



NRC-CNRC

*Institute for
Information
Technology*

The Future of E-Learning

Stephen Downes

National Research Council Canada

October 21, 2006



National Research
Council Canada

Conseil national
de recherches Canada

Canada

We can, as we understand the prehistoric, understand the future by reading the artifacts.



Stephen Downes <http://www.downes.ca>

What is a Blog

- Defined by format, not content
- A series of dated entries, most recent first
- Like a journal, but not necessarily a journal
 - http://www.rebeccablood.net/essays/weblog_history.html
 - http://news.com.com/2010-1071-281560.html?legacy=cnet&tag=bt_bh
 - <http://www.robotwisdom.com/weblogs/>
- Some example blogs in learning technology:
 - <http://www.bloglines.com/public/Downes>
- Ease of use of blogging software

Using Blogs in Learning

- Replacement for typical course web page
- Link to items related to course
- Organize in-class discussions
- Organize seminars and readings – group blogs
- Student created blogs as part of course work and assignment
 - <http://www.crookedtimber.org/archives/000516.html>

Blogging Systems

- Hosted
 - Blogger <http://www.blogger.com>
 - Live Journal <http://www.livejournal.com>
- Server
 - Movable Type <http://www.movabletype.org/>
 - WordPress <http://wordpress.org/>

Related Systems

- Content Management Systems
 - PostNuke <http://www.postnuke.com/>
 - Scoop <http://scoop.cim.com.au/>
 - Drupal <http://www.drupal.org/>
 - Plone <http://www.plone.org/>
- Wiki
 - <http://c2.com/cgi/wiki?WikiWikiWeb>
 - http://en.wikipedia.org/wiki/Main_Page

