

Understanding Learning Networks



Stephen Downes, October 28, 2006

Web 2.0



O'Reilly: [What is Web 2.0?](#)

Web 2.0 is mostly about

Content Creation & Posting

- Blogs – [Blogger](#), [WordPress](#)
- E-Portfolios – [ELGG](#)
 - [ePortfolios](#) – Helen Barrett
 - [ELGG and blogging](#) – Miles Berry

(a good way of promoting learner autonomy and voice)
- Images - [Flickr](#)
- Audio – [Odeo](#), [Audacity](#)
- Video – [YouTube](#), [Google Video](#)

Collaborative Writing

- Wikis – [PB Wiki](#), [Media Wiki](#)
 - [RSS inside a Wiki](#) – Alan Levine
 - [South African Curriculum](#) on a wiki
- Collaborative Bookmarking – [del.icio.us](#), [Furl](#)
- Online Office Applications – [Writely](#), [Gliffy](#), [iRows](#)

Web 2.0 is *also* mostly about

Content Syndication



<http://www.mcli.dist.maricopa.edu/show/merlot03/>

RSS - Simplest of Meta-Data

```
<?xml version="1.0" encoding="ISO-8859-1" ?>
- <rss version="0.91">
- <channel>
  <title>WriteTheWeb</title>
  <link>http://writetheweb.com</link>
  <description>News for web users that write back</description>
  <language>en-us</language>
  <copyright>Copyright 2000, WriteTheWeb team.</copyright>
  <managingEditor>editor@writetheweb.com</managingEditor>
  <webMaster>webmaster@writetheweb.com</webMaster>
- <image>
  <title>WriteTheWeb</title>
  <url>http://writetheweb.com/images/mynetscape88.gif</url>
  <link>http://writetheweb.com</link>
  <width>88</width>
  <height>31</height>
  <description>News for web users that write back</description>
</image>
- <item>
  <title>Giving the world a pluggable Gnutella</title>
  <link>http://writetheweb.com/read.php?item=24</link>
  <description>WorldOS is a framework on which to build programs that work like
  Freenet or Gnutella -allowing distributed applications using peer-to-peer routing.
  </description>
</item>
- <item>
  <title>Syndication discussions hot up</title>
  <link>http://writetheweb.com/read.php?item=23</link>
  <description>After a period of dormancy, the Syndication mailing list
  active again, with contributions from leaders in traditional media and Web
  syndication.</description>
```

Channel Info
information about the source of the content

Item 1

title url blurb

Compare to [This](#)



What is RSS?

