

Language Acquisition Through Play

A Gestalt Learning Approach

Hannah Cannon, M.S., CCC-SLP
Speech-Language Pathologist
Laurie Shaw, M.S., CCC-SLP
Speech-Language Pathologist



Anna Shaw
Children's Institute



Learning Objectives

- 1. Learn the difference between analytic and gestalt language acquisition.**
- 2. Understand the importance of play and how it supports language acquisition in both types of language learners.**
- 3. Identify opportunities for language learning within therapy sessions.**
- 4. Utilize a child's play or verbal routines to target therapeutic goals.**

Language Acquisition

- **Analytic**
 - Considered 'typical' language development
 - Language develops from single words to phrases and sentences
- **Gestalt**
 - Pronounced 'guh-shtalt'
 - Defined as *an organized whole that is perceived as more than the sum of its parts*
 - Language is developed in chunks of information attached to meaning
 - Considered 'atypical' and characteristic of autism
 - Neurotypicals learn language this way too!

Word babies and Intonation babies



Illustration by Jon G. Lyon
Shared by Marge Blanc from
*Natural Language Acquisition on
the Autism Spectrum*

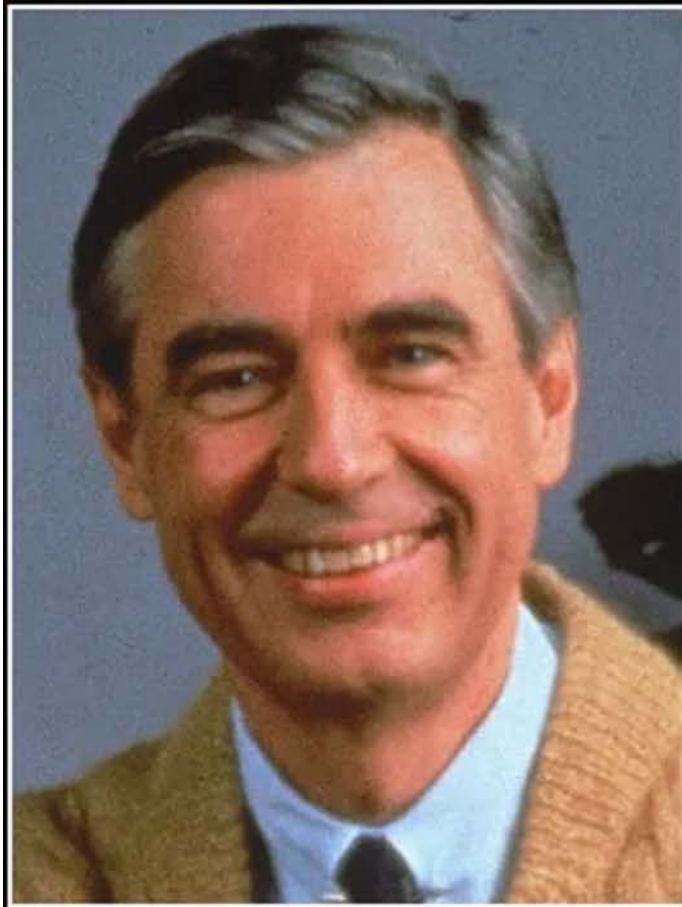
Language Acquisition

- **The Analytic Language Processor:**
 - **I + want + more + please = 4 units**
- **The Gestalt Language Processor:**
 - **I want more please = 1 unit**



Analytic	Gestalt
Stage 1: single words <i>more</i>	Stage 1: use of whole language gestalts (sentences) <i>Let's get out of here.</i> <i>Want some more?</i>
Stage 2: combination of words, 2 word phrases <i>more juice</i>	Stage 2a: mitigation into chunks <i>Let's get + out of here</i> <i>Want + some more?</i>
	Stage 2b: recombining these chunks <i>Want + out of here</i> <i>Let's get + some more</i>
Stage 3: first sentences <i>I want more juice.</i>	Stage 3: isolation and recombination of single words <i>Get + more</i> <i>Want + out</i>
Stage 4: complex sentences <i>I like juice, but I want milk.</i>	Stage 4-6: generation of sentences (simple to complex) <i>Let's get some more toys!</i> <i>You wanna go out?</i>





Play is often talked about as if it were a relief from serious learning. But for children play is serious learning. Play is really the work of childhood.

