



# **Play & Cognitive Development**

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**ECE 110-Lecture**

# Cute animal picture



# Receiving Loving Kindness Meditation

- Close your eyes. Sit comfortably with your feet flat on the floor and your spine straight. Relax your whole body. Keep your eyes closed throughout the whole visualization and bring your awareness inward. Without straining or concentrating, just relax and gently follow the instructions.
- Take a deep breath in. And breathe out.
- Keeping your eyes closed, think of a person close to you who loves you very much. It could be someone from the past or the present; someone still in life or who has passed; it could be a spiritual teacher or guide. Imagine that person standing on your right side, sending you their love. That person is sending you wishes for your safety, for your well-being and happiness. Feel the warm wishes and love coming from that person towards you.
- Now bring to mind the same person or another person who cherishes you deeply. Imagine that person standing on your left side, sending you wishes for your wellness, for your health and happiness. Feel the kindness and warmth coming to you from that person.
- Now imagine that you are surrounded on all sides by all the people who love you and have loved you. Picture all of your friends and loved ones surrounding you. They are standing sending you wishes for your happiness, well-being, and health. Bask in the warm wishes and love coming from all sides. You are filled, and overflowing with warmth and love

**WIN**

What's your win for today?

**Win!**

# Check-In

- Touch base
- Announcements
- Comments
  - Emails/ Starfish
- Concerns
- Feedback
- Questions

*I want you to be successful in ECE 110 -- but more importantly in life! If any issue is preventing you from fully demonstrating your abilities or participating in our learning community, please contact me ASAP. We will work together to facilitate your success!*



# ECE 110-Lecture Requirements

ASSIGNMENT	VALUE
Participating in Learning Community	1 point
Observation Summary: Physical Development	1 point
Observation Summary: Social-Emotional & Language Development	1 point
Observation Summary: Cognitive Development	1 point
Commentary Paper	1 point
Domain Presentation	1 point
	<i>TOTAL</i>
	6 points
<i>Passing ECE 110-Seminar is required to successfully complete ECE 110-Lecture</i>	

# Agenda



- Check-In
- For Next Class
- SI with Carol
- Play
- Cognitive Development
- Domain Presentation

# FOR NEXT CLASS

## ECE 110-Lecture

- Due by 6/25 at 11:59 PM
  - Module 7 : Perceptual Development
    - Handout
    - Observation Summary Paper: Cognitive Development
- Due by 6/28 at 11:59 PM
  - Module 8: Sociocultural Influences
    - Handout
- ***6/29 meeting on Zoom!***

## ECE 110-Seminar

Due by at 11:59 PM:

- 6/27
  - Professional Development Plan
- 7/11
  - Site Visit Form





# SI: Carol

## Sessions

- Monday 6-8 PM
- Wednesday 6-8 PM
- Friday 5-7 PM

<https://bmcc-cuny.zoom.us/j/89546033157?pwd=d1d2WjU1TVNYNW1TRzBLMDA4QXJzZz09>

## What happens at SI Sessions

- Ask questions
- Discuss OpenLab
- Review assignments
- Get feedback on papers
- *Chat about concepts from ECE 110*

*People who regularly attend SI sessions have higher end-of-semester grades*



# Exploring Cognitive Development

1. I think cognitive development is.....
2. What has worked well to help you learn in the past? What has not worked well in the past that you want to change or avoid for future learning?
3. What have you noticed about how children seem to learn? What events or experiences stand out in your memory? What were the roles of adults, children, the environment, materials, and activities on the learning in this memory?
4. Which of the following strategies have you used to help you learn? How might these strategies apply or not apply to how children learn?
  - a. Wrote your own study questions?
  - b. Asked yourself questions about something you read or heard?
  - c. Closed your notes and thought about what you remembered?
  - d. Tried to fit what you've read into the bigger picture of what you know?
  - e. Tested out an idea or tried to recreate something you saw?
  - f. Watched an expert perform a skill?
  - g. Asked for feedback from someone else?



# Expanding Discussion Groups

- Discuss your answers with your partner
- More people will join your group
- Share your discussions with the new group members



# Cognition in Young Children

How do young children demonstrate their cognition?

- Infants & toddlers?
- Preschool age children (3- to 5-year-olds)?
- Young school age children (Kindergarten to 2<sup>nd</sup> grade)?



