

# Models, Technological Resources and Knowledge Management



Stephen Downes

June 21, 2012

# First, Some Context



We also believe that higher education is on the brink of a transformation now that online delivery has been legitimized by some of the elite institutions.

- Rector Helen Dragas on the forced resignation of UvA president

<http://www.deltainitiative.com/bloggers/with-forced-resignation-of-uva-president-we-see-the-biggest-impact-of-moocs>

# Mobile is Here



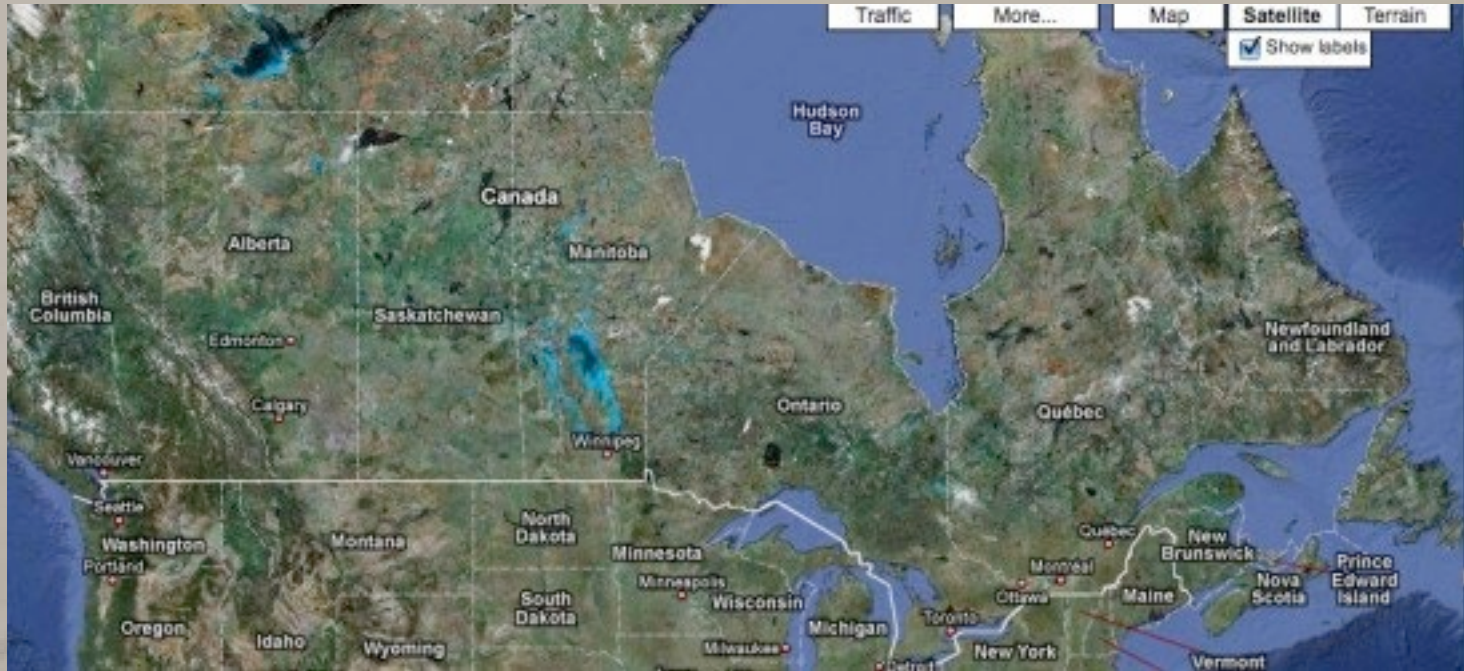
*Juan Lucca, Blackboard*

The use of mobile technologies is disrupting existing models.

For example: your mobile device is now your library. Vendors sell directly to iPad or Kinect. In the same way, they sell music, and courses.



# Online Learning is Here



Canada: just under one million online course registrations equivalent to about 100,000 FTEs

<http://www.tonybates.ca/2012/06/12/the-status-of-online-learning-in-canada-in-2012/>

# Programs Have Been Developed

“This isn’t something that just happened... it is the result of a plan started a number of years ago.”

