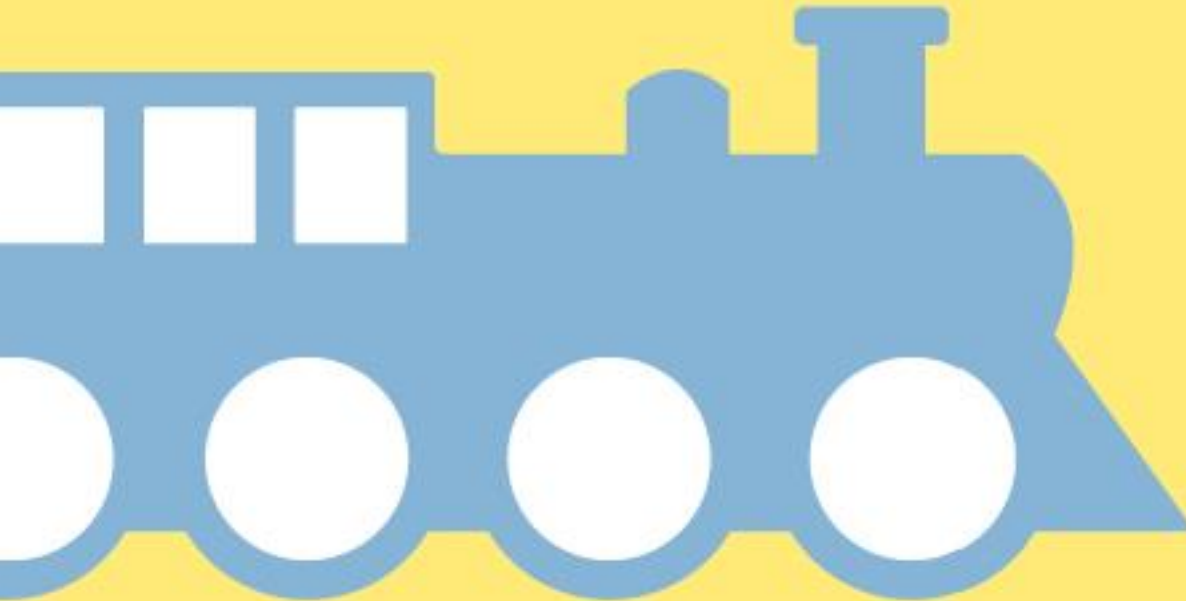




THE PLAY PROJECT™

PLAY Consultant Webinar May 22, 2019

Climbing the Language Mountain: When Will A Child with Autism Talk?



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The PLAY Project

www.playproject.org



Climbing the Language Mountain

Introduction

- The most cherished first wish for parents of a child with autism is that they “talk”
- Yet 25% with ASD will not develop functional language
- While certain interventions including ABA, PECS, augmentative communication, etc. can force the bloom on the flower of language
- I want to make the case for a more organic, slower, more developmental approach to help the child’s language flower



The Flower of Language





Let's get going...





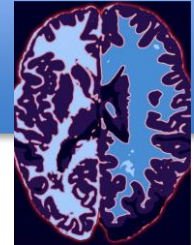
Review of Language Development

- Origins of language: Critical period, innate brain capacity vs. language as learned
- Chomsky vs Skinner
 - Steven Pinker vs Vyvyan Evans
- Process vs Content
 - **Process:** The social emotional and sensory/regulatory *foundations* for language development
 - **Content:** The specific skills that enhance a child's ability to understand and communicate



Let's Think Twice





Review

Speech and language in autism spectrum disorder: a view through the lens of behavior and brain imaging

Maria Mody*₁, Dara S Manoach₂, Frank H Guenther₃, Tal Kenet₄, Katelyn A Bruno₅, Christopher J McDougle₆ & Kimberly Ann Stigler₇

Neuropsychiatry (2013) 3(2), 223–232



Early Deficits in ASD

- **Infancy:** Delayed babbling, reduced consonant inventory, idiosyncratic order of speech-sound acquisition and reduced use of phonetic contrasts
- **Toddlers:** Decreased speech output
- **14 months:** Unusual prosody (flat intonation, poor control of volume), use of rote utterances and difficulties in verbal imitation



Research on Language & ASD

- Children with ASD don't orient to speech from an early age suggesting that. . .
- Communication impairment in autism may be secondary to a **broader deficit** in social reciprocity and motivation.
- The problem may be traced to **impaired joint attention and shared reference** early in development at 9–12 months of age.
- Communication is intertwined with cognitive, social and emotional domains, which influence each other on an ongoing basis.



Brain Studies on Language & Autism

- Impaired prosody and pragmatics are hallmarks of ASD secondary to deficits in social reciprocity and motivation.
- Reduced activation and reduced connectivity in the frontotemporal language network in the brain
- Individuals with ASD display less functional lateralization for language or a tendency for rightward asymmetry.
- Advances in neuroimaging (EEG, magnetoencephalography, functional MRI and diffusion tensor imaging) hold tremendous promise for early detection and designing interventions for ASD.