# What is Cognitive Development?

Cognitive development is:

- The learning process of acquiring intelligence & increasingly advanced/complex thought processes & problem-solving abilities
- How children think, explore, figure things out, & understand the world
- Brain development is part of cognitive development
- Includes the following skills & processes:
  - Decision making
  - Reasoning
  - Perception
  - Knowledge
  - Memory
  - Creativity
  - Math Skills



# Cognitive Skills & Processes

- Learning Schemes
- Cause & Effect
- Use of tools
- Object Permanence
- Understanding Space/Spatial Relationships
- Imitation
- Symbolic play
- Classification
- Numeracy
  - Want more
  - Quantity (all gone, a lot)
  - Say numbers from memory
  - Count objects
  - Add objects
  - Subtract objects
  - Calculate mentally
- Literacy
  - Reading
  - Writing
- Understanding Routines
- Creativity
- Problem Solving
- Reflecting
- Memory
- Reasoning
- Perception
- Knowledge
  - Use of objects
  - Information
  - Skills



# Decision Making/ Problem Solving

- Figuring out a problem
- Gathering/ taking in info
- Processing info
- Using info to make choices



# Reasoning

- Logical thinking
- Cause & effect
  - Understanding an action causes a reaction)
- Use of tools
  - Using 1 object to obtain or create something else





# Perception

- Becoming aware of stimuli through senses
- Learning Schemes (smallest units of info)
- Understanding Space/Spatial Relationships



# Knowledge



- Learned info
- Imitation
  - Copying another person's behavior
- Use of objects
  - Knowing what objects are used for – brush, spoon,
- Symbolic play
  - Dramatic or pretend play

# Memory

- Object Permanence
  - Objects exist when out of site
- Remembering
- Reflecting
  - Thinking about an event & forming an opinion/ analyzing what happened
- Sequencing
  - Putting events in order
- Understanding Routines
  - Knowing what routines happens next
  - Predictability (what happened next)



# Creativity

- Original
  - Thinking
  - Ideas
  - Creations
- Connected to:
  - Arts
  - Play
  - Problem solving
  - Etc.



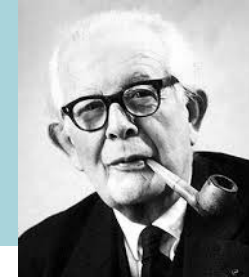
# Math Skills

- Numeracy
  - Quantity (more, all gone, a lot)
  - Repeat numbers from memory
  - Count objects
  - Add objects
  - Subtract objects
  - Calculate mentally
- Patterns
  - Repetitious designs elements in objects, songs, or phrases
- Symbols
  - Characters, marks, or pictures used to represent something else

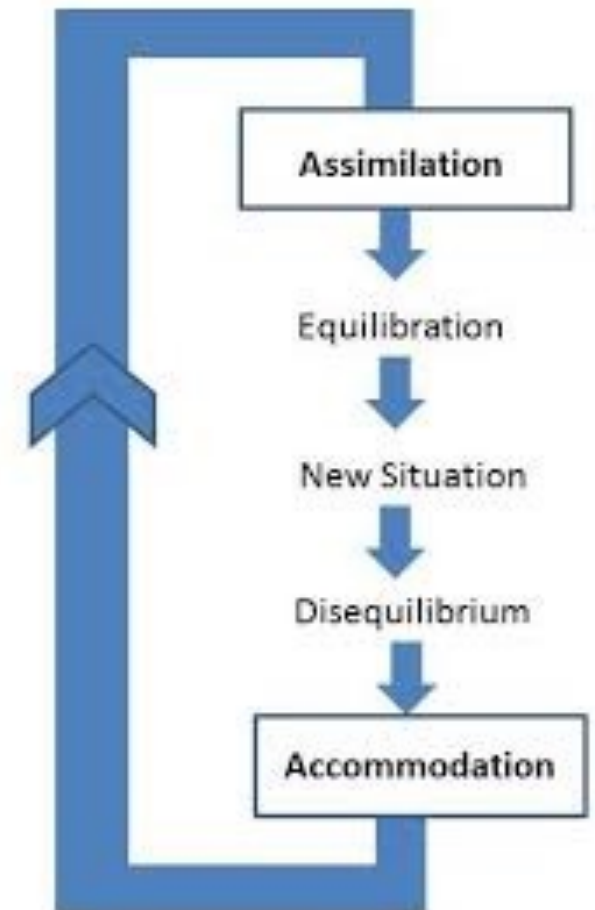
- Understanding relationships between concrete materials
  - Compare
  - Order/Seriate
  - Match
  - Sort, Classify, Categorize
  - Spatial Relationships
  - Size
  - Shape



# Piaget



- All children go through same stages
- Stages are biological, not environmental
- Identified 4 stages of Cognitive development
  - Sensorimotor (birth to 2-years-old)
    - Learns & experiences environment through 5 senses, develops object permanence
  - Preoperational (2- to 6-years-old)
    - Pretends, uses symbols to represent objects/ words, is egocentric, & cannot reason logically
  - Concrete Operational (7- to 12-years-old)
    - Thinks logically, practically & linearly, can add/ subtract, understands conservation
  - Formal Operational (12+-years-old)
    - Thinks abstractly & in hypothetical terms



# Identifying Cognitive Skills & Processes

## Skills & Processes:

<https://www.youtube.com/watch?v=GIJh3zCK6Pg> (stop at 2 minutes)

<https://www.youtube.com/watch?v=uv5sYBm8v6o>

<https://www.draccess.org/videolibrary/>

[https://www.cde.state.co.us/resultsmatter/RMVideoSeries\\_PracticingObservation](https://www.cde.state.co.us/resultsmatter/RMVideoSeries_PracticingObservation)

## NY Early Learning Guidelines:

<https://www.ccf.ny.gov/files/7315/9112/1561/ELG-2020.pdf>

# Vygotsky Activity



In groups

- Take a card.
- Create a story about the card
- Incorporate elements of each group's story into your group's story!