*Eduardo Jaen, AIG  
Panama*



# Getting on the Change Bus

Academics are not driving the change bus. Leadership in traditional universities has been grossly negligent in preparing the academy for the economic and technological reality it now faces.

-- *George Siemens*



<http://campustechnology.com/articles/2012/06/20/seeking-systemic-change-for-higher-ed-in-a-digital-networked-age.aspx>



# Models



# The Internet is a Model

If you take the idea literally, the whole internet is a model of the world. Or a model of what we think about the world (if there is any difference between the two).





# The Whole Internet



But you have to take it literally. It's the *whole internet* that is the model, not some privileged subset of it, such as the erstwhile semantic web.

# Models Are Hard

Just ask Google. It has tried again and again with the social web – first Orkut, then Google Wave, now Google+ -- None of them are stopping the slow erosion from search to social



<http://rizzoma.com/>

# Real Life



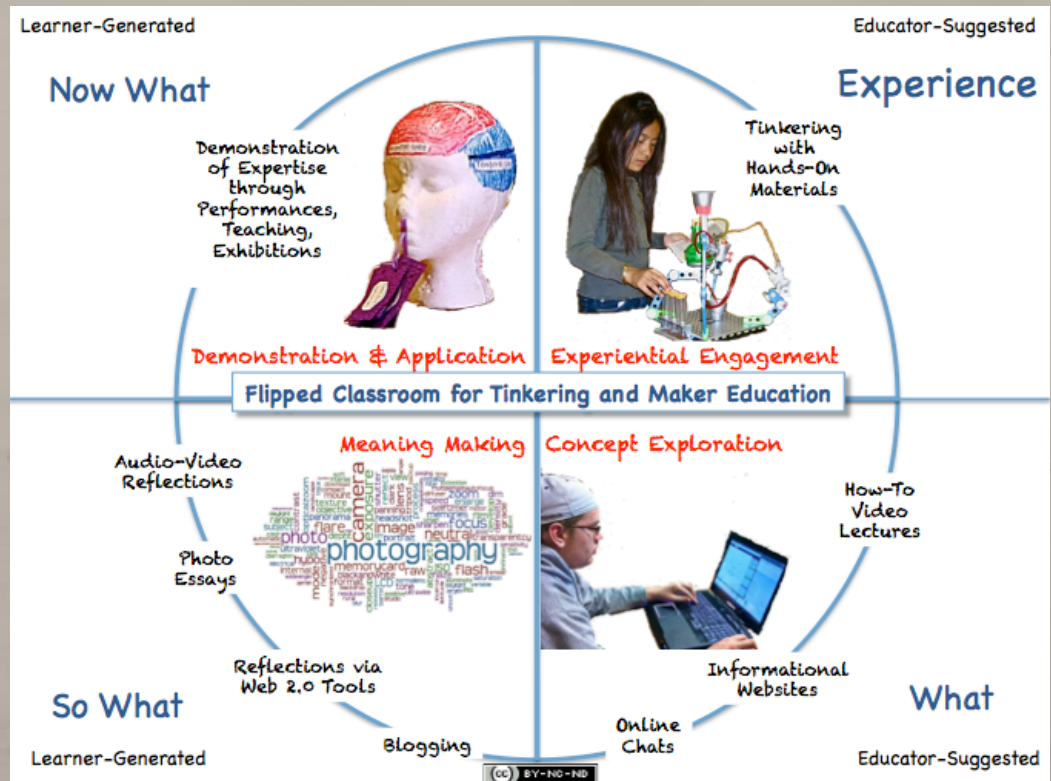
Where's the e-learning? In the video, of course, and the intended audience is the wider community.

<https://www.youtube.com/watch?v=cQZQ7RPQNeM>



# The Flipped Classroom

The school must represent present life—life as real and vital to the child as that which he carries on in the home, in the neighborhood, or on the playground.”



*John Dewey*

<http://usergeneratededucation.wordpress.com/2012/06/16/the-flipped-classroom-the-full-picture-for-tinkering-and-maker-education/>

# MOOC

Massive  
Open  
Online  
Course



# The Blackboard MOOC?



*Curt Bonk*

“I was thinking to myself that there are more people in this one class than I have likely taught 23 years of teaching in higher education.... If teaching is a calling, than a MOOC may be the ultimate such calling—at least today.”