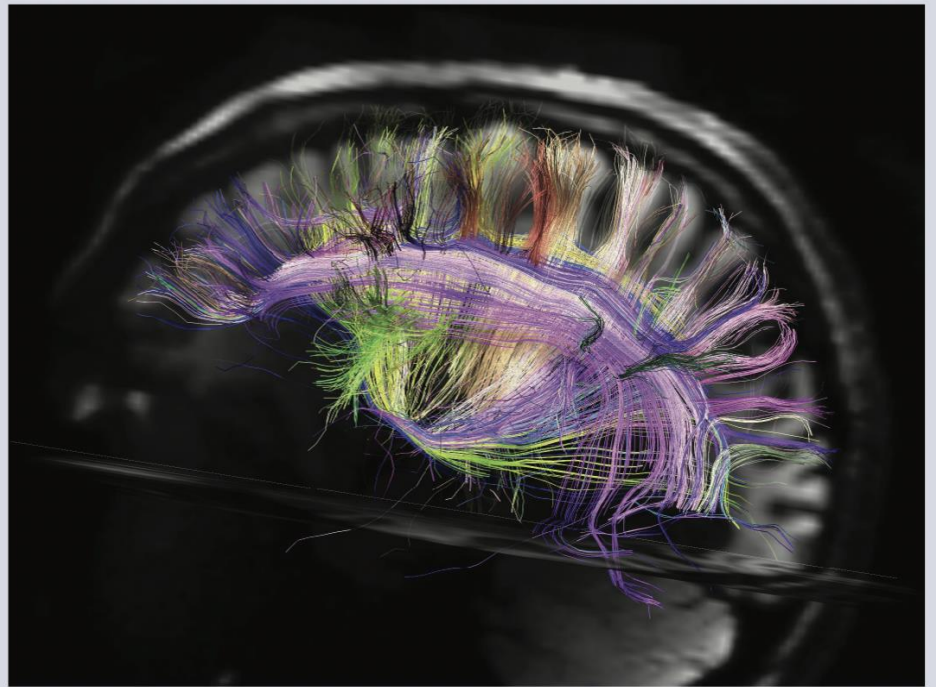
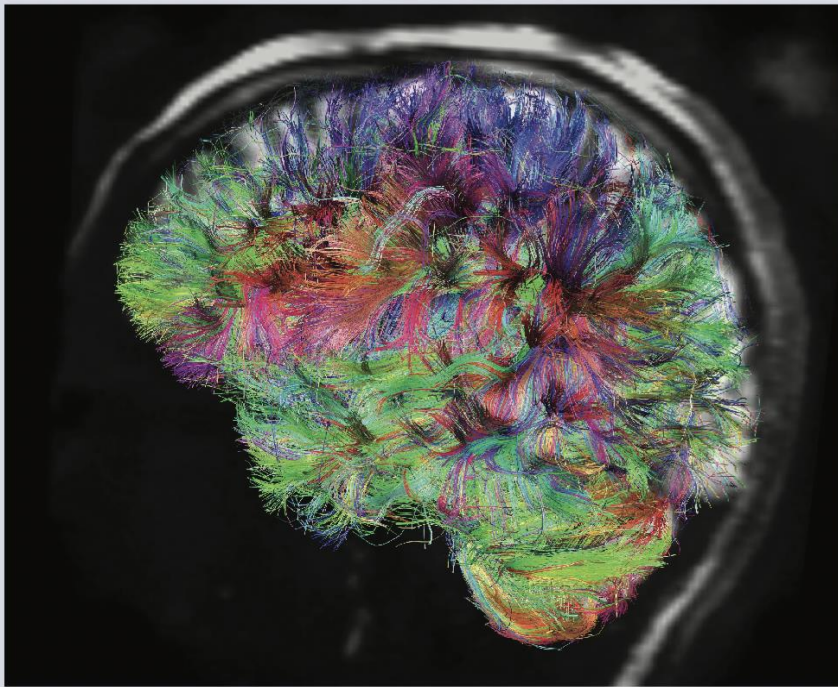
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Complex Connectivity

- I want to make the case for a more ***interactive, emotional & imaginative*** language (not *just* talking). . .
- That integrates brain circuitry across regions
- Leading to more complex language, more complex thinking, more complex feeling
- One that would re-organize the various neurological circuits in the brain
- To recreate the beauty of inter-connectivity



Fiber pathways of white matter, the 'wiring' of the brain in a normal volunteer.





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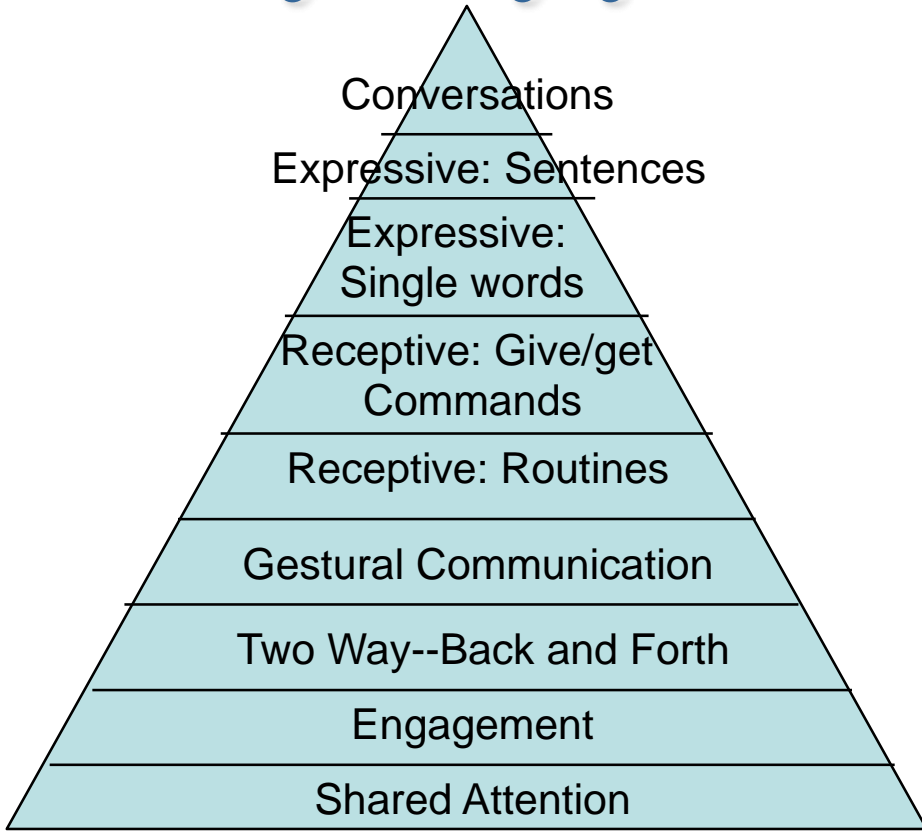
The Foundations of Language





The Language Mountain

Climbing the Language Mountain





Overview

- The developmental and relational foundations of language
- How to promote early language acquisition
 - Listing key language milestones**
- How to foster literacy
 - Books
- Dr. Rick's tricks of the trade that promote language
- How to climb up *The Language Mountain*



Parent Implemented Models that are Developmental & Relationship-based



Calvin and Hobbes





Greenspan & Weider

Developmental Framework

- **Self regulation and shared attention (FDL 1)**
- **Engagement (FDL 2)**
- **Two-way Communication (FDL 3)**
- **Complex Two-way Communication (FDL 4)**
- **Shared Meanings & Symbolic Play (FDL 5)**
- **Emotional Thinking (FDL 6)**





Children Will Talk When They Can...

