

The Rise of MOOCs

Past Successes, Future Challenges

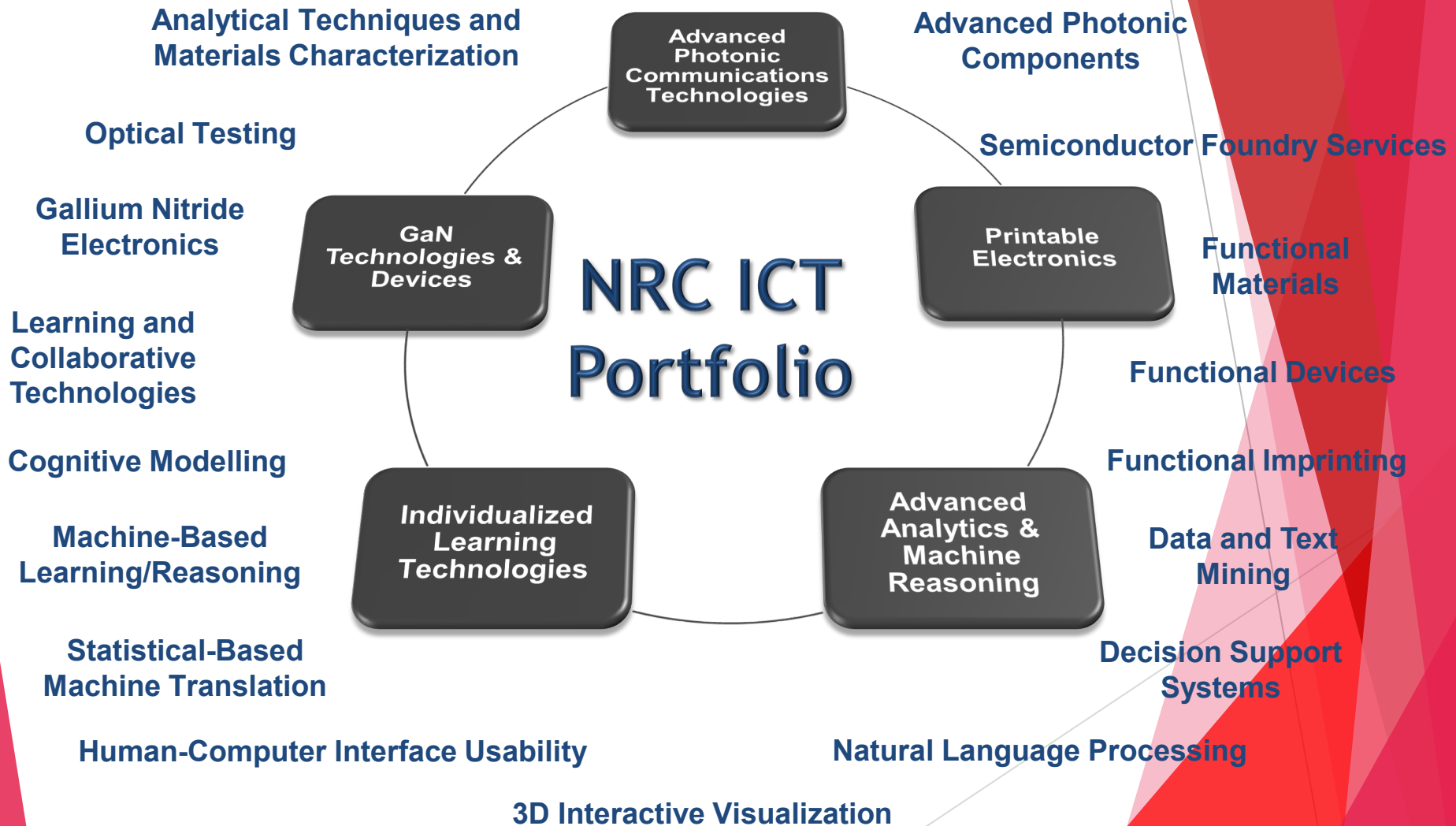


Stephen Downes

Tunis, March 24, 2014

<http://www.downes.ca/presentation/337>

World-Renowned Competencies



The Skills Shortage

August 26, 2013

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OTTAWA CITIZEN

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An answer to Canada's mining skills shortage

BY DANIEL BLAND, OTTAWA CITIZEN AUGUST 26, 2013

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While economists and labour market researchers agree one of Canada's greatest challenges over the next decade will be how to solve skilled worker shortages, there seems to be a common theme that...

STORY TOOLS
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PARLIAMENT of CANADA

Home Parliamentary Business Senators and Members

LABOUR AND SKILLS SHORTAGES IN CANADA: ADDRESSING CURRENT AND FUTURE CHALLENGES

Report of the Standing Committee on Human Resources, Skills and Social Development and the Status of Persons with Disabilities

Report on Business

Economy Lab

Delving into the forces that shape our living standards. Best Business Blog, EPPY awards, 2011 and 2012

Home » Report on Business » Economy » Economy Lab



Canada's labour pain: 1.3 million jobless, but not enough skills

TAVIA GRANT - ECONOMICS REPORTER
The Globe and Mail
Published Sunday, Mar. 31 2013, 6:41 PM EDT
Last updated Tuesday, Apr. 02 2013, 9:00 AM EDT

Ed Komarnicki, M.P.
Chair

DECEMBER 2012 PARLIAMENT, FIRST SESSION

The Conference Board of Canada

NEWS RELEASE 14-09

Skills Shortages Cost Ontario Economy Billions of Dollars Annually

Share Tweet 27 +1 0 Like 0 E-mail Print

"This is money that could provide substantial economic and social benefits to Ontarians. Closing the skills gap could help the province reduce public debt or invest in much needed infrastructure improvements," said Michael Bloom, Vice-President, Organizational Effectiveness and Learning. "Consider, for example, that a proposed expansion of public... on Area... on per year,



itbusiness.ca

Syndicated Education Human Resources

IT skills shortage still a problem in Canada

Published on: July 10th, 2013

CANADIAN BUSINESS JOURNAL

Home | Features | March 09 | Advanced Skills Shortages in Canada – Getting to the Root of the Problem

Advanced Skills Shortages in Canada – Getting to the Root of the Problem

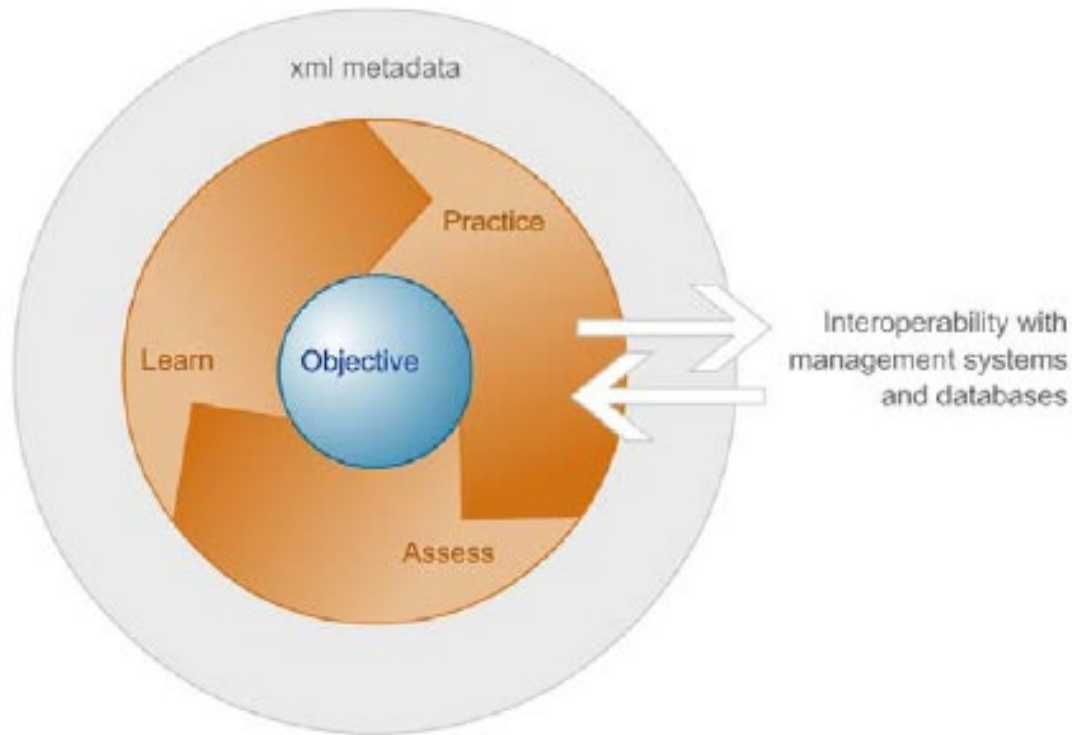
Font size: [A] [A-]

In November of last year, the Canadian Chamber of Commerce published a report on skills shortages in Canada, expressing a view felt by many: the skills shortage is a critical economic issue that impacts Canadian productivity, and ultimately, competitiveness in a global market. The Chamber commented in the report that skills shortages are not "just a 'made-in-Canada' problem", saying that the country is in a global fight for talent.



Learning Objects

Anatomy of an e-Learning Object



Learning Objects: Resources For Distance Education Worldwide

<http://www.irrodl.org/index.php/irrodl/article/view/32>



<http://www.ignou.ac.in/>



<http://www.open.ac.uk/>

<http://www.open.edu.au/>



<http://www.athabascau.ca/>

The Idea of Open Learning...

