

**Stephen Downes** MoodleMootUY, Montevideo, Uruguay November 22, 2012

### Title: The LMS and the MOOC

• Abstract: With the widespread adoption of the massive open online course (MOOC) over the last year, questions are now being raised about the role of a learning management system (LMS) such as Moodle. Where previously the focus was on the management of course materials and cohorts progressing according to predefined objectives and curricula, the learning environment of the future is more open-ended and less overtly managed. In this talk Stephen Downes, one of the originators of the MOOC format, describes the differences between types of MOOCs, compares them to the LMS, and outlines the changes LMSs such as Moodle are looking at in the future.

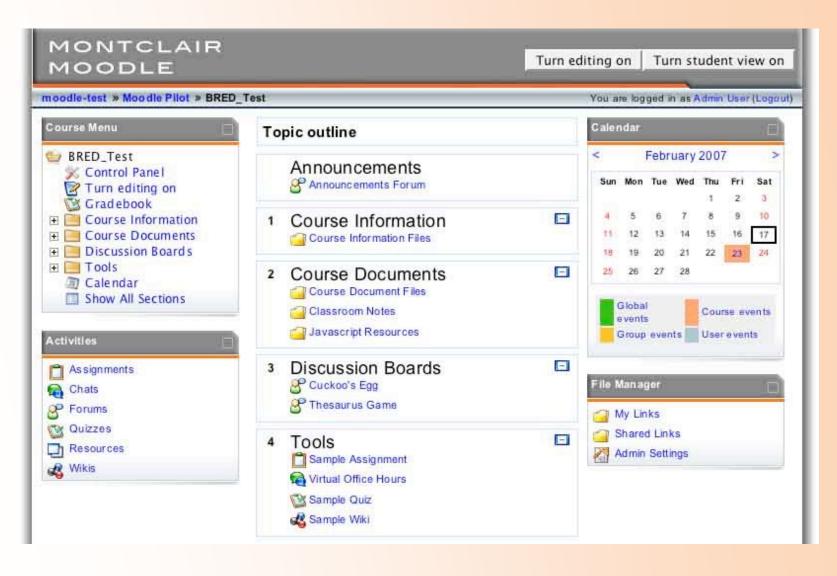
- 1. The Classic Model
- 2. A bit about MOOC Structure
- 3. The Connectivist Courses
- 4. Improving MOOCs
- 5. Reconceptualizing MOOCs
- 6. The Education Platform



## 1. The Classic Model



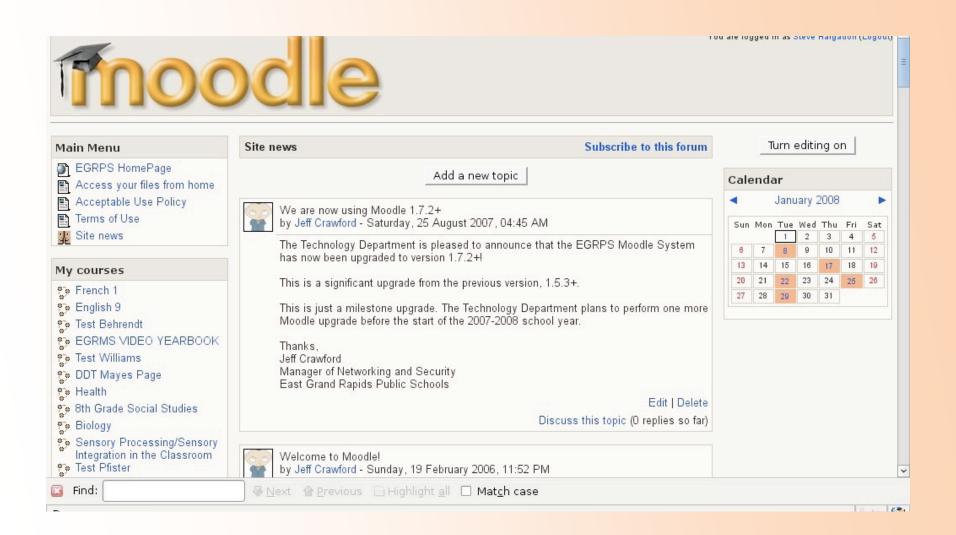
# A Typical Course



### The Classic Model

- Objectives / Competences
- (Pre-test or warmup)
- Presentation of content
- Learning Activity
- Discussion / Reflection
- Evaluation or Assessment
- Reflection