- Regulate sensory input & the ability to share attention (FDL 1)
- Develop attachment and closeness (FDL 2)
 - Example: Reunion behavior
- Formulate and execute an idea in the context of a relationship i.e. be purposeful (FDL 3)
 - Follow routines (get shoes, take a bath, go out. . .)
 - Have longer back and forth interactions (6-10 exchanges in one episode)
 - Early gestural communication



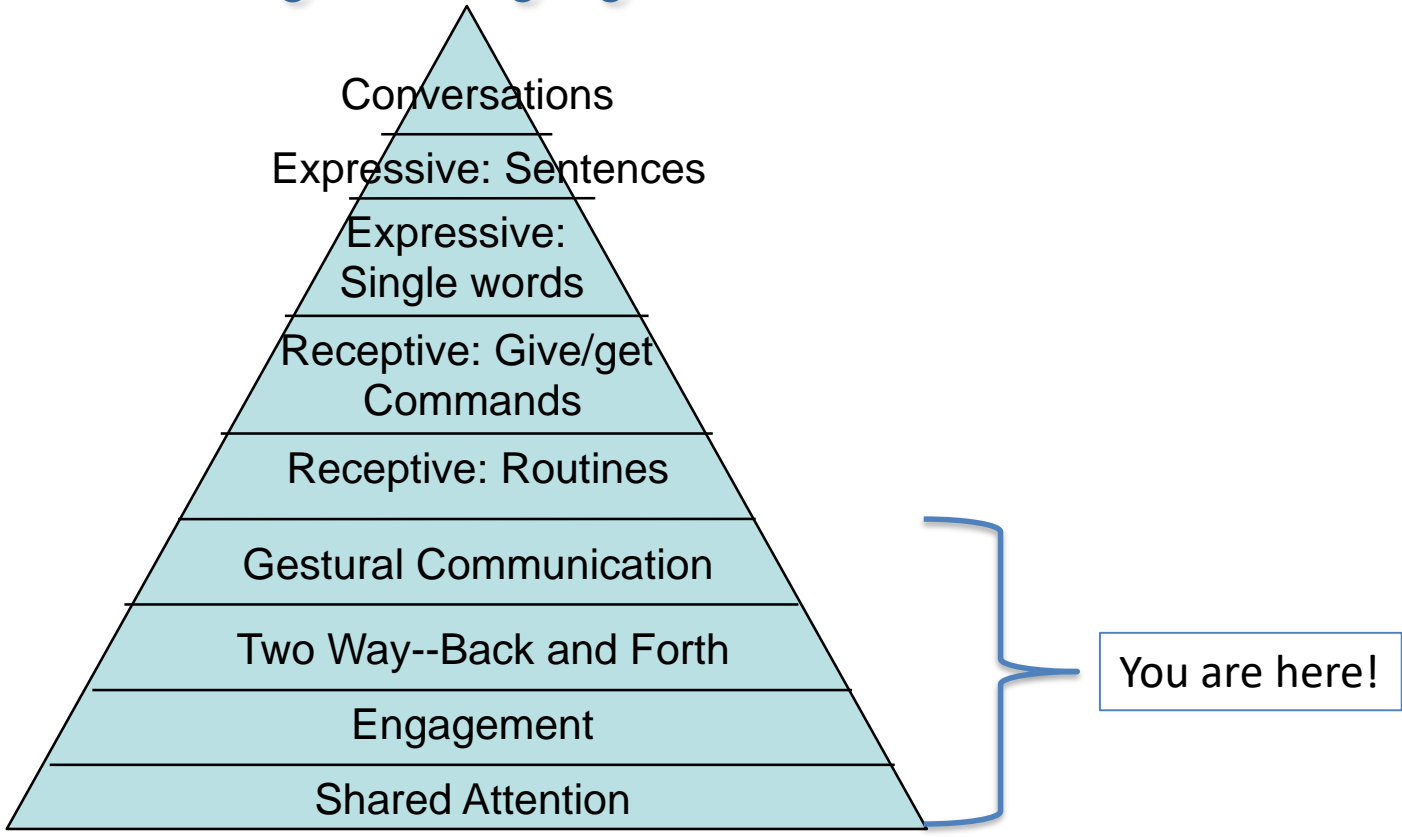
Gestures!

- “In infancy and early childhood, the ability to communicate with gestures is a precursor to language and social interactions. Age 0-8 months (FDL 1-3)”
 - Development of the child as a sound producing unit
 - Playing with sound
 - Reflexive sounds
 - Intentional sounds
 - Gestural intentions used to request and guide adult attention



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Gestures





Types of Gestures

- Big
 - Taking hand to get something
 - Turning head when called
 - Body orientation
- Little
 - Pointing
 - Head nodding or shaking
- Micro
 - Eye contact
 - Vocal inflection
 - Facial expressions of feelings



Gestures





Children Will Talk When They Can...

- Engage in a 50-50 gestural dialogue (FDL 4)
 - Engaging in long sequences of interactions (20-30 exchanges)
 - Read and respond to other's emotional cues
 - Rich and dynamic gestural dialogue with emerging words
- Solve simple problems
- Engage in early pretend/imitative play
- **Most Important:** Follow one step spontaneous (not routine) commands to 'go get' an object and 'give it' to someone