— *Fred Rogers* —

AZ QUOTES

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Typical Development of Play Skills



**Indiscriminate
Actions on
Objects
(mouthing,
banging, etc.)**



**Relational Play
(stacking
blocks, pieces
in a puzzle,
etc.)**



**Symbolic Play
(feeding a
baby doll,
putting
pretend food
in a pot to
cook, etc.)**

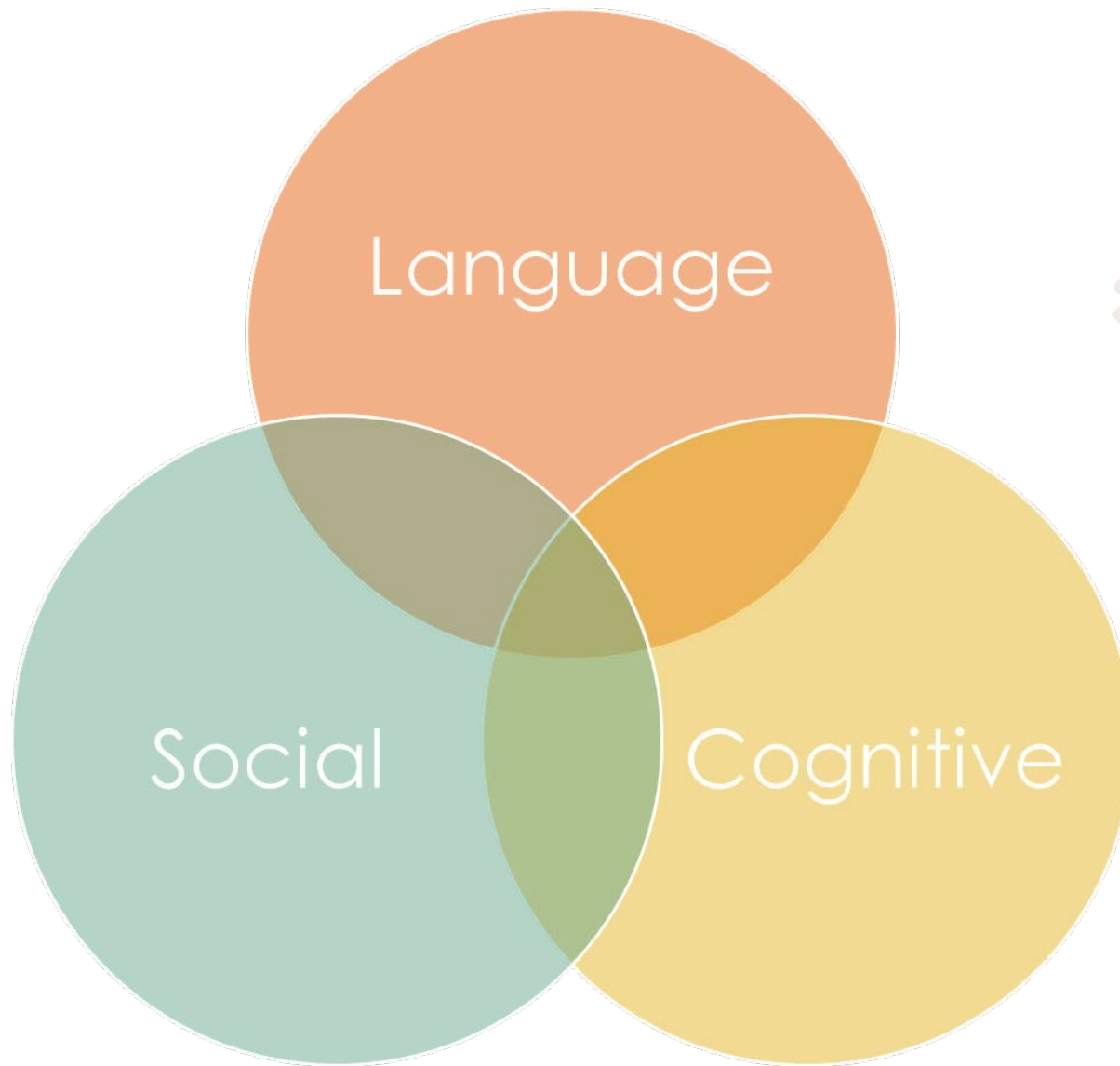


**Games with
Rules
(turn-taking)**



**Sociodramatic
Play
(social rules
built into play