Open Educational Resources

- ▶ 'teaching, learning and research materials
- ▶ any medium, digital or otherwise
- ▶ reside in the public domain or have been released under an open license
- ▶ no-cost access, use, adaptation and redistribution by others with no or limited restrictions.

The OERu 'Logic Model'



Indian e-tutors generate \$20 million annually, teaching American students. Do you see a world of potential? We do.

HSBC
The world's local bank

00104/2011



Students awarded credible degree or credential



Participating institutions grant credit for courses



Open assessment from participating institutions



Open student support via "Academic Volunteers International"

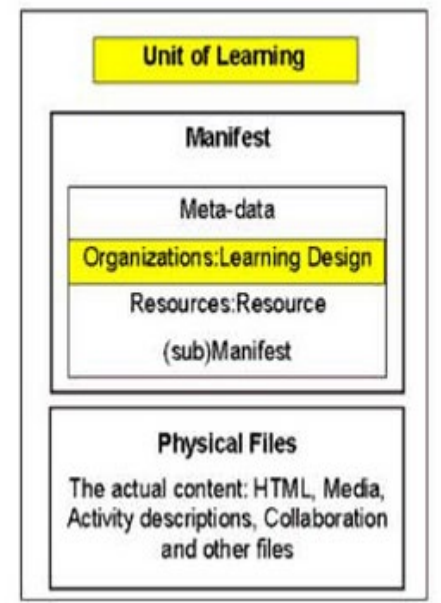
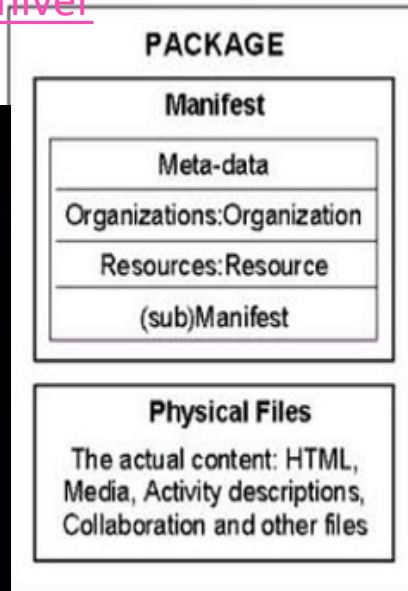


Learners access courses based solely on OER



Phase 1

<http://zaidlearn.blogspot.com/2008/06/university-learning-ocw-oler-free.html>



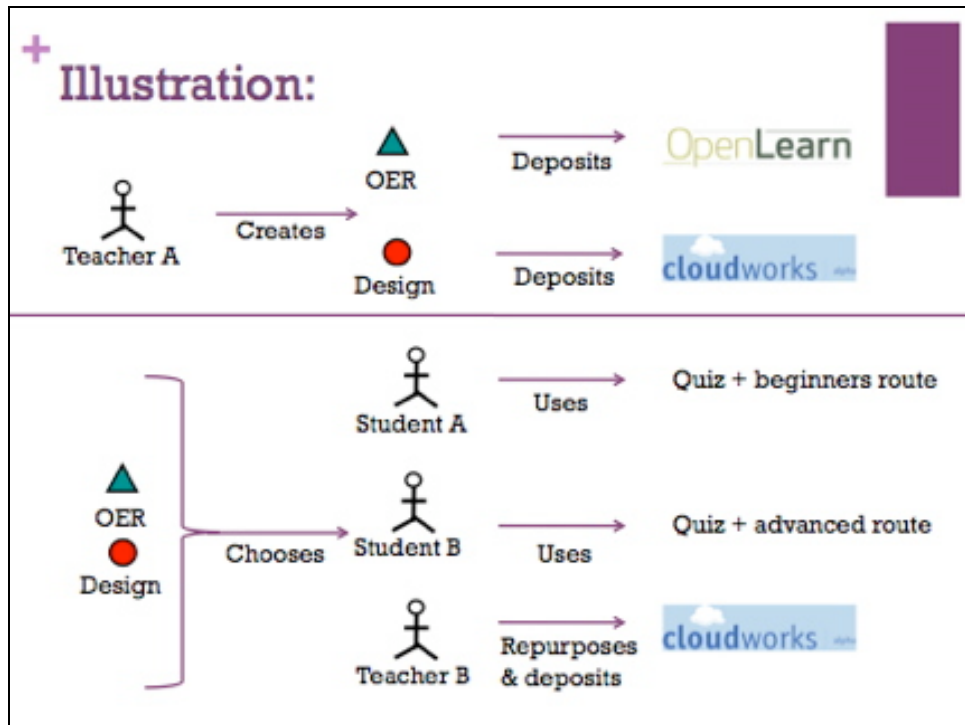
<http://www.imslobal.org/metadata/>

http://ltsc.ieee.org/wg12/files/LOM_1484_12_1_v1_Final_Draft.pdf

<http://creativecommons.org/>

Open Educational Resources

Phase 2



<http://www.educause.edu/Resources/BeyondOERShiftingFocusToOpenEd/224619>

<http://opal.innovationpros.net/news/launch-of-tools-to-enable-open-educational-practices/>

...the Open Educational Practices movement, developed by Germany's [Ulf-Daniel Ehlers](#) and the UK's [Gráinne Conole](#)...

<http://e4innovation.com/?p=373>





Learning Design & Open Practices

Phase 3

READING HORIZONS™
DISCOVER INTENSIVE PHONICS FOR YOURSELF

Phonemic Awareness Assessment

Phonemic Awareness

CORRECT (Y)
INCORRECT (N)

List 1

HEC ASSESSMENT - Student

RESTART (R) STOP (S)



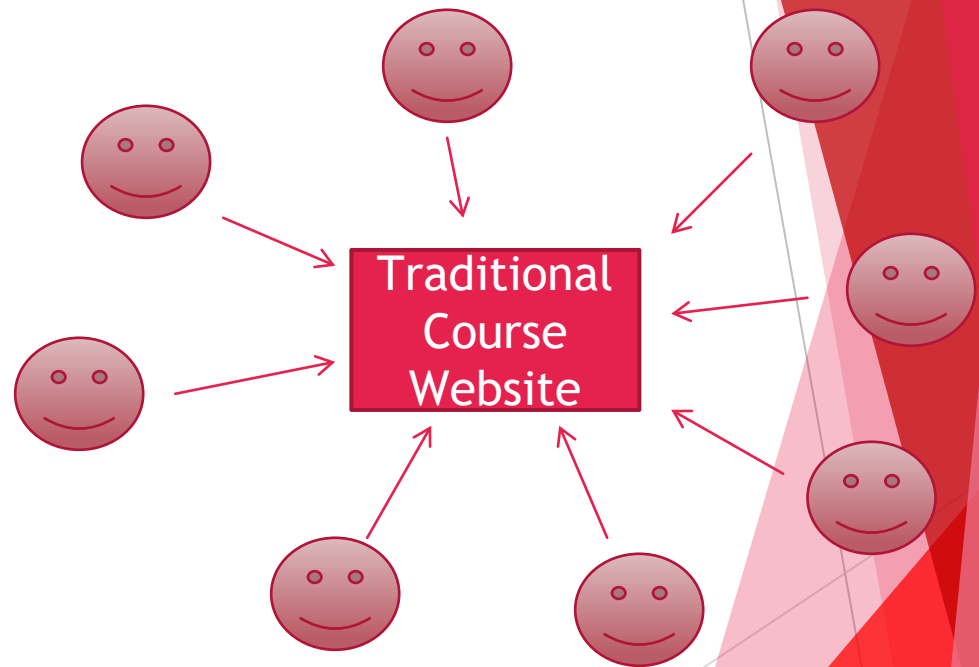
<http://www.brainbench.com/>

<http://www.aspirationtech.org/events/p2pu/openassessment/2010>

Open Credentials

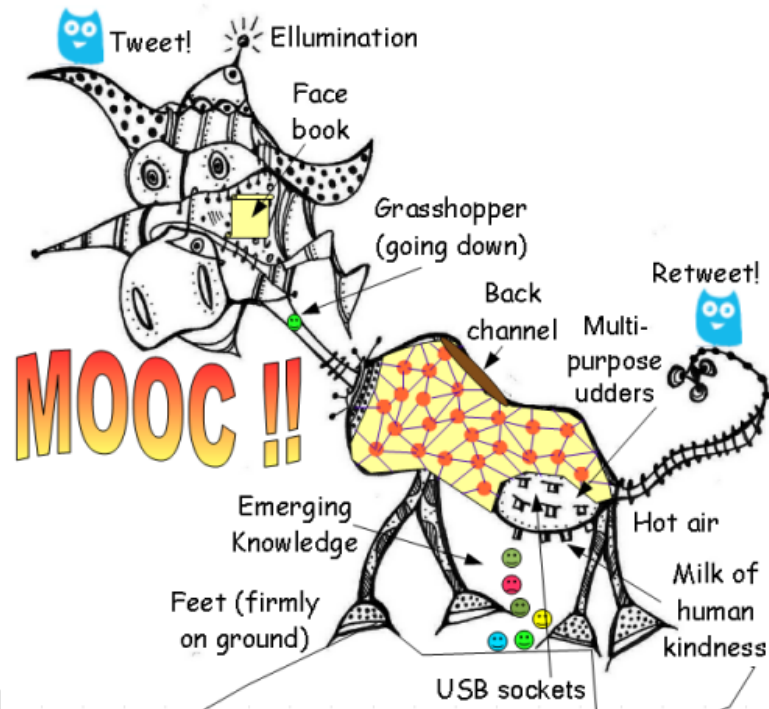
Traditional Course

In the traditional course, we just throw content at people, and hope it sticks.