### **Discussion List**



### Characteristics

- Managed enrollment
- Linear structure
- Organized local content
- Set curriculum to be remembered
- Competitive assessment
- Knowledge as constructed or created

## 2. A bit about MOOC Structure



# The MOOC Experience



#### Contents

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#### Participating

Listen to Audio
Join a Backchannel Chat
Read Discussion Threads
Read Daily Newsletter
Newsletter Archives

# Welcome to Change: Education, Learning, and Technology!

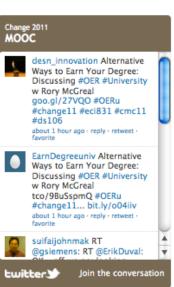
The Massive Open Online Cource (MOOC) #change11

#### [To Register for this Course, Click Here!]

Being connected changes learning. When those connections are global, the experience of knowledge development is dramatically altered as well. Over the past four years, a growing number of educators have started experimenting with the teaching and learning process in order to answer critical questions: "How does learning change when formal boundaries are reduced? What is the future of learning? What role with educators play in this future? What types of institutions does society need to respond to hyper-growth of knowledge and rapid dissemination of information? How do the roles of learners and educators change when knowledge is ubiquitous?"

Experimenting with answers to these questions has produced what is now called "massive open online courses" or MOOCs. Three of us - George Siemens, Stephen Downes, and Dave Cormier - have had over 10,000 participants in the various courses we've run since 2008. The learning experience has been terrific. We've refined our pedagogical approaches, improved the software (well, actually, just Stephen did that), and developed a research agenda around learning in networks in open online courses.

We've always been a bit uncomfortable being the sole facilitators of open courses - knowledge, after all, is networked. To grow knowledge is to grow connectedness and diversity.



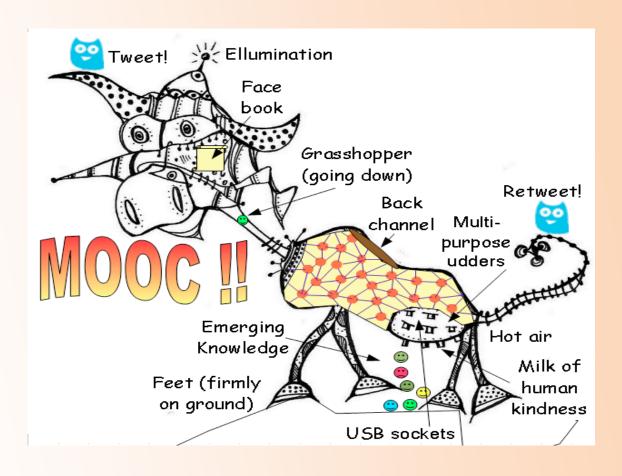
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## Open



