

What E-Learning 2.0 Means To You

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National Research Council Canada Conseil national de recherches Canada





Three Views of Learning Resources

- 1. Learning Resources as a thing
 - Book, content object, etc
- 2. Learning Resources as events
 - Class, lecture, seminar, meeting
- 3. Learning Resources as flow
 - Experience?
- The first two models are *information-theoretic* and *medium-based* models



New Medium, New Semantics (1)

The information-theoretic view...

- Communication consists in getting a bit of knowledge P from point A to point B
- In learning, the concept of *transactional distance (Moore)* is based on this idea
- Pedagogy therefore consists in *improved communication* and *interaction*



New Medium, New Semantics (2)

In effect...

- 'Knowledge' is like sentences (RDF anyone?)
- Vocabulary is unambiguous; meaning is fixed and universally understood (cf. pedagogically neutral technology – Goldberg)
- Description (and for that matter, truth) does not vary from person to person (a 'horse' is a horse (of course, of course))



New Medium, New Semantics (3)

But none of this is true, can't be true...

- If it were true, context would have no effect on truth or meaning
- But *context-sensitivity* is everywhere
- Wittgenstein (meaning), Quine (observation), van Fraassen (explanation), Hanson (causation), Lakoff (categorization), Stalnaker and Lewis (modality)



The New Medium (1)

The web is changing...

- Web 2.0 not just a slogan
- A shift from the idea of the web as *medium* to the idea of the web as *platform*
- This just is a shift from the idea of the web as communication (information theory) to the idea of the web as network (or environment... pick your metaphor)

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The New Medium (2)

- Web 2.0 the idea of the web as platform rather than medium – <u>checklist</u>
 - Structured microcontent
 - Distributed data (data outside)
 - Feeds and integration APIs the <u>Google</u>
 <u>Maps</u> API, the <u>Flickr API</u>, the <u>Skype API</u>

- Single identity

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The New Medium (3)

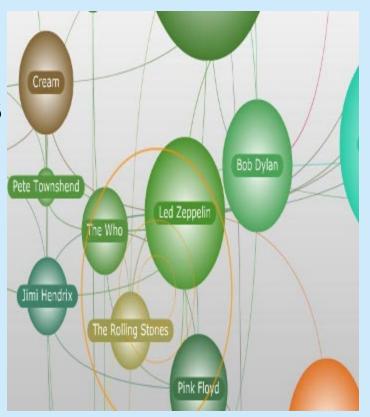
- Some Aspects (Masie)
 - Velocity a shift from the idea of static to dynamic content (and learning)
 - Ubiquity (scalability) an information network that reaches to every person, and more importantly, *from* every person
 - Personalization *My* EWeb 2.0
 - Mobility my online presence follows me, and *interacts* with location-based services (makes a mash of the idea of *integration*)

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What does this look like? (1)

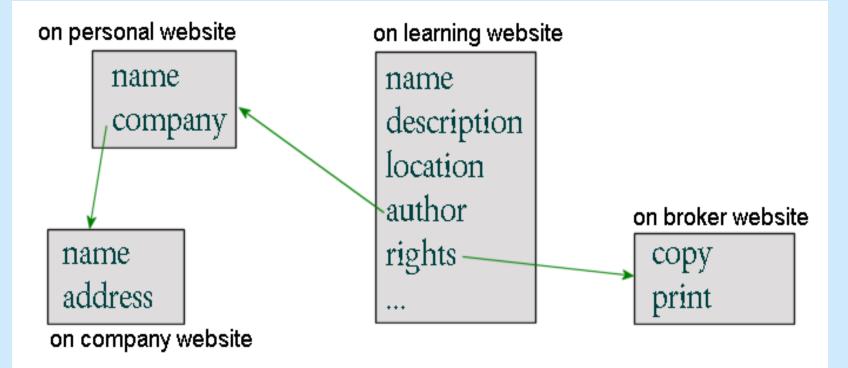
- The Interactive Web...
- Social networks, power laws
 - MacManus and Porter
 - -<u>Shirkey</u> Power Laws
 - <u>Downes</u> Semantic SN
 - Bond





What does this look like? (2)

Distributed Resource Descriptions... information not only on a person's c.v., but in school transcripts, police records, credit bureau...





