



NRC-CNRC

*Institute for
Information
Technology*

Distributed Learning

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National Research Council Canada

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National Research
Council Canada

Conseil national
de recherches Canada

Canada

**I strongly wish, for what I faintly hope:
Like the day-dreams of melancholy men,
I think and think on things impossible,
Yet love to wander in that golden maze.**

- Dryden

<http://arthurwendover.com/arthurs/scott/12166-8.html>

Traditional Online Learning

- Institution Based
 - Online courses, learning management system
 - Content ‘federations’ – closed network
- Product Based
 - Content packaging and CD-ROM delivery
 - Digital rights and authentication
- Content Based
 - The idea of courseware, course packs
 - Learning design and sequencing

What we need...

- ***“We need a system that is optimized toward slotting in new pieces as they become available, not as an after-thought or an add-on, but as a fundamental characteristic of the system.”***

- *Michael Feldstein, August 7, 2005*

http://mfeldstein.com/index.php/the_long_tail_of_learning_applications/

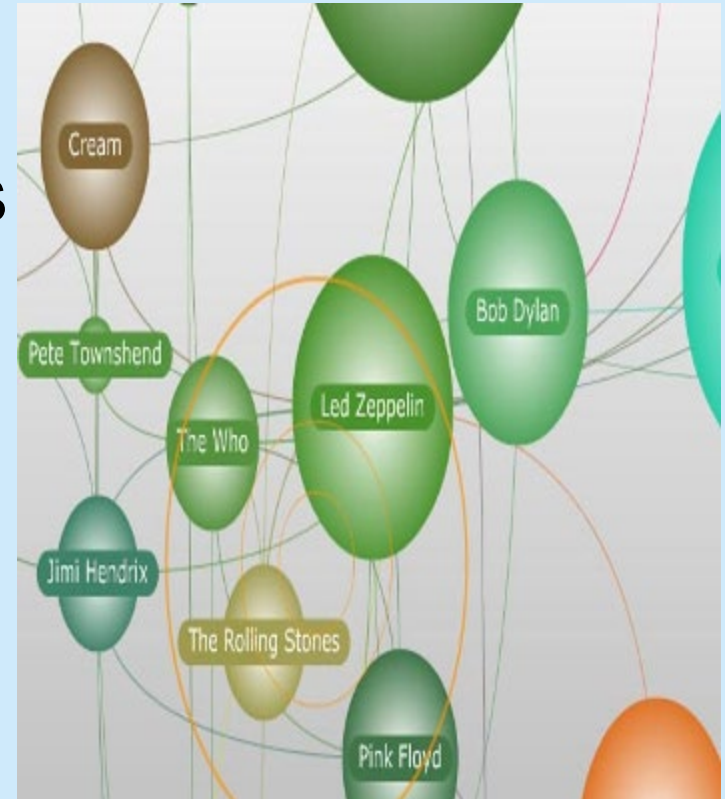
Learning Networks

- Not Institution Based
 - Resource based, learning integration
 - Open access, content networks
- Not Product Based
 - Web based, content not packaged but aggregated
 - Identity used to enable access, not restrict it
- Not Content Based
 - E-learning as engagement, conversation
 - Focus on services and interaction

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

What does this look like? (1)

- The Interactive Web...
- Social networks, power laws
 - MacManus and Porter
 - Shirkey – Power Laws
 - Downes – 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...