Mix of levels – novice and experienced

### The network structure



http://cor-ar.blogspot.in/2012/03/two-distinct-course-formats-in-delivery.html

# Aggregation – bringing together



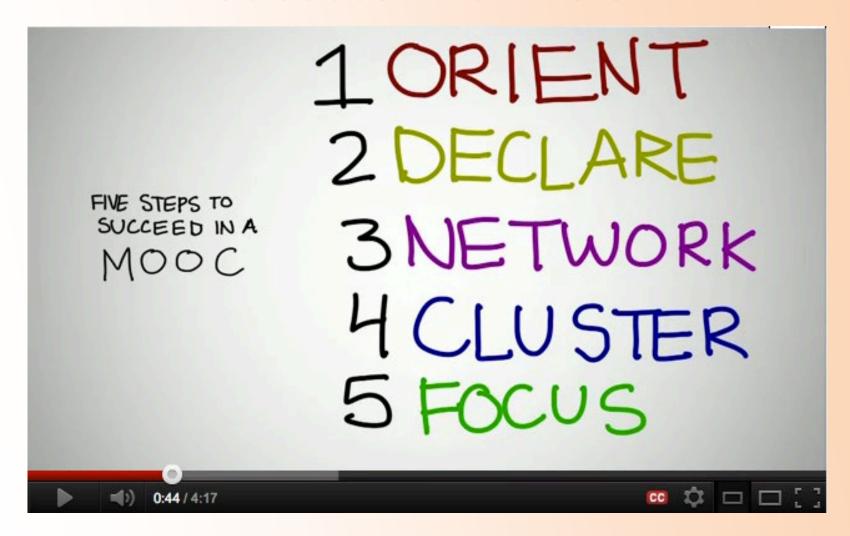
### The abundance of content

- Some analogies:
  - following football there are more games in the world than you could possibly watch
  - recipes there is more food int eh world than you could possibly eat, more ways of eating food than you could experience in a lifetime
  - places to visit the world is vast, ou cannot possibly see everything

## Social versus Solo



### Success in a MOOC



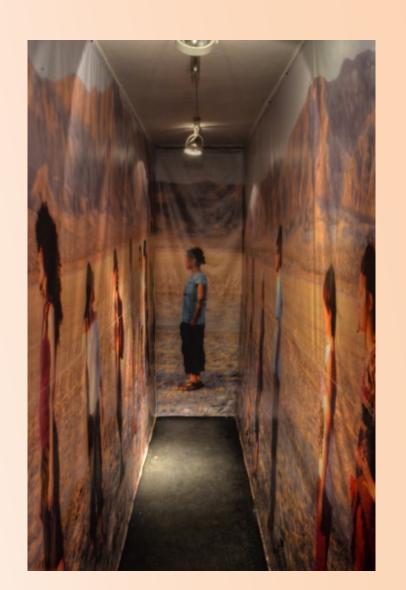
### Self-Education

Bates: "They belong philosophically within the context of thinkers such as R. H. Tawney, Ivan Illich and Paulo Freire, who believed strongly in self-education, as part of their broader socialist views on equality, the need to open access to knowledge, and to educate the workers in order to break the existing hegemony, etc."

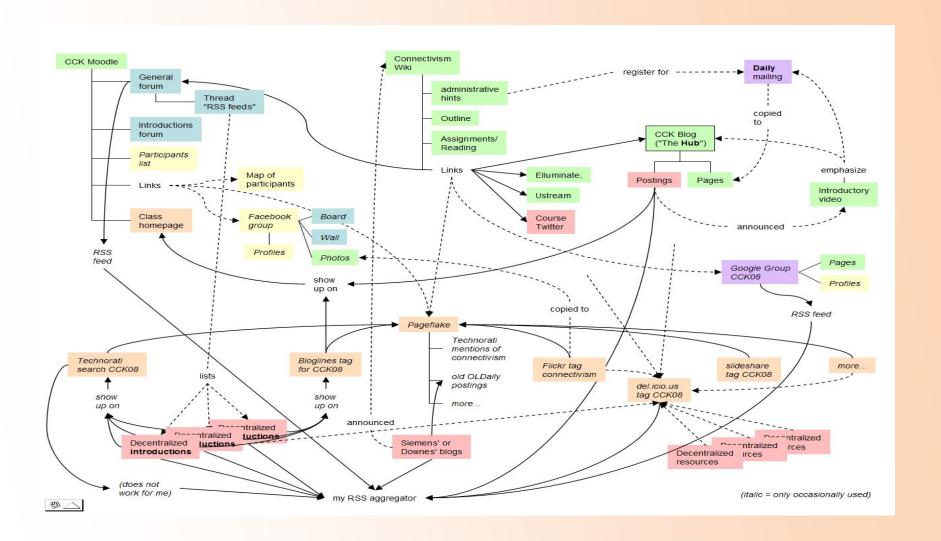
http://www.tonybates.ca/2012/03/03/more-reflections-on-moocs-and-mitx/

# Knowledge as Grown

There is a contrast between knowledge as something that is acquired, ingested, retained, remembered, and knowledge that is something that is grown as a response to experience rather than as a representation of it



