Integrasi Teknologi dalam Pembelajaran

Bahan Kuliah :
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Chapter 3
Learning Theories and Integration Models
Past Perceptions

- Tutor
- Tool
- Tutee
Divergent Views

Learning is constructed knowledge

Constructivists

Students should be able to generate their own knowledge

Direct instruction is too rigid & teacher-centered

Learning is transmitted knowledge

Objectivists

Teaching should be teacher-directed, systematic, & structured

Constructivist approaches are too inefficient, unstructured, & unsystematic
Theoretical Foundations

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
Theoretical Foundations

Constructivism
Learning Theories

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

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

- 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
Directed Models

• Provides Skill Remediation
• Provides Mastery & Fluency
• Provides Systematic Self-instruction
Constructivist Models

- Fosters Creativity
- Fosters Inductive Thinking & Problem Solving
- Fosters Metacognition
Constructivist Models

- 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