on personal website

name
company

name
address

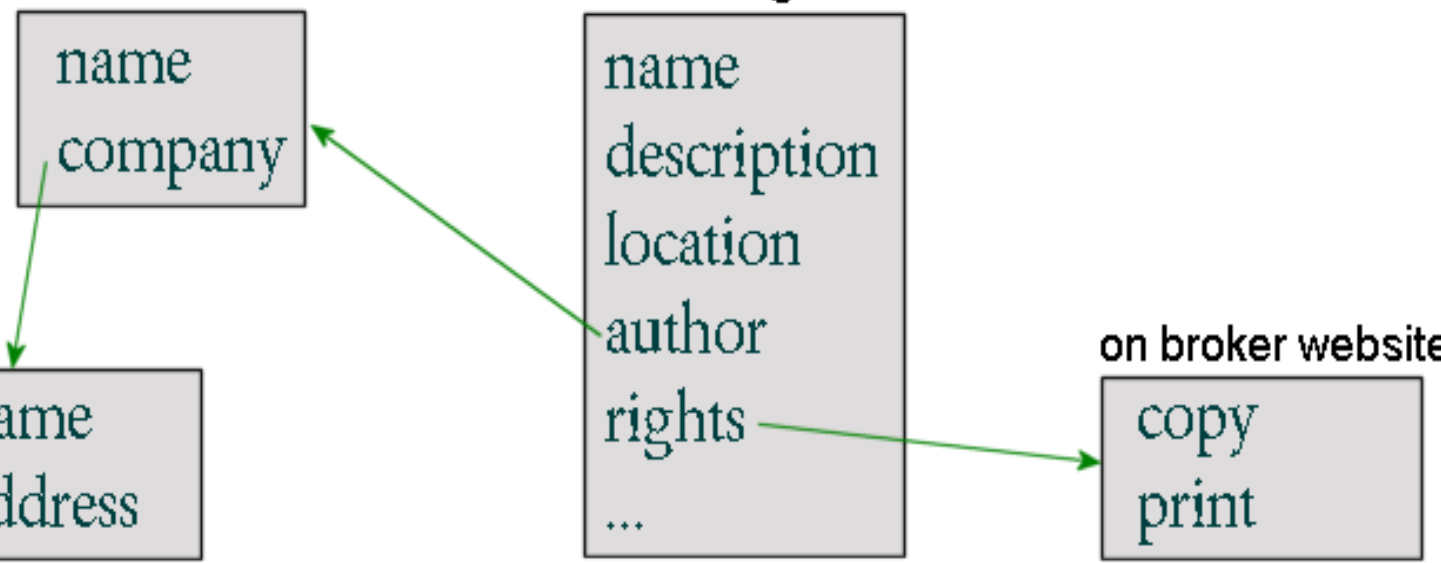
on company website

on learning website

name
description
location
author
rights
...

on broker website

copy
print



Learning...

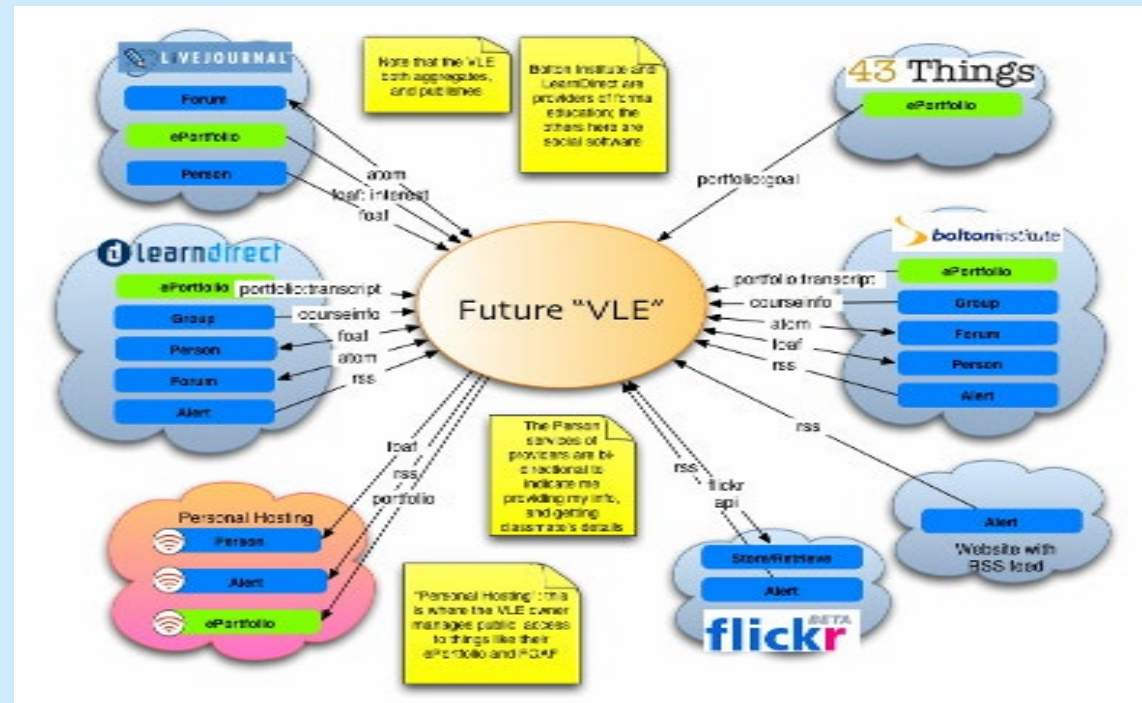
Learning as a network phenomenon...