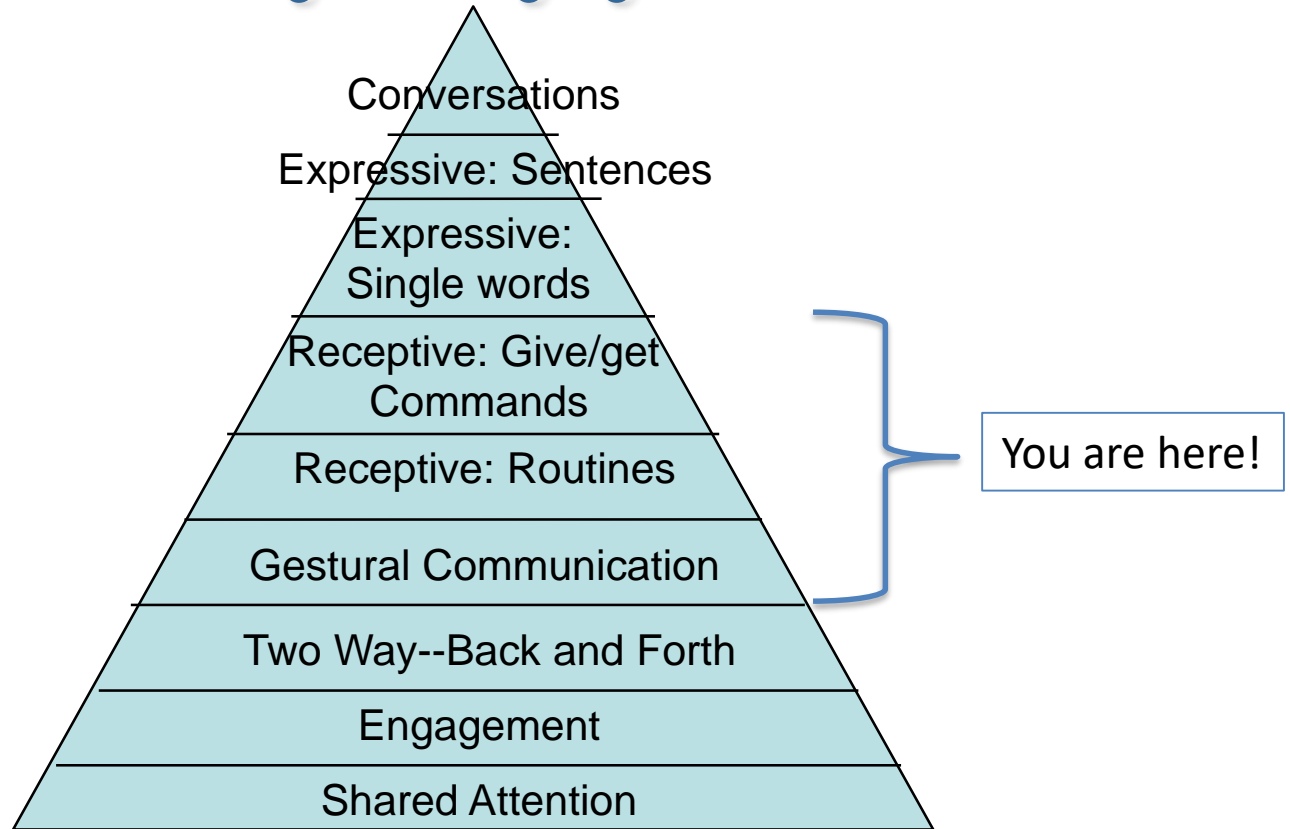
First Single Words

- Age 8-12 months (FDL 3-4)
 - Semantics
 - Understanding 3-50 words
 - First words used for names of familiar people, objects, communicative games, and routines
 - Functions of language
 - Requesting objects and actions
 - Refusing
 - Commenting
 - Communicative games



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Moving Up

- Age 12-18 months (FDL 4)
 - Functions from 8-12 months expressed with one word utterances
 - By 18 months: Average expressive vocabulary 50-100 words
 - A child's first words
 - Rejection: *No*
 - Nonexistence/Disappearance: *All gone, away*
 - Cessation or prohibition of action: *No, stop*
 - Recurrence: *More, again*



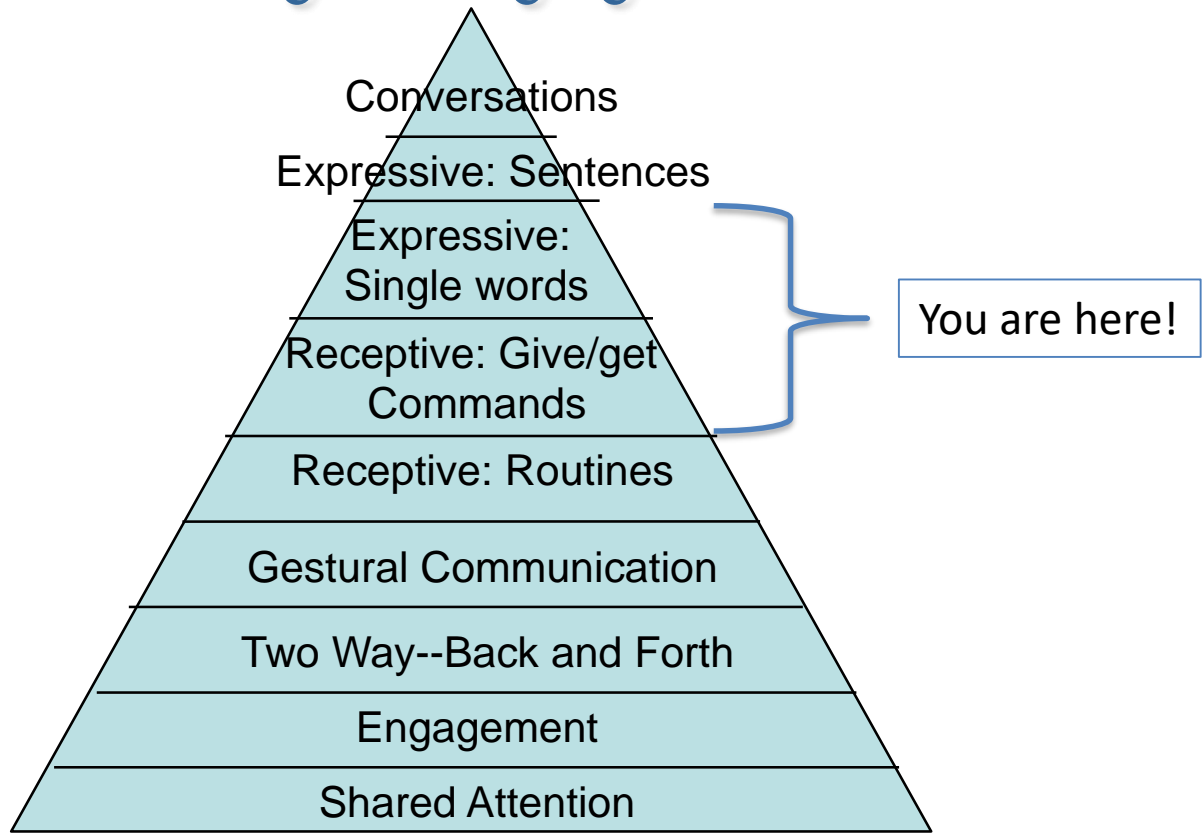
Early Language Techniques

- Honor gestures as communication
- Speak for the child. Use statements not questions.
- Onomatopoeia—word sounds like what it means (e.g. buzzzz, woo woo choo choo, etc.)
- Asked and answered
- Salient language
- Speak to the child in normal tones and rhythms. No baby talk.
- The top 20 words that matter



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A Child of Few Words





Research Review:

6 Conditions Promote Language

1. Children need to hear many words often
2. Children learn words when they are interested
3. Children learn best when adults are responsive to them
4. Words are learned when the meanings are made clear
5. Vocabulary and grammar are learned together
6. Keep it positive



First Words

- A child's first words (cont')
 - Action on objects: *Get, do, make, throw, eat, find, draw, fix, wash, kiss, bump, push, squeeze*
 - Locative action: *Put, take, up, down, out, fit, sit, fall, go, dump, turn*
 - Attribution: *Big, hot, dirty, pretty*
 - Possession: *Mine*
 - Commenting: *Look*
 - Social Interaction: *Hi, bye-bye, night-night*
- Very important to combine words with affect, gestures, and rhythm
 - Sing sentences



