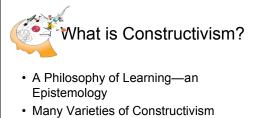
## Education 173 Cognition and Learning in Educational Settings

#### Constructivism







- Not a coherent theory
- Knowledge is the Result of an Inventive Process

# Ideas Are Constructed

- · Philosophical Idealism - Reality is in our heads
- Psychological Constructivism
- The mind invents reality Sociocultural Constructivism
- The categories of our experience are given to use by our culture



#### Where is the Mind?

- In the Individual
- · In the Social Actions of Communities?
- Both?
- · Degrees of Constructivism
  - One extreme: Radical constructivism
  - · There is no external reality
  - Another extreme: Naïve realism
  - · Minds have direct access to external truth

## The Learner Must Construct Knowledge

- Is Constructivism:
  - A theory of learning
  - Or a theory of teaching?
- Is Lecturing Compatible with Constructivism?
  - It is if the student is activity processing the lecture, and constructing meaning from it.
- · Are Student-Centered Approaches More Likely to Assure Knowledge Construction? - Maybe so

#### Situated Cognition

#### Knowledge is:

- Bound to the context in which it is learned
- Deeply enmeshed in cultural institutions, roles, tools, and symbols
- Made meaningful by its uses
- Limited in transferability
- Situated Cognition Theory • Connects (And Corrects) Psychology with Anthropology





# Implications of Situated Cognition Theory

- Questions Abstract (Context-Free) Assessment and Instruction

   Promotes "authentic" assessment
   Promotes "authentic" instruction
- Questions General (Context-Free) Cognitive
   Abilities
- Does intelligence make sense?
   Questions Broad Transfer

   Does transfer really happen?
   Is it difficult?



 Suggests that Teachers Should "Situate" Knowledge in Multiple Contexts