- **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**

What does this look like? (3)

- A web of content
- The personal learning centre

- Wilson
- ELGG

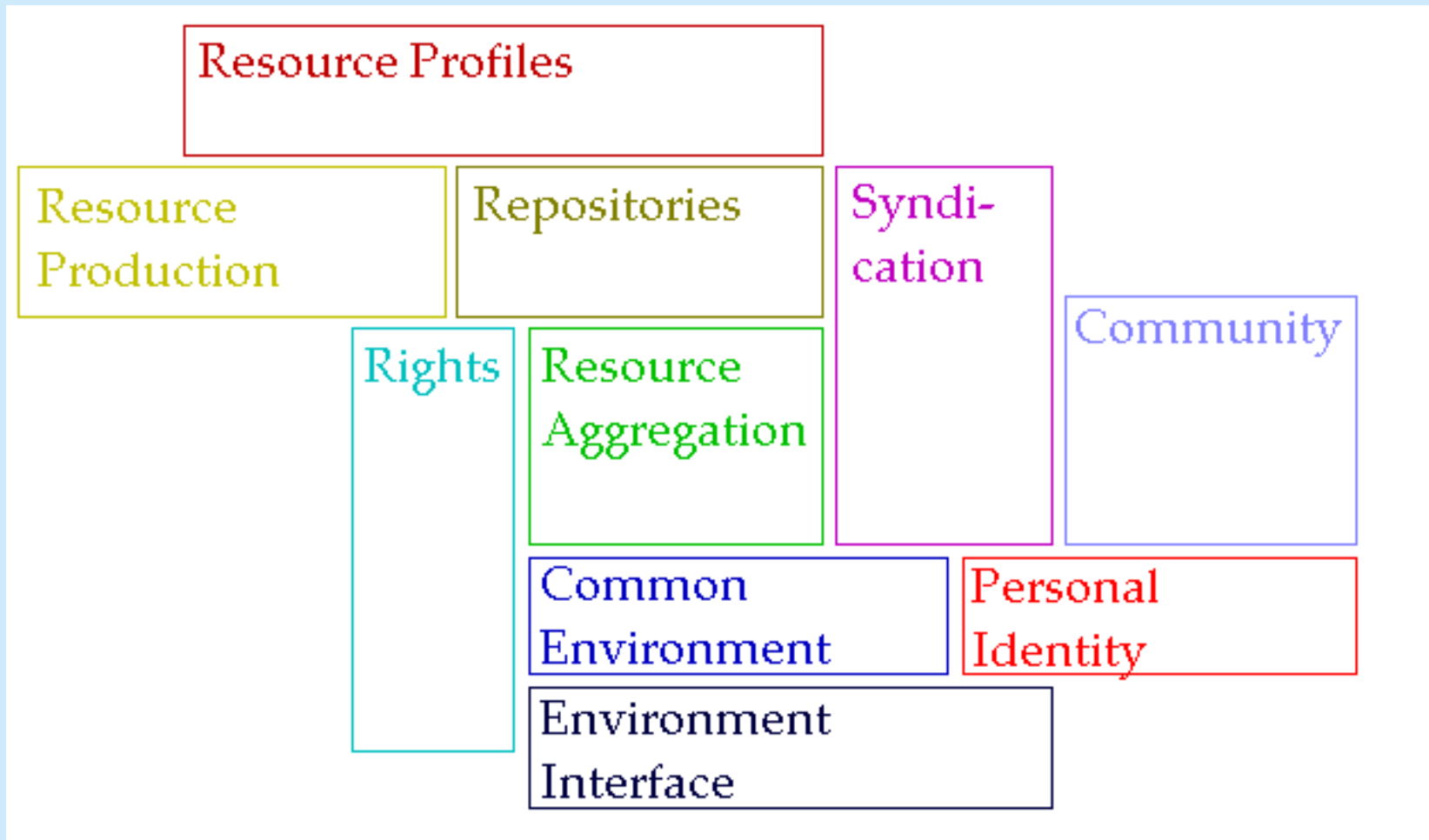


What does this look like? (4)

- **User generated Content - Personal, opinionated**
- **Network of interactions**
- **Blogs and learning** Downes – [Educational Blogging](#)
Creating Blogs – [Blogger](#), [LiveJournal](#), more...
 - Thinking of blogs as structured data
 - [RSS](#), Atom, OAI
 - Aggregation – [Bloglines](#), [others...](#) Filters – [Feedster](#), [Technorati](#)

Architecture

Rethinking Learning Resources...



Blogs

"Never have so many people written so much to be read by so few..." Katie Hafner NY Times.

[Blogger](#) - [Live Journal](#) - [Movable Type](#) - [Wordpress](#)

Here is a tutorial on using [Wordpress](#)

Danah Boyd - [Blogs and Identity](#)

[Educational Blogging](#) - article

[Educational Weblogs](#) - [Edublogs.org](#)

Photos, Podcasting and Vodcasting

- [Flickr](#)
- [Podcasting](#) - wikipedia article - [iPodder](#) - [Odeo](#)
- [Liberated Syndication](#)

- Podcasting in Learning
- [Ed Tech Talk](#) - [Ed Tech Posse](#) - [FLOSSE Posse](#)
- [Bob Sprankle](#)
- [Education Podcast Network](#)