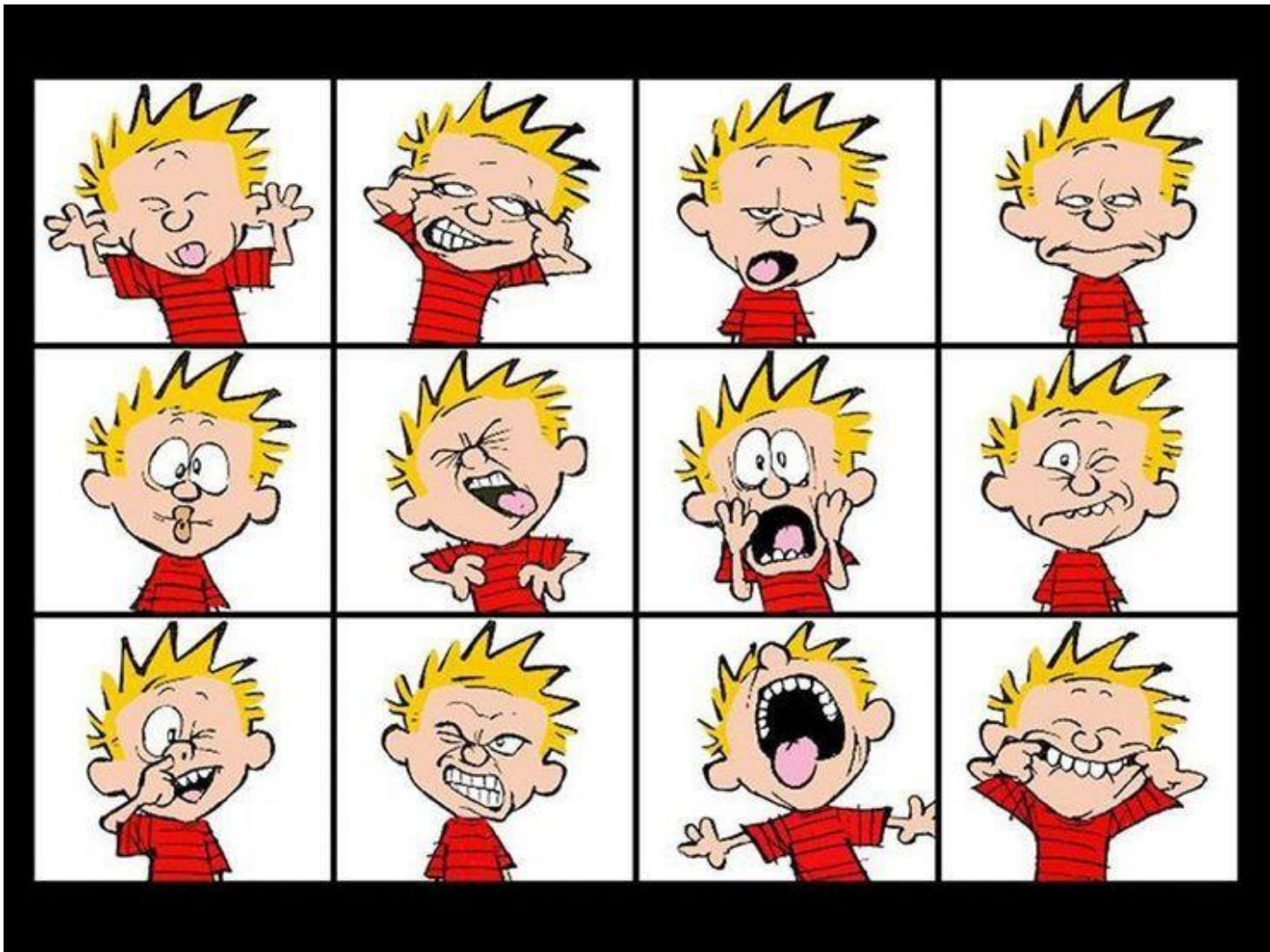
Emergence of Emotions

- When children have climbed up to this height on The Language Mountain emotions are more organized: The flower grows!
- Children become 'bad', oppositional
angry, sad, jealous
- The 'Dark Side' emerges
- Critically important to recognize, honor (not suppress) and mirror/
label feelings with simple words





Emergence of Emotions





The Best Single Feeling Words

- No!
- All done
- Mad
- Sad
- Bye bye/go away
- Yay!
- More
- No more
- Kiss my butt (just kidding)



Promoting Language

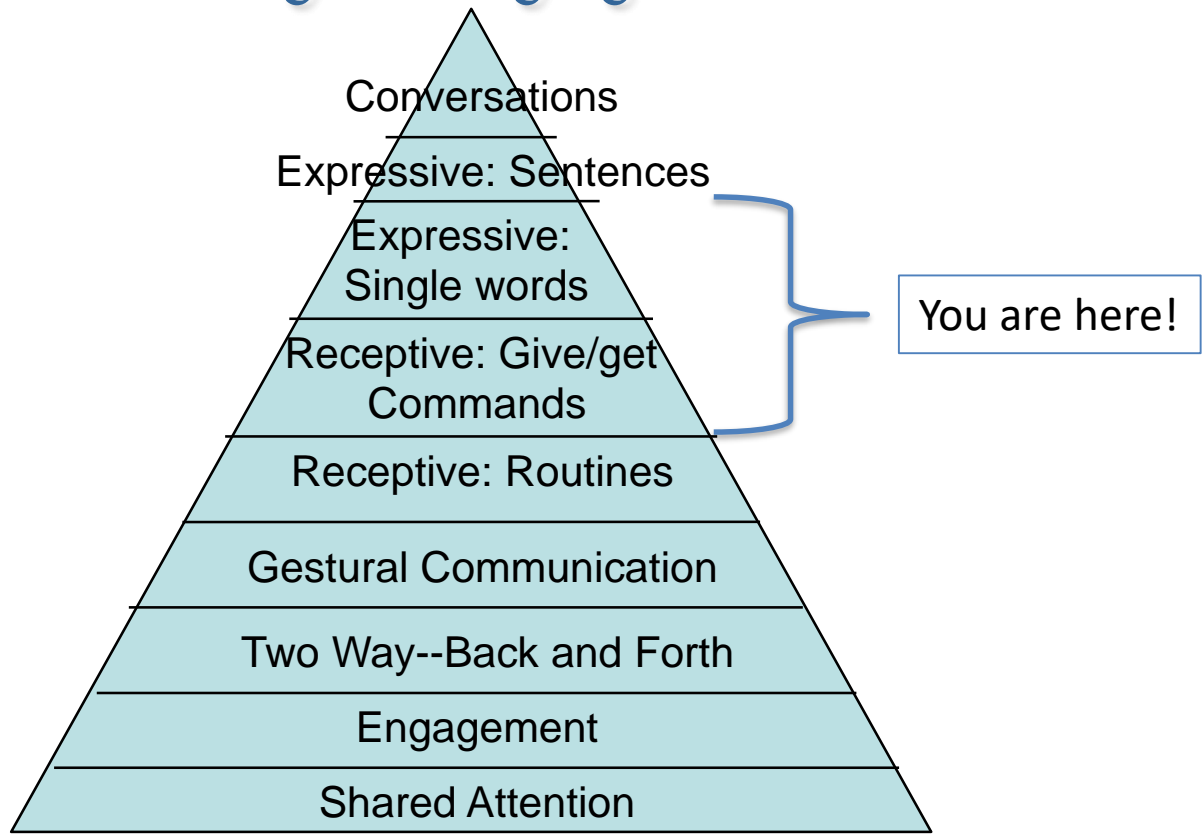
(Frank Porter Graham Child Development Institute)

