- What is "Development"? How is it defined?
- -- One definition describes it as "a progressively on-going change that moves from basic to increasingly more complex." The main problem with this view is that it does not reflect the issue of development across the lifespan to include the plateaus of life.
- -- Just as everyone is this class defines what constitutes development differently, there is no consensus in the field of psychology (to include developmentalists) as to what development is. It is for this very reason that when or if you read through the available literature on development, you will find multiple arguments that go in a variety of directions.

- Domains of Developmental Psychology
  - To describe behavior
  - To explain development
  - To predict outcome behavior to aid others' understanding of developmental processes.

- Concepts & Issues in Developmental Psychololgy
  - Bidirectionality of development
    - -- Developmental Psych view....
    - -- Social Psych view....
  - Periods of Critical development
  - Resiliency & Vulnerability
  - Continuity –vs- Discontinuity

- Concepts & Issues in Developmental Psychololgy con't.
  - Environment & Heredity
  - Age
    - -- This concept is inherently difficult in all aspects of developmental research.
    - This appears to be consistent for most, if not all, constructs.
    - The reason is being that developmental constructs change in how they are defined depending on age.

- Concepts & Issues in Developmental Psychololgy con't.
  - Gender issues
  - -- Just as with age differences, many gender issues are not consistent <u>across</u> genders.
  - Culture
  - -- Different cultures define development and what is considered "optimal" differently.
  - Phases of Transition

#### Models of Development

#### Mechanistic Models

- The child is a passive reactor to environmental influences
- Highly reductionistic / deterministic
- Views development as continuous
- Individual differences are accounted for by the Hx of reinforcements
- All things are explained via S R relationships



- Organismic Models
  - Assumes the existence of psychological structures in the child that underlie and control development.
  - The child is an active participant
  - Assumes "the whole is greater than the sum of its parts." Non-reductionistic
  - Assumes that structures are already based within the individual

- Organismic Models con't.
  - Assumes that development has trajectory and goals
  - Takes a maturational approach
  - Biologically bassed; multiple universal principles
  - Interested in the integration of interaction (the event, not the duration)
  - Moderately deterministic in that development is viewed as certain provided that criteria is met (degree & quality of development varies)

- Contextual Models
  - Not necessarily interested the organism as a whole, but is greatly interested in the historical aspect of development
  - => These models view changes & novelty as a fundamental rule of life
    - => Change is considered constant (on-going)
    - => The individual is always evolving

- Contextual Models con't.
  - Interested in the transaction between the organism and the environment
  - Not a good predictive model because it holds that individuals are <u>always</u> in flux (i.e., always in a unpredictable / erratic state)
  - Interested in the duration of the integration process
  - Development is probabilistic NOT certain
- What accounts for probabilities is the context & the interaction between the individual and the context (duration of interaction is key)

#### Milesstones:

 Human development is generally characterized by milestones that occur in a predictable sequence. A developmental milestone is therefore the appearance of a new, developmentally more advanced behavior

- Maturation:
- Maturation is the unfolding of genetically controlled changes as a child develops.
- Example: Motor skills walking, running, & jumping develop primarily as a result of neurological development, increased strength, and increased muscular control. Such changes are largely determined by heredity.

#### **Basic Assumptions**

- Children are active and motivated learners
- Children's knowledge of the world is not limited to a collection of isolated pieces of information, but rather becomes increasingly integrated and organized over time.

#### **Basic Assumptions con't.**

- Children learn via the processes of assimilation and accommodation.
- => Assimilation: The process of dealing with a new event in a way that is consistent with an existing schema.
- => Accommodation: The process of dealing with a new event by either modifying an existing schema or forming a new one.

**Basic Assumptions con't.** 

• Interaction with one's physical and social environments are essential for cognitive development.

- **Basic Assumptions con't.** 
  - The process of equilibration promotes progression toward increasingly more complex levels of thought.
    - Equilibrium
    - Disequilibrium
    - Equilibration

#### **Piaget's Stages of Development**

- The sensorimotor stage spans from birth to approximately 2 years of age
- Begins with reflexive responding and ends with symbolic thinking
- Object permanence: understanding that objects exist even though they can't see them. The onset of object permanence represents the transition phase of development to the next stage; begins approx. from 8 – 12 months

#### **Piaget's Stages of Development**

- Preoperational stage spans ages 2 to 7 years
- Children use symbols but there are many errors in thinking
- Characterized by:
  - Significant acquisition of motor skills
  - Egocentrism
  - Centration
  - Confuse appearance and reality
  - Cannon conserve or use logical thinking

#### **Conservation Tasks**

Type of Conservation Starting Configuration		Transformation	Final Configuration
Liquid quantity		Pour water from one glass into a shorter, wider glass.	
	Is there the same amount of water in each glass?		Now is there the same amount of water in each glass, or does one have more?
Number	\$\$\$\$\$\$ \$\$\$\$\$	Stretch out the top row of pennies, push together the bottom row.	8 8 8 8 8 888888
	Are there the same number of pennies in each row?		Now are there the same number of pennies in each row, or does one row have more?
Length	Are these sticks the same length?	Move one stick to the left and the other to the right.	Now are the sticks the same length, or is one longer?
Mass	Does each ball have the same amount of clay?	Roll one ball so that it looks like a sausage.	Now does each piece have the same amount of clay, or does one have more?
Area	Does each cow have the same amount of grass to eat?	Spread out the squares in one field.	Now does each cow have the same amount to eat, or does one cow have more?

#### **Piaget's Stages of Development**

- Concrete operational stage spans ages 7 to approx. 12 years
- They can conceive of things and think logically, but only with aids.
- No longer egocentric.
- Operations can be reversed.
- Focus on the real and concrete, not the abstract

#### **Piaget's Stages of Development**

- Formal operational stage spans from approx. age 12 through adulthood
- They can think hypothetically, i.e., abstract reasoning emerges and develops.
- They can use deductive reasoning to draw appropriate conclusions from facts.

# Sociocultural Theory of Areas of Emphasis:

- 1. The importance of social interaction for cognitive development.
- 2. The concept of scaffolding.
- 3. The interrelationship between language and thought.
- 4. Cognitive Development is inseparable from social and cultural contexts.

#### 3 Areas of Development:

- 1. Actual Developmental Level (ADL): what one can do without any assistance.
- 2. Level of Potential Development (LPD): what one can do under the guidance of someone more competent.
- 3. Zone of Proximal Development (ZPD): the difference between what one can do alone vs with assistance.

- Scaffolding:
- A support mechanism, provided by a more competent individual, that helps a learner successfully perform a task within his/her ZPD.
- Examples.....
- Construction work; Teachers; ect.

The interrelationship between language and thought:

Vygotsky proposes that egocentric speech is better understood as "talking to one's self" rather than talking to someone else. Some people are more likely to talk to themselves when performing difficult or frustrating tasks. Talking aloud seems to help guide & direct individuals as they attempt to perform a complex task or solve a difficult problem.

The interrelationship between language and thought con't.:

Vygotsky believed that thought and language are separate functions in infants and young toddlers. He believed that somewhere around age 2, thought and language become intertwined. This is because Vygotsky didn't believe that the individual was able to express their thoughts until they were able to speak and think in terms of words.

The interrelationship between language and thought con't.:

According to this theoretical perspective, it is at this point that we begin to see self-talk (often referred to as "private speech")... for talking to one's self mentally rather than out loud. The thing to remember here is that "self-talk" and "inner-talk" (thought) serve to guide and direct behavior. It is a means of providing "scaffolding" for one's self.