<http://travelinedman.blogspot.com/2012/06/unabridged-interview-on-mooc-for.html>



# The MOOC 'Model'

Massive for massive's sake is a red flag. In ds106 we scale fractally not arithmetically – Alan Levine



<http://worstprofessorever.com/2012/06/18/udacity-pearson-moocs-and-the-rest/#comment-4340>

<https://www.coursera.org/>

# Learning Ecologies

A set of contexts made up of configurations of activities, materials, resources and relations generated in physical or virtual spaces, which provide opportunities for learning.

-- Barron, 2004



*Albert Sangra, UO Catalunya*

# Technological Resources





# Why Digital Editions?

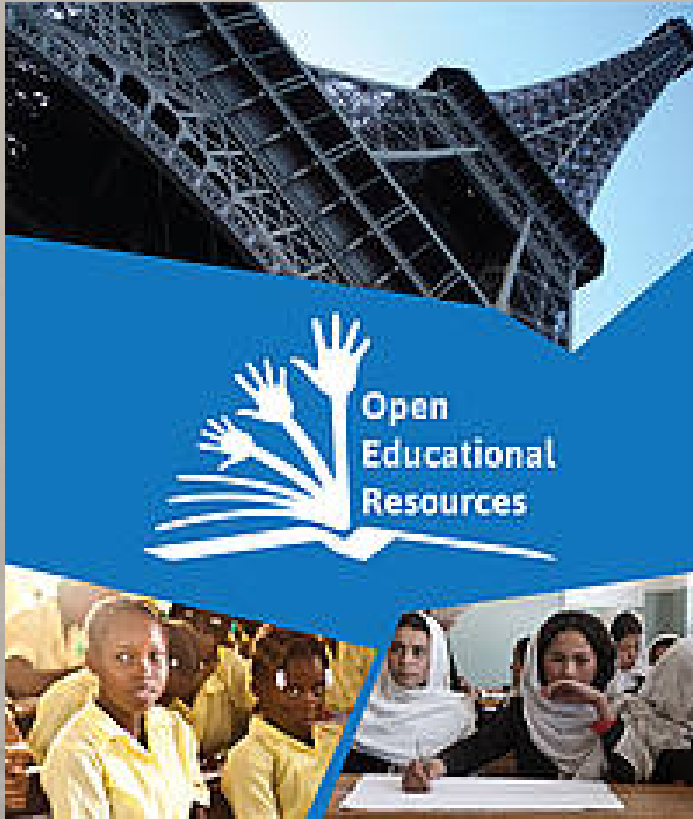


As we progress from printed texts to eBooks to online courses, the types of content will become indistinguishable

And they will be very affordable

*Rafael Rangel Sostmann*

# As We Speak...



“Is the textbook dead?  
The model of selling  
learning materials for  
profit is quickly becoming  
obsolete in today’s online  
world.”

<http://www.unesco.org/new/en/communication-and-information/resources/news-and-in-focus-articles/all-news/news/world-open-education-resources-congress/>