Practice	Description
1. Get Chatty	Engaging in conversations with children
2. Be a Commentator	Giving descriptions of objects, activities or events
3. Mix It Up	Using different types of words and grammar
4. Label It	Providing children with the names of objects or actions
5. Tune In	Engaging in activities or objects that interest children
6. Read Interactively	Using books to engage children's participation
7. Read It Again and Again and Again!	Reading books multiple times
8. Props, Please!	Introducing objects that spark conversations
9. Make Music	Engaging in musical activities
10. Sign It	Using gestures or simple signs with words



The Language Mountain

Climbing the Language Mountain





Language Development

- Age 18-24 months (FDL 4-5)
 - Functions
 - Requesting information
 - Answering questions
 - Average expressive vocabulary
 - 200-300 words (24 months)
 - Very important not to baby talk when speaking to the child
 - When speaking for the child use the language they would use
 - Add a word



1-2 Word Speech

– Semantic roles

- Agent: Daddy
- Action: Eats
- Object: Cake
- Location: *up, down, on, off*
- Possession
- Disappearance/Nonexistence: *all gone, away*
- Denial



1-2 Word Speech

- Understands two-word relations similar to those expressed
- Semantic relations
 - Agent-action: *Daddy sit*
 - Agent-object: *Mommy ball*
 - Action-object: *Kiss Daddy*
 - Action-location: *Fall down*
 - Possessor-possession : *Michael ball*
 - Attribute-object: *Big ball*



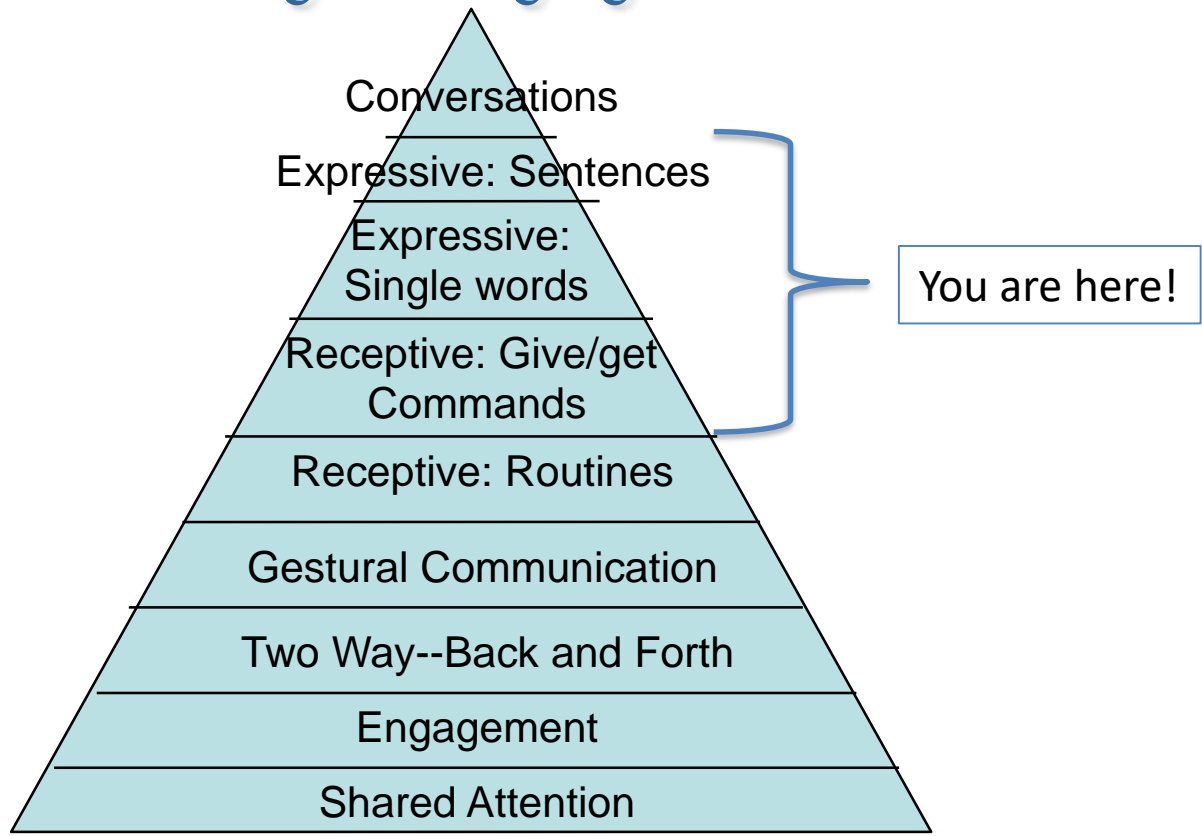
Language Development

- Age 24-36 months (FDL 5)
 - Functions
 - Symbolic play/pretend
 - Talk about absent objects
 - Misrepresenting reality (lies, teases)
 - Imagination!!
 - Answers yes/no questions
 - What, who, where questions
 - In, on, under, off, up, down



The Language Mountain

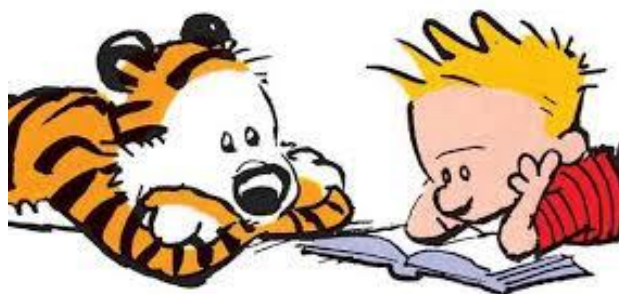
Climbing the Language Mountain





Literacy

- When children with ASD reach FDL 5 and are using words consistently. . .
- Time to start reading to promote imagination, pretend, cognition, and emotional thinking



Imagination!





