

Learn Yourself

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SMOOT

Learning...

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

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

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'

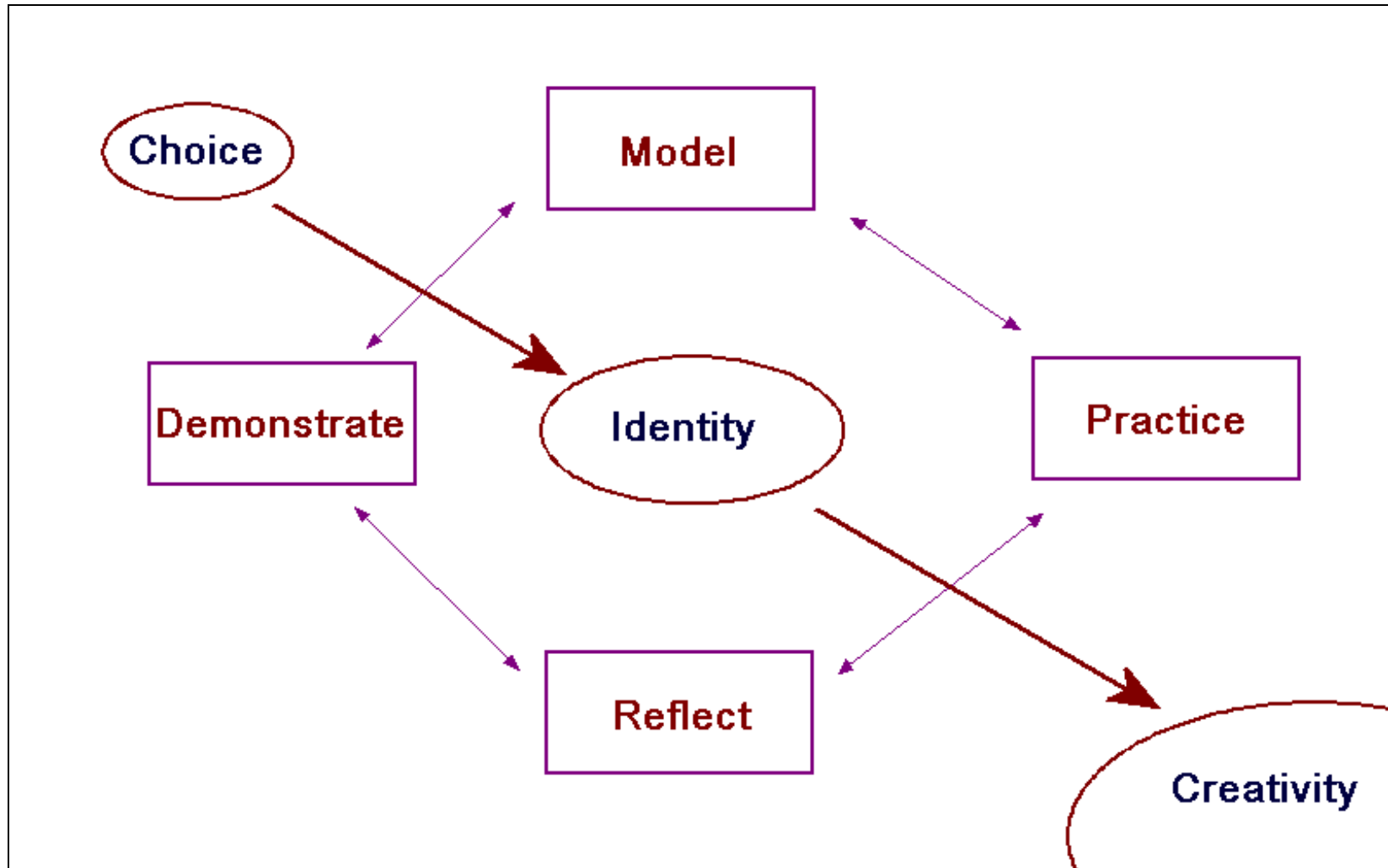
Role of the teacher

- 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
 - Eg. A role-playing game
 - Eg. Electronic Performance Support
 - Eg. Community of Practice
- 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