routines)**





Play and Language Development



2003 Study by Lesley Craig-Unkefer (University of Minnesota) and Ann P. Kaiser (Vanderbilt)

-6 children at risk for social language delays enrolled in a Head Start program

-Used a “plan-play-report” structure to measure social-communicative behaviors

Descriptive statements

Requests

**Language complexity and
diversity**

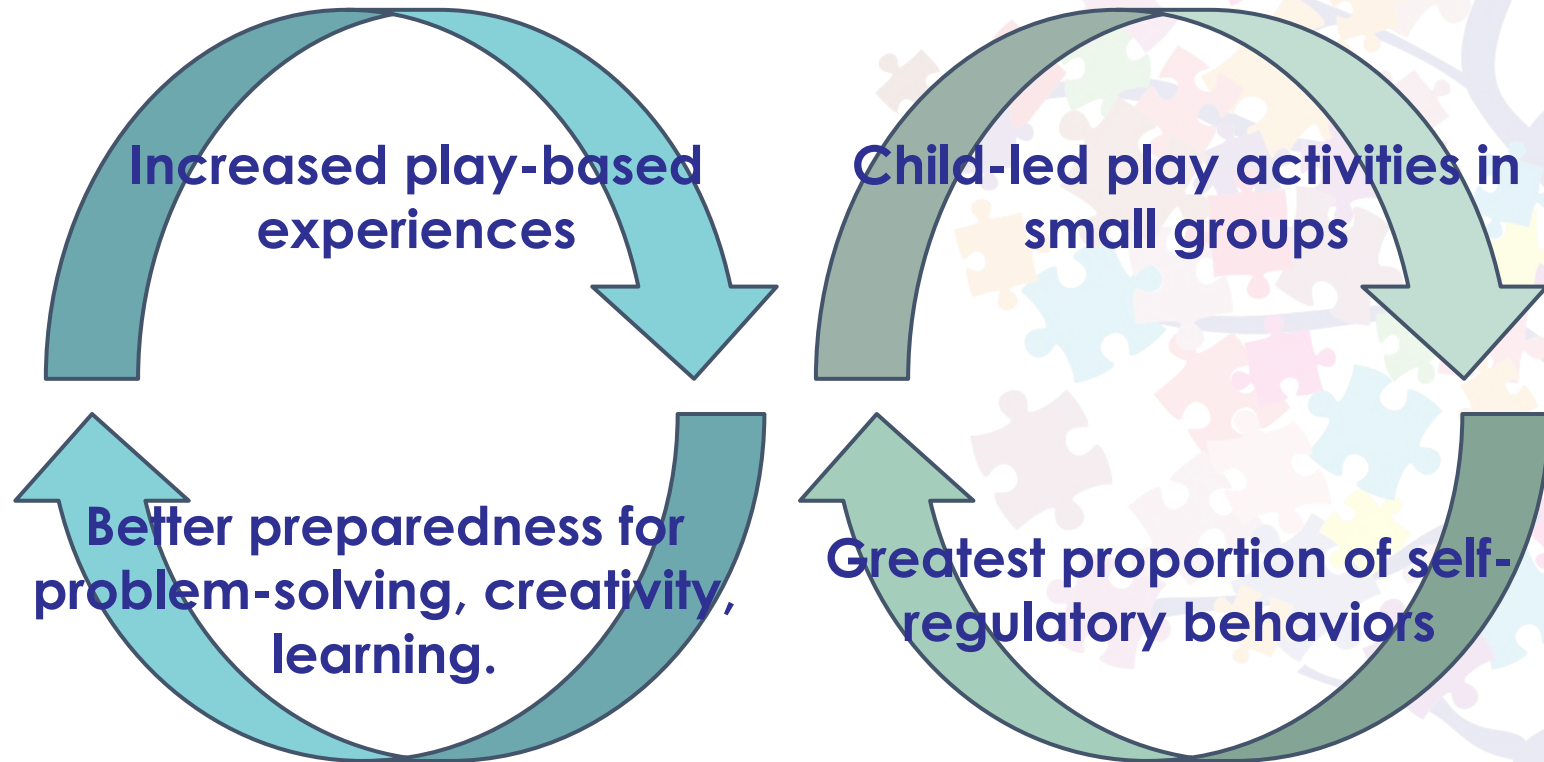
**Engaged in more complex play
behaviors**