Best One-Theme Pretend





On Reading: Dr. Rick's Rules

- Don't READ the book!! Experience it!
 - See what the child finds interesting
- For FDL 5 kids—It's the story on the page
- For FDL 6 kids—the the story in the book





Good Links on Language

- <http://www.hanen.org/Helpful-Info/Articles/Which-Books-are-Best---How-the-Type-of-Book-Affect.aspx>
- <http://www.hanen.org/helpful-info/articles/promoting-language-with-books.aspx>



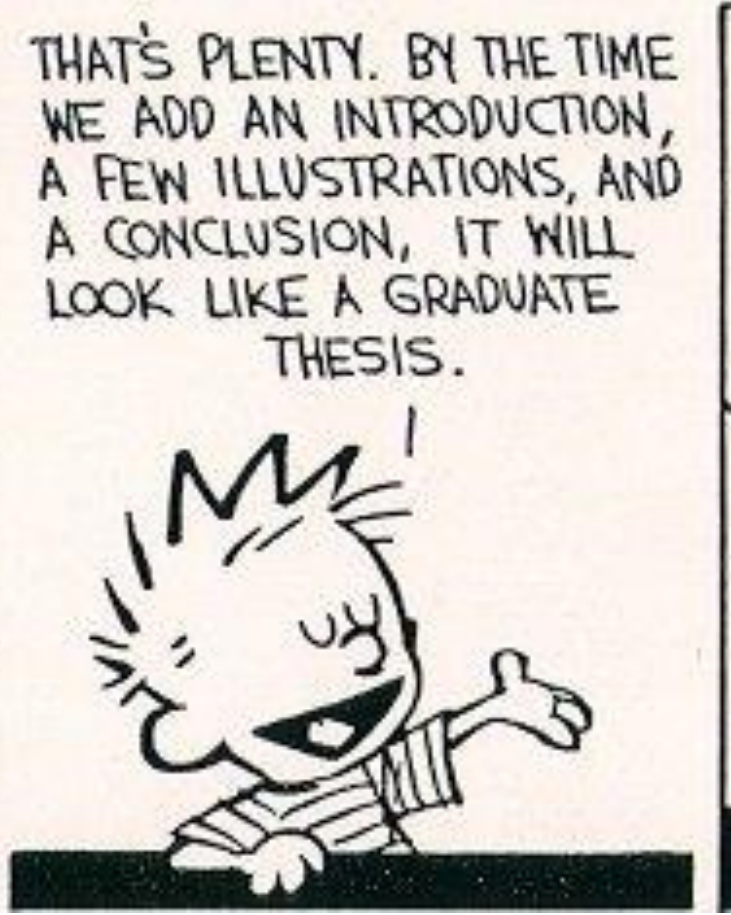
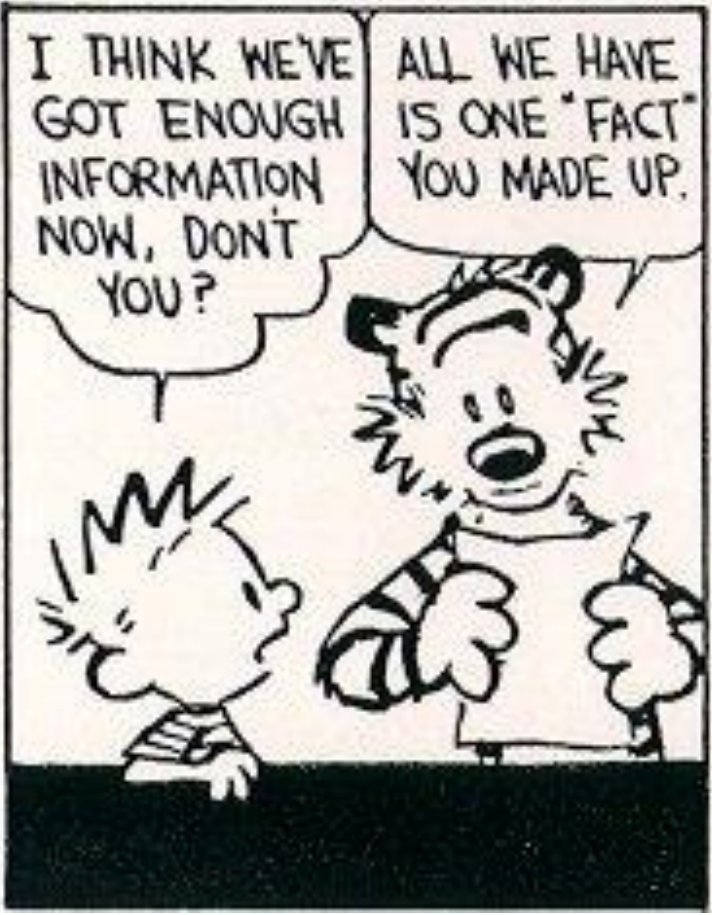
Reading Aloud

“...frequent reading aloud to and with children has been shown to lead to increases in multiple areas of literacy development, including vocabulary growth, print awareness, enjoyment of reading, and even children’s writing abilities ...”



Vocabulary and Grammar Are Learned Together







Language Development

- ing, plural /s/
- Use of no, not, can't, don't as negation between subject and verb
 - No Daddy go, Daddy not run
- Use of gonna, wanna, gotta, hafta
- Awareness of rhyme emerges





Complex Language

- Age 36-48 months (FDL 6)
 - Understanding of ‘why’ questions
 - Flexibility in requesting
 - Can you, would you
 - Asks ‘when’ and ‘how’ questions
 - Temporal
 - First, next, last
 - Ability to recall the immediate past (e.g. what did you eat for breakfast?)
 - Causal
 - Because/Connecting two ideas logically



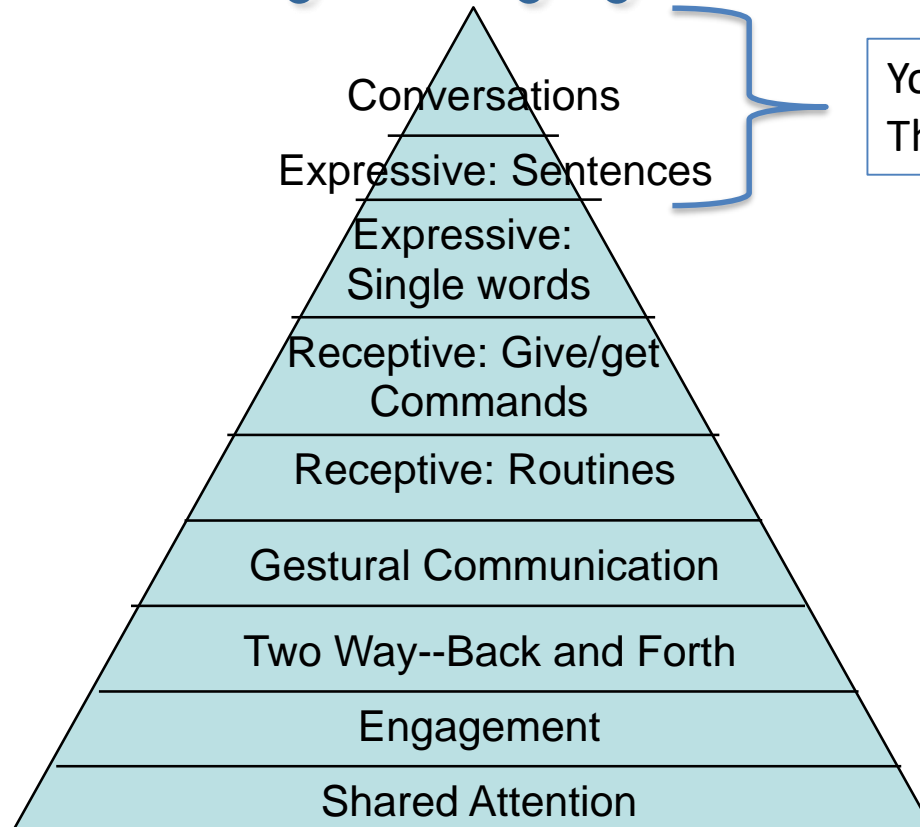
Complex Language

- Contrastive
 - This one is big and this one is little
- Articles
 - The, a
- Possessive ('s)
- Past and irregular past
- Content
 - Colors, numbers, shapes, attributes describing size, letters/letter sounds
 - Preschool readiness!



