

# Enhancing Expressive Communication in Young Children with Autism

*Lisa R. Audet, Ph.D., CCC-SLP*

*[laudet@kent.edu](mailto:laudet@kent.edu); 330-672-0257*

Kent State University

Ohio Speech Language Hearing Association

2008 Convention, Short Course

# Course Objectives

- To identify and describe 3 behaviors indicating a child's level of intentionality and readiness for verbal communication
- To identify and describe 3 strategies for promoting intentionality and expressive communication in pre-verbal children with autism
- To describe how to use language sampling techniques to determine developmental expressive language skills in children with echolalia
- To develop measurable expressive communication goals for children with autism.

# Confidentiality

- Many examples will be provided during this presentation
- The individuals in the examples may appear similar to individuals you know....
- Please do not assume the one I describe is the one you know nor ask me to identify the person (even in private)
- I thank the many, many children and families who have taught me so much over the years. The lessons they teach and the privacy they strive to keep are invaluable.

# Essential Definitions

- Language: Generative use of a shared, rule governed system of arbitrary symbols.
- Communication: Effective transmission and reception of a message (linguistic/non-linguistic)
- Joint Attention: Use of eye contact for a communicative purpose with shifting of gaze between partner and referent.
- Gestural Complex: Intentional use of pointing, showing, giving, and reaching. Strongest predictor of later linguistic achievements.

## Intentionality Revisited:

A developmental socio-linguistic perspective (Bates)

Perlocutionary child: Developmentally 0-9 m, no purposeful communicative behaviors, no meaningful comprehension or use of symbols.

Illocutionary child: Developmentally 9-18m, purposeful communicative actions, no meaningful comprehension or use of symbols.

Locutionary child: Developmentally 12-18+ months, purposeful use of communicative behaviors, comprehension and use of symbols.

## Intentionality and the Child with Autism

- Limited
  - development of joint attention
  - development of gestural complex (particularly distal pointing)
  - ability to comprehend symbols without contextual support (limited generative use/generalization)
  - ability to combine communicative behaviors (means)
  - limited presupposition (awareness of referent)
  - limited use of social pragmatic functions
- Use of unconventional/maladaptive behaviors with intent

## Implications of Deficits

- Limited readability of communicative behaviors leading to...
- Limited adult responsivity to (reinforcement of) communicative behaviors leading to...
- Child frustrations...withdrawal and...
- Adult directiveness in interactions with...
- Limited reciprocity...
- Reciprocity as foundational to social context for interaction....therefore....
- (let's also consider how this impacts relationship building, emotional regulation, comprehension, and trust!)

# Assessment of Intentionality via Play

- Associations with cognitive aspects of play:
  - Play as a correlate with cognitive/linguistic ability
  - Cause Effect
  - Object Permanence
  - Deferred and Immediate Imitation
  - Functional Object Use
  - Pretend: Self, Other, Life Size Objects, Miniature Objects, Schemes
  - A fresh look at perseverative play...
    - Could the child be stuck at a low level of play as well as linguistic ability?
    - Could the perseverative behavior really be reflective of the child's ideation/conceptualization ability?
    - How does using the term perseverative behavior help us assess strength and needs?
    - Could the perseverative behavior, restricted repetitive acts reflect anxiety about how to interact with others/objects?

# Assessment of Intentionality via Play Continued

- **Assessment of developmental social aspects of play:**
  - **Solitary:** Common for exploration novel/favorite items
  - **Onlooker:** Common when desiring to learn how to play
  - **Parallel:** Common when desired object is close to others
  - **Associative (trade prior to share):** Evidence of social skill
  - **Cooperative:** Needed for pretend play/story construction
- **Assessment of Motor Aspects of Play**
  - **Sensory Motor, Gross Motor, Fine Motor**
- **As one play demands increases in one aspect, skill in other areas decrease!**

# Assessment Tools for Play

- Westby Play Scale (Carol Westby)
- Communication Symbolic Behavior Scale (CSBS, Wetherby & Prizant)
- Must use criterion referenced assessments to develop meaningful goals
- Obtain baseline data and determine priorities for cognitive, social, motor aspects of play:
  - Length of specific type of play (motor/social)
  - Variety of play (schema)
  - Cognitive behaviors exhibited in play/frequency
  - Social behaviors exhibited in play/frequency
  - Maladaptive behaviors observed
  - Presence/Absence of Pretend and Level of Pretend (self/other/lifesize objects/miniature objects)

# Assessment of Intentionality via Behavioral Observations

## Functional Behavior Analysis:

- Minimum of 3 ½ hour observations
- Listing of Antecedent, Behavior, Consequence
- Coding of intent of behavior (gain attention, avoid, escape) or..
- Coding of social pragmatic function of behavior (request, protest, comment, gain attention)
- Also use formal measures ie: Vineland, REEL

**Assessment of Intentionality:  
Gestural Complex/Combined Means**

- **Minimum of 3 ½ hour observations or video**
- **Listing of frequency of gestural complex behaviors using event recording for: pointing, reaching, giving, showing**
- **Coding these for communicative role: initiator/responder**
- **Coding these for responsiveness of partner, or**
- **Coding of use of single, 2, 3, or 4 combined means (gaze/vocal or verbal/facial/gestural)**

# Intervention to Enhance Intentionality

- Start at child's developmental level;
- Create goals that address missing aspects;
- Integrate and use meaningful structure and routine to increase contextual support;
- Integrate and use meaningful, concrete (3D symbols and/or real photos) to enhance comprehension;
- Strategically manipulate and control your behavior and the environment to reduce distractions, increasing attention and associations;

# Intervention to Enhance Intentionality Continued

- Strategically introduce novelty repeatedly;
- Allow the child to observe;
- Provide frequent opportunities to practice, sabotage the environment to create real reasons to practice within generalized context
- Validate child's experience (even if it is your hypotheses of his/her experience) to assist in problem solving
- Issue of Dyadic vs. Triadic Readiness:
  - Perlocutionary children prefer dyadic interactions, gradually build in/towards triadic 3 people, 2 people and an object.