Play and Cognitive Development

2009 Research Review by Whitebread Et. Al.

- 1 observational study
- 2 experimental studies
- Examined relationship between symbolic play, metacognition, and self-regulation skills



Play and Social Development

2009 Study by Oppenheim Et. Al. Attachment and Symbolic Play in Preschoolers with ASD

-45 boys with ASD or PDD-NOS and their mothers, 32-69 months of age with cognitive age equivalent of ≥ 13 months, no underlying medical conditions.

-Significant correlation between level of attachment and quality of symbolic play.

2003 Study by Kohler et. al. Naturalistic, Play-based Tactics to Increase Social Skills

-4 children with ASD in four different integrated classrooms were offered daily 10-minute sessions of child-led play (chosen from 6-8 known preferred activities)

-Researchers trained teachers on naturalistic teaching techniques that were implemented over the course of the study

-All four children demonstrated improved play skills. Two of the four demonstrated high levels of social interaction during maintenance phase



Treatment Strategies

- **Appropriate preschool intervention should contain these key ingredients:**
 1. **Naturalistic**
 2. **Interactive**
 3. **Personal**
 4. **Supported**
- **“During times of optimal self regulation, natural joy is possible, sharing joy is possible, and natural language opportunities are possible.”**

–Marge Blanc, Natural Language Acquisition on the Autism Spectrum

The Importance of Connection

Finding moments of magic



The Mirror Neuron Hypothesis (2008 study)

- **Mu rhythm:** large groups of sensorimotor neurons fire to control voluntary movement in response to environmental stimuli.
- **Mirror neuron:** a class of neurons that enable an animal to imitate actions observed. Associated with empathy.
- Measured mu rhythm and mirror neuron system sensitivity when viewing a series of videos (unfamiliar actor, familiar actor, self, inanimate actor).
- Both typically developing and those with ASD showed greater MNS activity in response to familiar actors than unfamiliar.

Preference Assessments

What will they work for?

