with PECS or instead of PECS

GET ROBUST COMMUNICATION BOARDS ONLINE

- Teachers Pay Teachers (free & $)
- Seattle AAC (free)
- Pixon Project ($)
- PrAACtical AAC Blog (Free)
- Project Core (Free)
- Boardmaker Share/Online Community (Free)
- DIY with key design guidelines in mind

FEATURE MATCHING FOR BRADLEY

Notes:
BASIC FEATURES FOR CONTEXT-DEPENDENT COMMUNICATORS

Vocabulary Selection
- More vocabulary – even more robust!
- Conducive to word combinations
- A system that allows you to keep up with vocabulary needs quickly

Early literacy feature (e.g., spelling page, alphabet page)

ACCESS
- Continue to consider Vision & Motor needs
- Response effort must be as low as possible
- Does increased use of the system by the individual warrant reconsidering access needs?

ADDITIONAL FEATURES TO CONSIDER

Output
- Voice output – might emerge as a more important consideration now
- Partner needs
- Visual output (e.g., message window, symbols or text only)

Physical features of the system
- Size, durability, portability, social acceptance
- This individual is moving into more independence – does the weight and size impact ability to be independent with the device?

SYSTEMS TO TRY WITH CONTEXT-DEPENDENT COMMUNICATORS

- PODD
- Core and fringe communication boards and books with even more vocabulary and literacy options
- Any high tech system that has the features needed by the child
  - Robust vocabulary
  - Early literacy components
  - Output? Access? Portability? etc...

Is a leap toward high-tech more relevant here to simply keep up with vocabulary needs?
FEATURE MATCHING FOR ALEX

Notes:

VOICE OUTPUT (HIGH TECH) SYSTEMS

Dedicated Communication Devices
- PRC
- Tobii Dynavox
- Saltillo

My Favorite Communication apps

iOS:
- TouchChat HD AAC With WordPower
- Speak for Yourself
- Sonoflex
- LAMP Words for Life
- Snap Scene (not robust)

Android:
- Indi (Tobii Dynavox)
- PRIO (PRC)
- NOVA Chat 10 (Saltillo)

VISUAL SCENE DISPLAYS

High tech AAC Alternative to grid-based picture communication displays
- Highly contextualized
- Personal
- NOT ROBUST

WHY
- To reduce cognitive demands
- Make learning easier
- Support social interactions and exchange of ideas

Apps that do this
- TouchChat MultiChat (Student)
- Snap Scene (app for iPad and desktop computers)

Research summary and details on VSDs at Leader Project and ASHA has an EBP presentation here
APP LISTS TO CHECK OUT

AAC Apps Lists (Jane Farrall Consulting)
Free or Lite Version of AAC Apps & App Comparison Resources (PrAACtical AAC)
Robust AAC Apps for Android (Lauren Enders, Pinterest Pinboard)
See my slide on my favorite apps
Some low tech "apps that are low cost:
  GoTalk Now
  Sounding Board
  Talk Board
  Tap Speak Sequence (TS Sequence)

APP COMPARISON

Notes:

AAC TRIALS

Notes:
5 STEPS TO AAC INTERVENTION
Light & Drager, 2017 AAC in EI, Penn State University http://aackids.psu.edu

1. Identify meaningful contexts for communication
2. Provide effective means to communicate
3. Select appropriate vocabulary
4. Set up the environment to support communication
5. Use appropriate interaction strategies to support communication

START WITH ENGAGEMENT
You may not use your AAC right away
You may dance back and forth between modeling AAC and focusing on the interaction/engagement
Establishing back and forth/routine to lay the language onto later
WHY ENGAGEMENT FIRST?