The Language Mountain

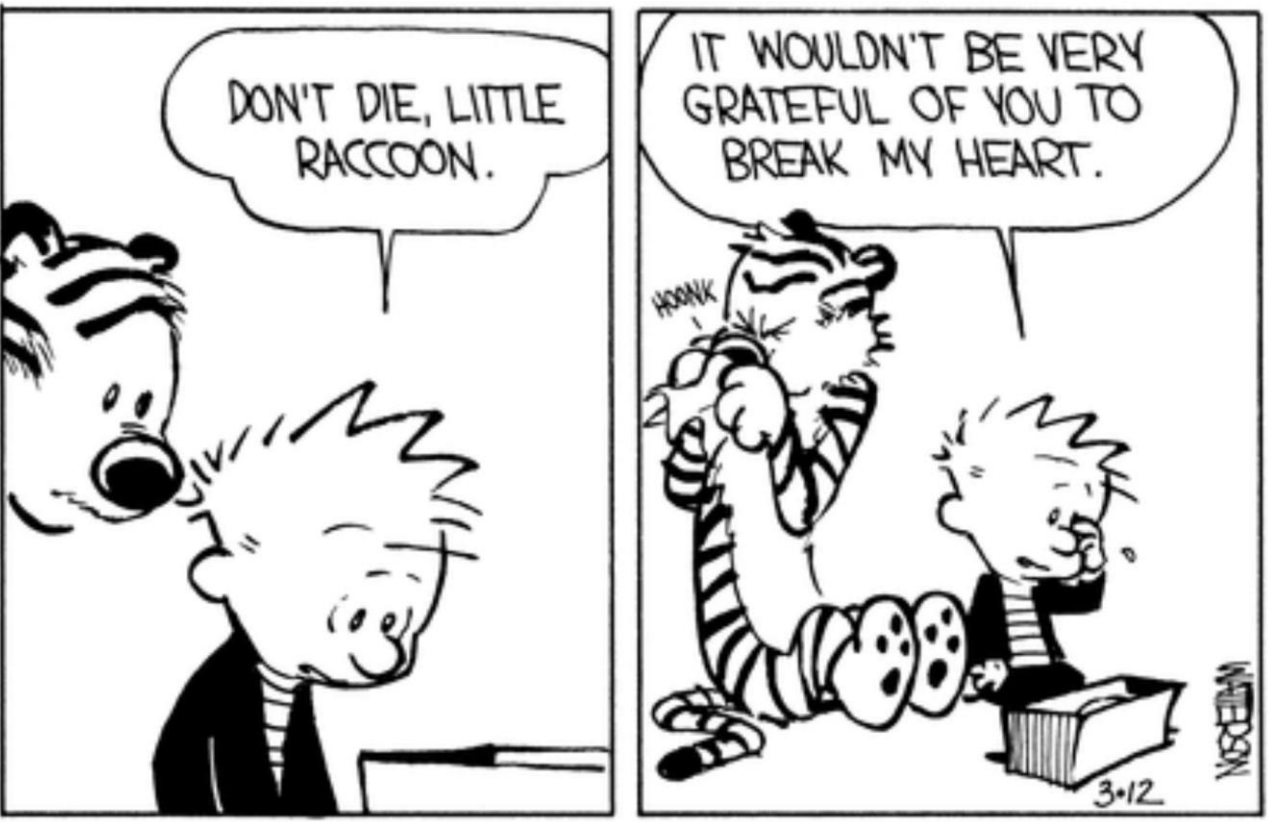
Climbing the Language Mountain



You are here. Top of The Language Mountain!



Higher Emotions





Sense of Humor!

COUNTY LIBRARY? REFERENCE
DESK, PLEASE. HELLO?
YES. I NEED A WORD
DEFINITION.



WELL, THAT'S THE PROBLEM.
I DON'T KNOW HOW TO SPELL
IT AND I'M NOT ALLOWED
TO SAY IT.



COULD YOU JUST RATTLE
OFF ALL THE SWEAR WORDS
YOU KNOW, AND I'LL STOP
YOU WHEN ... HELLO??



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SEE IF I EVER VOTE
FOR THEIR TAX LEVIES.

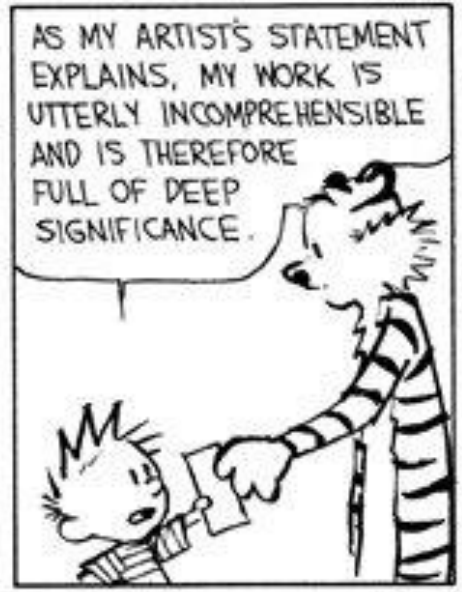




Creativity



BUT REALLY, ART IS A PRIVATE LANGUAGE FOR SOPHISTICATES TO CONGRATULATE THEMSELVES ON THEIR SUPERIORITY TO THE REST OF THE WORLD.





Summary

- Children with ASD must climb up The Language Mountain gradually
- The climb is complicated but worth it
- The seed of language grows organically from the ground of interaction into the stem of gestures and single words and blossoms into sentences that are rich with meaning, feeling, and creativity. . .



...And flowers on the mountain top





Thank You!

*This webinar will be uploaded to our website.

Next webinar:

Wednesday, August 14

Upcoming workshops:

June 3-4: Ferndale, MI

August 16-17: Burlington, VT

Call for testimonials!

If you have a training testimonial, please email jamie@playproject.org to discuss possibilities of being highlighted and linked on our social media channels!