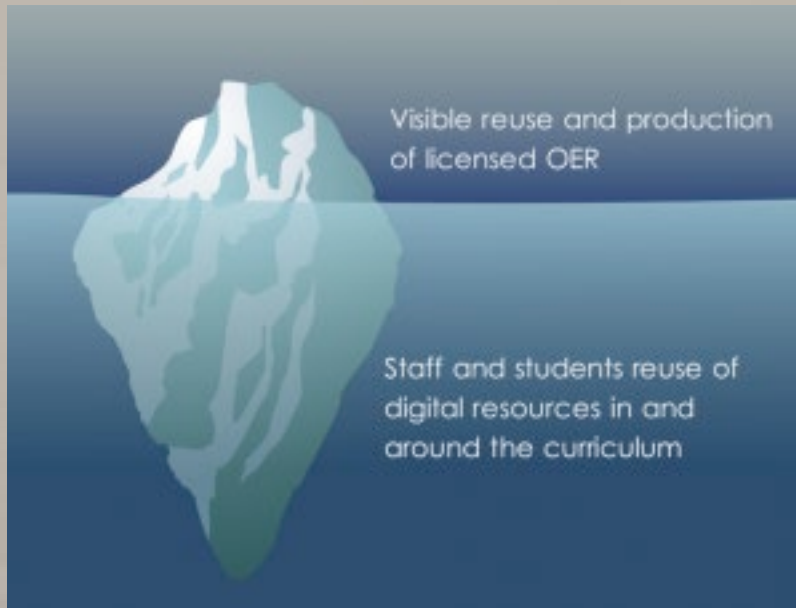
# Online Resources Will Be Open

Online *contents* – and this also includes software, to a large degree – will be open. Even our friends from Blackboard have acknowledged this, with their purchase of assets like MoodleRooms.





# The OER Iceberg



<http://jennymackness.wordpress.com/2012/06/14/open-educational-resources-and-pedagogy/>

- those above the water-line, visible, above board, properly licensed
- or those below the water line – where licensing is not so important.

# The Open Protocol



“With open graph, your app becomes a part of the user’s identity and social graph. Through a single API, you can deeply integrate into the key points of distribution on Facebook: timeline, app views, news feed, and ticker.”

<http://developers.facebook.com/docs/opengraph/#types>

# Capturing the Process

I've always felt, first, that whether or not to record one's work should remain a personal choice, but second, that everyone should do so.