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

Reflection

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

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

Choice – Identity - Creativity

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

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

Personal Learning

- *Interaction* – participation in a learning community (or a community of practice)
- *Usability* – simplicity and consistency
- *Relevance* – or *salience*, that is, learning that is relevant to you, now

Interaction: principles

- Pull is better than push...
- Speak in your own (genuine) voice (and listen for authenticity)
- Share your knowledge, your experiences, your opinions
- Make it a habit and a priority



Usability: principles

“... probably the greatest usability experts are found in the design labs of Google and Yahoo!”

Elements of Usability

- **Consistency** ... *I know what to expect...*
- **Simplicity** ... *I can understand how it works...*

Relevance: principles

- Information is a flow, not a collection of objects
 - Don't worry about remembering, worry about repeated exposure to good information
- Relevance is defined by function, not topic or category
- Information is relevant only if it is available where it is needed

Network Learning

Reliability

(AKA the Semantic Condition)



Diversity

- Did the process involve the widest possible spectrum of points of view?
- Did people who interpret the matter one way, and from one set of background assumptions, interact with people who approach the matter from a different perspective?

Autonomy

- Were the individual knowers contributing to the interaction of their own accord, according to their own knowledge, values and decisions?
- Or were they acting at the behest of some external agency seeking to magnify a certain point of view?

Openness

- Is there a mechanism that allows a given perspective to be entered into the system, to be heard and interacted with by others?

Connectivity

- Is the knowledge being produced the product of an interaction between the members, or is it a (mere) aggregation of the members' perspectives?
- A *different* type of knowledge is produced one way as opposed to the other.

Examples

Wiki...

- Associative learning:
 - provides examples to follow
 - allows correction and criticism
 - rethinking and rewriting

Wiki (cont)

- Personal Learning:
 - engages interaction – genuine voice, experiences, opinions?
 - simple and consistent interface...?
 - accessible where & when I need it...?

Wiki (cont)

- Reliability...
 - do I have diversity of sources (in wiki – means a threshold number)
 - are the sources autonomous
 - connectedness – links, etc?
 - open – can anyone contribute?

Image Samples...

- Associative learning:
 - provides examples to follow
 - allows correction and criticism...?
 - rethinking and rewriting – is reuse allowed?

Image Samples (cont)

- Personal Learning:
 - engages interaction – genuine voice, experiences, opinions? *personal* photos?
 - simple and consistent interface...?
 - accessible where & when I need it...? API?

Image Samples (cont)

- Reliability...
 - do I have diversity of sources (eg., Flickr?)
 - are the sources autonomous
 - connectedness – links, etc? (tagging?)
 - open – can anyone contribute?

Second Life...

- Associative learning:
 - provides examples to follow?
 - allows correction and criticism...?
 - rethinking and rewriting – is reuse allowed?

Second Life (cont)

- Personal Learning:
 - engages interaction – genuine voice, experiences, opinions? *personal* identity?
 - *simple* and consistent interface...?
 - accessible where & when I need it...? API?

Second Life (cont)

- Reliability...
 - do I have diversity of sources (inside SL, outside?)
 - are the sources autonomous (what is the role of the rules imposed by Linden?)
 - connectedness – links, etc?
 - open – can anyone contribute?

Blogs...

- Associative learning:
 - provides examples to follow
 - allows correction and criticism...?
 - rethinking and rewriting – a weakness of blogs?

Blogs (cont)

- Personal Learning:
 - engages interaction – genuine voice, experiences, opinions? Pull vs push
 - simple and consistent interface...? Blogger
 - accessible where & when I need it...? RSS, Blogger API

Blogs (cont)

- Reliability...
 - Am I reading a diversity of blogs
 - are the sources autonomous - not paid blogs?
 - connectedness – links, etc?
 - Are they open - can people comment, link?