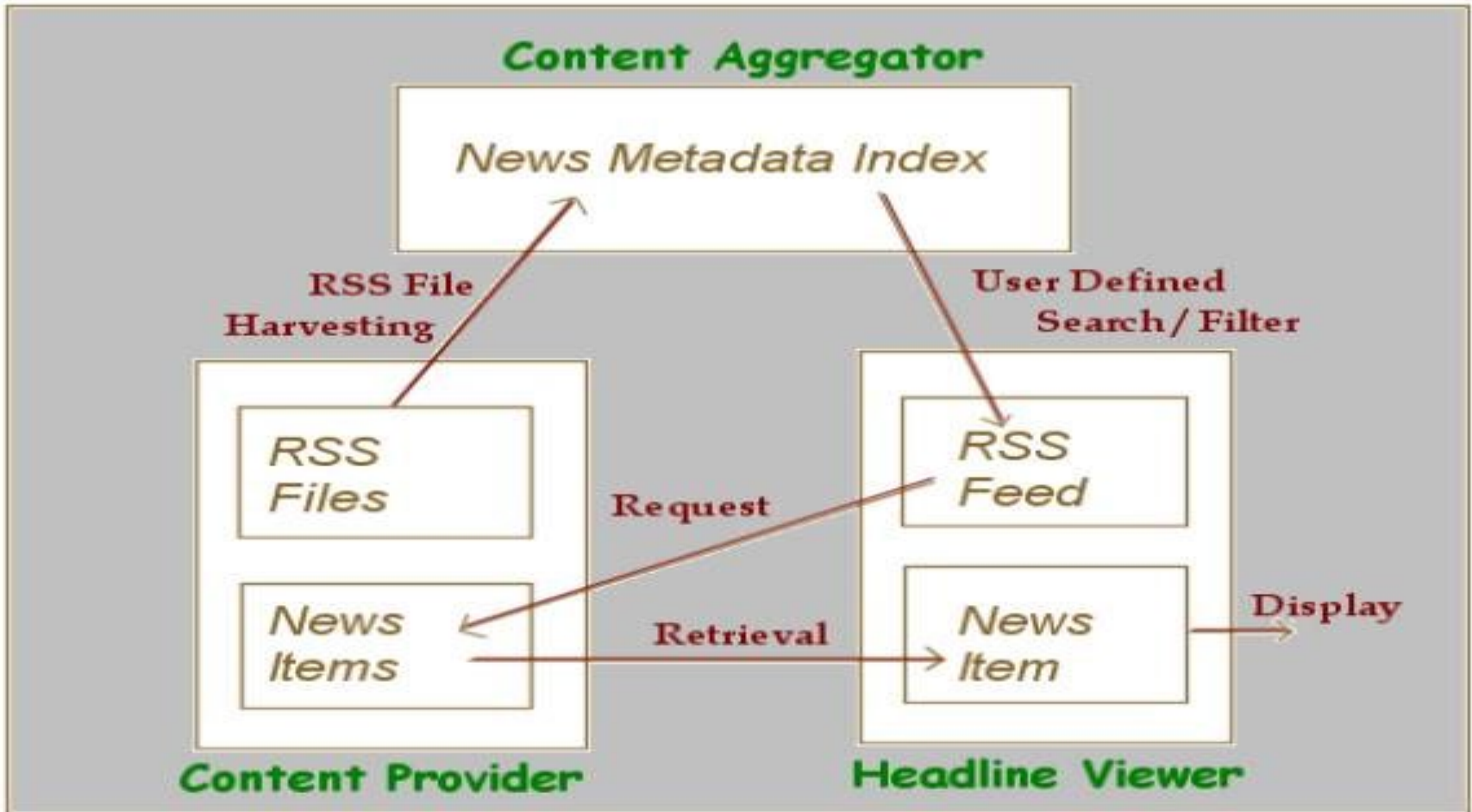


Pick an Acronym



Killer App for Education?

How RSS Works



RSS Network Examples

- Edu_RSS - <http://www.downes.ca/edurss02.htm>
 - [Threads Community](#) comment topic list
 - [Search Posts](#)
 - [Research](#) - lists of topics, publications and authors
 - [Most Popular Links](#)
 - [Conversation](#)
 - [Edu_RSS Most Recent](#) harvested links
 - [Most cited links](#)
 - [Feed List](#) and [Feed List - OPML](#)
- DLORN
 - <http://www.downes.ca/cgi-bin/dlorn/dlorn>

Context and Use

- Tarmo Toikkanen: “Learning for humans happens in context. Having complete reusability means having no context, and vice versa.”
<http://flosse.dicole.org/?item=intentional-learning-reflecting-the-discussion-in-the-blogsphere>
- What does this mean? The learning is not in the object, but in the **use** of the object

Examples of Use

- Non-instructional performance interventions
 - Electronic Performance Support System (EPSS)
 - Workplace Design
 - Knowledge Management (KM)
 - Just-in-Time Support
 - Communities of Practice
 - Multimedia
 - Job Aids

Aggregators

- [Aggregate This](#), Scott McLemee
- [MetaxuCafe](#) is "a network of literary blogs with over 300 members."
- [Postgenomic](#), aggregates "posts from life science blogs."
- [Edu RSS](#)
- [Intute](#) - the new face of the Resource Discovery Network (RDN)

Webtops

- [30Boxes](#), [PageFlakes](#), [ProtoPage](#), [Goowy](#)
 - [Interfaces of the future](#) – Mark Oehlert
- The Personal Learning Environment
 - [PLE Blog](#)
- [Windows Live](#)
- [Netvibes](#) (Tony Hirst)