# Small Group Discussion

*A parent comes to you at the end of the school day & tells you that they are very concerned because all their child tells them that they do all day is play. The parent also tells you that when they come to pick-up their child they only ever see them playing.*

- What would you say to the parent? Why?
- We will revisit the question at the module.



# Identifying Types & Stages of Play

What types of play do you see in the video?

What stages of play do you observe in the video?

Complete the handout as you watch each video

- <https://www.youtube.com/watch?v=QP-Jh1kpJdw&t=53s>
- <https://www.youtube.com/watch?v=PPPIiUxxqXk>
- <https://www.youtube.com/watch?v=eqN3tIR4k38>
- <https://www.youtube.com/watch?v=ZtJ7my7RCnk>



# Scenarios

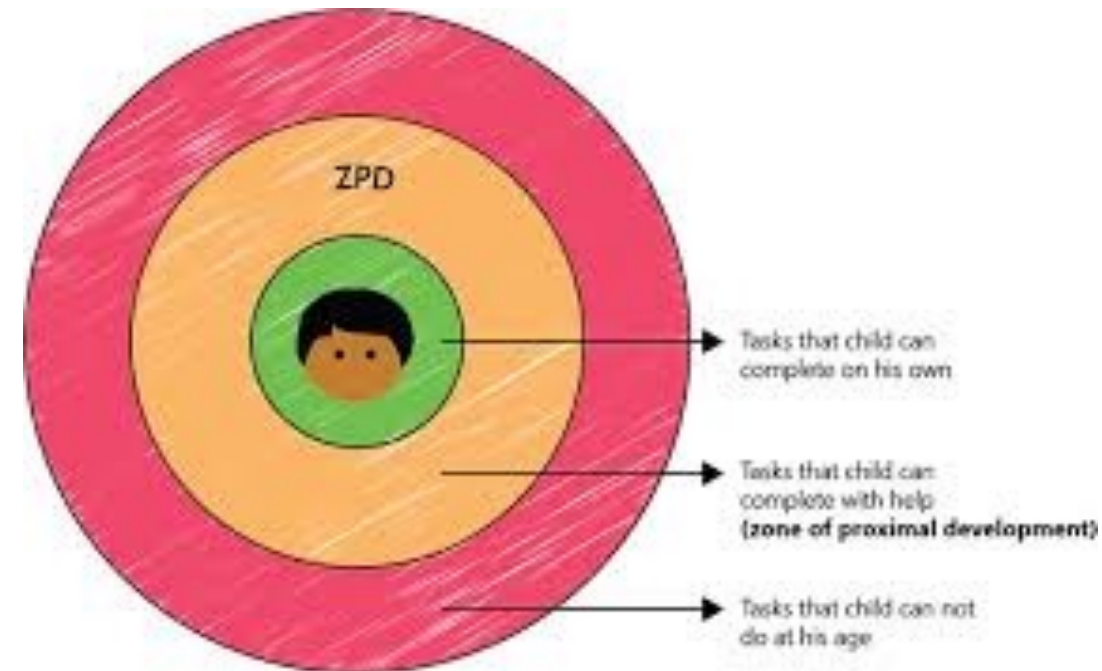
<https://1drv.ms/w/s!Aj5eI915Dy5egdYnHE4A14LEbnmxrw?e=ZVFI1j>



# Vygotsky Video

## Example of ZPD

- <https://www.youtube.com/watch?v=ibEP4xBdJco>
- How does this video demonstrate
  - Zone of Proximal Development?
  - Scaffolding?



# The Role of Teachers & Environments

- What can ECE teachers do to support cognitive learning for:
  - Infants & toddlers?
  - Preschool age children?
  - Young school age children?
- What should be in the environment to support cognitive learning for:
  - Infants & toddlers?
  - Preschool age children?
  - Young school age children?



# Loving Kindness Meditation

- Assume a comfortable position
- Relax your eyes – close them if you would like
- With each breath in, invite peace to enter your body
- With each breathe out, release stress & negativity leave
- Repeat 'May I be happy, may I be well, may I be filled with kindness & peace.'
- You can substitute "you" for "I" & think of someone you know -- or just send love to all people.