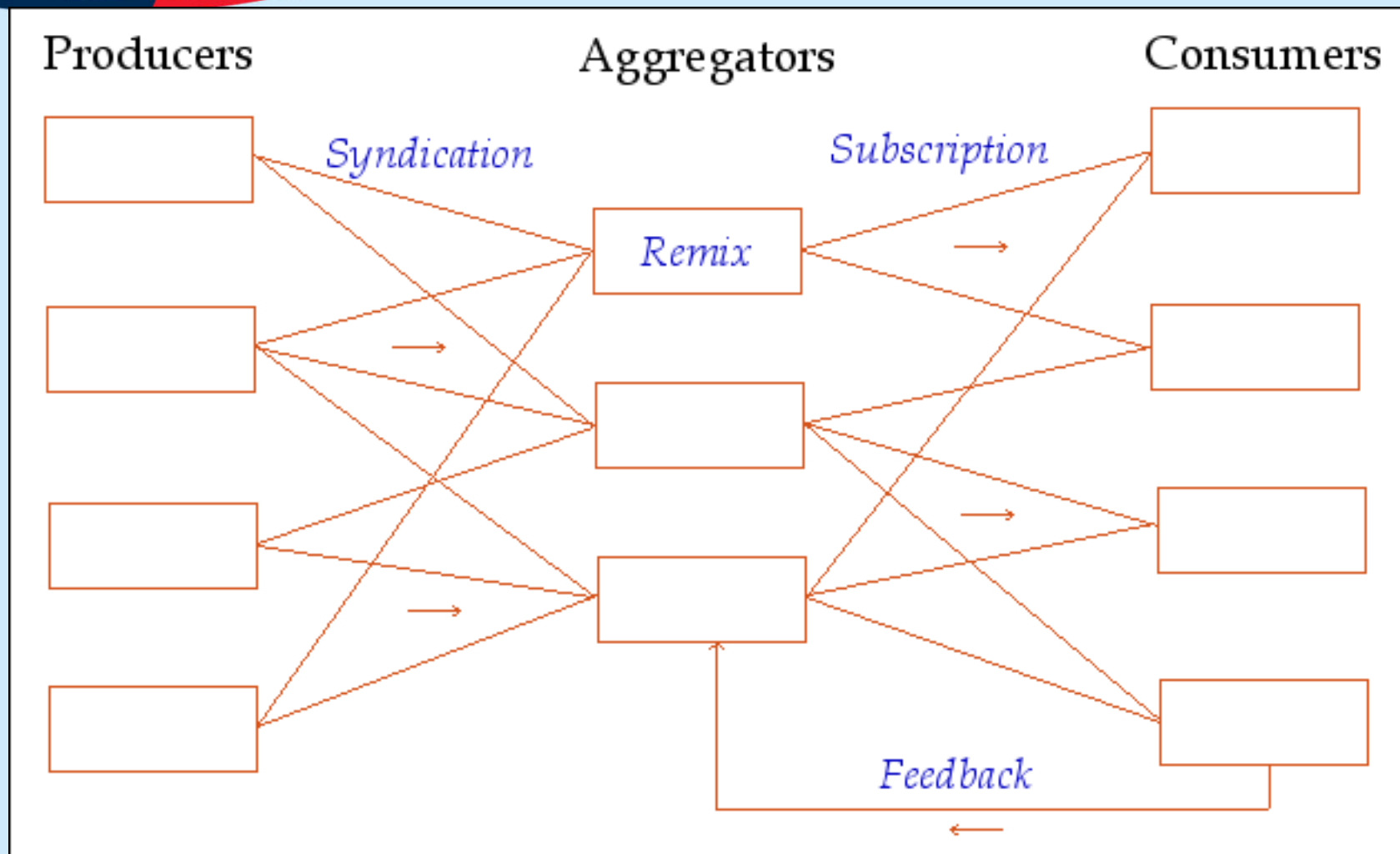
Blog Aggregation

- Blog Aggregation
 - Blogdex – <http://www.blogdex.net>
 - Popdex – <http://www.popdex.com>
 - Daypop – <http://www.daypop.com>
 - Blog Digger <http://www.blogdiffer.com>
 - Technorati – <http://www.technorati.com>

RSS Services

- RSS – stands for Rich Site Summary (or Really Simple Syndication, or is actually called Atom)
- Sample: <http://www.downes.ca/news/OLDaily.xml>
- RSS reading...
 - Bloglines <http://www.bloglines.com>

The Network is the Search



Putting It Together

- Web 2.0 :The web as platform, not medium
- Shift from ‘we do it for you’ to ‘we do it ourselves’ – that’s the real story behind, eg. YouTube
- <http://www.downes.ca> – combines content management, blog, wiki, RSS
- The idea is that no one tool does the entire job, but the collection works really well

New Media

- Photos – Flickr – <http://www.flickr.com>
- Music – Podcasting -
<http://en.wikipedia.org/wiki/Podcasting>
- Moblogging -
<http://www.typepad.com/news/2003/07/moblogging.html>
- Collaborative Blogging – FURL -
<http://www.furl.net/>
- Social Networking – Friendster, Orkut
<http://www.orkut.com> – LinkedIn, more...

Examples in Learning

- Weblogs at Harvard Law
 - <http://blogs.law.harvard.edu/>
- Weblogs at UPEI
 - <http://weblogs.upei.ca/>
- Educational Bloggers Network
 - <http://www.ebn.weblogger.com/>
- DDN
 - <http://www.digitaldivide.net/articles/view.php?ArticleID=69>
- BlogMeister <http://landmark-project.com/blogmeister/>

Theory and Practice

- Social Networks – Duncan J. Watts
 - <http://www.changethis.com/10.LongTail>
- Connectionism, Neural Networks, and self-organizing networks
- Constructivism and student centered learning
- Connectivism
 - <http://www.elearnspace.org/Articles/connectivism.htm>