Enabling new forms of learning

Progress/Innovation



Linear, slow
Proprietary knowledge
Ideas as strategic advantage
Mentors
Learn by reverse-engineering
Progress by "Shoulders of Giants"
Wisdom of experts

Old (closed)



Exponential, networked, quick
Shared knowledge
Ideas "paid forward"
Micromentors
Lessons-learned benefit all
Progress by "The Mosh Pit"
Wisdom of crowds

New (open)

E-Learning 2.0

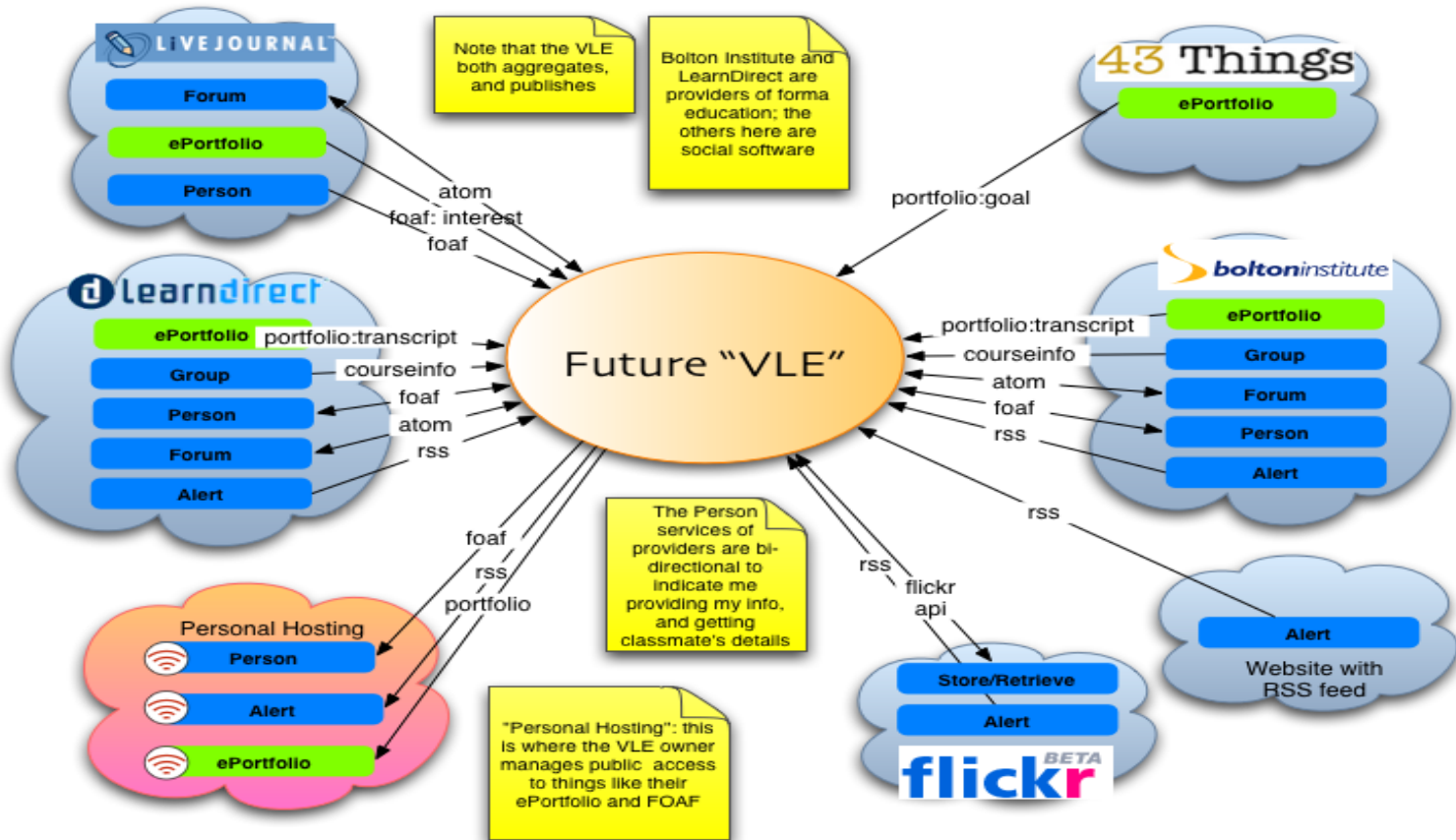
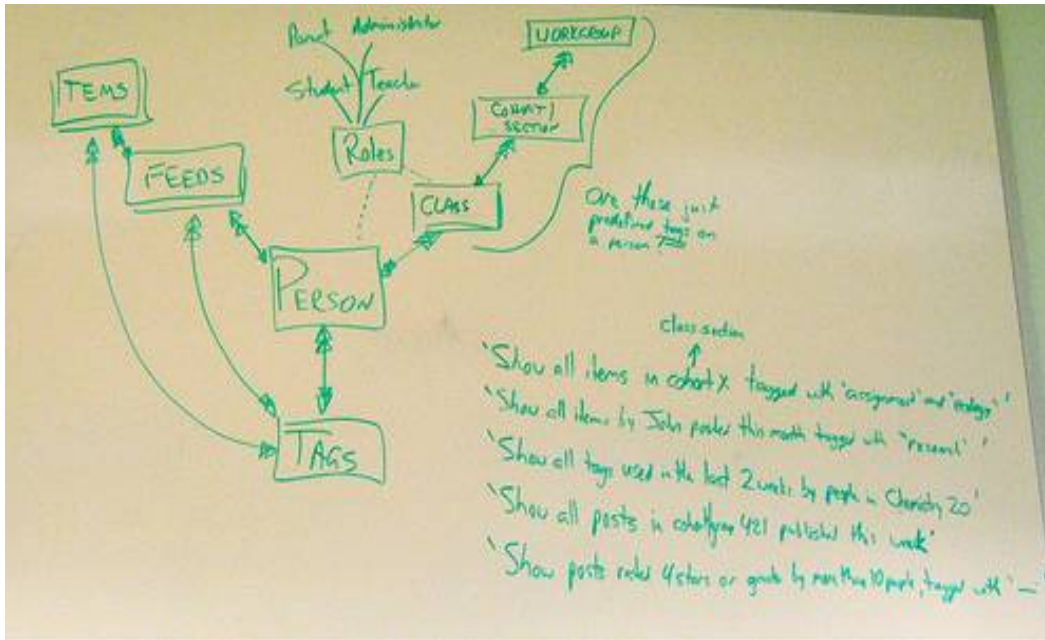