Most online courses are based on content-based websites (even Coursera, Khan and Udemy)

The MOOC

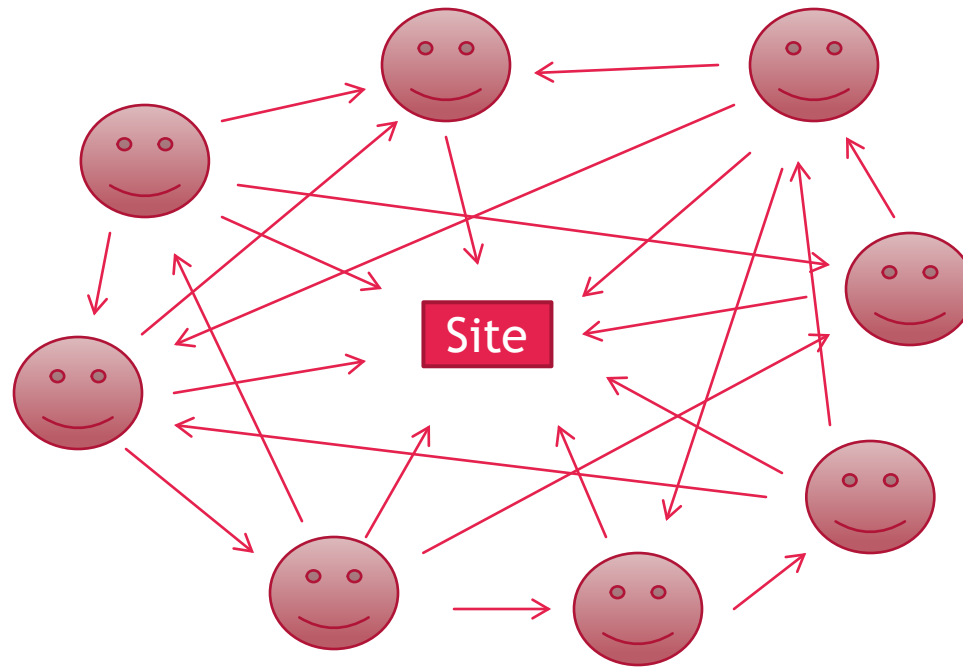


- ▶ **Massive** - by design
- ▶ **Open** - gratis and libre
- ▶ **Online** - not blended, not wrapped
- ▶ **Courses** - not communities, websites, video collections, etc

Image: Gordon Lockhart

<http://gbl55.wordpress.com/2011/03/08/cck11-man-this-mooc-is-something-else/>

Massive Open Online Course



A MOOC is a Web, not a Website

The screenshot shows a Moodle course page titled "Connectivism and Connective Knowledge". The page includes a navigation menu on the left with sections for Links, Activities, Forums, and Resources. The main content area features a "Topic outline" section with a list of 12 weeks, each with a corresponding icon. Below the outline is a numbered list of 10 topics. A calendar widget is visible in the top right corner of the page.

Connectivism and Connective Knowledge is a twelve week course that will explore the concepts of connectivism and connective knowledge and explore their application as a framework for theories of teaching and learning. It will outline a connectivist understanding of educational systems of the future.

- Introductions
- Google Map of participants
- General Forum
- Connectivas Spanish pageflakes site
- Connectivism English Pageflakes site
- Week 1: What is connectivism
- Week 2: Rethinking Knowledge
- Week 3: Networks
- Week 4: History of Learning Networks
- Week 5: Groups and Networks
- Week 6: Complexity and Chaos
- Week 7: Instructional Design
- Week 8: Power, Authority, Control
- Week 9: Changing Roles
- Week 10: Openness
- Week 11: Systemic Change
- Week 12: Next Steps and Research

- 1 What is Connectivism?
- 2 Rethinking epistemology: Connective knowledge
- 3 Properties of Networks
- 4 History of networked learning
- 5 Connectives and Collectives: Distinctions between networks and groups
- 6 Complexity, Chaos and Research
- 7 Instructional design and connectivism
- 8 Power, control, validity, and authority in distributed environments
- 9 What becomes of the teacher? New roles for educators
- 10 Openness: social change and future directions

<http://wwwapps.cc.umanitoba.ca/moodle/course/view.php?id=20>

2300 students

The screenshot shows the "The Daily" page for the course. It features a green header with the course title and a navigation menu with links for Home, The Daily, Wiki, About, Aggregations, and Readings. Below the navigation menu are links for Options, The Daily Archives, The Daily RSS Feed, Feeds, Posts, and Places. The main content area is titled "The Daily" and dated "October 15, 2008". It includes a section for "Elluminate Discussions Today" and "Highlighted Resources".

Connectivism & Connective Knowledge

[Home] [The Daily] [Wiki] [About] [Aggregations] [Readings]

[Options] [The Daily Archives] [The Daily RSS Feed] [Feeds] [Posts] [Places]

The Daily

October 15, 2008

Elluminate Discussions Today

Today we welcome Alec Couros into our course and our week 6 discussion of chaos and complexity. Two Elluminate discussions (both sessions can be [accessed via this link](#)): 11 am CST: See [time zone conversions](#) 7 pm CST: See [time zone conversions](#). Alec Couros will be presenting during both times, followed by informal conversation.

Highlighted Resources

[Connected Without Modem?](#)
Is feedback a form of coercion? Muru writes, "I have seen some behaviourism taking place in the feedback or lack of feedback given, I perceive some kind of light coercion going on, not in a direct way. It is in a vicarious way, I ignore your behavior and acknowledge the behaviour that I consider right for

<http://connect.downes.ca/cgi-bin/archive.cgi?page=thedaily.htm>

Other Courses



PLENK2010

Personal Learning Environments
Networks and Knowledge 2010

home discussion wiki the daily blog live sessions recordings about

Schedule


- WEEK OF...
- 12TH SEPTEMBER 2010
[A TOUR OF PLEs AND PLNs](#)
 - 19TH SEPTEMBER 2010
[CONTRASTING PLEs WITH LMSs](#)
 - 26TH SEPTEMBER 2010
[THE NEXT/EXTENDED WEB](#)
 - 3RD OCTOBER 2010
[PLE/PLN AND LEARNING THEORIES](#)
 - 10TH OCTOBER 2010
[EVALUATING LEARNING IN PLE/NS](#)
 - 17TH OCTOBER 2010
[USING PLEs SUCCESSFULLY](#)
 - 24TH OCTOBER 2010
[PLE/N TOOLS](#)
 - 31ST OCTOBER 2010
[PERSONAL KNOWLEDGE](#)

Welcome to the Course



If you would like to register for PLENK2010 there's still
[Click here to Register](#)

If you have subscribed to The Daily, then you will receive



CHANGE.MOOC.CA

home about contact

YOU ARE LOGGED IN AS DOWNES [[OPTIONS](#)] [[LOGOUT](#)]

Week 35: Terry Anderson

Change in formal education systems

Announcements

Terry Anderson Session Recording

Terry Anderson's week35 session recordings:

- [MP3 Audio](#)
- [Elluminate Recording](#)
- [Slides](#)

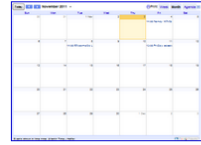
Week 35: Terry Anderson

Live Session Today

This is the last week of the Change11 course and we are pleased to welcome Terry Anderson. Our live session is **TODAY**.

Contents

Calendar



This Course

- [Home Page](#)
- [About This Course](#)
- [Course Outline](#)
- [How It Works](#)
- [Course Facilitators](#)
- [Your Privacy](#)
- [Contact Us](#)

Your Account

- [Register](#)
- [Login](#)
- [Manage Account](#)