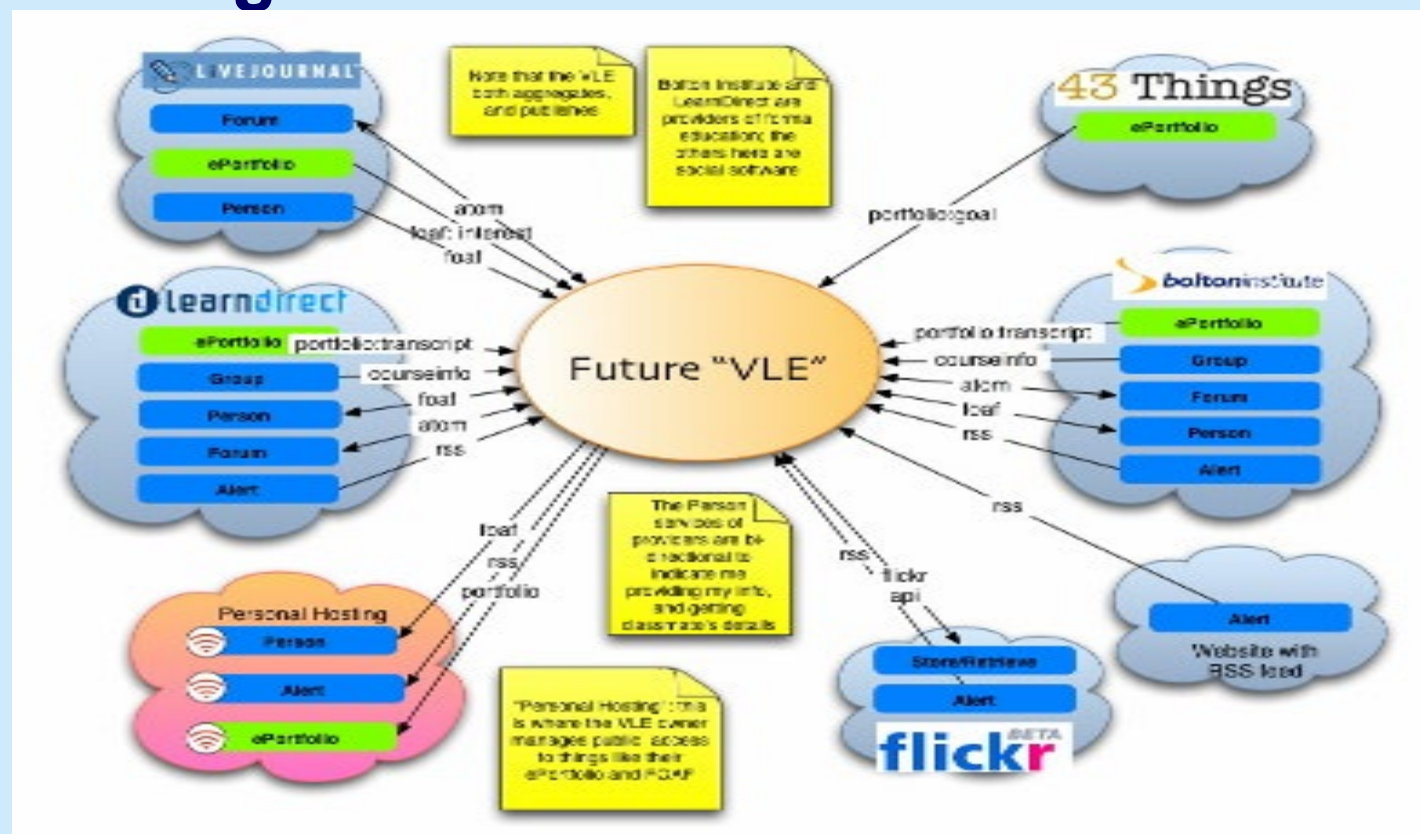
Connectivism

- Diversity of opinions.
- Connecting specialized nodes or information sources.
- Non-human appliances.
- Capacity to know more is more critical
- Continual learning through nurturing and maintaining connections
- Ability to see connections between fields, ideas, and concepts is a core skill

