The Connectivist Learning Model

Learning…

- Two major aspects:
- 'knowledge' is to be organized in a certain way
- - 'knowing' is like 'recognizing', ie., pattern matching

Vs. Cognitivism

- Cognitivism = the theory that knowledge consists of (propositional) models of reality

- Eg. 'sentences in the brain'

- Examples: declarative knowledge, general principles, causation, categorization

Connectivism

- The theory that knowledge and learning can be described and explained using network principles

- 'Learning' is not to acquire a set of facts, but rather, to develop or 'grow' into a certain neural configuration

Knowledge…

- Is distributed….
- Is emergent…
- Is ineffable…

Connectivist Learning theory

- Based on principles of associationism
- Four major ways to learn:
  - Simple (Hebbian) associationism
  - Accidental association (by proximity)
  - Back-Propagation
  - Boltzmann learning

Connectivist Pedagogy

- To 'teach' is to model and demonstrate
- To 'learn' is to practice and reflect
- Both imply participation in what might be called 'an authentic community of practice'

Role of the teacher

- To practice one's work in an open manner; to work transparently
- To 'work' is to engage in a community
- To be openly reflective, eg., to write about the work

Role of the Learner

- To attach oneself to an authentic environment

- To observe and emulate successful practice

- To be 'reflective', ie., to engage in conversation about the practice

The Connectivist Learning Model
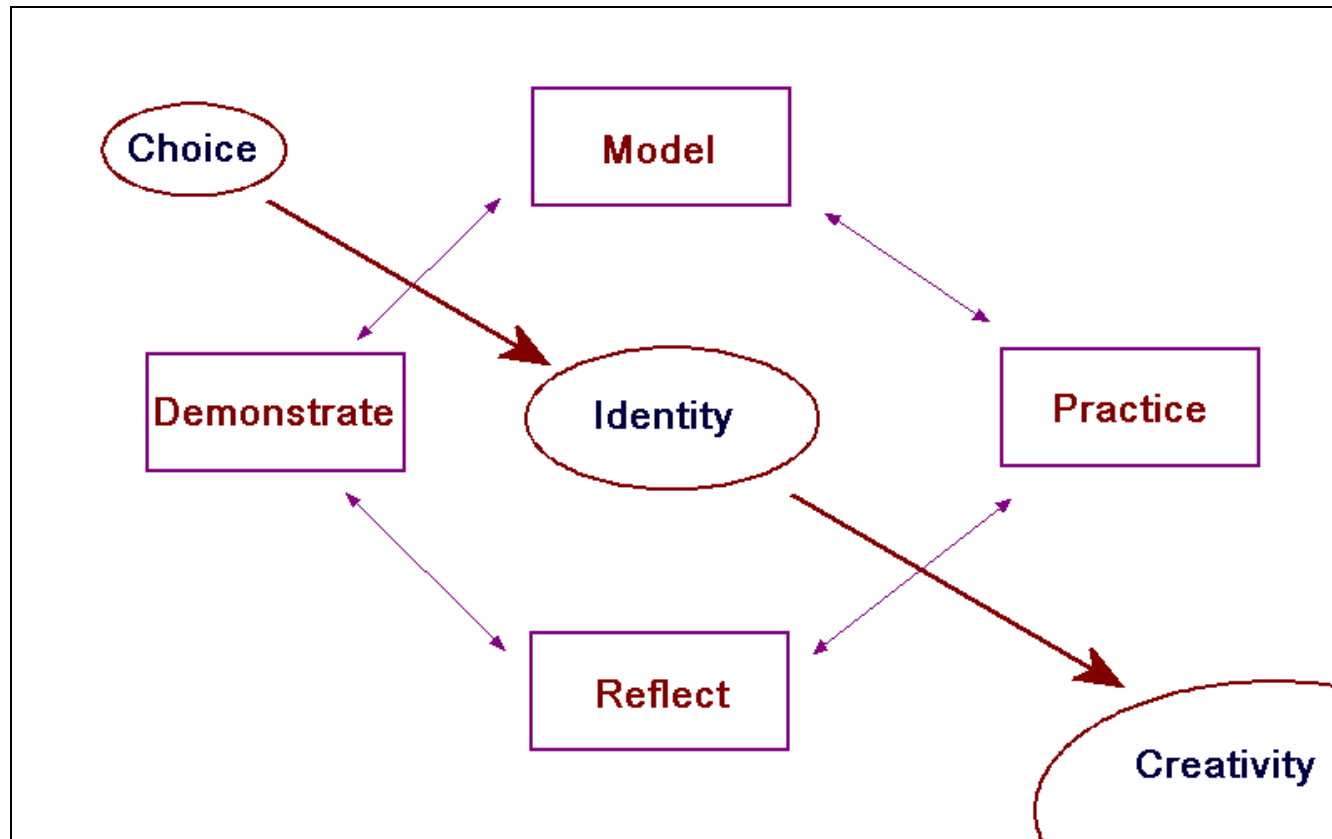
Model

The question is – how to transport and represent models that are actually used?

- conceptual frameworks
    - wiki (wiki API, RSS)
    - concept maps (SVG, mapping format)
    - gliffy (SVG?)
- reference frameworks
    - Wikipedia
    - video / 2L 3D representation – embedded spaces

Demonstrate

Demonstrate

- reference examples
  - code library
  - image samples

- thought processes

  - show experts at work (Chaos Manor)

- application

  - case studies, stories

The question is, how can we connect the learner with the community at work?

Practice

- scaffolded practice
  - game interfaces
  - sandboxes
- job aids
  - flash cards, cheat sheets
- games and simulations
  - mod kits, mmorpgs

The question is, how can we enable access to multiple environments that support various activities?

Reflection

The question is, how can we assist people to see themselves, their practice, in a mirror?

- guided reflection
  - forms-based input
  - presentations and seminars
- journaling
  - blogs, wikis
- communities
  - discussion, sharing

Choice – Identity - Creativity

- simulated or actual environments that present tasks or problems
- OpenID, authentication, feature or profile development
- Portfolios & creative libraries