1800 students

<http://connect.downes.ca/>

CFHE12 An Open Online Course

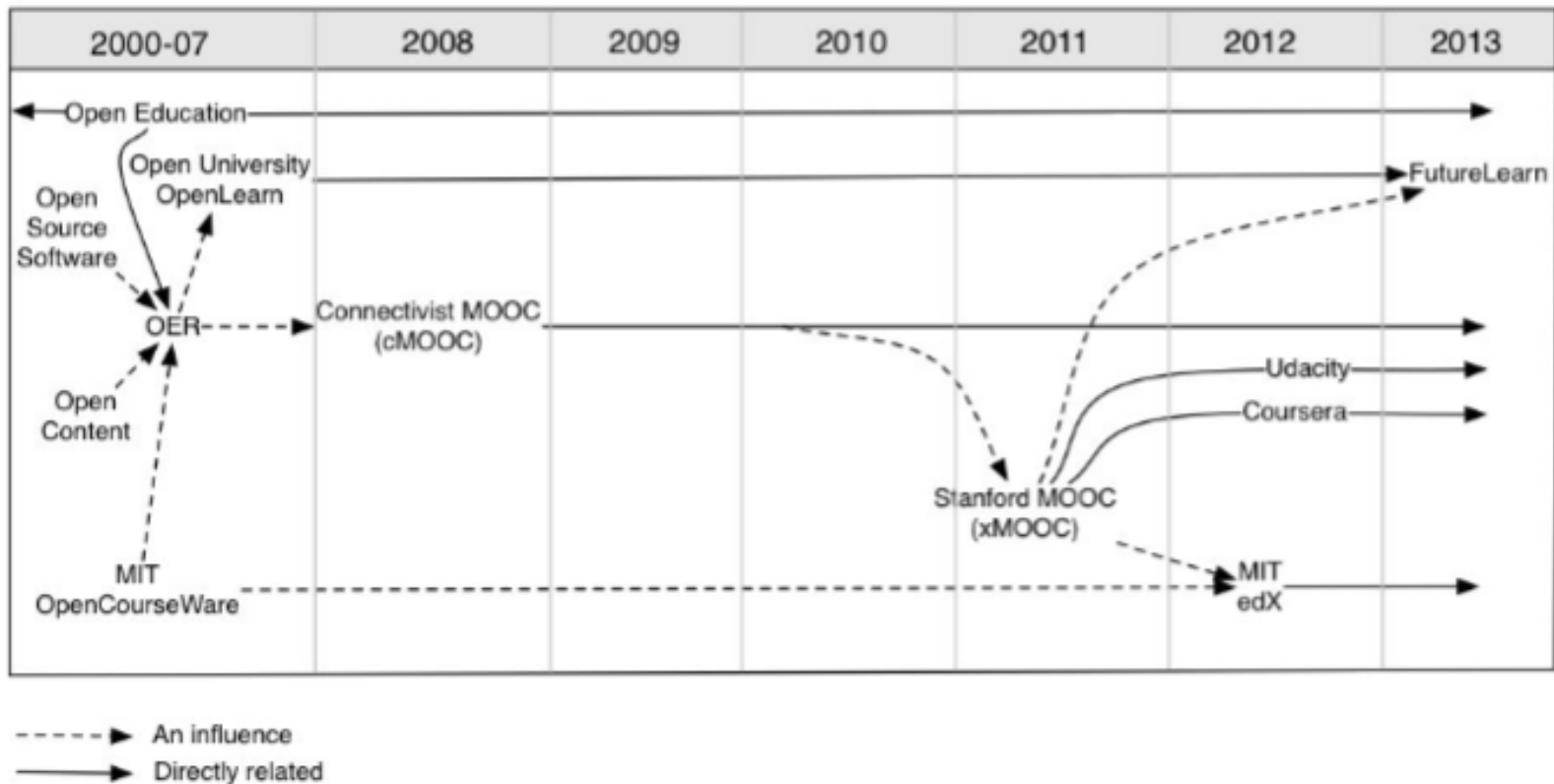
3000 students

<http://edfuture.net/>

2800 students

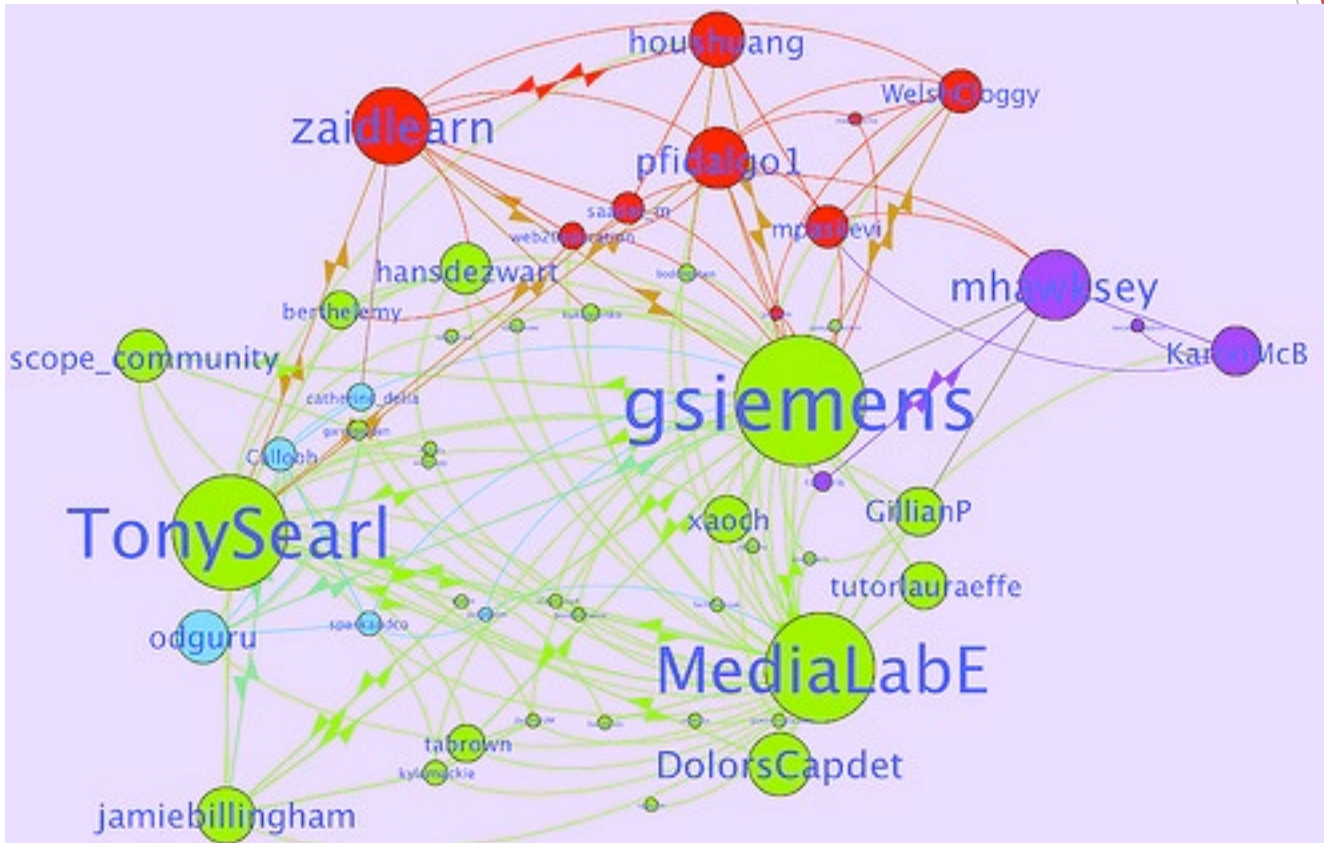
<http://change.mooc.ca/>

Evolution of MOOCs



<http://publications.cetis.ac.uk/wp-content/uploads/2013/03/MOOCs-and-Open-Education.pdf>

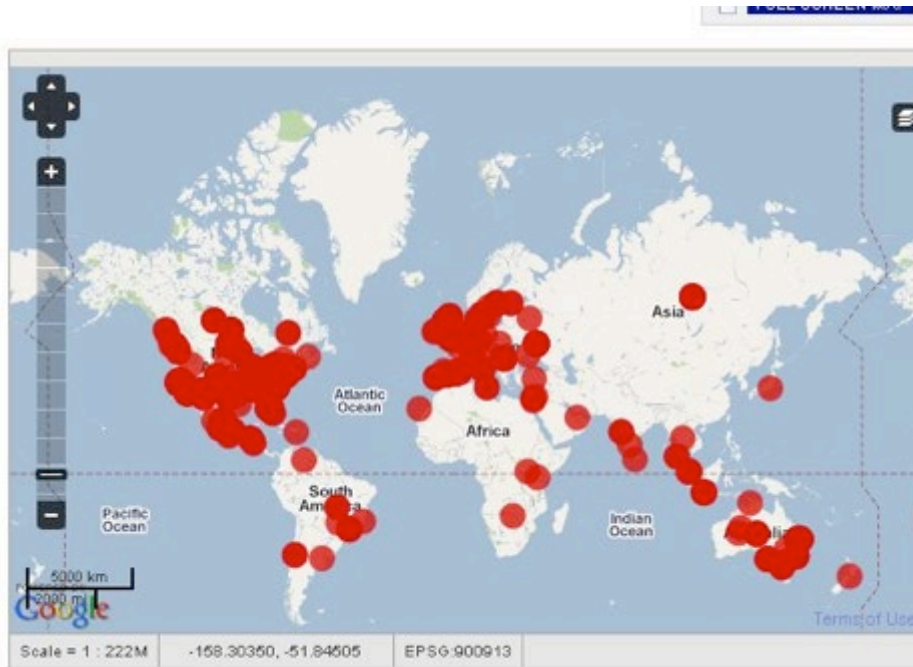
Learning Analytics



LAK11: How to measure success in a MOOC

<http://scope.bccampus.ca/course/view.php?id=365>

MobiMOOC



ALL CATEGORIES

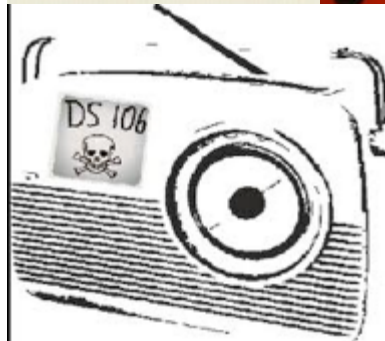
- VIA MOBIMOOC TEXT MESSAGE
- TWITTER #MOBIMOOC
- VIA MOBIMOOC CALL
- VIA MOBIMOOC EMAIL
- VIA CROWDMAP WEBSITE
- PROJECT: GGATIN (MANITOBA, CA)
- VIA SMARTPHONE APP
- PROJECT: SEAN ABAJIAN FIELD TESTS MLEARNING (LOS ANGELES, US)

Inge de Waard

Supporting Mobile Learning Technology

<http://mobimooc.wikispaces.com/>

The madness and mayhem of DS106



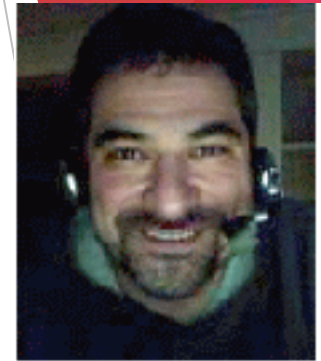
Jim Groom

DS = Digital Storytelling

DS106 redefined activities and participation

<http://ds106.us/>

eduMOOC underground



Jeff
Lebow

Jeff Lebow, Google+ hangout, and Livestream:
Taking something ordinary, and making it something
special – YOU make the MOOC

<http://www.livestream.com/jefflebow/>

Currently

REL 2014 - Pour une éducation libre

ACCUEIL VOTRE COMPTE ▼ COMPTES RENDUS ▼ PARTICIPER ▼ SYNDICATION RSS ▼ ARCHIVES ▼

Vous êtes connecté(e) en tant que **admin** [Déconnexion] - [Profil]

Bienvenue
admin



INTRODUCTION ▼

1. DU CLOM CONNECTIVISTE
ET FONCTIONNEMENT DE
CE COURS ▼

Réutiliser, Retravailler, Recombiner, Redistribuer – 4R des REL pour une Éducation libre

Bienvenue à votre Cours en Ligne Ouvert et Massif (CLOM) de l'Organisation internationale de la Francophonie portant sur les ressources éducatives libres (REL).

