

What to look for in good instructional strategies

From M. David Merrill

- 1) Problem-centered
- 2) Activate prior learning
- 3) Demonstration
- 4) Application
- 5) Integration

From Stephen Downes

- 1) Model
 - 2) Demonstrate
- And promoting:
- 3) Reflection
 - 4) Practice

From M. David Merrill – Part II

- 1) Tell (level 0)
- 2) Show (level 1)
 - a. Consistent
 - b. Guidance
 - c. Use appropriate media
- 3) Ask/apply (level 2)
 - a. Consistent
 - b. Feedback
 - c. Coaching
- 4) Problem-centered (level 3)
 - a. Progression
 - b. Activation
 - c. Structure (mental models)
 - d. Integration
 - e. Peer collaboration/peer critique

From Andrew S. Gibbons

- 1) Organization of learning environment
- 2) Provisions for interacting with cause-effect systems
- 3) Ability to observe models of expert performance
- 4) Opportunity for learners to attempt performance related to instructional goals
- 5) Augmentation or scaffolding by learning companion support

From Patricia L. Smith and Tillman J. Ragan

- 1) Declarative knowledge
 - a. Organize
 - b. Elaborate
- 2) Concepts
 - a. Define attributes
 - b. Generalize
 - c. Discriminate
- 3) Procedure
 - a. Expository
 - b. Discovery
- 4) Principles
 - a. Expository
 - b. Discovery
 - c. Information-processing analysis
- 5) Problem-solving
 - a. Represent the problem
 - b. Plan solution
 - c. Implement solution
 - d. Evaluate solution