# Meaningful Structure, Routine, Support

- **Basic Rule: We listen to each other, I mean what I say and trust that You do too! And I will talk to you at a level you understand! Fair....Fair...Let's Shake!**
- **We must teach children how to listen and that we expect them to listen**
- **We must show children that we will listen and desire to understand**
- **Reduce repetitions of directions (use least to most prompting). THIS IS VERY IMPORTANT!!!**

# Meaningful Structure, Routine, Support Continued

- Reduce language output
- Reduce language complexity
- Slow the pace and allow processing time
- Reduce adult to adult talk
- Talk about the here and now (with perlocutionary and illocutionary level kids). They don't have a referent for past or future.
- Code behavior for emotional and social intent
- Comment on the moment

# Meaningful Structure, Routine, Support Continued

- Use object schedules
- Allow the child to observe and talk about observing/watching.
- Pay attention to where the child's eyes are and talk about what he/she sees
- Avoid hand over hand as the initial prompt (use least to most prompting: verbal, visual, proximity, tactile, physical assist)

# Dealing with Rejection of Novelty

- Reflective of limited schema/conceptual development.
- Negatively impacts conceptual/receptive language learning
- Carefully introduce novel objects events and allow the child to observe.
- Use Visual Supports (micro-schedule)
- Let the child know how long the event will last (turns/minutes) and provide a visual representation of this
- Once done, allow the child to select activity.
- Return often to novel event and gradually increase length of time tolerated
- Gradually increase participation demand.

# Linguistic Mapping (Audet)

- A method of coding behavior linguistically at the child's level.
- Provide model using carrier phrase Child's name says...X as the child demonstrates a behavior.
- Withhold and provide carrier phrase and use expectant wait til the child demonstrates a higher skill (vocalization, verbal approximation)
- Withhold and use expectant wait til the child demonstrates higher skill.
- Pause and change inflection between Carrier Phrase (X says) and coded message.

# Writing Goals for the Preverbal Child

- Child will use x behavior (reach, point, joint attention, AAC) for x purpose (request, comment, protest) x times in x minutes.
- Child will engage in x play for x minutes within an x minute session.
- Child will orient to his/her partner x times in x minutes.
- Child will imitate x type of play.
- Child will search for missing items x% of the time.
- Child will initiate interactions using x behaviors with peers/adults x times in x minutes
- Child will respond to motor directives x% of the time with no more than two verbal prompts.
- Child will point to labeled item in naturalistic context with x% accuracy and no more than 2 verbal prompts.
- Child will engage in x non-verbal turns using a triadic joint action routine
- Others.....

# Language and the Child with Autism

- Development of echolalia (reflection of learning style and receptive language delay)
- Significant Receptive Language and/or Conceptual Delays
- Limited theory of mind (metacognitive/metalinguistic skills)
- Limited comprehension and use of abstract terms: think, know, guess, realize, wonder, feel, remember, forget etc.
- Limited comprehension and use of pronouns (referent)

# Echolalia Revisited

- Associated Receptive Language Deficits
- Use of echoed production with social meaning but without linguistic meaning
- Attention to paralinguistic aspects of message
- Reflects anxiety, confusion, inability to process
- Strategy to allow processing time

# Pronoun Confusion

- Development of Pronouns: First, Second, Third person....
- Child not using first person pronouns refers to self using proper name...
- Can't expect comprehension and use of second/third person pronouns
- Huge processing demands to track pronouns and referent, acknowledge perspective of speaker and engage in theory of mind

# Assessment

- Use language sampling
- Collect a 50 utterance sample
- Code utterances as Delayed/Immediate Echo or Spontaneous
- Calculate MLU for Echolalic
- Calculate MLU for Spontaneous
- Compare Spontaneous MLU to Developmental State (is there a match between receptive language and spontaneous expressive language per MLU?)

# From Language Sample to Goals

- Determine priorities
  - To increase % of spontaneous utterances
  - To increase linguistic complexity of spontaneous utterances (morphology, syntax, pragmatic function)
  - Use language sample as baseline/pre-post testing.

# What if I can't get a Language Sample

- Child produces minimal utterances (echoed or spontaneous)
- Use time as the criteria when collecting the sample.
- Collect a sample for 10 minutes
- Create a goal that the child will produce more within a 10 minute interval

# Intervention Emerging Linguistic Child

- Use
  - Linguistic mapping
  - Elaboration
  - Expansions
  - Strategic Wait
  - Sabotage
  - Accept what the child says...Don't unconsciously reinforce echolalia

# What about those Pronouns

- Teach one at a time
- Control your output for second and third person pronouns when teaching first person.
- Use gesture to support pronoun meaning
- Provide multiple and elaborate models
- Gradually withhold until child uses pronoun.
- Use linguistic mapping

# Goals for the Emerging Linguistic Child

- Child will produce x spontaneous utterances within x amount of time
- Child will increase spontaneous productions to x% of a 15 minute language sample or x utterance sample
- Child will correctly use first person pronouns to make requests, protest x% of the time.
- Child will use x morphological forms spontaneously x% of the time
- Child will combine verbal approximations with non-verbal behaviors to request, comment, protest x% of the time.
- Child will comprehend novel directives with no more than 2 verbal prompts % of the time.

- Questions
- Thank You!