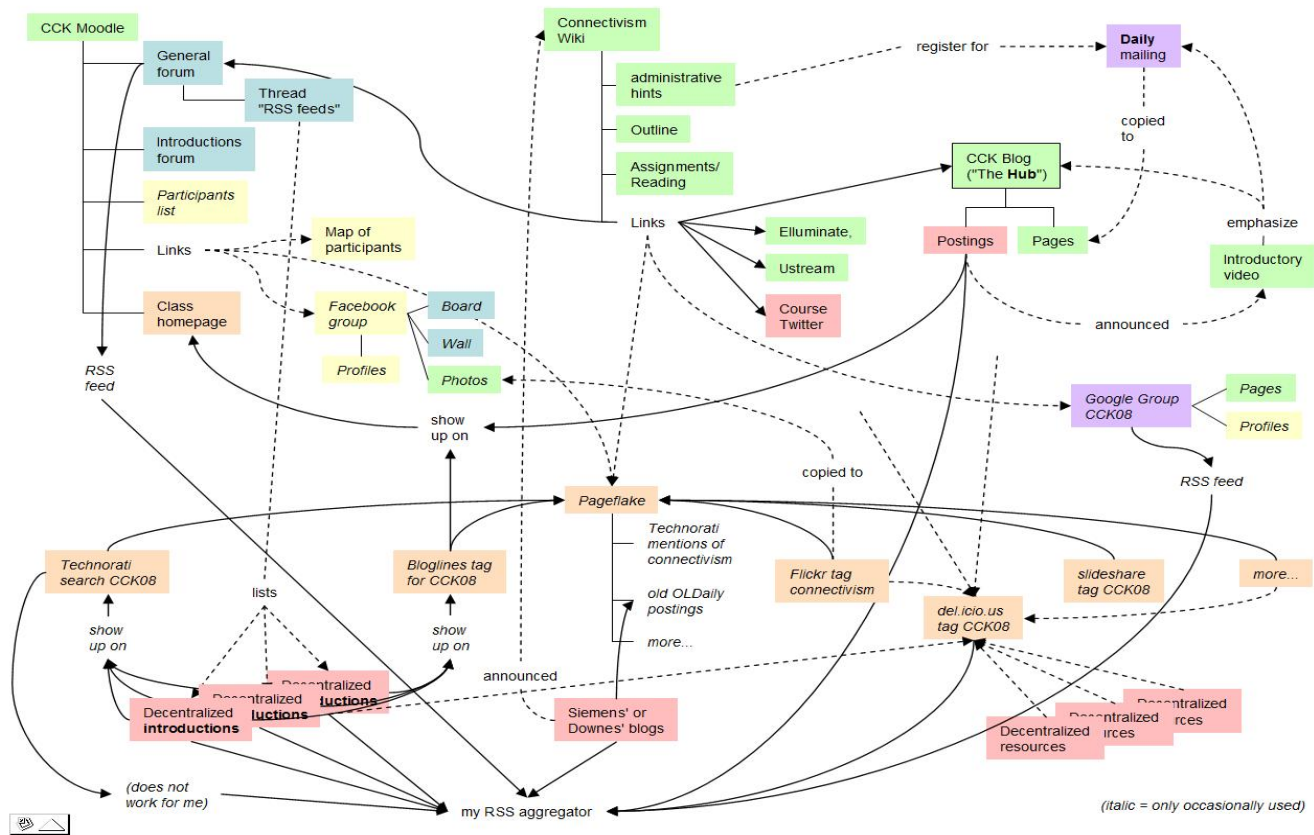
Le cours débute le 3 mars 2014 et dure neuf semaines consécutives. Si vous n'êtes pas déjà inscrit(e), faites-le tout de suite pour recevoir le Bulletin de nouvelles quotidiennes et bénéficier du droit de commentaires/discussion dans le site.