Different than establishing rapport
Being in tune with the individual
The relationship and interaction drive the language/communication
These individuals only want to communicate about their interests and motivations
  So we need to be able to have that perspective to support the language
Following the individuals lead
  What are they looking at
  Following, Social Thinking

STRATEGIES FOR ENGAGEMENT

Position:
  - At or below a client’s eye level
  - Face-to-face
  - Close interactions
Follow child’s gaze
Follow child’s “message” (A.R.E.E. we will discuss shortly)
Using tone and affect to alert the brain and make things fun
Reduce the “stuff”
  - Melody, music, singing, movement, sensory
  - “People toys” and “People Games”
Finding a interest topic/activity and centering activities around that interest

MEANINGFUL CONTEXTS FOR COMMUNICATION

- Contexts that are motivating to the child
  - Fun
  - Encourage PARTICIPATION
- Contexts that have many communication opportunities
  - Social versus contrived requests
  - Can be sustained for many turns
  - Activities that occur frequently throughout the day or week
  - Repetitive activities (bubbles, songs, crashing blocks, songs, finger plays, silly sound games)
  - Hanen’s “People Games” and “People Toys”
- Contexts that are developmentally appropriate
- Gradually add new contexts
EFFECTIVE MEANS TO COMMUNICATE

Effective means ...
* Improve a child's ability to express himself
* Reduce frustration
* Support language learning
* Enhance development of basic concepts (cognitive development)

An AAC “System” is comprised of multiple modes of effective communication

A MULTIMODAL APPROACH

Using a variety of appropriately matched AAC supports depending on:
- Response effort
- Effort versus reward balance
- Different communication partners
- Different communication environments
- Different communication pressures

THIS INCLUDES NON-SYMBOLIC MEANS

MAXIMIZE NON-SYMBOLIC COMMUNICATION

- Acknowledge the signal
- Interpret the meaning
- Respond/reinforce consistently
- Create a “Communication Dictionary”
- Directions for developing a personal communication dictionary
- Have symbols available for making associations during the shaping process
BASIC COMMUNICATION BOARD CHECKLIST

- Core Vocabulary
  - Detailed core vocabulary
  - Include specific vocabulary
  - Words that play a part of early communication
- Fringe Vocabulary
  - Mix of novel and familiar vocabulary
  - Arranged for literacy & automaticity
  - Grouped by parts of speech
  - Color-coding
  - No pictures without words

Check out these resources for more guidelines!

- Manual Communication Boards with Core Vocabulary
- Organizing Vocabulary for Communication Books
- Vocabulary Selection & Organization
- Colorful Considerations in AAC supports

WE TEND TO FOCUS ON FRINGE

Fringe vocabulary is mostly nouns
- A large number of words
- Infrequently used
- Used in very specific contexts
- With high variation from person to person

Building Vocabulary Handout from Speak for Yourself Blog
- Use this handout to help a person build vocabulary
- Print it with their favorite fringe words
- Give it to the parents to help expand language
- Great tool for choice and vocabulary for AAC systems

Click the Image Above to Access Word Doc
WHAT IS CORE VOCABULARY?

- A small number of words (representing many word types—pronouns, verbs, adjectives, etc.)
- Used even often
- Applicable across contexts
- Relevant to EVERYONE

General Core Vocabulary includes the top 300 words that make up 94% of what adults and children actually say and it is often ignored (or under-represented) in the design of AAC systems, especially for beginning communicators.

Personal Core includes words that a person uses all of the time (daily or several times a week) which are not included in the top 500 core words.

Join Together Core & Fringe Vocabulary!

TODDLER VOCABULARY ARRANGED BY FREQUENCY OF USE

The 23 core words shown here comprise 96.3% of the total words used by toddlers.

How many of these words are commonly seen on AAC supports in EI?


REPRESENT COMMUNICATION FUNCTIONS

Choose vocabulary that allows you to move beyond requesting right from the start.

- Sometimes we focus on what is most tangible or concrete but the power of language is being able to communicate beyond the here and now.

Emerging communicators are often expressing functions other than requesting through:

1. Nonverbal: Non-Symbolic, and/or Unconventional means
2. A range of communication functions can be modeled and expressive at the single word level
HOW MANY WORDS DO I START WITH?

A LOT!

Do some troubleshooting around access (visual and physical) and use an array that has the most amount of cells possible within these needs.

Typically developing children acquire approximately 50 single words before they begin combining 2 words – this usually occurs by the age of 2 years.

We need words for the concepts the child is able to express and words to model the language around those concepts for language growth.

