

**NRC-CNRC**

*Institute for  
Information  
Technology*

# The Future of E-Learning

**Stephen Downes  
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CGA Canada National Educators Meeting  
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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://www.rebeccablood.net/essays/weblog_history.html)
  - [http://news.com.com/2010-1071-281560.html?legacy=cnet&tag=bt\\_bh](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](http://en.wikipedia.org/wiki/Main_Page)

# Blog Aggregation

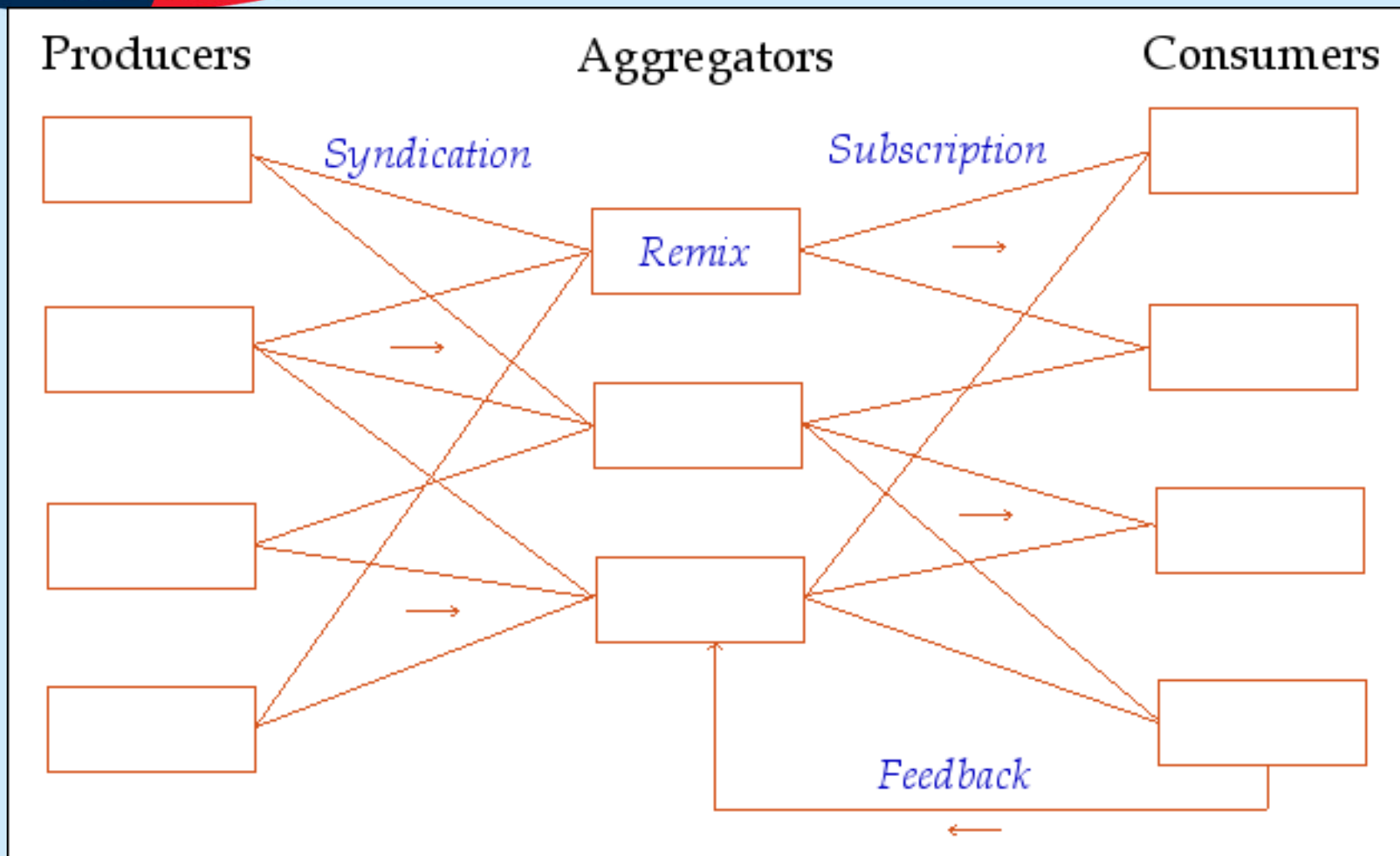
- Blog Aggregation
  - Blogdex – <http://www.blogdex.net>
  - Popdex – <http://www.popdex.com>
  - Daypop – <http://www.daypop.com>
  - Blog Digger <http://www.blogdiffer.com>
  - Technorati – <http://www.technorati.com>

