

The eXtradordinary Kids Clinic

Speech-Language Intervention: Goals and Expectations, Early intervention through High School
Jackie Frazier, MA, SLP-CCC
eXtraordinary Kids Clinic, Children's Colorado
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Topics (from KS&A)

- How is speech therapy addressed in Early intervention?
- What is the influence of low tone on articulation and how is it addressed?
- What should speech therapy look like as the children progress into middle school and high school?
- Therapy: goals and methodologies
- Advocacy Strategies

Speech Language Intervention

- Below the age of 24 months
- Preschool (3-5 years of age)
- The school age child
- Advocacy
- Articulation

Who is on the Speech-Therapy team?

- Your child
- Your child's speech-language therapist
- Other therapists: OT, PT
- Your child's educational team: teacher, aide.

AND

Who is on the Speech-Therapy team?

YOU!

What do we know about speech language development in X/Y?

- The body of research on **speech-language development** in children with x/y variations remains small.
- What we do know is based on clinical experience as well as research.
- Speech-language strengths and weaknesses vary in children with X/Y
- Test scores do not always capture the challenges in day to day functioning.

Speech Language Development in Children with X/Y Under Two

- Often described as very quiet babies
- Those children that vocalize seem to be variable in the quantity and quality of the vocalizations they produce; may not vocalize at all for several days in a row only to vocalize extensively the 3rd day.
- Limited **verbal** communication as a result of the delay in sound development
- May exhibit selective and sporadic response to environmental sounds and/or voice, e.g., may not respond to the loud ring of a cell phone but may respond to a knock on a door or may look in response to the mention of a favorite toy but not respond to their name.

Intervention in Young Children under Two Years

- Must be **indirect** as children this age lack the developmental maturity to engage in direct treatment
- YOU are the focus
- Young children learn best within the routines of daily living within their environment

Intervention Strategies for Young Children under Two

- Reinforce sound production by:
 - ✓ Imitating the sounds your child produces
 - ✓ Offering immediate, positive attention (smile, comment "good talking", "I hear you!")
 - ✓ Stimulating your child with new sounds (as directed by your therapist)

Intervention Strategies for Young Children under Two

- Reinforce all efforts at communication:
 - ✓ Respond to attempts at non-verbal communication: Your child points to something he or she wants: You respond, "Want cereal? Thanks for telling mommy. Here you go. Good talking"
 - ✓ Respond to attempts at word use: says "uts" with extended arms, you respond with "up, pick up, mommy pick you up" as you pick up your child

Intervention Strategies for Young Children under Two

- Model **key words** for your child verbally **and with sign**. Key words are words that have a lot of communication value for your child and that he or she seems to want to use often. You determine what these words are through observation.

Intervention Strategies for Young Children under Two

- Stimulate language by narrating feelings and activities:

You are eating yogurt! Yum, Yum.
Daddy is stirring eggs. Stir. Stir. Stir.

These strategies and others can be addressed in 1:1 therapy or through a parent program such as **Hanen: It Takes Two to Talk**

Speech Language Challenges in the Preschool Child with X/Y

- May have weaknesses in understanding of vocabulary , questions* (who refers to people, when refers to time), and grammar (pronouns, verb tense, clauses).
- May demonstrate immature verbal development of grammar.
- Word retrieval may be compromised
- On going challenges with articulation

*If your child is having difficulty with question(s) consider that he may not have understood the question, may not have the knowledge needed to answer the question, or may not have the words to answer the question.

**Need to do some standardized testing to obtain baseline information in understanding and production of language--can't always identify the weaknesses by observation

Speech Language Challenges in the Preschool Child with X/Y

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Speech Language Intervention with the Preschool Child

- Between 2 and 2 ½ children are usually ready for more direct therapy.
- Therapy should:
 - ✓ Incorporate both structured and less structured activities and include a wide range of cues and prompts (sign, rebus cues, pictures and objects)
 - ✓ Be individualized to your child with shifts in approach if progress is not steady: higher levels of repetition, change in cues, change in focus (expressive to receptive); modification of goal(s)

Speech Language Intervention with the Preschool Child

- ✓ Include specific tasks designed to teach a specific concept
- ✓ Needs to have a strong carryover component to the home.

Examples:

Speech Language Intervention with the Preschool Child

- Teach the use of *he* using structured activities, play, books, modeling, repetition, and visual and sign cues. Examples:
- ✓ Prompt use of *he* with a sign cue when asked to describe action cards (He is walking)
- ✓ Use a game based activity such as concentration, again using action cards and a sign cue as needed

Preschool Intervention: Goals and Strategies

- ✓ Use books that target *he*: Eric Carle's The Very Hungry Caterpillar → But *he* was still hungry.
- ✓ Using rebus symbols, create "books" with *he* that your child can "read" using a program such as Writing with Symbols
- ✓ Model use of *he* throughout the day

*all of the above can be carried over to the home

Speech Language Intervention with the Preschool Child

- Improve word retrieval:
 - ✓ Name pictured items within categories such as furniture, animals, colors, shapes, fruit, vegetables, etc.
 - ✓ Adding onto categories or groupings, e.g., I can think of two foods/ things that are good to eat. Can you think of two?
 - ✓ Finishing sentences: We sing a X ?; We brush our teeth with a X ?
 - ✓ Making up riddles based on descriptions of objects or events. I'm thinking of an animal. She lives on a farm and says moo. What is it?