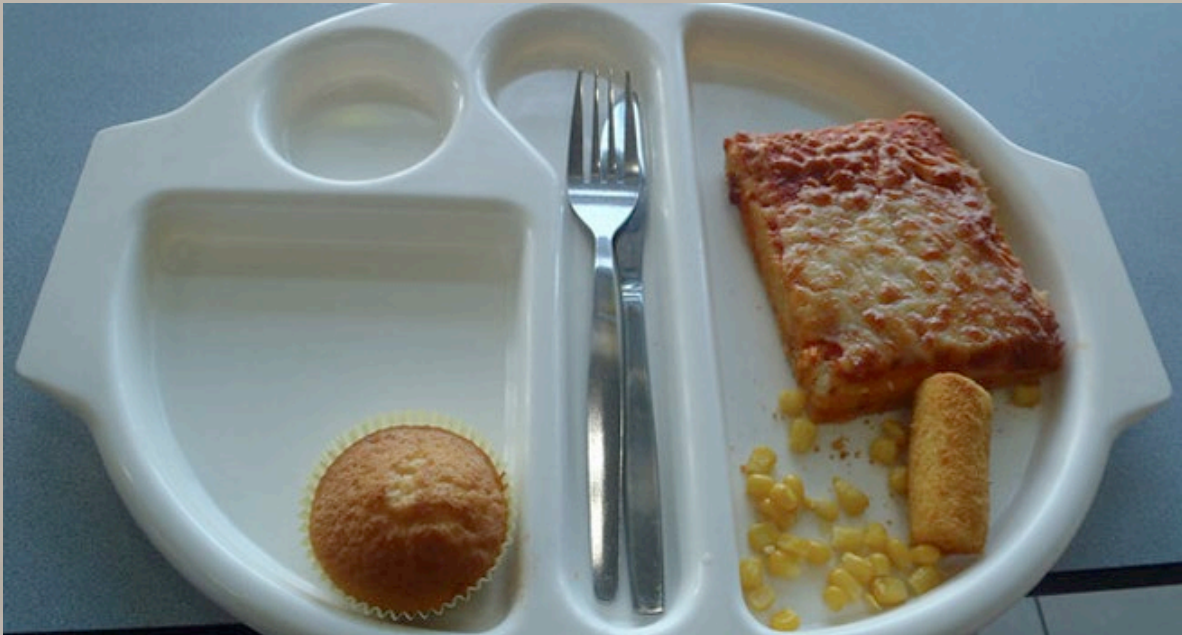
<http://www.downes.ca/post/58412/rd>



# Knowledge Management



# Real Life

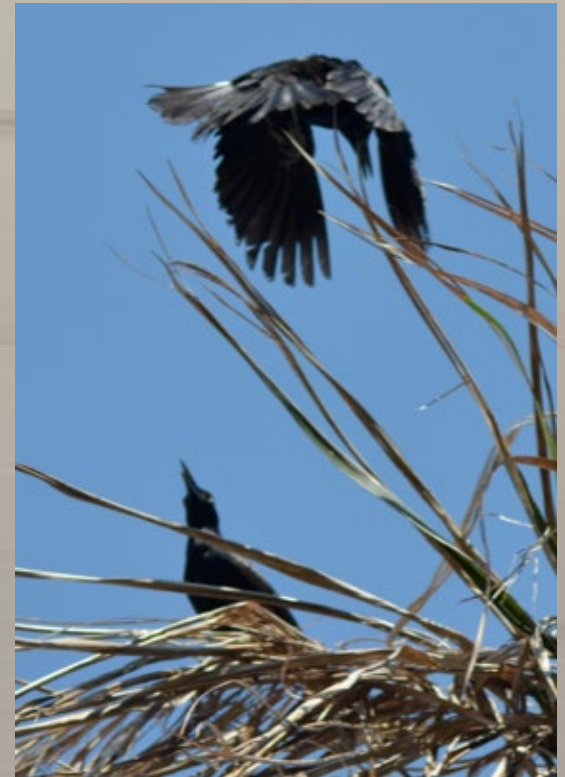


Her school has decided that it will no longer allow its food to be photographed

<http://www.wired.com/wiredscience/2012/06/neverseconds-shut-down/>

# Why Knowledge Management Doesn't Work

The same principle the transistor works on – a very small energy can leverage a very large energy



<http://www.howtogeek.com/116890/grams-to-pounds-a-domino-chain-reaction-video/>



# Murmuration

What this looks like when you have more than one domino. You can no more 'manage' knowledge than you can 'lead' a flock of birds