People talk about 'motivation' – but the real issue here is *ownership*

What does personal learning mean for learners?
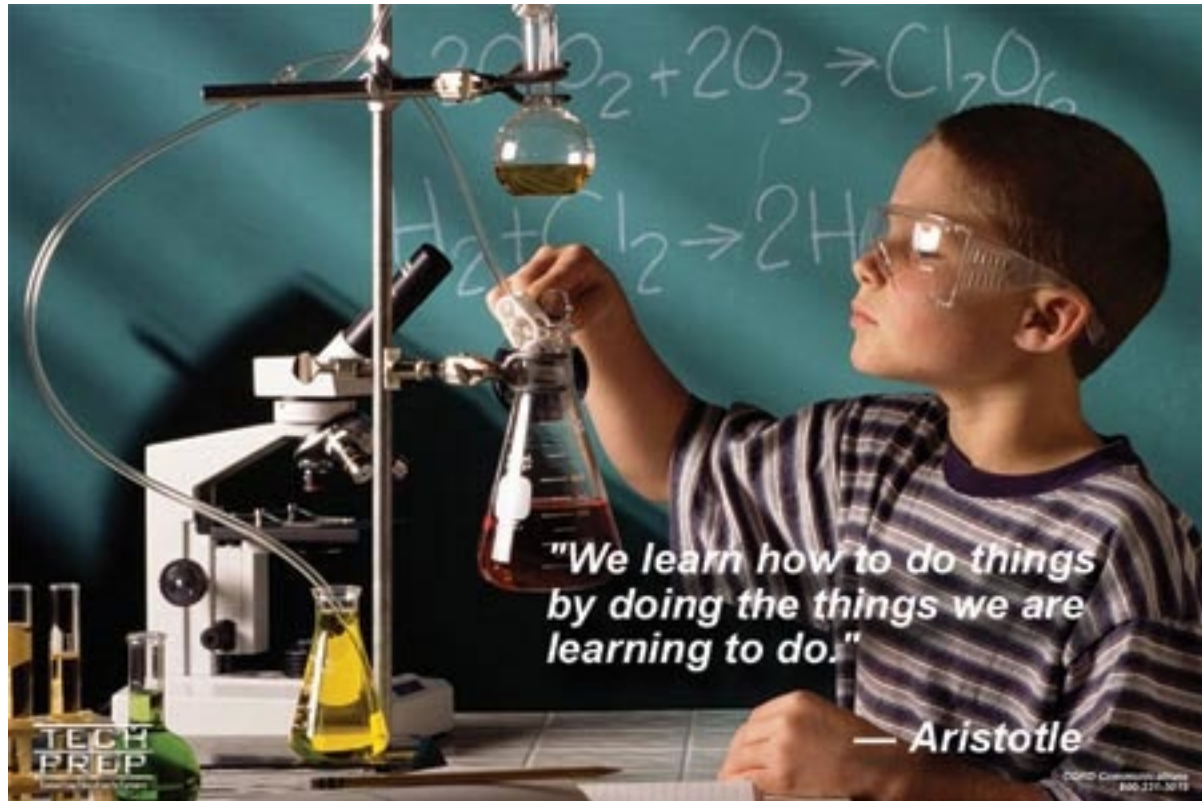
User generated Content
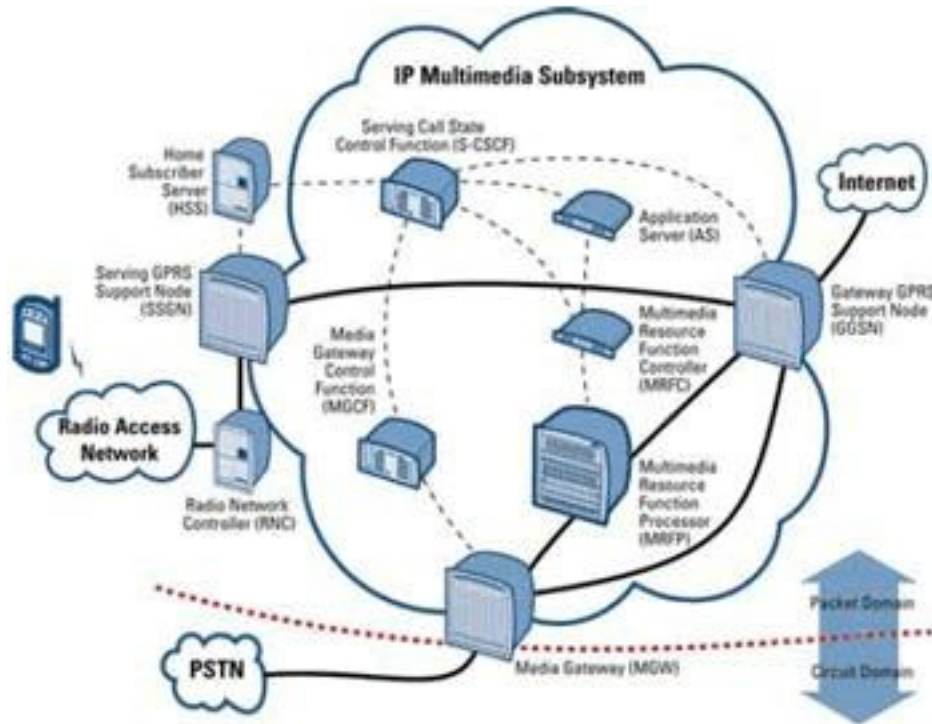– Personal, opinionated

Connections, connections…

Figure 1: IP Multimedia Subsystem (IMS).