Introduction au CLOM REL 2014

MOOC REL 2014

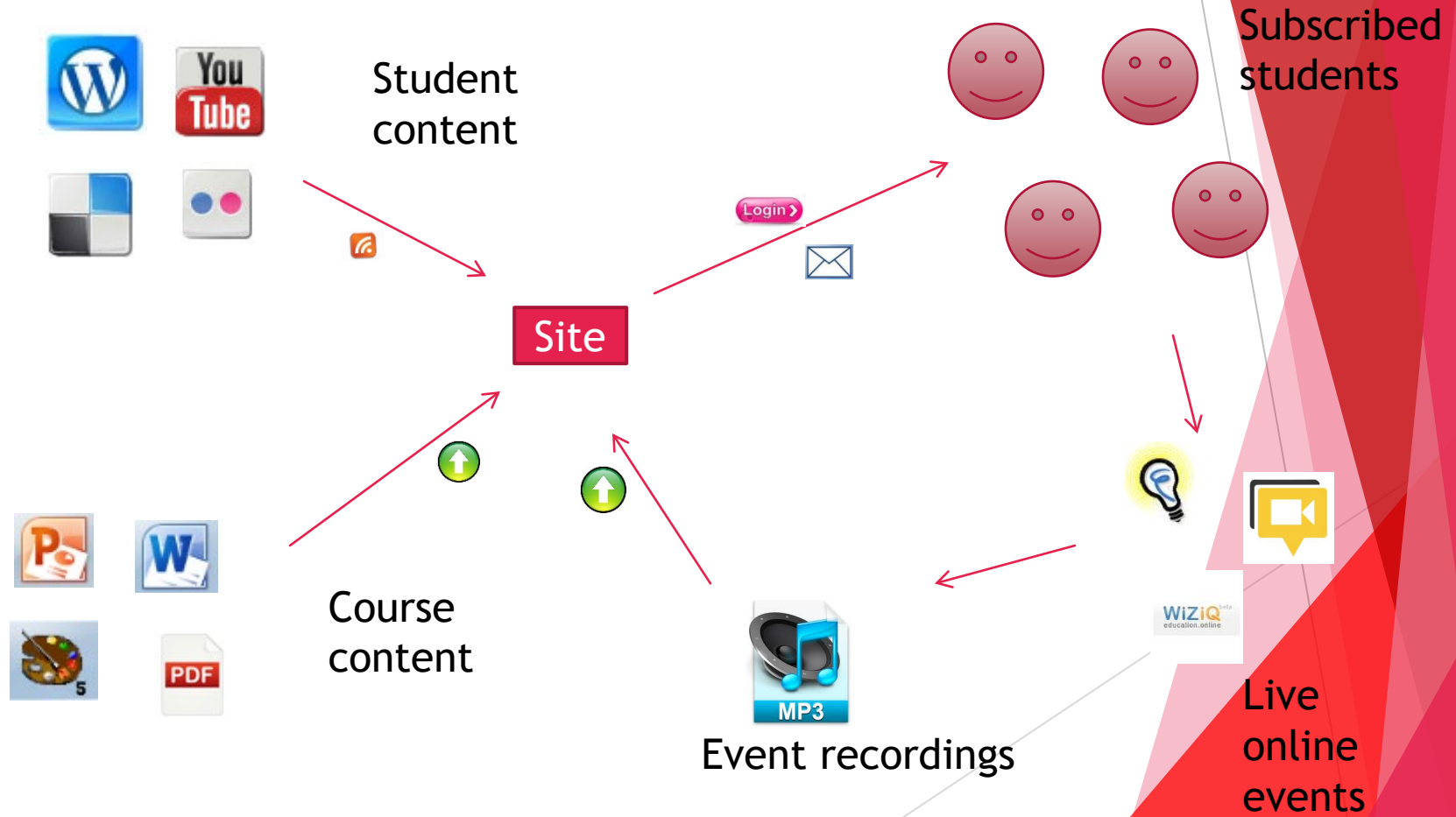
<http://rel2014.mooc.ca>

Connectivist MOOCs



<http://x28newblog.blog.uni-heidelberg.de/2008/09/06/cck08-first-impressions/>

Course Provider Perspective



Underlying MOOC Support

1. First student creates resource and sends info to course



Site

2. Second student sees resource info in newsletter and RSS feed



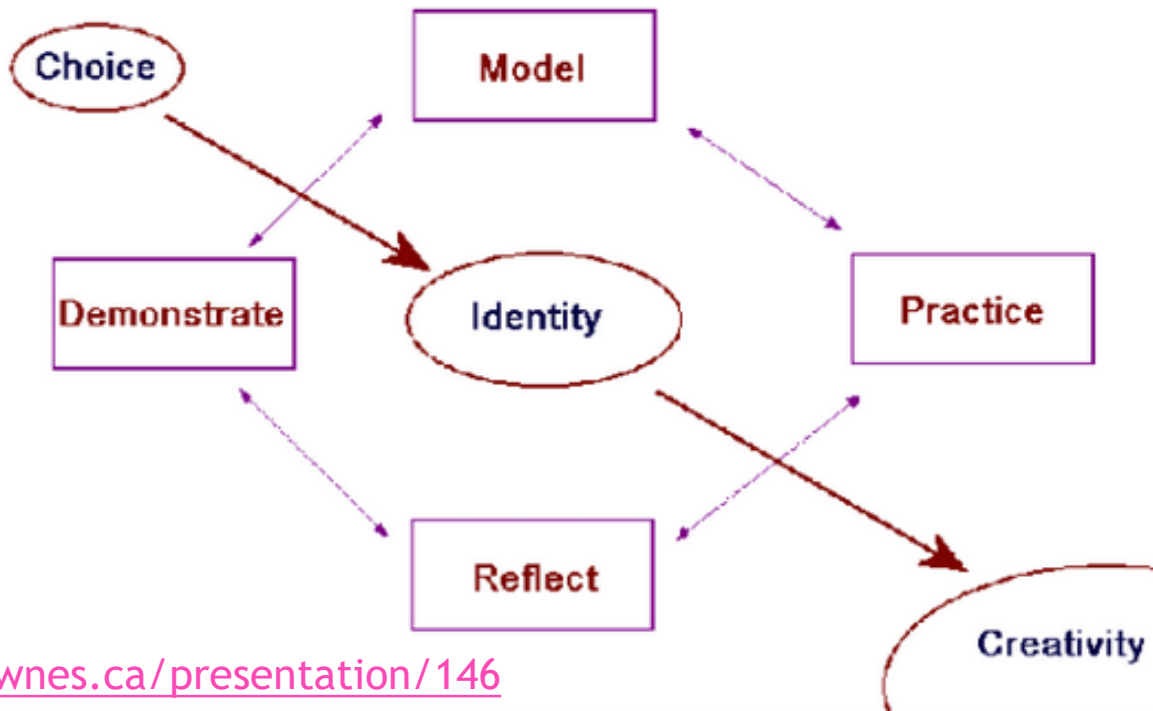
3. Second student accesses the resource directly



4. Second student finds link to third student's resource

Pedagogical Models

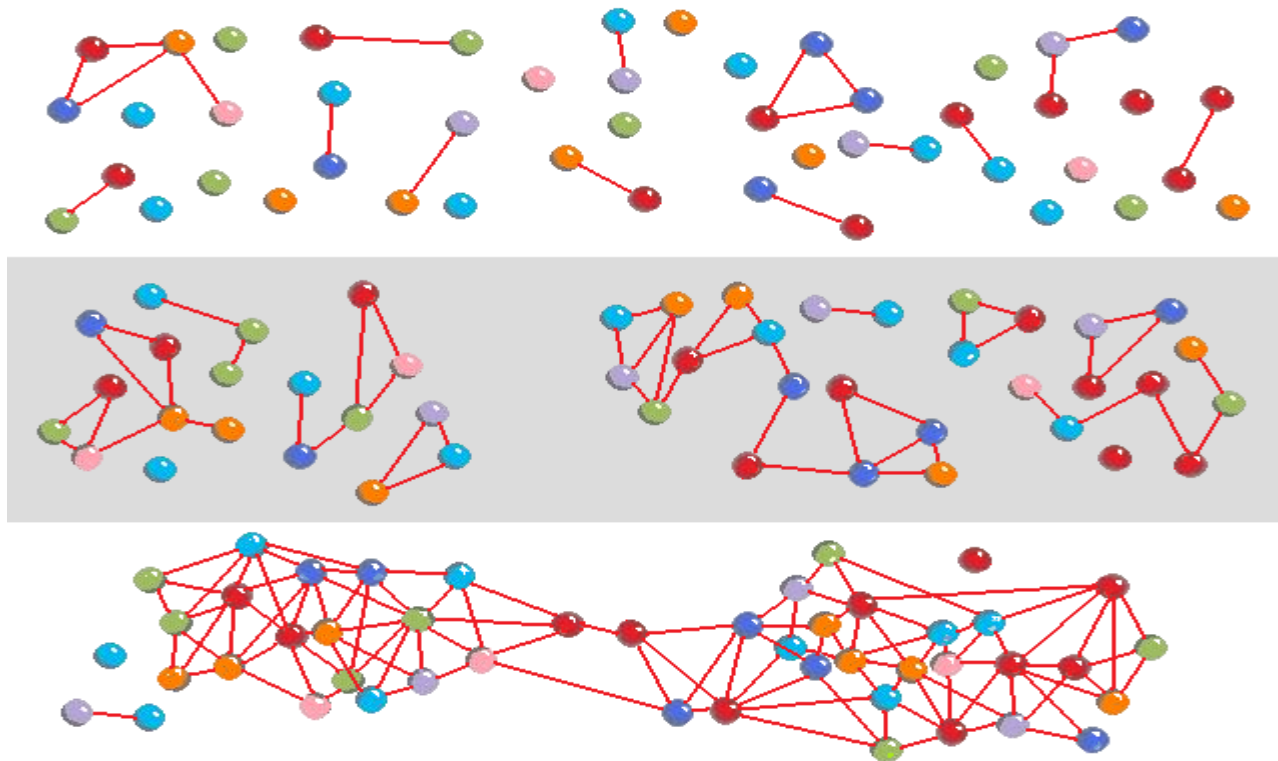
- ▶ Instructivist - knowledge as transmission
- ▶ Discovery - knowledge as experience
- ▶ Constructivist - knowledge as representation
- ▶ Connectivist - knowledge as recognition



Connectivist Learning Design

- ▶ A non-curricular based approach
 - ▶ course content is the ‘McGuffin’ vs (Freire) the ‘banking system’
 - ▶ learning takes places through interaction and creativity
 - ▶ Seymour Papert - constructionism
 - ▶ Aggregate, remix, repurpose, feed forward
- ▶ Learning a matter of growth, not accumulation