Speech Language Intervention with the Preschool Child

- ✓ Can do all of these same activities at home
 - ✓ Can reduce the influence of the word retrieval on communication at home and in the classroom by Offering choices
- Examples:
Do you want to wear your red shirt or your green shirt?
Is this a B or a P?

Speech Language Intervention with the Preschool Child

- As children move closer to 5 we want to begin to look at/monitor:
 - ✓ Their ability to link information from sentence to sentence. This is a skill needed to track longer conversations, classroom instruction, and curriculum.
 - ✓ Their developing ability to think with language. Do they understand simple when and why questions? Can they compare concepts (How are an apple and a banana the same?)

Speech Language Challenges in the School Age Child with X/Y

- Once in school challenges often surface with language skills that require abstract language reasoning*. These skills include the ability to:
 - ✓ Spontaneously identify the connection among concepts
 - ✓ Use language for problem solving

Speech Language Challenges in the School Age Child with X/Y

- ✓ Recognize that words and sentences can have more than one meaning (park/She took his picture)
- ✓ Read between the lines (inferencing/implied meanings)
- ✓ Understand language that is not literal such as sarcasm, slang, metaphors

*understanding of abstract language influences social interaction as well as academic success.

Speech Language Challenges in the School Age Child with X/Y

- Additional challenges that surface or that become more problematic include the ability to:
 - ✓ Engage in complex recall, interpretation, and integration of connected language. Difficulty with complex language interpretation, integration, and analysis may contribute to breakdowns in understanding of longer explanations and discussions, reading comprehension, and tracking of conversational interchange.
 - ✓ Understand more complex grammar (may influence **production** of grammar in written language and for expression of more complex information/thoughts).

Speech Language Challenges in the School Age Child with X/Y

- ✓ Recognize, understand and/ or apply the rules for communication/social interaction (also involves comprehension and non-verbal development).
- ✓ Demonstrate a deeper understanding of vocabulary*
- ✓ Rapidly retrieve specific vocabulary
- ✓ Understand and internalize concepts related to time

Intervention: Challenges

- Persistent problems with abstract reasoning, recall, interpretation, integration of complex connected language, and word retrieval are difficult to resolve.
- Strategies that are typically used with children with learning disabilities may not be realistic or effective; these strategies may need to be adapted/tailored to your child's challenges.

Intervention: Goals and Strategies For the School Age Child with X/Y

- Shift expectations—what is the goal?
- Focus on learning essential information/skills that will have the greatest positive influence on the quality of your child's academic achievement and future independence.

Intervention: Strategies
For the School Age Child with X/Y

- Some GENERAL ideas
- ✓ With your participation, request that the school conduct an environmental analysis to identify the language breakdowns that are occurring at school, at home, and in the community and then develop a plan to work directly on resolving those breakdowns or finding a compensation. This might involve short term 1:1 therapy , participation in a group, support in the classroom with prompts and cues, a tutor .

Intervention: Strategies
For the School Age Child with X/Y

- ✓ Preview classroom curriculum: watch a video on the topic; go over key vocabulary, take field trip; read an overview. This is an extremely effective strategy for children who have problems with attention, processing speed, and comprehension
- ✓ Use/develop visual supports (visual schedules), technology, and apps that will bolster your child's areas of weakness.

Intervention: Strategies
For the School Age Child with X/Y

- ✓ Reduce the work load during the school year by taking a class in the summer.
- ✓ Shifting to a work-study program if offered by your school system.
- ✓ Continued support with note taking, modification of assignments, graphic organizers etc., IF those compensations are working.
- ✓ Teach/model ways to save face: I don't know much about that, tell me what you think

Articulation

- Therapy always needs to involve multiple methods, multisensory cues (visual, verbal, tactile, associative), and high levels of practice.
- Often see random mispronunciations in older children. Varied causes: difficulty with phonemic retrieval, residual sequencing issues, lack of awareness/self-monitoring. Examples: mitten/minute; organ/Oregon/oregano; marble/Marlboro*. This requires:
- ✓ Identification of the error words for the therapist (therapist may never hear them in a therapy session)

Articulation

- ✓ Short term therapy using association cues and mass practice. Example: For minute/minute want to contrast the differences:
 - ❖ For mitten: picture of a baseball mitt + ten (picture or hold up both hands)
 - ❖ For minute: min (on a note card)+ sign for it).
 - ❖ This is followed by mass practice in therapy and at home for retrieval of the word *minute* (Give me a ?, I will be there in just a ?)
- Intelligibility: also influenced by accurate use of grammar, staying on topic.

Articulation: Low Tone

- ✓ Low tone is diagnosed by assessing resistance to passive stretch. No standardized way to do this in the face.
- ✓ Lots of overlapping muscles groups in the face so it is difficult to determine which muscle(s) is compromised and to what degree
- ✓ No information available on what the normal range is for tone in the face.

Articulation: Low Tone

- ✓ Low tone is generally clinically inferred
- ✓ Low tone does not necessarily mean compromised strength
- ✓ Low tone and a reduction in oral motor strength can be difficult to differentiate.

Articulation: Low Tone

- ✓ Influence of compromised strength or low tone on speech is not well understood. So far we have not been able to develop a functional relationship between low tone or reduced strength and functional limitations in speech.
- ✓ Only a very small amount of strength is needed for speech

Articulation: Low Tone

- ✓ Tone cannot be changed and there no research on the effectiveness of strength building exercises in children
- ✓ See many children with low tone with excellent articulation.
- ✓ If low tone extends into the trunk they may have challenges with volume, respiratory control (sound breathy, less words per breath).