# 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>

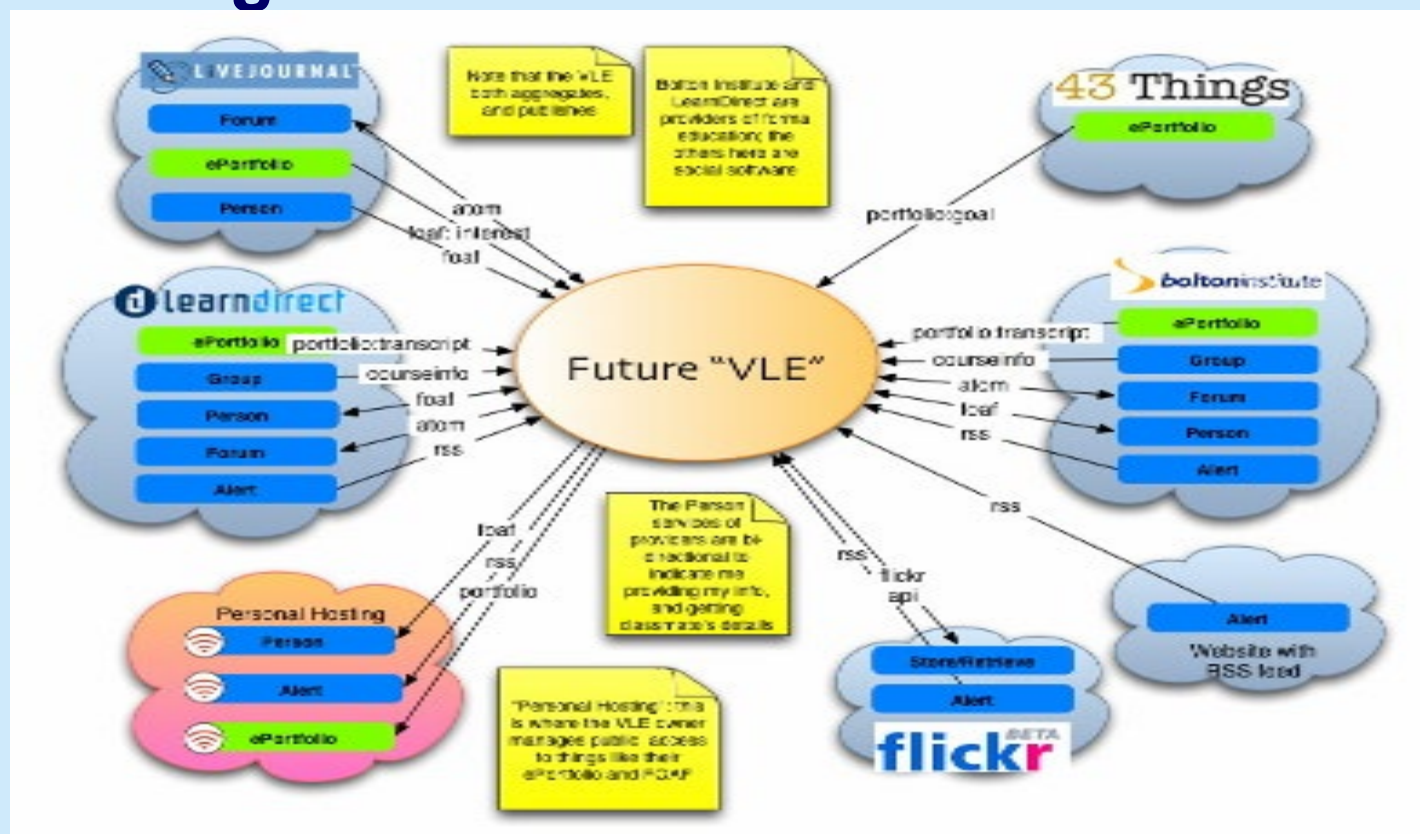
# Connectivism

- 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...