Self-Organizing networks



These are at once perceptual systems
and reasoning systems

Design Principles

Autonomy

- Choice of contents
- Personal learning
- No curriculum

Openness

- Open access
- Open content
- Open activities
- Open assessment

Diversity

- Multiple tools
- Individual perspective
- Varied content

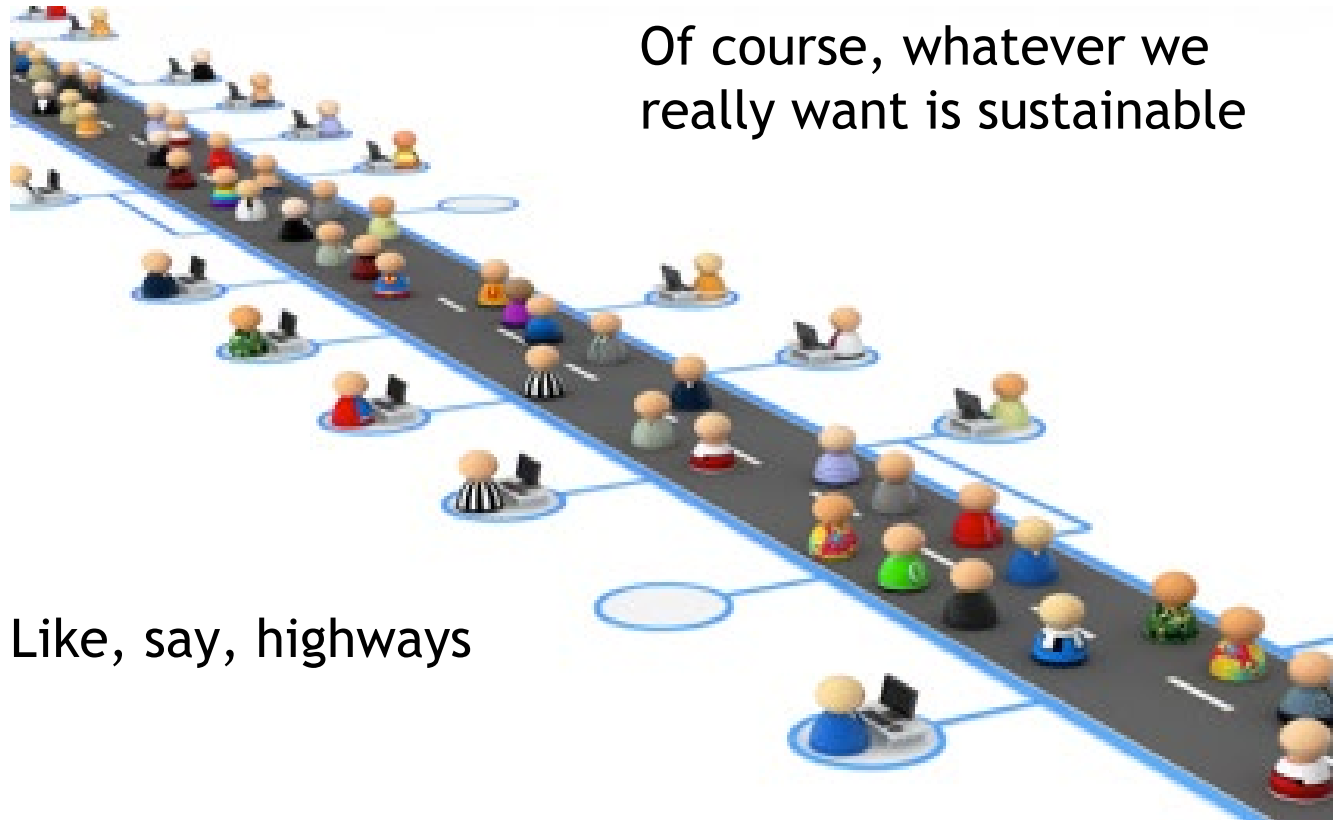
Interactivity

- Encourage communication
- Cooperative learning
- Emergent knowledge

A Note on Sustainability

- Ongoing costs for development, cloud hosting, software

Of course, whatever we really want is sustainable



Like, say, highways

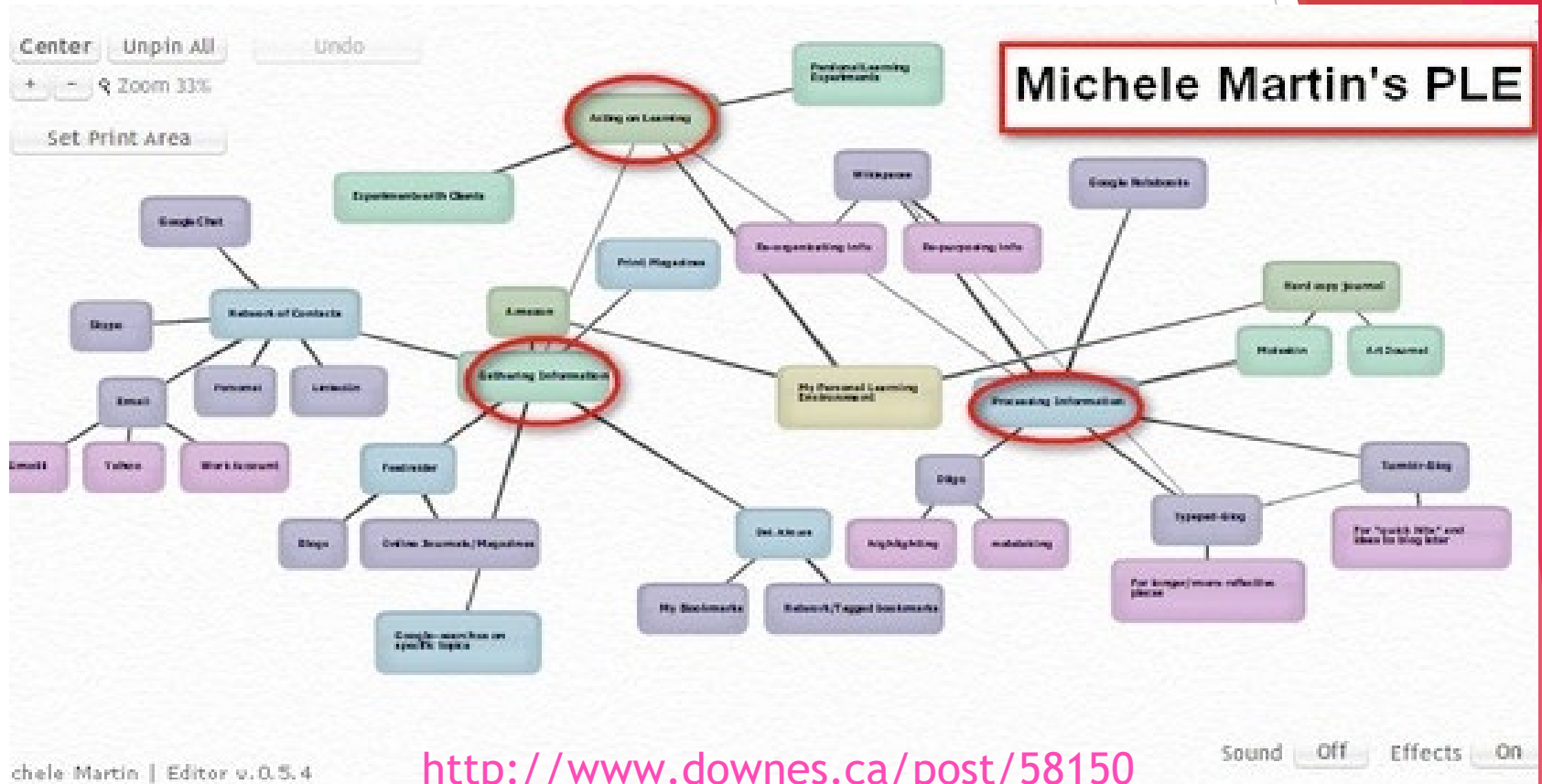
Sustaining OERs

- ▶ Redirection of existing resource allocations
 - ▶ eg. OA mandates for grants and programs
 - ▶ community outreach for existing agencies
 - ▶ eg, NASA
- ▶ Support for community-based OER process
 - ▶ integration of OER development and use within publicly supported curricula
 - ▶ use of OERs in public services and programs

- Stephen Downes, Models for sustainable Open Educational Resources, [ijklo.org/Volume3/IJKLOv3p029-044Downes.pdf](http://www.downes.ca/presentation/76) <http://www.downes.ca/presentation/76>

- OER Help with Keynote Slides, OER-Forum <http://lists.esn.org.za/pipermail/oer-forum/2011-October/thread.html>

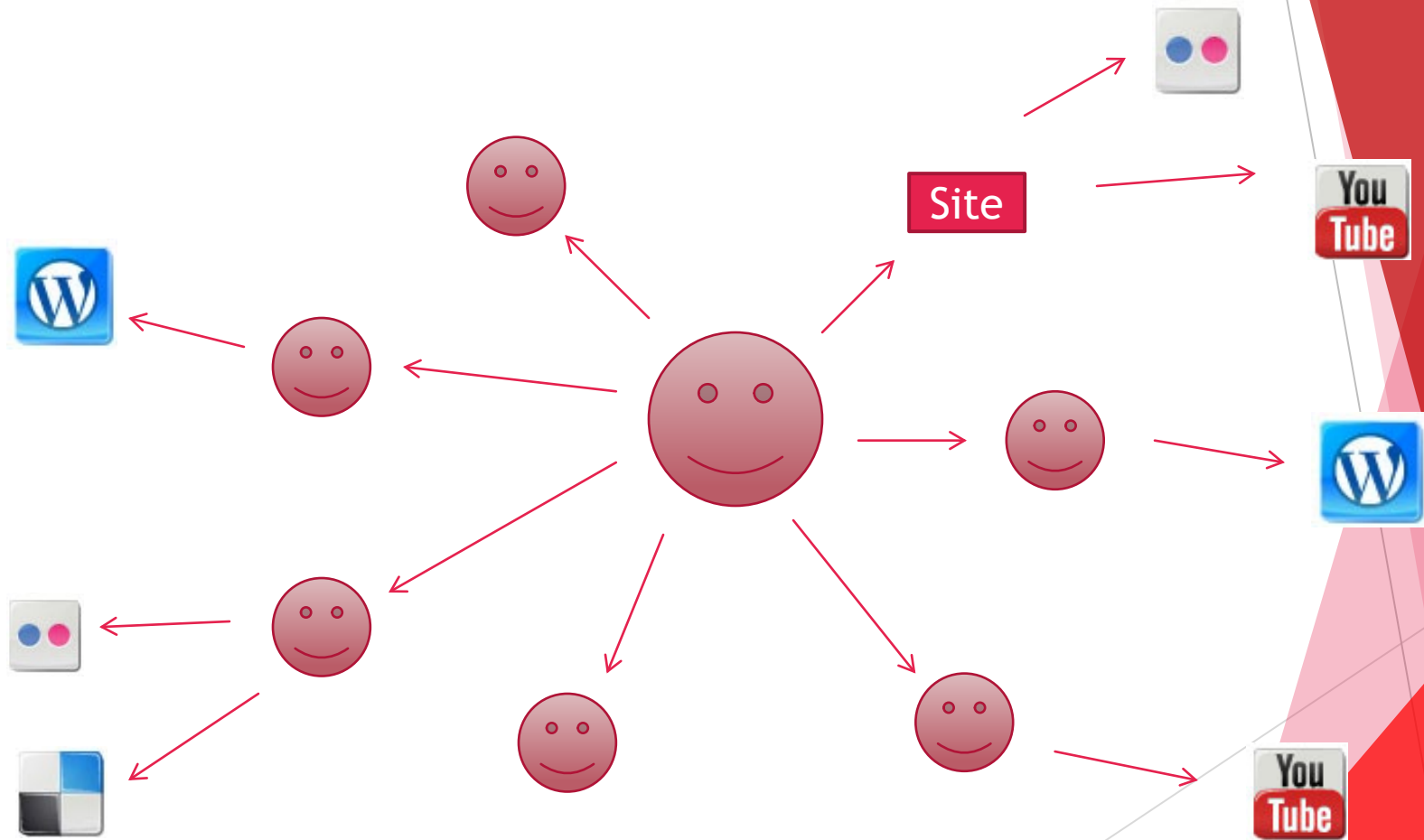
Personal Learning



<http://www.downes.ca/post/58150>

<http://dmlcentral.net/blog/howard-rheingold/diy-u-interview-anya-kamenetz>

The Student's Perspective



A range of different resources and services

LPSS program

Personal Learning and Performance Support

Single point of access to all skills development and training needs

- Individual learning path
- Context-aware support
- Searchable and verifiable
- Tailored to industry needs
- Always available

