

SYMBOLS AND MEANING: Developing a Conceptual Foundation

Access

Academy

Leanne Grillot

**Stacey Chambers** 

Leanne Grillot National Director of Outreach Services American Printing House for the Blind





#### Stacey Chambers

#### M.Ed from Vanderbilt University

#### Teacher of Students with Visual Impairments in Coppell ISD

#### Author of the Sensorimotor Spotlight

### Learning Objectives

- Compose games for learners (the main intervention strategy) using SAM materials.
- 2. Differentiate the use of sensory and symbolic bridging to build schemas for simple to complex concepts.
- 3. Identify learning strategies when working with learners who have
  - limited hand use.



How much time do you spend with your students who have significant cognitive disabilities?

- Daily, over four hours
- Daily, under four hours
- More than twice a week
- More than twice a month
- More than twice a quarter
- Consultation with others only
- Collaboration with others only





### SAM in a Snapshot

- SAM is.... A program for developing a foundation for concepts so that symbols referring to them are meaningful
- SAM is for.... learners at the late sensorimotor and early preoperational stage of cognitive development







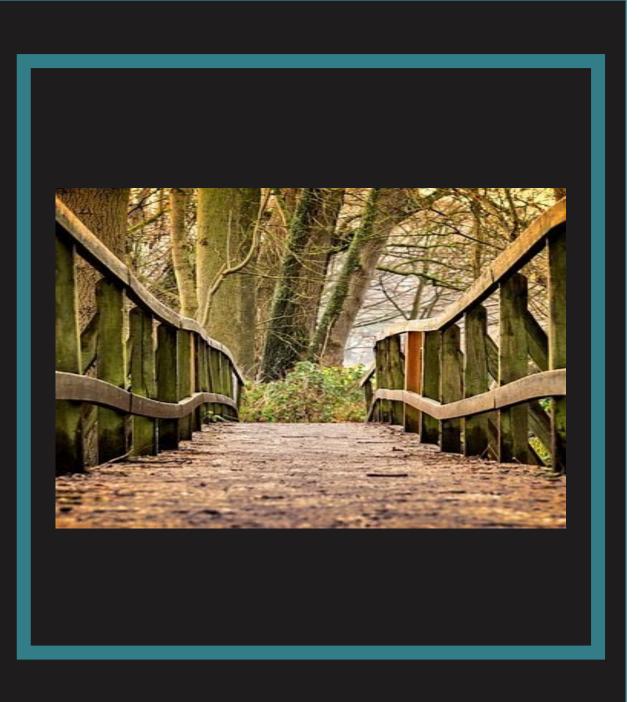


#### Visual Impairment & Concept Development

• Absent and Incomplete

Concepts

- Objects Experienced Out of
  Context and Without Intended
  Function
- Words Without Meaning



#### Sensory & Symbolic Bridging

- Learners form "schemas" about familiar events and experiences
- Sensory bridges build connections between these objects and related distance sensory experiences
- Symbolic bridges (meaningful words and objects) reinforce and strengthen schemas

## Meet Joey

- CVI
- Loves Music, her peers, and taking walks
- Successful in several routines demonstrating function of objects
- Not making progress with picture/object symbol communication systems





### What Comes to Mind When I Say "Game"?

- Board/Field
- Rules
- Pieces/Players
- Cards







# Main Intervention Strategy

- Non-threatening and fun
- Structure from context to context
- Maximize active learning
- Appropriate at any age
- Facilitate sibling and peer cooperative learning







# **Good Instruction**

- Focused
- Regular
- Appropriate
- Natural
- Consistent







# The Inverted Pyramid

- People-object-action-place relationships in events beyond the body
- People, objects, actions, and places beyond the body
- People, objects, and actions touching the body
- Own body