- **Establishing what MOTIVATES the child at any given moment is VITAL to maintaining engagement and cooperation throughout your session.**
 - *Yes! At any given moment.*
 - **Conduct preference assessments when:**
 - You begin your therapy session.
 - You notice the child is losing interest in an activity.
 - You notice the child is engaging in problem behaviors.
 - You notice the child is becoming frustrated.
- **If the child is not motivated, then the likelihood of them participating/engaging in therapeutic tasks is very slim.**

Treatment Strategies

- **Create an environment in which the child is in a well-regulated state**
- **Follow the child's lead in play**
- **Listen for spontaneous language**
- **Respond, repeat, modify utterances**



Treatment Strategies

- Narrate activities using descriptive language
 - Reduce use of questions
 - Increase use of statements
 - use starters such as: *Let's, it's, this, that, wanna*
 - Avoid saying 'Say –'





Analytic	Gestalt
Bus	It's time for school!
Girl	Let's get on the bus!
Boy	Everyone sit down!
	Good morning!
Get on/off	See you tomorrow!
Open/close	Wanna get on/off?
Sit	Open the door.
Go, stop	Time to go!



Analytic	Gestalt
<p>Cow, pig, horse, farmer Barn</p> <p>Go in/out Eat Play</p>	<p>It's a cow. Wanna play? Let's go in, pig! I'm hungry! Let's eat some corn!</p>



Analytic	Gestalt
Car Blue Orange Go/stop Mine/yours	Wanna play cars? This one is blue! It's an orange car. Go car go! Uh oh, crash! Let's get more cars!

Inferring Meaning

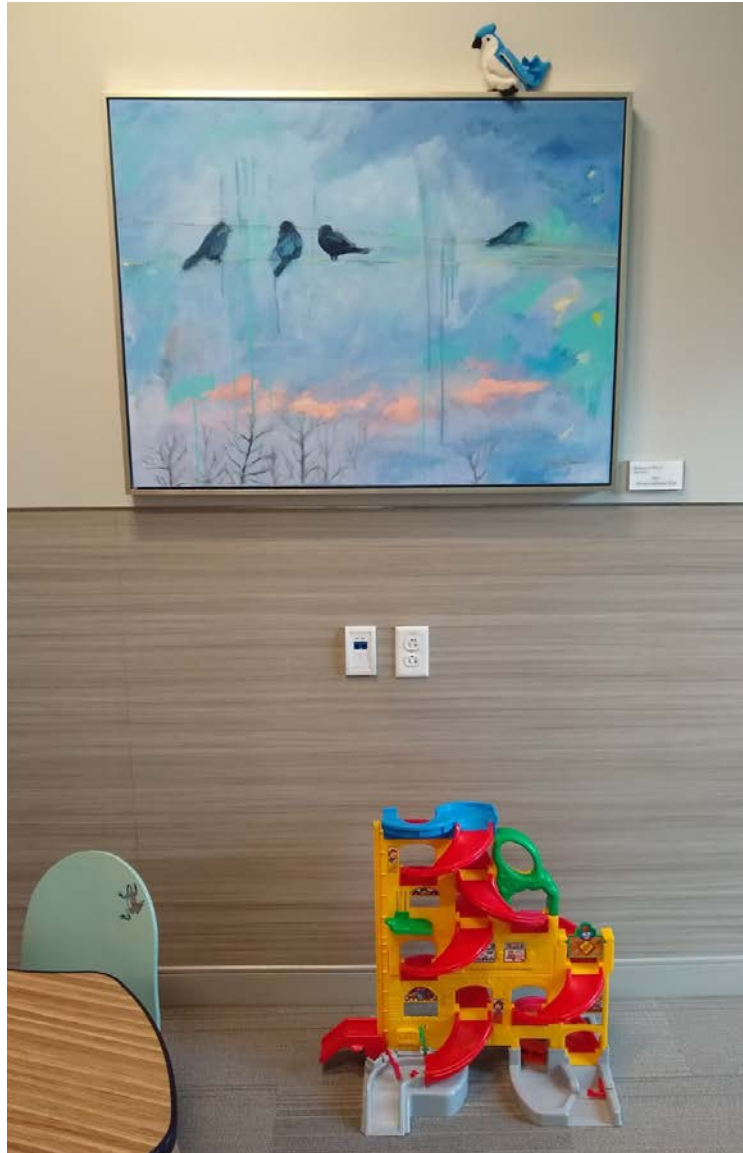
- **When our patients use gestalts, its our job to determine what they really mean.**
- **When media gestalts are used, the meaning is often unclear. They are also more difficult to break down into more functional parts that can be recombined.**
- **Listen, Observe, and Ask Why?**
- **Once we determine the intended message of a gestalt, we can provide a 'better' gestalt that is more meaningful and easier to break down to promote language development.**

