"New Directions in Learning and Motivation" Marilla D. Svinicki

BEHAVIORIST MODEL

Theory	No advantage in focusing on nonobservable mediating events like thinking because environmental consequences could explain even complex chains of behavior
Learning…	is the development of associations between stimuli and responses
Instructional Implications	Useful in class organization and management Instruction should increase frequency of correct responses and minimize errors (learners were passive participants) Positive consequences increased response's probability Self-paced instruction- target behavior should be divided into small easy to achieve steps presented in logical sequence to build towards the final complete behavior *Computers can incorporate individualization by using branching, where one's next step is determined by one's answer to the previous step* Criterion-referenced evaluation of learning, rather than compare with other students

COGNITIVE MODEL

Theory	Learner needs to be actively aware of learning and directing his/her learning
Learning…	is a structuring and restructuring of memory occurs when information from environment receives learner's attention, enters working memory where it is help briefly until it is either processed into long-term memory, discarded as unimportant, or displaced by incoming information
Instructional Implications	Useful in advising teachers how to design instruction, but not useful in classroom or behavior management Instruction needs to focus learner attention on critical feature of information, provide support for storage strategies (analogies, examples, clear definitions, etc) and incorporate opportunities for learners to respond on basis of understanding material in order to determine if info has been stored correctly Highlight main ideas verbally or visually Ask learners what they already know and use examples that relate to them Long term memory is network of associations, some well organized some unique, *can use hypertext and hypermedia to demonstrate these associations* Recognize limitations of learning system- good to take break after making a point Focus learner's attention, because multiple demands made on learner divides up his/her capacity

Cognitive Model, Phase II: METACOGNITION

Theory	Learner needs to be actively aware of learning and directing his/her learning
Learning…	must be done to achieve goals the learner has set. The learner is aware of these goals and refers to these goals throughout the learning process to assess progress. is based on "authentic problem-solving tasks" in environments that are close to the real environment of practice *Multimedia can assist in creating very realistic environments within a classroom*
Instructional Implications	Student self-regulate their learning by setting learning goals, selecting and implementing learning strategies, and monitoring their own learning Groups of students make decisions about what and how to learn

Cognitive Model, Phase III: LEARNER-CENTERED MODELS

Theory	Constructivism- learners are constructing their own worldview using prior knowledge and present experience (as perhaps those of others) to understand new knowledge
Learning…	is a "process of developing a construction of reality in the mind of the learner"
Instructional Implications	Learner responsible for directing the process with the support of the instructor. Since learn often not metacognitively aware, instructor might have to teach them how to learn Instructor should model thinking, provide methods that support metacognition, such as journals, and directly teach strategies for problem solving when needed

THE UNIQUE LEARNER: INDIVIDUAL DIFFFERENCES

Theory	Role of individual differences among learners
Learning…	is "the product of so many different variables," some of which can be measured and other of which can't. Because of this, learning cannot be simplified based on one of these variables. Some of these variables include: - level of prior knowledge - cognitive processing variables (serial vs. holistic learners) - personality variables - strategies for learning - beliefs about learning and thinking - demographics Most of these variables are preferences or experiences, not inborn traits of an individual
Instructional Implications	Instruction should be varied so "most learners will find something to meet their needs" "Equip learners with a range of experiences and learning strategies so that they become self-regulated learners"

MOTIVATION

	Perspective on Motivation	**Major Contribution to Motivation**	**Instructional Implications of Motivation**
Behaviorist Theory	In original theory, motivation did not exist because learner engaged in a behavior because it had be reinforced in the past, not in anticipation of reward Modern versions include incentive value of future rewards or anticipated consequences	Concept of reinforcement and punishment to motivate behavior	Provide reinforcement for activities you wish to encourage
Cognitive Theory	Learners "motivated to learn when feedback on their responses indicated a mismatch between their memory structure and the 'real world'"	Expectancy-value theory- learner's motivation is a function of how likely he/she expects to be success at a task and the value he/she places on the task (instructor can help raise student expectancy or value)	Enhance perceived value of task
		Self-efficacy- belief in one's own ability with regard to a specific task	Incrase learner self-efficacy
		Goals help motivation, because learners want to narrow the gap between current level of performance and the goal	Set challenging yet attainable goals for learning, and provide feedback on progress
		Attribution theory- motivation based on what they believe causes their success of failure (outside forces or force within learner's control)	Change learners beliefs and attitudes about learning
		Goal Orientation Theory- mastery goal orientation or performance goal orientation	Encourage mastery goal orientation
		Self-determination Theory- greatest motivation when learners make their own choices about how to learn	Give learner choices about goals and strategies for achieving them
		Intrinsic vs. extrinsic motivation	Emphasize internal reinforcers and motivation
		Volition- after motivation gets behavior started, volition keeps it going despite obstacles	