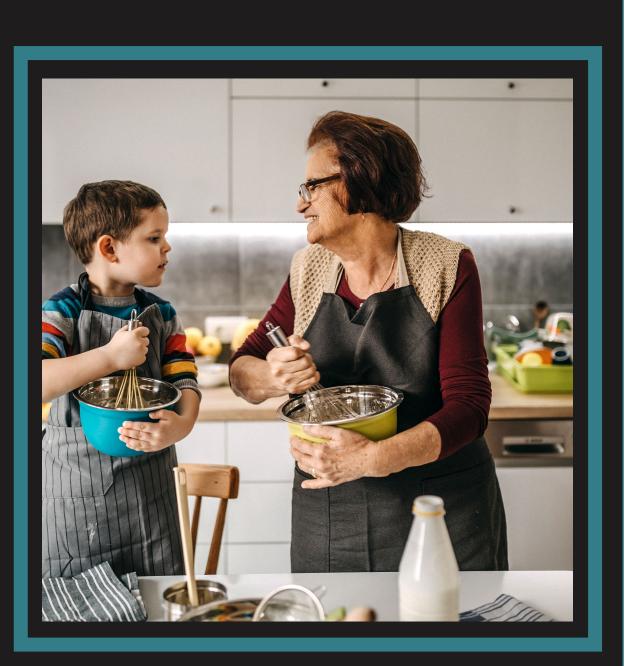






# SAM Concept Categories

Making Sense of the World



### People

- Self
- Others
- Body characteristics
- Emotions

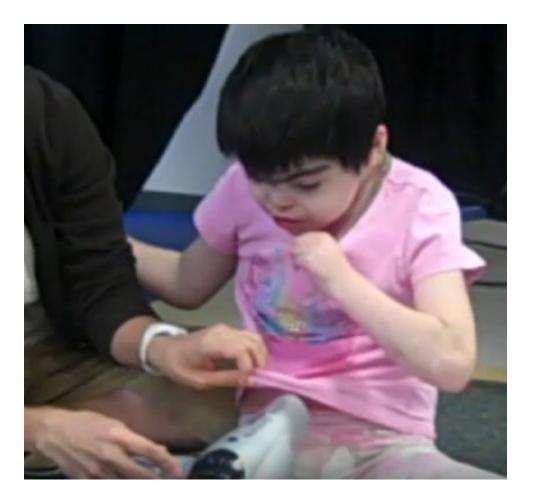


### Joey's Concepts of Self & Others

- Build a symbolic bridge giving her the word "hand"
- Lotion on hands, high fives with others
- Explore others' hands
- Listen for clapping hands provide a sensory bridge
- Using a SAM game for teaching own body concepts

### Games for Own Body

- Body Buzz
- Whoopee Clothes
- Finger Tap







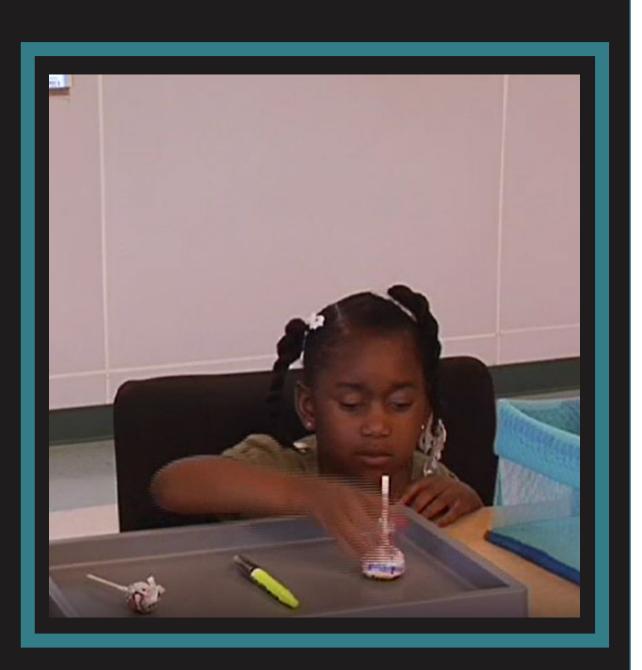
### Games for Teaching About People

- Hot Potato
- Show Me Who
- Mystery Voice
- Scavenger Hunt









### Objects

- Tangible things
- Acquired through senses
- How it is used
- How it relates to other objects

#### Exploratory Hand Motion

- Lateral motion
- Pressure
- Static contact
- Unsupported holding
- Enclosure
- Contour following





#### Joey's Concepts of Objects

- Build symbolic bridges to teach words for the objects from her routine.
- Strengthen schemas by having her help clean the towels in the washer and dryer.
- Build sensory bridges to sounds of water in multiple settings
- Use SAM games to add repetition and practice for symbols in a meaningful way

## Games for Teaching About Objects

- Slap
- Yours and Mine
- Go Fish
- Scavenger Hunt
- Bag Stories
- Box Stories
- Binder Stories









### Actions

- Body movements of the self
- Random movements
- Intentional movements
- Other people's actions
- Imitation of actions



#### Joey's Concepts of Actions

- Built symbolic bridges for teaching words for "up," "sit," then "turn on light," and "turn on water"
- Used love of peers to motivate and play SAM games to reinforce symbolic meaning

### Games for Teaching About Actions

- Simon Says
- Do it Again
- Sounds Like
- What Do
- Scavenger Hunt









### Places

- Where things are
- Mental relationship maps
- Contexts for groups of

#### things



#### Joey's Concepts of Places

- We haven't made it to this area very thoroughly with Joey.
- What would you do? Where would you start?

### Games for Teaching About Places

- Scavenger Hunt
- Clue







Impact of Physical Impairments





#### Cerebral Palsy

- Collaborate with OT and PT
- Environmental modifications
- Common Visual Impairments
  - CVI
  - Strabismus
  - Hyperopia



#### Passive Touch versus Active Touch

- Passive
  - Invasive
  - Lacks receptor stimulation
- Active
  - •Planned movement
  - •Required for object
  - recognition



#### Build Content!

- Toys
- Things used while eating
- Things used while dressing
- Things used while bathing
- Things used at bedtime
- Things used during calendar circle
- Things found in the refrigerator
- Things used when playing music
- Things I hear Mom and Dad use in the yard



#### **Offer Different Formats**

• One Object

•Protracted exploration

•Longer period of time

- Array of Objects
  - •Offers choice
  - •Varies in complexity
  - •Bundles of similar objects



#### Context is the Setting

- Artificial
  - All objects are toys
  - Early sensorimotor development stage
  - No clues
- Functional
  - Provide clues
  - Develops concepts



#### Time, Space, and Mode

- Give time for exploration
- Touching and seeing
- Hands, feet, mouth





Symbols and Meaning: Developing a Conceptual Foundation

Access

Academy

Leanne Grillot: <a href="mailto:lgrillot@aph.org">lgrillot@aph.org</a>

Stacey Chambers: <a href="mailto:TheECCandMe@gmail.com">TheECCandMe@gmail.com</a>