What We Know (1)

Think about what we *know* about a person (and how we know it)

- It includes pointers to external metadata about:
 - Your property (which may cease one day to be associated with you)
 - Your pets (which you may give away)
 - Your car (which you may sell)



What We Know (2)

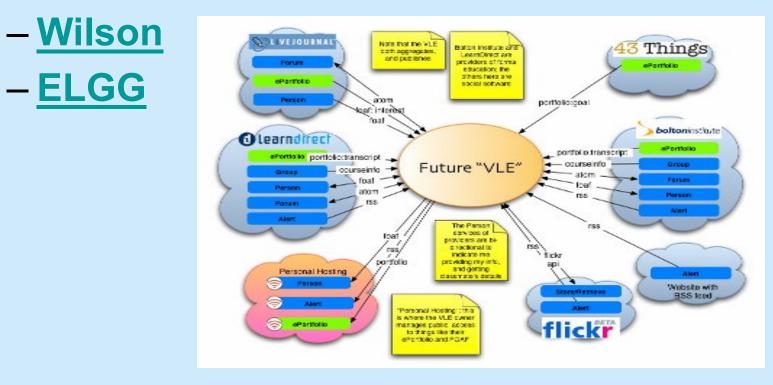
Resource Profiles...

- Major features:
 - -Different types of metadata (microformats)
 - -The information is *distributed*
 - Any given perspective is aggregated



What does this look like? (3)

- A web of content
- The personal learning centre





What does this look like? (4)

- User generated Content Personal, opinionated
- Network of interactions
- Blogs and learning Downes <u>Educational Blogging</u> Creating Blogs – <u>Blogger</u>, <u>LiveJournal</u>, more...
 - Thinking of blogs as structured data
 - <u>RSS</u>, Atom, OAI

 Aggregation – <u>Bloglines</u>, <u>others...</u> Filters – <u>Feedster</u>, <u>Technorati</u>



Reaching Blogs

- <u>How To Be heard</u> Plan (purpose, content, support), <u>Design</u> (font, speed, colours), Implement (tools, information flow, posting), Market (register, engage, <u>RSS</u>)
- Structuring existing information
 - Tagging how to tag
 - The <u>Semantic Social Network</u> <u>RSS</u> referencing



Issues:

- Too much information, filtering info
- Too many sources to scan, new sources
- Localization, personalization, relevance
- <u>Newsmaster</u> example <u>behind</u> the <u>scenes</u>
- Content Manager, content management
 - As enabler, not author

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New Media

Podcasts, Screencasts and Beyond



User generated multimedia
http://www.ipodder.org/ - iPodder
http://www.flickr.com - Flickr
http://en.wikipedia.org - Wikipedia
http://blog.ericrice.com/blog/_archives/2
005/6/4/909411.html - Rice
http://blog.educause.edu/penrose/archive/
2005/06/07/1902.aspx - Penrose

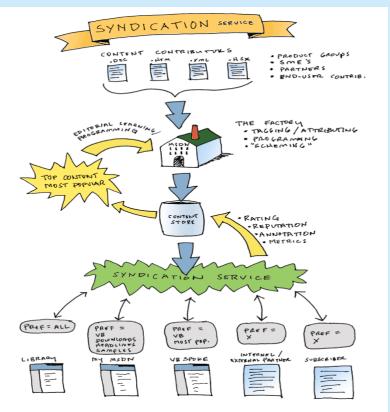
http://www.pocketcasting.com/archives/2005/01/00/leatured-podeast-for-january-2005/

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Syndication

Content Syndication



http://petersterndesign.com/concepts.htm

- XML generation and aggregation
- 'Selective Attention' (like the brain)
- Aggregate, remix, repurpose, feed forward

<u>http://www.google.ca/search?q=downes+</u> <u>rss</u> – Downes

http://www.technorati.com - Technorati

<u>http://www.blogdex.net</u> – Blogdex

http://www.bloglines.com – Bloglines



The Learning Network

Learning as a network phenomenon...

- Web of user-generated content (eg. Wikipedia)...
- Social networks and communities (entails a genuinely portable (and owned) identity
- Networks of interactions (aggregate, remix, repurpose, feed forward) – syndication
- The personal learning centre



Success Factors

- 1. The Network is Diverse multiple views, multiple technologies
- 2. The Network is connected and interactive (*not* 'integrated') – small pieces, loosely joined
- 3. The Network is open

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http://www.downes.ca



This presentation:

http://www.downes.ca/files/What_EL2_Means.ppt



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