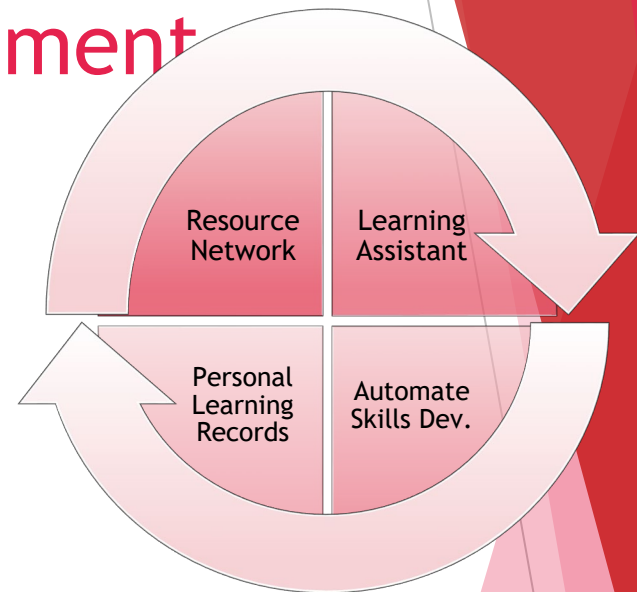


LPSS Program Overview

- LPSS is a \$19 million program over 5 years, average 30 FTEs per year
- Based on hosted services used to develop and monetize core technologies, which are then transferred to commercial receptors
- Will work with Canadian learning technology providers and target verticals to address critical skills shortages in that industry
- Revenues during program execution, with potential for ongoing licensing revenues

Learning and Performance Support System: Core Technology Development Projects

- Learning services network and marketplace
- Automated skills development and recognition
- Lifetime management of learning and training records and credentials
- Personal learning assistant to view, update and access training

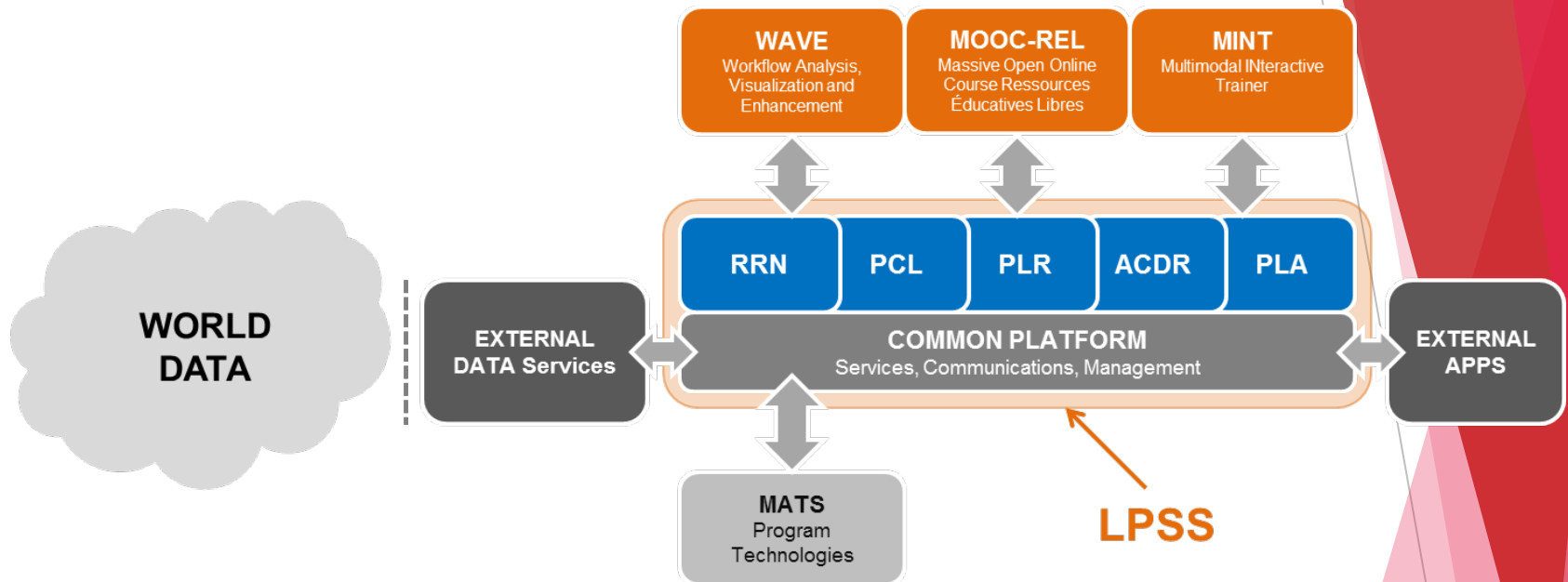


- Learning as a cloud service and deep integration with external systems

Why Is This Difficult?

- ▶ It's not one big thing...
- ▶ ... but a set of many small things
- ▶ Tasks that are simple in an enterprise system...
 - ▶ Like data storage
 - ▶ Like content distribution
 - ▶ Like authentication
 - ▶ Like analytics
- ... become that much more difficult

What is LPSS?

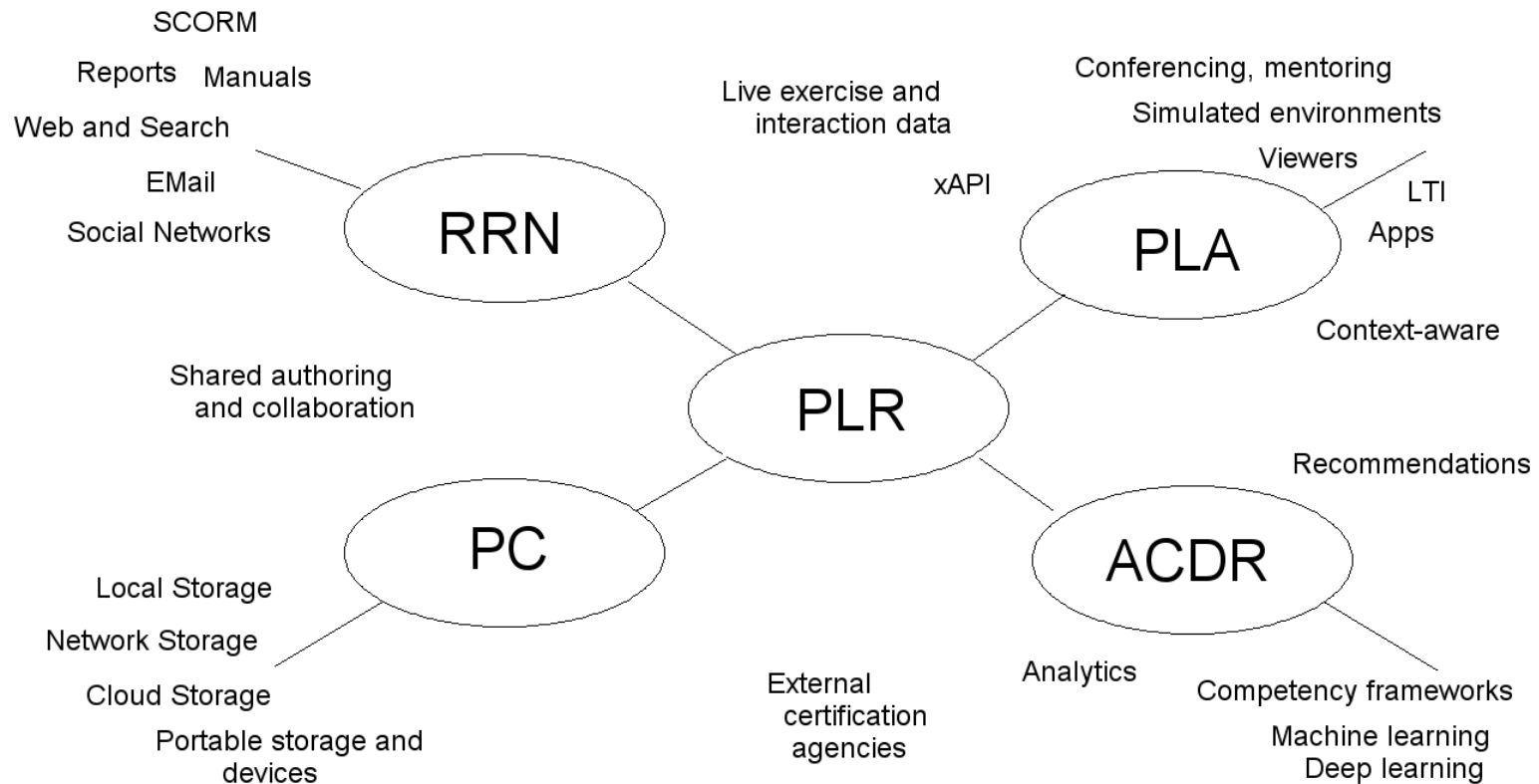


- ▶ It's a network of personal learning environments...
- ▶ ... connected to a large array of learning services

<http://halfanhour.blogspot.com.es/2013/12/learning-and-performance-support-systems.html>

<http://www.nrc-cnrc.gc.ca/eng/solutions/collaborative/lpss.html>

Core Projects, Implementation Projects



Triad Model

- ▶ Students, Teachers, Community = presence
- ▶ Sunshine Project, Slave Lake, Canada
http://www.huffingtonpost.com/stephen-downes/the-role-of-the-educator_b_790937.html
- ▶ Educamp Colombia, Bogota and Medellin
<http://www.irrodl.org/index.php/irrodl/article/view/884/1677>
- ▶ Jaaga - via EdgeX, India <http://jaaga.in/study/>



New Roles for Government

- ▶ Communications and Education Infrastructure
- ▶ Support for Open Educational Resources
- ▶ Support for Free Learning
- ▶ Management of assessments and credentialing



<http://www.downes.ca>

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