A variety of words

Enough words

Words that don’t move around too much as language skills increase.

LAMP is a great resource to help you understand the role of motor planning and processing in AAC use. [https://aacapps.com/lamp/what-is-lamp](https://aacapps.com/lamp/what-is-lamp)

SOME THOUGHTS ON ACCESS

- Ask yourself if this is a true access challenge?
- Start with a grid that represents the smallest cell size that a child is able to visually and physically access.
  - This is not about discrimination.
  - Reducing the grid can be achieved without limiting cell number and while maintaining a predictable vocabulary arrangement to support future growth.
  - Hiding cells on a high tech device.
  - Leaving surrounding cells blank on a printed display.
  - Partner strategies for access.
    - Scaffolding/supporting access.
    - Partner assisted access.

REFERENCE: Gail Van Tatenhove handout, Normal Language Development.
SUPPORTING MOTOR PLANNING/AUTOMATICITY

LAMP is a great resource to help you understand the role of motor planning and processing in AAC use.

https://aacapps.com/lamp/what-is-lamp

Don't move things around!
Keep position of vocabulary similar or the same from page to page, support to support
Use color-coding

TOP 5 REASONS TO USE PHRASE-BASED MESSAGES

1. Emergency phrases/Emotional Regulation
   - Such as “I need a break” or “I’m in pain”

2. Partner Instructions
   - Such as “I need a minute” or “It’s not on my board”

3. Discourse Functions
   - Such as “See you later” or “What’s your name?”

4. Questions
   - Such as “Why is that happening?” or “When can we be finished?”

5. Predictable Routines
   - Such as the Pledge of Allegiance and Songs/Nursery Rhymes


THOUGHTS ON YES/NO

Do we really need to “waste” valuable AAC real estate for a “yes”?
Is using an AAC device or manual communication board/symbol the method of expressing a yes/no response that is the least restrictive for this student?
Are there more efficient yes/no signals we can shape to achieve this very important communication function without using the device or AAC support?

No, not, don’t are definitely valuable to a communication display in terms of providing the vocabulary needed for negation, rejection, protest but not necessarily for a “no” response to a yes/no question
SWITCH ACTIVITIES

- Assist in providing practice for switch access
- Encourage communicative participation

BUT...

Do not do the entire job of teaching language and communication skills

Utilize “Parallel programming”

SAME IS TRUE OF “AAC READINESS” ACTIVITIES

The best way to obtain skills to use AAC is to use AAC
- Switch games and using a Big Mack do not assist with the linguistic competence of AAC skills, they assist with participation and development of access

How can we support access (visual and physical)?
- Ability to access the tool does not hold back ability to access the language

You may consider using a light tech system with partner support while on the journey to refining access

ENVIRONMENT TO SUPPORT COMMUNICATION

- Position the child to maximize vision, hearing, and motor skills
  - Child will be able to participate more effectively in social interactions if or she can see, hear, reach and touch the related items

- Position yourself to maximize interaction
  - Sitting directly in front of him or her (Face to Face – Hanen)
  - Positioning yourself at his or her eye level
  - Holding activities and materials in front of you in the child’s line of sight
  - Using lots of expression and intonation in your voice
  - Minimizing competing distractions (such as the TV)

- Incorporate AAC appropriately
  - Model the use of throughout the day
  - Make the AAC system available
INTERACTION STRATEGIES TO SUPPORT COMMUNICATION

- Provide lots of opportunities for the child to communicate
  - A range of functions
- Model the use of AAC as you talk
- Wait and allow the child time to communicate
- Respond to the child's attempts to communicate
- Have fun!
- Follow the child's lead as much as possible
  - Communicative learning occurs when the child talks about what he wants to talk about, your job is to set up the opportunity to entice that child into communicating

In other words.....

BECOME A “SMART” PARTNER...

Knows the AAC system inside and out
Shares control with the child
Provides access to the system at all times
Acknowledges communication attempts of all kinds
Provides ample models (aided language modeling)
Reiterates, enhances, and expands with AAC (A.R.E.E.)
Brings a motivating, reinforcing activity to the table
Sabotages expectations to create learning opportunities
Tempt with aided language
Waits

Linda Burkhart & Gayle Porter - PODD

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Waits

Teach language in natural experiences, everyday!