Diagram by Scott Wilson; Downes: [E-Learning 2.0](#)

Personal Learning Environments



<http://www.cetis.ac.uk/members/ple>

<http://www.flickr.com/photos/dnorman/100494256>

<http://www.darcynorman.net/2006/02/16/eduglu-early-whiteboard>

USB: Study Stick: <http://blogs.open.ac.uk/Maths/ajh59/005515.html>

Read/Write E-Learning

Stephen's Web Start Search
[Change Theme]

[OLDaily] [Archives] [Threads] [Best Of] [Search] [Options]







Welcome to RSS Writr

Select a content source from the list (see the panel at the lower right hand side of the page).

When you see an item that interests you, drag it into the editing area (at right). You can drag multiple items into the editor.

When you have finished editing, save your new post to your blog.

Title:

B **U** *I*         Shift+Enter for single line spacing

Hello

Content Sources

Select an Entry

The Personalized Web

2006 has seen the emergence of the personalized web, the interactive web, the web that places a premium on participation and community.

How should the learning sector respond?

- Different flavours of personalization
- Different types of 'learner centered'

The Response

The initial reaction from educational institutions has been negative, with access to many of the new applications blocked and banned by administrators.

Institutions want centralized systems, to bring the new technologies 'into' the VLE or LMS, in order to provide support, control the environment...

The Challenge

Can we, when we explore their world, resist the urge to make them just like us?

It's a
question
of control...



Danah Boyd...