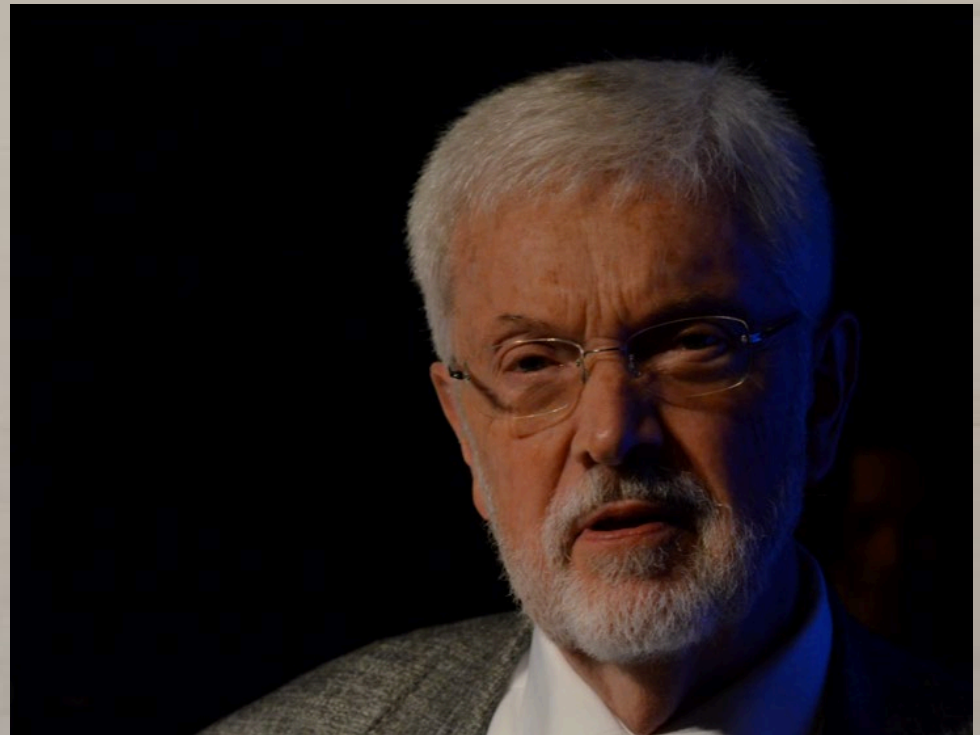


<http://www.youtube.com/watch?v=V71hz9wNsgs&feature=related>

# Education vs Catastrophe

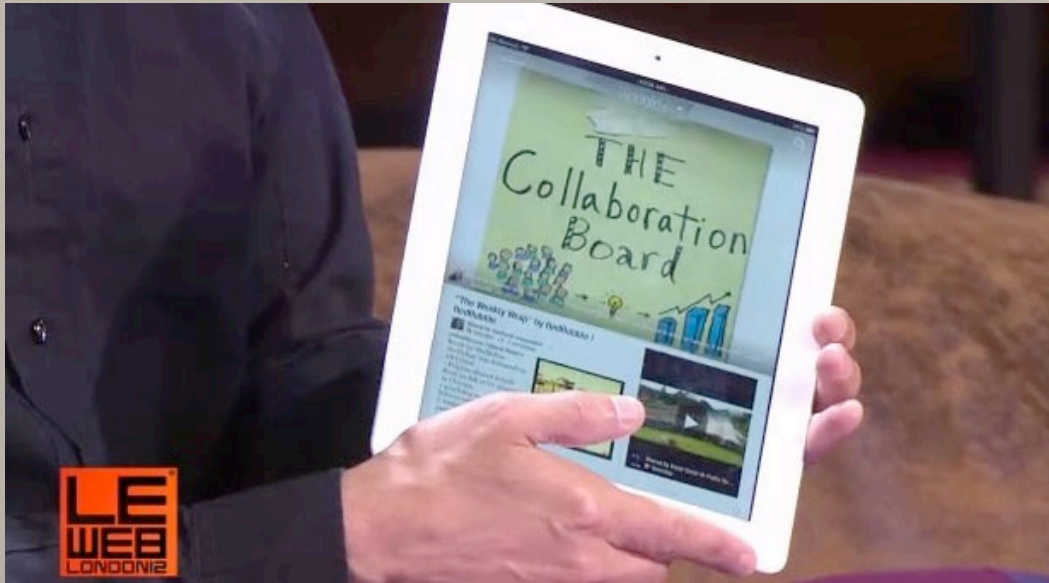
A common  
objective – an  
educational system  
attainable to all to  
avoid catastrophe

But (cf Ostrom) we  
can't *manage* our  
way forward



*William H. Graves*

# Collaboration: This is Old



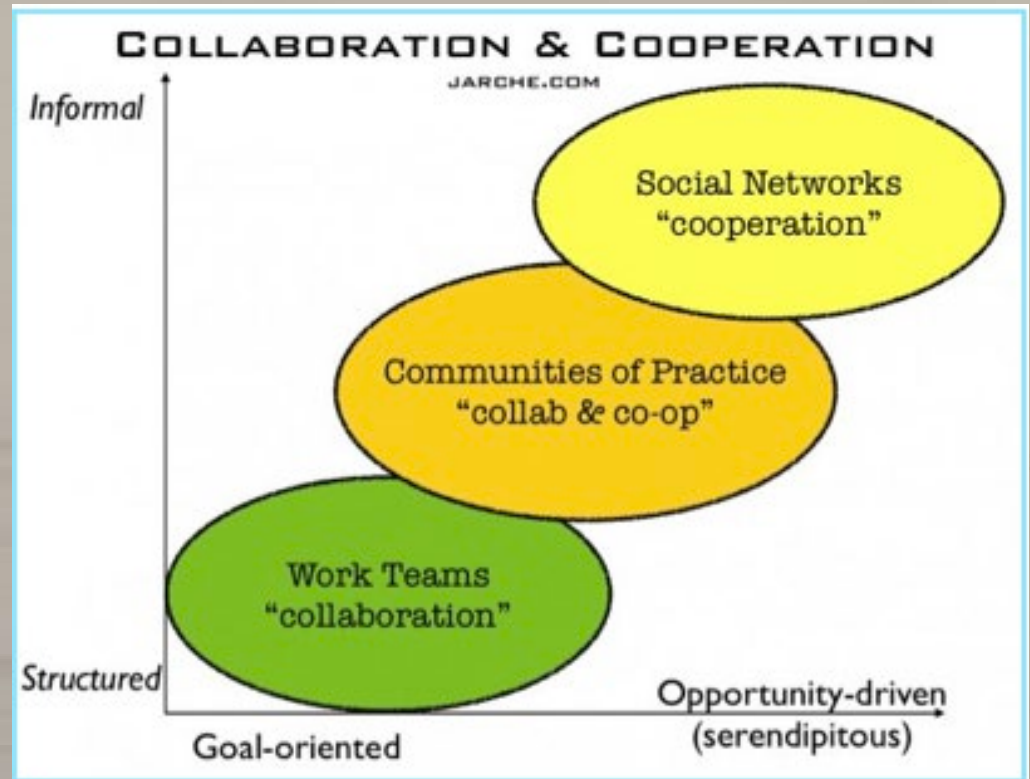
A model based on a closed ecosystem and proprietary interface - no data in, no data out