RSS and Content Syndication

- [How to create](#) an RSS file
- [RSS Ideas for Educators](#)

Aggregation and Syndication

- [Bloglines](#), [Technorati](#), [Feedster](#)
- [Community Blogging](#)

Glu

- [SuprGlu](#), [Myglu](#) , [RSS Writr](#)

Collaborative Authoring

- Messaging – [ICQ](#), [Skype](#)

Wikis

- [Jotspot](#), [Wikipedia](#) - [Gollum](#) -
- [Bering Strait School District's Open Content Initiative](#)
 - Organization tips for setting up a wiki
- [Writely](#)

Social Networks

- [Friendster](#), [Orkut](#), [Myspace](#)

The Wisdom of Crowds

Collective Bookmarking

- del.icio.us, Furl
- [Bookmarklet to bookmark to multiple services](#)
- Lee's furl and del.icio.us sites - I bookmarked many of the sites we wandered to today.

Recommender Systems

- Amazon.com
- [Recommender Systems?](#) - Presentation

Open Source and Open Content

- [Creative Commons](#) - in [Yahoo and Google](#)
- [Podsafe Music Network](#)
- [Eduforge](#)
- [Open Course Ware](#) and [Connexions](#)
- [Open Educational Resources](#)

Connective Knowledge

- [Connectivism](#)
- [Connective Knowledge](#)
- [E-Learning 2.0](#)

Principles of Connective Knowledge:

- Autonomy
- Diversity
- Openness
- Interaction

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