Agenda

• Playful start
• Neurology and play – whole group discussion
• Break
• Play Theories: The Gameshow
• Stars and Wishes
Playful Start

• Choose either Replay or Figure Me Out Identity Web – see instructor guide
Play Kit

1. Something to sculpt with (clay, putty, slime, playdough)
2. Something to build/construct with (LEGOs, blocks, popsicle sticks, plastic cups, rocks, sticks)
3. A collection of Beautiful Stuff
4. Paper and something to make marks with (markers, crayons, paints, pastels)
Playdough Recipe

- 1 c flour
- 1/3 c salt
- 1 c boiling water
- 1 Tbsp cream of tartar*
- 1 Tbsp oil
- Food coloring if you wish

1. Mix the flour, salt, and cream of tartar
2. Mix together the boiling water, oil, and food coloring
3. Combine everything until mixed, then knead with your hands until smooth
4. Add a little more flour if too sticky
5. Store in an airtight container at room temperature

*if you don’t have cream of tartar, you can skip this and just keep your playdough in the fridge. It won’t keep as long but will work ok
Frameworks and Theories to Understand Play
What is play?
“Remembering what play is all about and making it part of our daily lives are probably the most important factors in being a fulfilled human being. The ability to play is critical not only to being happy, but also to sustaining social relationships and being a creative, innovative person.

What is play? I hate to say...

- Apparently purposeless (done for its own sake, not for survival)
- Voluntary
- Inherent attraction
- Freedom from time (sense of flow)
- Diminished consciousness of self
- Improvisational potential
- Continuation desire

From Brown & Vaughan, 2009
Cross-cultural Indicators of Playful Learning
Patterns from schools in Denmark, South Africa, the U.S, and Colombia

LEADING LEARNING
- choice
- ownership
- empowerment
- autonomy

EXPLORING THE UNKNOWN
- wonder
- curiosity
- meaning

FINDING JOY
- delight
- enjoyment
- joyful

Playful Learning
Indicators of Playful Learning

Indicators of Playful Learning from 6 U.S. Schools

Indicators of Playful Learning from the International School of Billund in Denmark

Indicators of Playful Learning from 3 South African Schools

Indicators of Playful Learning from 5 Colombian Schools
Types of play

• Fantasy/imaginative play
• Constructive play
• Games with rules
• Rough-and-tumble play
• *Taboo play*

Now think about your play autobiography – what type of play were you engaged in?
Stages of play (Parten, 1932)

- Unoccupied behavior
- Onlooker behavior
- Solitary play
- Parallel play
- Associative play
- Cooperative play
12 TYPES OF PLAY

Play is Learning
How to Relate to Others

UNOCCUPIED
Random movements with no purpose is the initial form of play.

SOLITARY
Playing alone, independently is important for children of all ages.

ONLOOKER
Watching other children, without joining. Observation is vital play.

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As children grow and develop, play evolves. Certain types of play are associated with, but not restricted to, specific ages.

COOPERATIVE
Group play with coordinated goals. Vital for team & leadership skills.

ASSOCIATIVE
Children begin to play together, but activities are not coordinated.

PARALLEL
Playing side-by-side, without interacting is the beginning of socialization.

CONSTRUCTIVE
Building and creating. Supports visual-spatial, fine-motor, and math skills.

PHYSICAL
Supports muscle development, healthy exercise, and coordination.

EXPRESSIVE
Expressing feelings through art, music, and writing. Vital for creativity.

COMPETITIVE
Learning about fairness, rules, and taking turns.

FANTASY
Imagining and thinking beyond their world. Creative Problem-Solving.

DIGITAL
A pseudo-type of solitary play, without social interaction. Impacts social skills, like eye contact & attention.

Parents have an important role in play.

Provide interesting materials to promote exploration and learning.

Make play time a priority for your family and child.

Play with your child to model social skills and promote bonding.

Sources:


www.famili.com
“Traditionally, play has been conceptualized within a narrow band of theories on cognitive and social development (e.g., Piaget’s cognitive developmental theory; Parten’s play typologies) that were presumed to have universal applications. More recent conceptualizations of childhood development in the areas of cultural psychology and early education (e.g., Greenfield et al. 2003; Chaudhary and Tuli 2010) have proposed different cultural pathways to achieve common developmental goals across cultures...In most cases, the theoretical perspectives converge or intersect regarding play as a universal cultural activity. However, they do diverge on the developmental significance of play. Its benefits for the development of cognitive and social skills in children in different cultural settings are only now beginning to be discerned...Whereas, in some cultural communities, a strong case is made for the connection between play activities and practicing and learning culture-specific modes of behaviors, in others, children learn through a mixture of work and play or by observing others and replicating their activities.”

