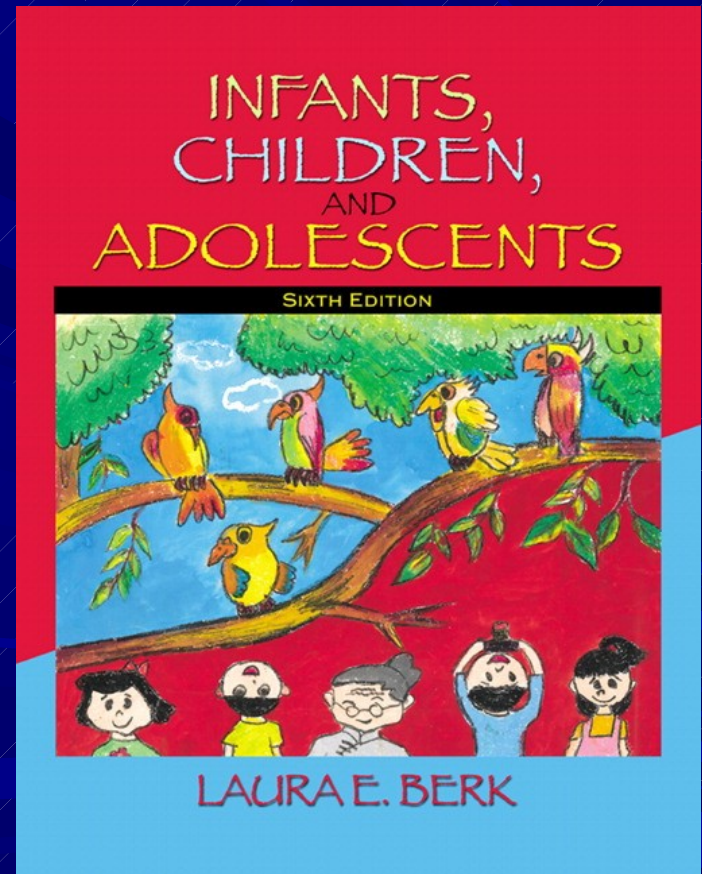


# Chapter 9: Cognitive Development in Early Childhood



# Piaget's Preoperational Stage

- Ages 2 to 7
- Gains in mental representation
  - Make-believe play
- Sensorimotor activity leads to internal images of experience, which children then label with words.

# Development of Make-Believe Play



Piaget believed:

- Allows for practice of new representational schemas

Allows children to act out things that are only in existence in their mind

# Benefits of Make-Believe Play

- Allows for social interactions if others are involved
- Develops social competence

Related to self-esteem

- Strengthens:
  - Concentration skills
  - Memory
  - Language skills
  - Logical reasoning
  - Creativity

Possible social practice in their make believe play

i.e. pretending to be a teacher (voice)



# Enhancing Make-Believe Play in Early Childhood

- Provide sufficient space and play materials.
- Supervise and encourage children's play without controlling it.
- Help children solve social conflicts constructively.
  - E.g., fights with friends (real or imagined)

# Egocentrism

Apparent from age 2 to 4

Failure to distinguish others' views from one's own.



Look at an object and they see things from only their point of view

# Piaget's Example of Egocentric Speech

- **Child 1:** "My dad is a fireman"
- **Child 2:** "I am 6 years old"
- **Child 1:** "He is a real hero"
- **Child 2:** "I had my birthday party yesterday"

Children are eventually taught how to take perspective and with normal development they lose some of this narcissism

# Children's Private Speech

- Piaget called “egocentric speech” i.e. When colouring, children talk to themselves
- Vygotsky viewed as foundation for all higher cognitive processes
  - E.g., “ok, I am going to draw and stay in the lines. That’s it! Good Job”
- Helps guide behavior
  - Used more when tasks are difficult, after errors, or when confused
- Gradually becomes more silent
  - Children with learning and behavior problems use for longer



Vygotsky says this is an essential component of learning

# Information Processing

- Better at **recognition** than **recall**
- **Learning about letters**
  - Initially think that a letter is a word or represents a word
  - E.g., O = deer???
  - Words are learned informally
    - E.g., ON, OFF, PIZZA

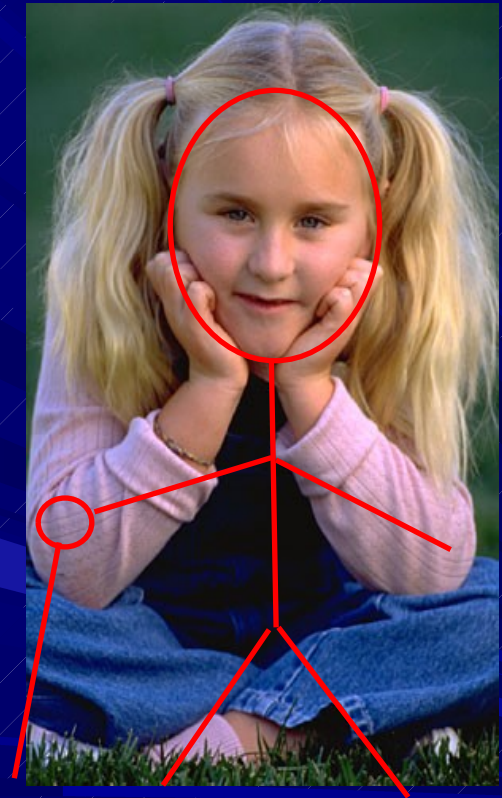


# Mathematical Reasoning

- Preliminary knowledge **gained via informal experience** Not from school, just from home
- E.g., 1 vs 2 cookies
- Concepts of lots, little, big and small are learned
- **Principle of Cardinality** = learning using memory  
children have an understanding that when counting, the number they reach at the end (1, 2, 3, 4, 5... 5 cookies!) represents the number of things there

# Improvements in Attention

- Sustained attention **increases sharply between 2 and 3 1/2 years**
  - Frontal lobe growth
  - Increasingly complex play goals



# Individual Differences in Early Childhood Mental Development

- Can use and **IQ test** to measure
  - **Simple addition and subtraction**
  - **Vocabulary**
  - **memory**

3 new things can be tested compared to the preoperational stage



# Individual Differences cont.

## Factors Contributing to Individual Differences:

- Home environment Socioeconomic Status
- Quality of child care, preschool, or kindergarten
  - Child-centered versus academic
  - Early intervention programs
- Television
  - Educational TV

Average 2-6 year old watches television 1 1/2 to 3 hours a day

# Types of Preschool and Kindergarten

- **Child-centered programs**= teachers provide activities from which the children select and most of the day is devoted to play.
- **Academic programs**= teachers structure children's learning through formal lessons, often using repetitive drills.

# Early Intervention for At-Risk Preschoolers

- Project Head Start
- Canada's Aboriginal Head Start
- Long-term benefits
  - Better early school achievement
  - Less special education
  - More high school graduation, college enrollment
- Advantages still evident at age 40 ONLY IF they continue on a solid educational path

Identifies and selects At-Risk children and prepares them for school



# Vocabulary Development in Early Childhood



- Learn how to use words within a social context
- = *pragmatics of language*
- ★
- By age 4, Able to adjust speech for different ages i.e. Baby Speech

# Supporting Language Learning in Early Childhood

- Restructuring incorrect speech into correct form
- Expansions  
Elaborating on children's speech