[http://news.cnet.com/8301-1023\\_3-57455826-93/flipboard-becomes-prominent-google-partner/](http://news.cnet.com/8301-1023_3-57455826-93/flipboard-becomes-prominent-google-partner/)

# Cooperation: The New

Cooperation is also necessary, but it's much less controllable than our institutions, hierarchies and HR practices would like to admit.

*Harold Jarche*



<http://www.jarche.com/2012/06/in-networks-cooperation-trumps-collaboration/>



# Valve



An organization with no managers, with self-organizing groups, and a workforce that decides for itself what it will do

<http://www.techspot.com/news/48303-valves-new-employee-handbook-is-chock-full-of-awesome-read-it-now.html>

# Analytics are not Local

Knowledge management has been replaced with 'analytics' – but what sort of analytics?

“Twitter is the main way our posts are being shared.

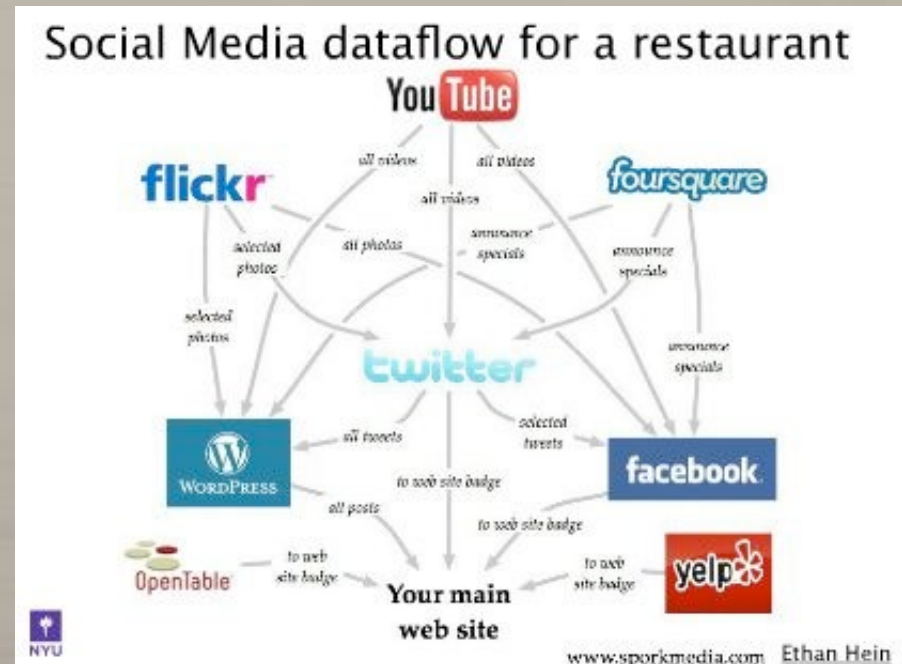
Linkedin comes in second with Delicious and Google+ (following).”

An Educational Positioning System? (Graves)



# The Course Web

Downes's law of MOOCS: if it isn't a course web, it isn't a MOOC



<http://www.pontydysgu.org/2012/06/social-learning-glue/>

# Our Next Course



What is role of the academy in increasing national economic competitiveness while preserving the “vital combat for lucidity” that defines an open democratic society?

<http://edfuture.net/>





Thanks  
@verarex

<http://t.co/MoSdTLgA>

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<http://www.downes.ca>