

Models of Teaching and Instructional Design

John P Egan, PhD

john.egan@ubc.ca



Session objectives

By the end of this session you will:

- Be familiar with the learning theories of Piaget and Vygotsky
- Explore Pratt's general model of teaching
- Link teaching and learning theory to instructional design



Jean Piaget

- Child psychologist
- Studied how children made meaning ("sense") of their world
- Early learning is exploratory, incremental, non-linear
- Children learn rapidly when they construct knowledge in their own lives
- Constructivism



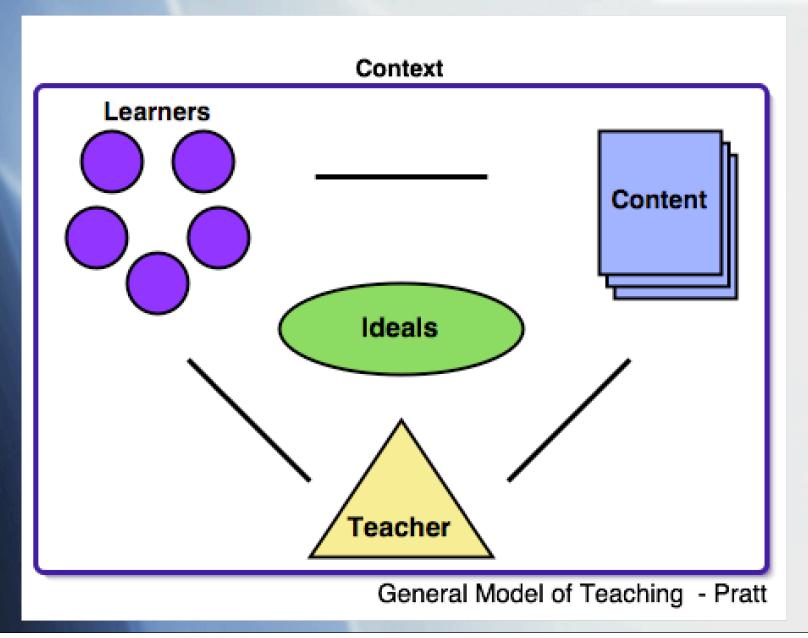
Lev Vygotsky

- Child psychologist
- Relationship between learning and language
- Ability to learn tied to language
- As language becomes more sophisticated, so does learning
- Language as external and internal tool
- Finding (or introducing) a common language

john.egan@ubc.ca

Pratt's General Model of Teaching







General Model of Teaching (GMT)

- Teacher, Learner and Content are components
- Ideals (values) inform each component
- Ideals inform interactions between components
- Situated in context (or contexts)



Applying Pratt's GMT

Use the GMT to analyze your course

- What roles do you, your students play?
- What do you know about how your students learn?
- How can you support their learning?
- •How might your use technology to help you enrich the learning environment?



Pratt's five teaching perspectives

- Teaching perspective: what we see as the role of teachers in adult & higher education
 - 1. Transmission
 - 2. Apprenticeship
 - 3. Developmental
 - 4. Nurturing
 - 5. Social reform
- Key components of effective teaching apply across contexts and perspectives



Transmission

- Teacher as expert
- Content delivered didactly to learner
- Learner consumes, then replicates, knowledge
- Learning is the acquisition of knowledge
- Freire called this the "banking method"



Apprenticeship

- Learning through modelling
- Learning by observation, demonstration, and replication of performance
- Learning is situated in real-world (or simulation)



Developmental

- Learning is acquiring and refining analytical thinking skills
- How one reasons is evidence of learning
- Learning can be facilitated by others
- Learners are responsible for their own learning



Nurturing

- Learning is both emotional (affective) and intellectual
- Caring relationships at the core learning
- In addition to knowledge acquisition, learning focuses on building confidence and self-direction



Social reform

- Learning occurs in societies
- Learning about how society operates
- Learning about how to change society for the better
- Popular education, liberatory pedagogy



Multiple perspectives

- No one wholly situates their teaching in one perspective
- Multiple perspectives co-exist
- Perspective can be overridden by context



Questions

- Which teaching perspectives resonate with you?
- What experiences of yours inform your teaching perspective?
- How easily can you integrate your teaching perspectives into your own practice? Are there any barriers to doing so?



BREAK

john.egan@ubc.ca



How adults learn

By the end of this session you will

- Understand the nature of the adult learner
- Become familiar with Bloom's three domains of learning
- Become familiar with four learning styles



According to Knowles adult learners

- Are autonomous and self-directed
- Want to link their life experiences and prior knowledge to teaching and learning
- Are goal-oriented
- Expect relevance
- Demand respect
- Expect practical applicability
- Do you agree with Knowles? Why or Why not?



Domains of learning (Bloom)

- Cognitive: Thinking. Rational ideas, problem solving, evaluation, classification
- Affective: Feelings. Attitudes, values and beliefs
- Psychomotor: Physical skills. Acquiring technique
- Different domains require different instructional strategies



Cognitive Domain hierarchy (low to high)

- Recalls/recognizes concept
- Comprehends/understands
- Applies
- Analyzes
- Synthesizes
- Evaluates, judges or assesses



Affective Domain hierarchy (low-high)

- Awareness of a belief, value or attitude
- Acceptance that others value a belief
- Sees value in a belief
- Accepts belief as their own
- Belief put into practice



Psychomotor Domain hierarchy (low-high)

- Recognizes action
- Can describe action
- Observes and imitates action
- Performs single action without guidance
- Performs complex or multiple actions without guidance
- Performs skill "automatically", as second nature



Domains: So what?

- Different domains require different instructional strategies
- Different levels of a domain often do as well
- Affective domain learning is process-centred and takes time
- Psychomotor domain learning often involves rote practice or drills
- Cognitive domain learning tends to rely on learners to read, think, speak and write critically



Learning styles

- Visual: through images and observation, including body language
- Auditory: through listening AND speaking ("talk learners")
- Kinesthetic: through physical action, including touching
- Activity: My learning style: write down your answer for each question



References

- Bloom B. S. (1956). Taxonomy of Educational Objectives, Handbook I: The Cognitive Domain. New York: David McKay Co Inc.
- Knowles, M. S. (1980). The modern practice of adult education: From pedagogy to andragogy. Englewood Cliffs: Prentice Hall/Cambridge.
- Piaget, J. (1975). The Child's Conception of the World. Lanham MD: Littlefield Adams Quality Paperbacks.
- Pratt, Daniel D. (1998). Five Perspectives on Teaching in Adult & Higher Education. Malabar, Florida: Krieger Publishing
- Vygotsky, L. S. (1986). Thought and Language. Boston: MIT Press.