(Roopnarine et al., 2015, p.2)
What happens in the brain during play?
Your Brain
Your Brain on Play
Your Brain on Play
<table>
<thead>
<tr>
<th>Joy</th>
<th>Meaningful</th>
<th>Active Engagement</th>
<th>Iterative</th>
<th>Socially Interactive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotions are integral to neural networks responsible for learning</td>
<td>Making connections between familiar and unfamiliar stimuli guides the brain in making effortful learning easier</td>
<td>Active and engaged involvement increases brain activation related to agency, decision making, and flow</td>
<td>Perseverance associated with iterative thinking is linked to reward and memory networks that underpin learning</td>
<td>Positive caregiver-child interactions help build the neural foundations for developing healthy social emotional regulation and protecting from learning barriers, such as stress</td>
</tr>
<tr>
<td>Joy is associated with increased dopamine levels in the brain’s reward system linked to enhanced memory, attention, mental shifting, creativity, and motivation</td>
<td>Meaningful experiences introduce novel stimuli linking to existing mental frameworks; processing these stimuli recruits networks in the brain associated with analogical thinking, memory, transfer, metacognition, creating insight, motivation and reward</td>
<td>Active engagement enhances memory encoding and retrieval processes that support learning</td>
<td>With practice, iteration increasingly engages networks related to taking alternative perspectives, flexible thinking, and creativity</td>
<td>Early social interaction promotes plasticity in the brain to help cope with challenges later in life</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Full engagement in an activity allows the brain to exercise networks responsible for executive control skills, such as pushing out distractions, that benefit short term and lifelong learning</td>
<td></td>
<td>Social interaction activates brain networks related to detecting the mental states of others, which can be critical for teaching and learning interactions</td>
</tr>
</tbody>
</table>
Play gives access to content and higher levels of thinking for a variety of learners.

-Mraz, Porcelli, & Tyler (2016)
Play and Neuroscience Discussion

What stood out to you in the neuroscience and play report?

What are you curious about?

Two ways to participate:
Please raise your hand to speak, or add comments/questions to the chat
Extra resource

• [http://playtime.pem.org/play-digest-this-is-your-brain-on-play/](http://playtime.pem.org/play-digest-this-is-your-brain-on-play/)
Theories for Understanding Play
Play Theories: The Gameshow
Playing the Gameshow

• Teams take turns being *Play Analysts* or *Judges*.
• Play Analysts: Work with your team to come up with the most convincing in-character analysis of the play episode. You have 90 sec to prepare each round. Share your response (in character, of course).
  – Bonus point in each round for correctly identifying the type of play (see Mraz et al. Chapter 2)
  – Second bonus point for making a substantive connection to the the neurology report
• Judges: award a point to the team with the most theoretically sound and in-character response.
• Winning the game: The team with the most points at the end of the game wins fame and fortune (or at least a fun applause of their choice)
Pick your Team!

- Team Vygotsky
- Team Piaget
- Team Bateson
- Team Corsaro
- Team Bruner
- Team Parten
- Team Paley
- Team Bruce
- Team Skovbjerg
- Team Hirsh-Pasek
**Bateson – play frames**
What roles are children taking on? Is there role flexibility at play?
Do the events in the play frame relate to their real world? How?

**Vygotsky – play as a ZPD**
What pivots (play objects) are involved?
In what ways do adults scaffold play?
How is play socially constructed?

**Piaget – play as assimilation**
How are children acting on objects to assimilate knowledge?
Are children transforming objects or themselves during play?

**Bruner – problem solving**
What domains of learning are children developing in this play?
Are children acting in ways that minimize consequences, compared to actions in the real world?
Are tools being used to solve problems?

**Corsaro - peer culture and play talk**
What types of play talk took place in this play episode?
What do you think about the social dynamics/power relationships here?

**Paley – storytelling, culture, and language development**
What stories are children telling during their play?
As a teacher researcher, what are you learning about these children by observing their play?

**Bruce – 12 features of play**
What features of play do you see in this example?

**Skovbjerg – play moods**
What play moods do you observe in this example?

**Hirsh-Pasek – guided play**
In what ways are educators guiding play in this example?
Round 1

• Team Bruner
• Team Parten
• Team Vygotsky
• Team Bruce
Insert video link to video library clip of your choice here
Round 2

• Team Corsaro
• Team Paley
• Team Bateson
• Team Hirsh-Pasek
Insert video link to video library clip of your choice here
Round 3

- Team Parten
- Team Piaget
- Team Skovbjerg
- Team Bruce
Insert video link to video library clip of your choice here
Round 4

• Team Paley
• Team Piaget
• Team Vygotsky
• Team Hirsh-Pasek
Insert video link to video library clip of your choice here
Round 5

• Team Bateson
• Team Corsaro
• Team Bruner
• Team Skovbjerg
Insert video link to video library clip of your choice here
“Remember that theory should help you think about and understand what you are seeing children do, and that no one theory will explain it all.”

Frost (2012) p.53
Star and Wish

• Add link here if you choose to do star/wish reflections digitally