Linda Burkhart & Gayle Porter - PODD
TRAIN EVERYONE TO BE A SMART PARTNER

Explore some of these training resources online and/or develop one of your own, tailored to your team’s needs

- Training Ideas for the SLP
- 5 PrAACtical Skills to Teach New AAC Facilitators
- Training Paraeducators to Promote the Use of AAC… (research article)
- Targeted Training in AAC for Paraprofessionals

Consider where the smart partner’s roles and responsibilities might fit into the IEP
- How will your smart partners track their own progress?

10 WAYS TO PROVIDE LANGUAGE THERAPY AAC style!

- WAITING & EXPECTANT DELAY
  - Expectant delay
    - "Watch-Wait" Maintain eye contact with the person while you wait quietly with an expectant look on your face (Gail Vantatenhove, The Art & Science of AAC Intervention)
  - Simply Waiting
    - For the individual to initiate
    - For the individual to respond

-IN THIS ROOM WE TEACH ONE MORE WORD TO THE FLIX
- Use quick access
- Model
- Allow wait time
- Presume competence
- Promote motor planning
- Keep calm and wait expectantly
- Speak AAC

Meme courtesy of PrAACtical AAC
CREATE COMMUNICATION TEMPTATIONS

- Use your environment
- Sabotage routines
  - Through delay (Waiting/Pausing in routines)
  - Through violating expectations/oversight
    - playing “dumb”
- Create gentle barriers
- Use aided language modeling to tempt
- Use absurdity

Learn more about temptations at PrAACtical AAC!

CUT QUESTIONS

We tend to ask our nonverbal/less verbal kids a lot of yes/no and “this” or “that” questions
- this teaches them to be responders and limits their opportunities to truly communicate

Do you want juice?
- What do you want to drink? (gesturing to choices)

Do you want more or are you all done?
- Tell me what you want (gesturing to choices)

Narrate (verbally AND visually) what you are doing, what you want, what you don’t want — you can even “pretend” to provide some temptation and a valuable modeling opportunity
- I’m so thirsty! I want some juice. Mom, what do you want to drink? Oh, you want juice too! Here you go… etc.

More on cutting questions here

A.R.E.E.

- Acknowledge the child’s message, even if he didn’t use a symbol
- Reiterate the message so the child knows you understand his attempt & to check for accuracy in your understanding
- Do this affirmatively, when you can, not always with a question
- Enhance the message — model a new form for enhanced meaning, clarity, efficiency
- Expand the message through word combinations

“Find the spark and fan the flames!”
**USE PROMPTS & CUES**

**Verbal prompts & cues**
- Open ended questions or statement (I wonder what you want, what should we do next?)
- Directive Tell me what you want, use your words.
  - You need to ask me
  - Closed question with part of answer (this or that)
  - Size
  - Carrier Phrase

**Visual prompts & cues**
- Gesturing toward board, holding board in close proximity, pointing to board
  - Highlighting the target word(s), such as with a flashlight

**Visual model**
- Pointing to the target picture on the AAC system

Tips to reduce prompt dependency

**FOCUSED STIMULATION**

Repetition with variety! Teaching, not testing!

Step by Step (courtesy of PrAACtical AAC)

- STEP 1: Introduce the new word(s) using focused AIDED language stimulation
  (similar to Frontloading)
- STEP 2: Teach the new word(s) with explicit instruction activities
- STEP 3: Elaborate on the new word meanings with engaging practice activities
- STEP 4: Provide repeated exposure to the new word(s) on an ongoing basis
- STEP 5: Check for understanding and reteach, as necessary

Learn more about Focused Stimulation in AAC here

**HELP KIDS USE THEIR NEW WORDS**

FOR EXAMPLE

Choral Responding
Filling in repetitive lines in songs and books
Giving directives to others in a game

how else?
10. PROVIDE (AIRED) LANGUAGE MODELING all of the time!!

