



Learning Theories

# + Behaviorism



- Conditioning and Reinforcement
  - Classical Conditioning
    - Learning to connect a neutral stimulus to an instinctual response
  - Operant Conditioning: Reinforcement
    - Learning by small increments through a schedule of reinforcement

# + Early Cognitive Theorists

## ■ Piaget

### ■ Learning happens in a sequence:

- Sensory Motor (0-2)

- Preoperational (preschool-7)

- Concrete Operational (7-11)

- Formal Operational (11+)

- Watch how a preschooler has trouble understanding that objects stay the same no matter their container:

- <http://youtu.be/YtLEWVu8l5o>



# Early Cognitive Theories



## ■ Vygotsky

- Learning happens in a sequence as language develops

### ■ Schema formation:

- Kids first connect objects around them to ideas
- Then they start connecting ideas together

### ■ Zone of Proximal Development

- Teachers provide logical systems and connections kids wouldn't otherwise make  
-- scaffolding



# Constructivism



## ■ Philosophy:

- Students “construct” their own meaning by taking in new learning and adding it to old learning
- Students enter a class with some knowledge already

## ■ Comes from modern cognitive psychology and neurobiology

## ■ Students are the focus

- Start from where students are and move them toward a standard
- Collaborate and use other students’ knowledge



# Constructivism



## ■ What it looks like:

### ■ Teachers:

- Are facilitators and guides for students to learn in their own way
- Are also learners

### ■ Students:

- Discovering new info. with experiments and experiences
- Projects with hands-on components
- Collaboration with others
- Student choice – products, reading, methods of learning