

Integrasi Teknologi dalam Pembelajaran

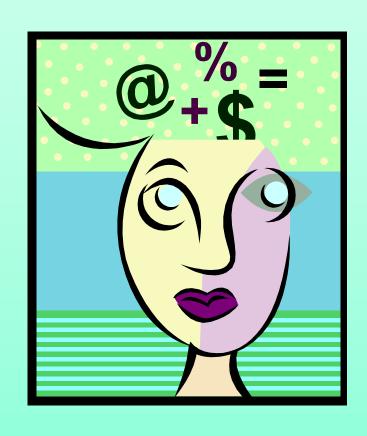
Bahan Kuliah:

Cepi Riyana. M.Pd

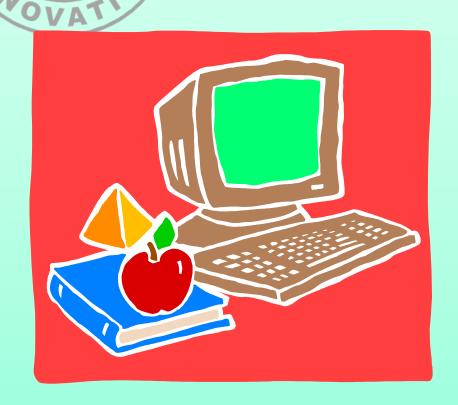
Integrating Educational Technology into Teaching

Chapter 3

Learning Theories and Integration Models







- Tutor
- · Tool
- · Tutee



Divergent Views

Learning is constructed knowledge

Constructivists

Objectivists

Students should be able to generate their own knowledge

> Direct instruction is too ridged & teachercentered

Teaching should be teacherdirected, systematic, & structured

Constructivist approaches are too inefficient, unstructured, & unsystematic

Learning is

knowledge

transmitted



Directed Instruction





Learning Theories

- · Behaviorism: Skinner
- Information-processing:
 Atkinson & Shiffrin
- · Teaching Guidelines: Gagne
- Instructional Design System Approaches

Directed Instruction Characteristics



- Focus on teaching sequences based on prerequisite skills
- Clear objectives with matching test items

Directed Instruction Characteristics

- Stresses individualized work
- Emphasizes traditional teaching & assessment methods







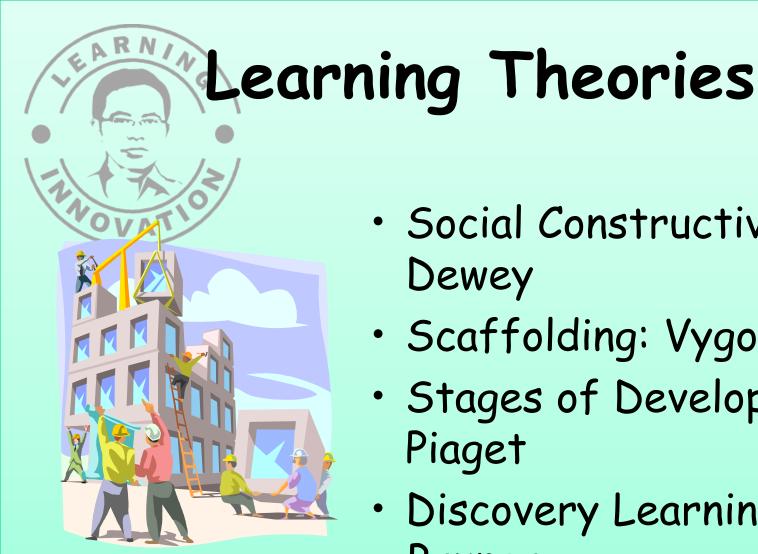
Criticism

- Students Cannot Do Problem Solving
- Activities Unmotivating
- Students Cannot Work Cooperatively

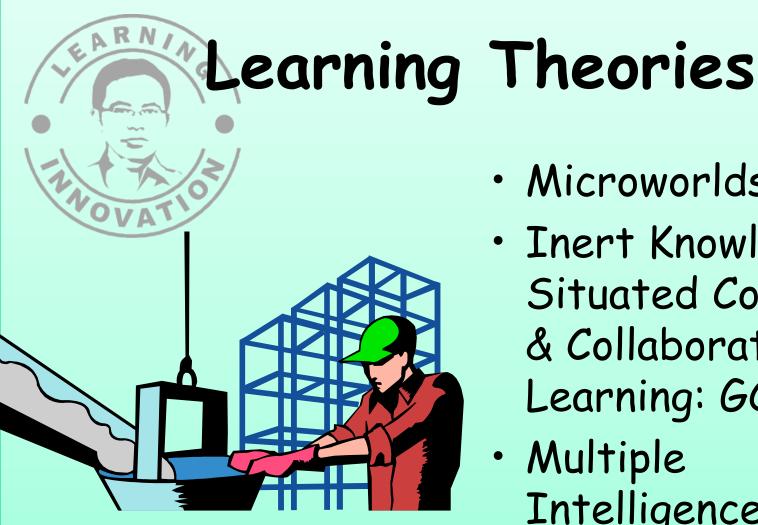


Constructivism





- Social Constructivism: Dewey
- Scaffolding: Vygotsky
- Stages of Development: Piaget
- Discovery Learning: Bruner



- Microworlds: Papert
- Inert Knowledge, Situated Cognition, & Collaborative Learning: GCTGV
- Multiple Intelligences: Gardner





- Focuses on learning through posing problems, answer exploration, and product development & presentation
- Pursues global goals and specifies general abilities

Constructivist Learning Characteristics

- Stresses group over individual work
- Emphasizes
 alternative learning
 & assessment
 methods





Criticism

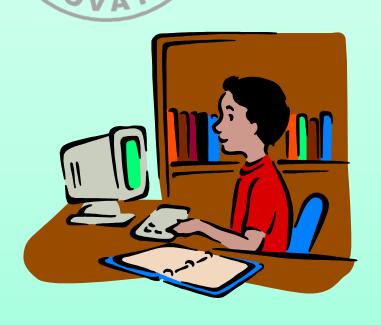
- How to Certify Learned Skills
- Need for Prior Knowledge
- Ability for Students to Choose Effective Instruction
- · Which Topics Suit Methods
- Transfer of Skills to Practical Situations



Integration Strategies







- Provides Skill Remediation
- Provides Mastery & Fluency
- Provides Systematic
 Self-instruction

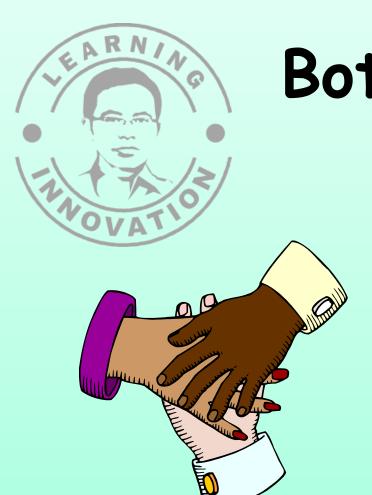


Constructivist Models

- Fosters Creativity
- Fosters Inductive
 Thinking & Problem
 Solving
- · Fosters Metacognition



- Increases transfer of knowledge to problem solving
- Fosters group cooperation
- · Allows for multiple & distributed intelligences



Both Models

- Increase motivation
- Optimize learning resources
- Remove logistic hurdles to learning
- Foster communication skills and information & visual literacy