Immersive Learning
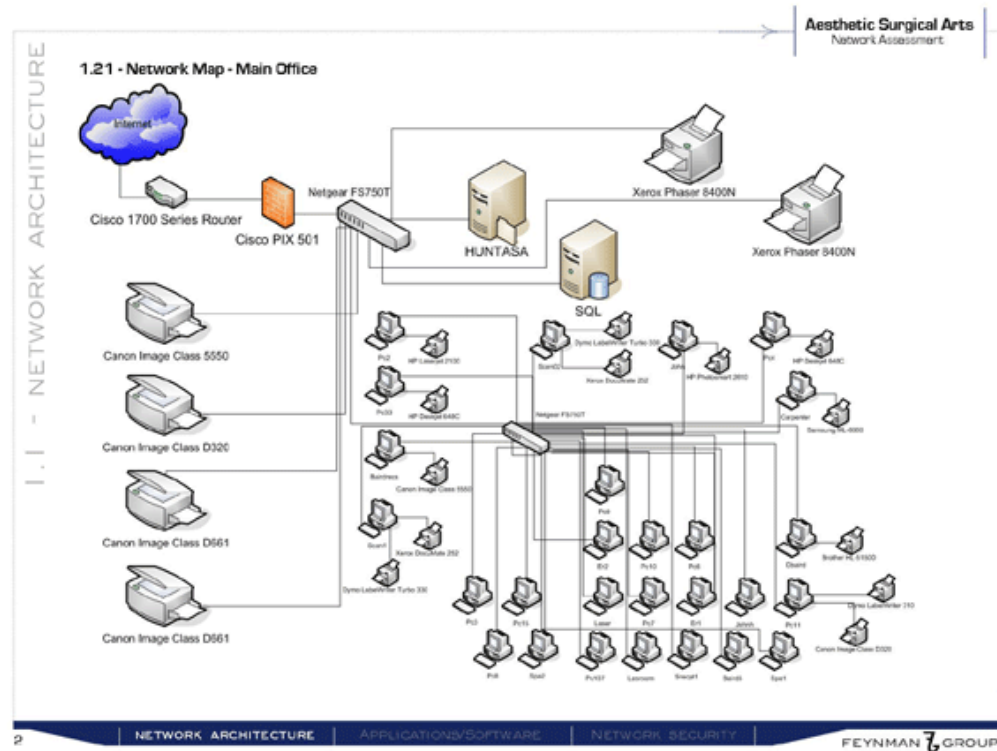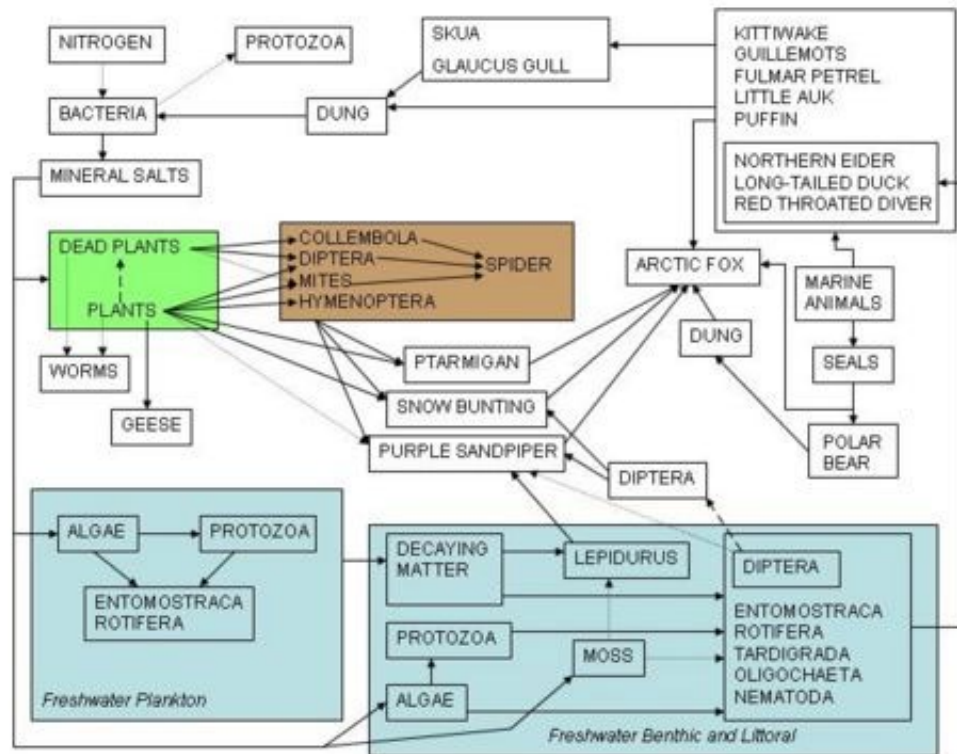
New Roles

– For students - as creators of learning

– For teachers - as coaches and mentors

– For the rest of us - as teachers

• Learning as a network phenomenon…

- Networks of interactions (aggregate, remix, repurpose, feed forward) – syndication

An ecology…

- The *personal* learning centre

Autonomy

http://blog.core-ed.net/derek/2006/11/more_on_mles_and_ples.html

http://getfeedforward.org/