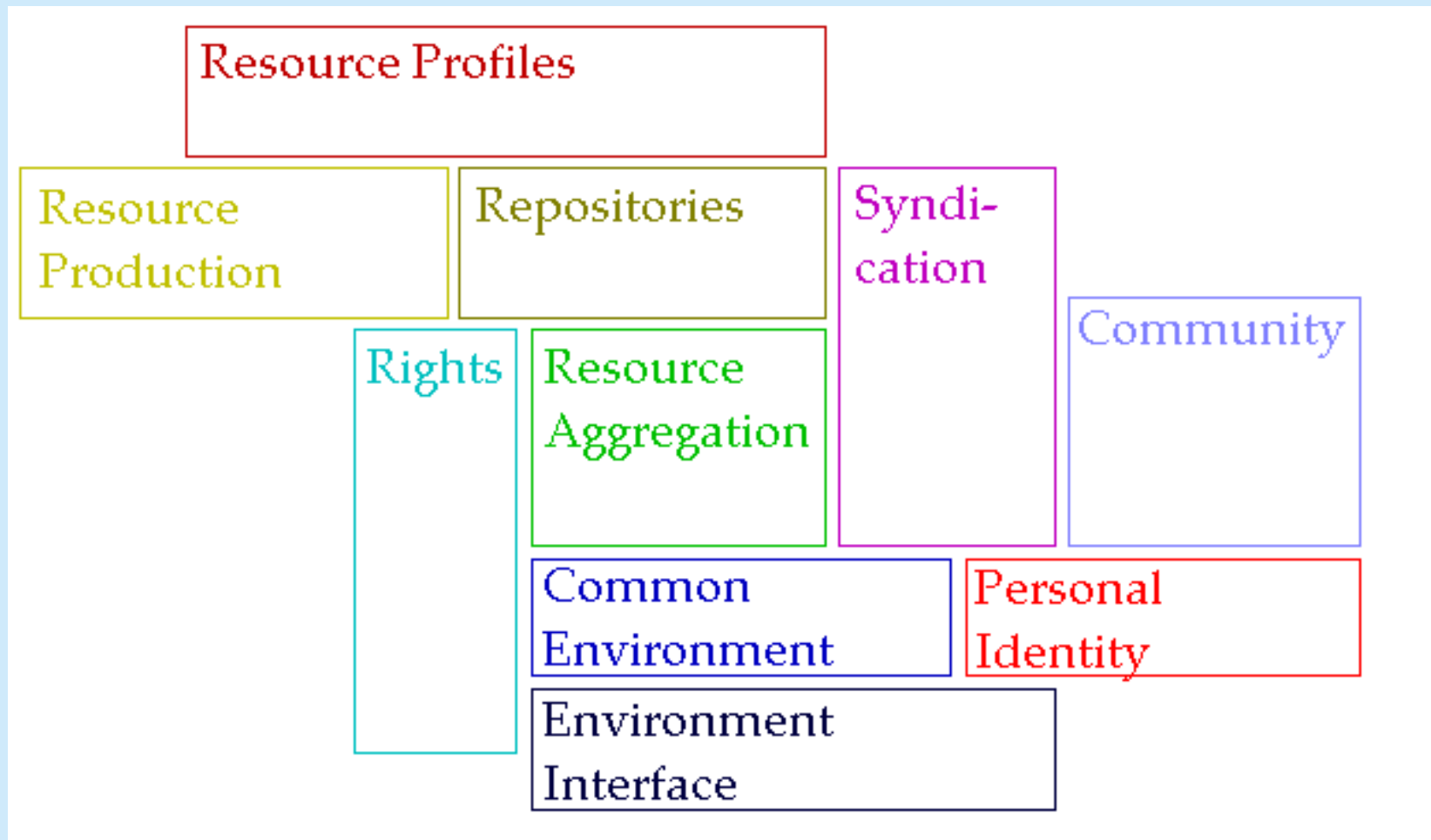
Learning Networks...

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

E-Learning 2.0...



Learning Network: Architecture



The Palm Tree and the Horse

Courses? No, not courses...

Learning objects
not as collections
or aggregations,
but as elements in
an ecosystem

Games, EPSS,
simulations



- Learning Networks
 - <http://www.downes.ca/cgi-bin/website/view.cgi?dbs=Article&key=1097292310>
- Educational Blogging
 - <http://www.downes.ca/cgi-bin/website/view.cgi?dbs=Article&key=1097292310>
- The Semantic Social Network
 - <http://www.downes.ca/cgi-bin/website/view.cgi?dbs=Article&key=1076791198>
- More Than Personal: The Impact of Weblogs
 - <http://www.downes.ca/cgi-bin/xml/papers.cgi?format=full&id=3>



NRC CNRC

*Institute for
Information
Technology*

<http://www.downes.ca>

Science
— at work for —
Canada



National Research
Council Canada

Conseil national
de recherches Canada

Canada