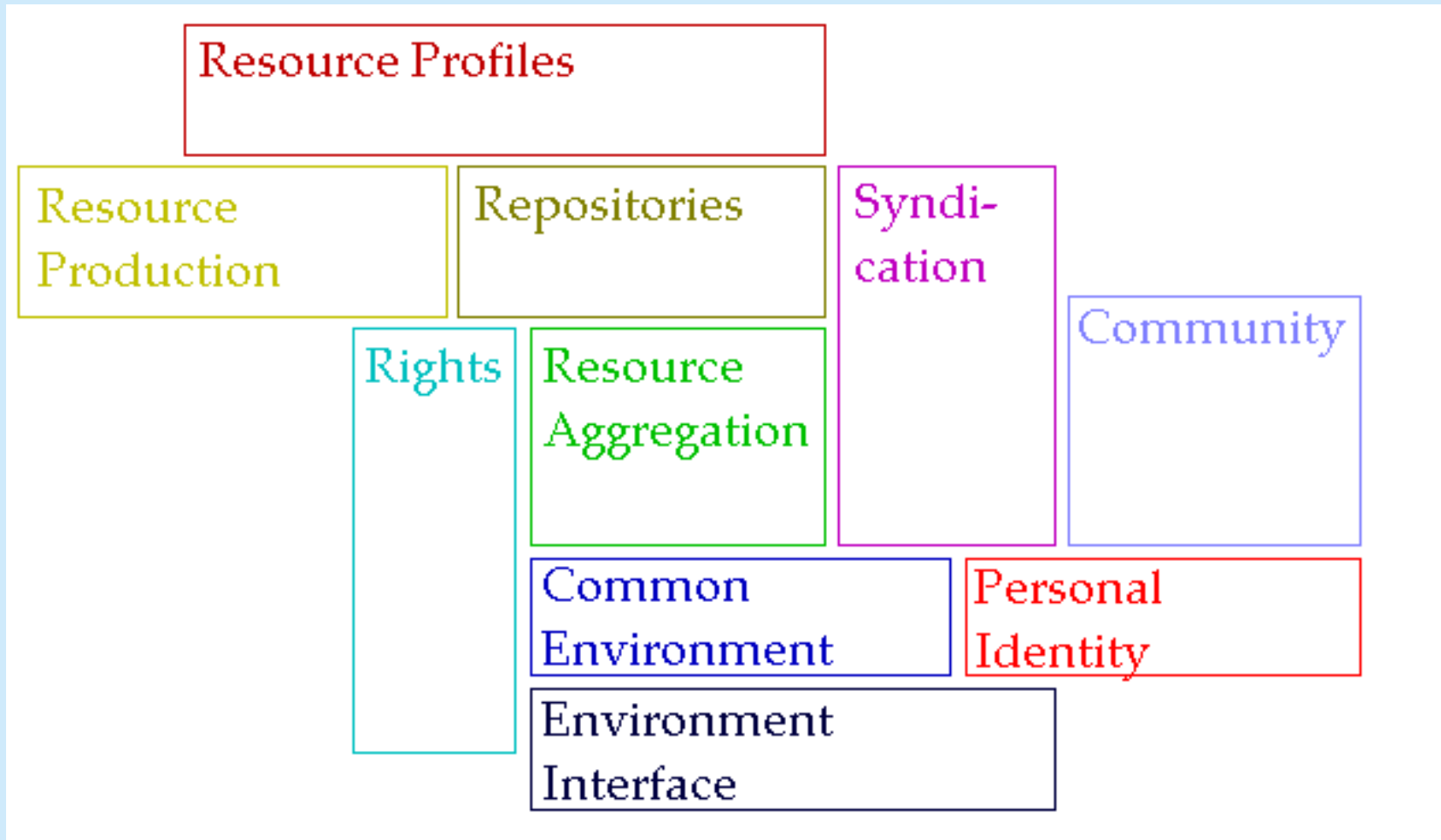
- Web of user-generated content...
- Social networks and communities (entails a genuinely portable (and owned) identity)
- Networks of interactions (aggregate, remix, repurpose, feed forward) – syndication
- The personal learning centre

# 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>

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