Inferring Meaning

- **Levi: Where's Mrs. Megan?**
 - *How much longer? I'm ready to leave. I want the bubble tube.*
- **Ibrahim: (approached door during therapy) 1-2 buckle my shoe, 3-4 shut the door**
 - *Open the door. I want to leave*
- **Mateo: (approaches parent) Do you want some milk?**
 - *I want milk.*
- **Josie: Who taught that baby how to talk?**
 - *???? Line from Boss Baby*

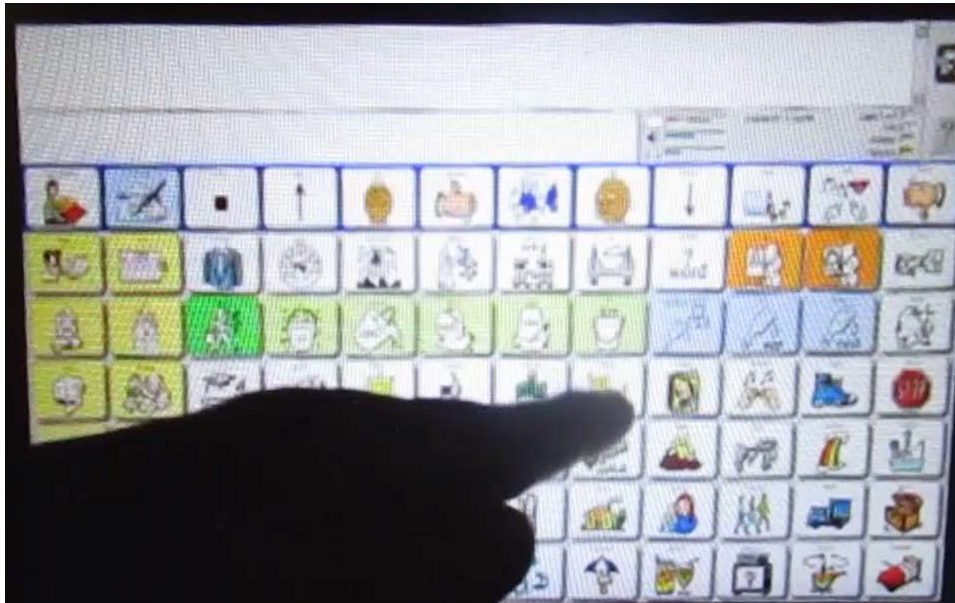


- **Preschooler with ASD**
- **Increase utterance length**
- **Participate in structured tasks for 5+ minutes.**
- **Use words to request help**
- **Identify common objects from a field of 3**





- **6 yr old child with ASD**
- **Total Communication**
- **Introducing AAC through core words with LAMP**
- **Loves dinosaurs; very impulsive and can perseverate on tangibles**



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1. Learn the difference between analytic and gestalt language acquisition.
 - *Analytic: build vocabulary and increase utterance length through expansion*
 - *Gestalt: determine meaning of scripts used and provide new gestalts to build flexibility in language*
2. Understand the importance of play and how it supports language acquisition in both types of language learners.
 - *Children learn best when they are having fun!*
3. Identify opportunities for language learning within therapy sessions.
 - *Follow the joy!*
4. Utilize a child's play or verbal routines to target therapeutic goals.
 - *Be flexible with your therapy plans, focus on fun!*

Questions?

Hannah Cannon, MS CCC-SLP
hcannon@hhcs.org



Laurie Shaw, MS CCC-SLP
lshaw@hhcs.org



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