“The dynamics of identity production play out visibly on MySpace. Profiles are digital bodies, public displays of identity where people can explore impression management...”

Identity Production in a Networked Culture: Why Youth Heart MySpace

<http://www.danah.org/papers/AAAS2006.html>

Sherry Turkle

“We do not feel compelled to rank or judge the elements of our multiplicity. We do not feel compelled to exclude what does not fit.”

Life on the Screen

<http://www.transparencynow.com/turkle.htm>



A Question of Ontology?

- Is there an *essence* of learning that can be understood independently of...
 - The players?
 - The technology?
- Does what we are looking for reflect our theoretical stance? Do we *need* a theoretical stance?
 - Logical Positivist? Behaviourist? vs
 - Phenomenology? Critical Theory? Feminism?

Traditional Online Learning



The concept of online learning usually revolves around a computer...

The Future of Online Learning



- May be in Mississauga
- Probably does involve computers at all

The School of The Future...



... is a living arts centre (or some such thing)

The Concept...

- Learning is centered around the interests of the learner (which may be arts, history, computing...)
- This learning is immersive – learning by doing – and takes place not in a school but in an appropriate environment (such as a living arts centre)
- The computer connects the student to the rest of the world, no matter where they are

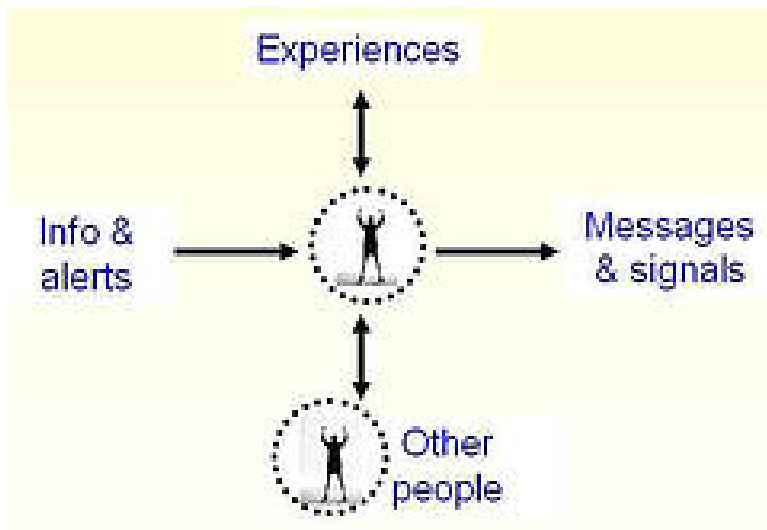
Game Based Learning



Types: Branching, Spreadsheet, Game, Lab...

<http://www.downes.ca/cgi-bin/website/view.cgi?dbs=Article&key=1116274375>

Workflow (Informal) Learning



Types: Community of Practice, Environment, Visualization...

<http://metatime.blogspot.com/>

Online Learning at the Crossroads

- On the one hand – we have developed tools and systems intended to support traditional classroom based learning
- On the other hand – we *could* (should?) be developing tools and systems to support immersive learning
- My take: we should be developing for dynamic, immersive, *living* systems...

First Iteration: User-Produced Media

- Blogs and Blogging
- Podcasting and Vodcasting
- Game mods and other multimedia



Web 2.0: The Learning Network

- The e-Portfolio lives in the intersection between the worlds for education, work, and home
- A model for e-Portfolio as a learner-managed construct
- Key requirement is easy-to-use tools and hosting services*
- *E.g. the “e-Portfolio-as-blog” approach

Scott Wilson:

<http://www.cetis.ac.uk/members/scott/entries/20050523083528>

Groups and Networks

“Groups require unity, networks require diversity. Groups require coherence, networks require autonomy. Groups require privacy or segregation, networks require openness. Groups require focus of voice, networks require interaction.”

<http://www.downes.ca/cgi-bin/page.cgi?post=35839>

Rethinking Learning



http://static.flickr.com/109/252157734_9e6c29433b_b.jpg

<http://video.google.com/videoplay?docid=-4126240905912531540&hl=en>

Thank You

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