MODELING IS A FIRST LINE STRATEGY

Also referred to as:
Aided-Language Stimulation
Aided Language Input
Aided Language Modeling
Partner Augmented Input

You “speak” AAC to the individual to teach him to “speak” using AAC
WHY DO WE MODEL THIS WAY?
You learn a language by being immersed in it
- AAC is this individual's language

Modeling teaches: CONTENT, FORM, and USE

We are teaching LANGUAGE using the MODALITY of AAC
- You teach the language by using the language

This is the MOST ESSENTIAL PIECE OF YOUR AAC INTERVENTION!
- DO IT!
- OFTEN!

AIDED LANGUAGE MODELING - 101
- Use the individual’s AAC system to speak to them in naturally occurring communication interactions (ex: play a song, read a book, etc.)
- Model language on the AAC system at a level just above what the individual is typically doing
  - 1-2 words above current level of expression
  - Say your full message, show the key words

- Model a range of motivating words that express a range of communication functions
  - Verbs
  - Modifiers
  - Negations
  - Question words
  - Pronouns, etc...

- Model navigation/operation
  - Including the "Oops!"

ALM-HOW TO (CONTINUED)
- Use support strategies to encourage attention
  - Movement, sound, light, waiting, vocal prompt (throat clear)
  - engagement strategies
  - reduce complexity with masking
  - Slow down, exaggerate your pointing movements

- Match the child’s "message"
  - as demonstrated by non-symbolic means (Enhancement)
  - an expansion to what the child "says"

- Balance conversational turns
MODELING IN THE CLASSROOM

- Identify & create opportunities within daily school routines
- Pick small core word targets at a time and embed these targets into your instructional activities
- Engage support staff in simultaneous modeling during group instruction
- Integrate target symbols into your group instruction materials and plan

MODELING IN THE CLASSROOM IN ACTION

The Big Core (TPT)
Assistiveware core word poster (Zazzle)

RESOURCES ON AAC IN THE CLASSROOM

- 54 Tips & Tricks for Implementing AAC in the Classroom
- How I do It: Supporting Teachers of Students with AAC Needs
- PrAACtical AAC: AAC in the Classroom Series
- Project Core Online Modules
- Teachers Pay Teachers (Core Word Lessons & Materials)
- TELL Me Program: AAC in the Preschool Classroom (Curriculum)
- Assistiveware Core Word Classroom (free as beta testing is underway)
- Upcoming NWACS Conference: Using Aided Language Stimulation to Promote Early Language and AAC, Dr. Carol Goossens, October 21, 2017 in Bellevue

This session targets clinical strategies for using scripted and unscripted activities to address communication goals within a group format in a variety of classroom settings.
BUT WHEN ARE THEY SUPPOSED TO ACTUALLY "USE " IT?

Typically developing children are exposed to language for a full year before we expect them to talk; and then we only expect one-word utterances (initially).

Language learning for AAC users could take years!

MONITORING “AAC PROGRESS” AT THIS EARLY STAGE

- Focus on MODELING, not on expression
  - Although you are providing opportunities for expression
- Consider developing measurable goals around modeling
  - Track progress with a child’s attention to models and attempts to initiate/use his or her system to express.
- Track progress with expression using non-symbolic means as well

Check out the NWACS Resource tab under Goals for resources on writing measurable AAC/language goals in various settings.

Remember we are shaping toward more symbolic, more conventional, more independent; any move in these directions is progress!

TIPS TO SUPPORT PARENTS

- Share strategies discussed in previous slides, including prompts and cues
- Emphasize MODELING as goal at home-80% or more input should be the focus
  - Helps parents learn the communication supports
  - Takes the pressure off of the parent-child interaction
  - Helps parents recognize communication opportunities and think about vocabulary within those opportunities
- Emphasize multimodal-different times, different partners, different strategies
- Help parents follow their child’s lead
  - Interpret and expand on communicative attempts
  - Provide consistent feedback to the child

Family-Centered Approach to AAC
NWACS WEB RESOURCE PAGE

Resources and links can be found at www.nwacs.com under the Resources Tab

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