## 3. The Connectivism Courses



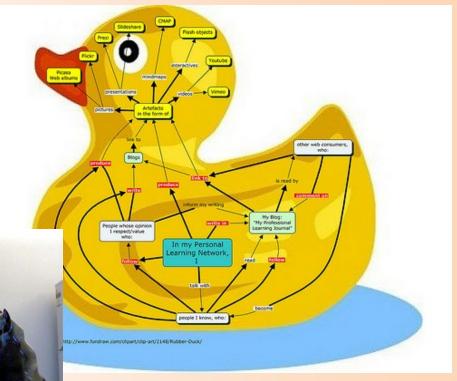
http://connect.downes.ca

http://www.mooc.ca

http://cck11.mooc.ca

http://change.mooc.ca

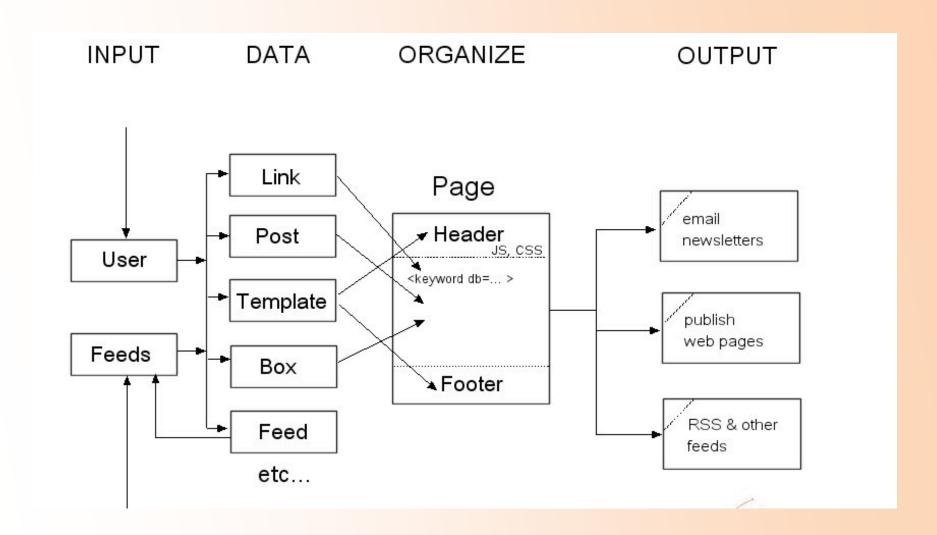
http://edfuture.mooc.ca



http://suifaijohnmak.wordpress.com/2011/03/10/cck11-how-to-explain-connectivism-moocand-plepln/

### The Connectivism Courses

# gRSShopper



### Feeds

### Connectivism and Connective Knowledge 2011

home about contact

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#### List feeds

Listing 0 to 1000 of 179 feeds

- [Harvest] [Retire] [Edit] [Delete] Links: #CCK11 OR CCK11 OR Connectivism Twitter Search (edubloggers)
- [Approve] [Edit] [Delete] Links: @bigenho Twitter Feed (category)
- [Harvest] [Retire] [Edit] [Delete] Links: A Chronicle of a Learning Journey (edubloggers)
- [Harvest][Retire] [Edit] [Delete] Links: A Learning Quest (edubloggers)
- [Harvest][Retire] [Edit] [Delete] Links: A Point of Connect (edubloggers)
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- [Harvest][Retire] [Edit] [Delete] Links: amaniram (edubloggers)
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- [Harvest][Retire] [Edit] [Delete] Links: Autoria coletiva (edubloggers)
- [Harvest][Retire] [Edit] [Delete] Links: Özlem Ozan (edubloggers)
- [Harvest][Retire] [Edit] [Delete] Links: <u>barbaramworks</u> (edubloggers)
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- [Harvest][Retire] [Edit] [Delete] Links: Before it is too late (edubloggers)
- [Harvest][Retire] [Edit] [Delete] Links: Best content in CCK2011 | Diigo Groups (edubloggers)
- [Harvest] [Retire] [Edit] [Delete] Links: binzeh (edubloggers)
- [Harvest][Retire] [Edit] [Delete] Links: BLOGGING USING WER 2.0 AND SOCIAL MEDIA IN XXI CENTURY

# Feed Management

### Connectivism and Connective Knowledge 2011

home about contact

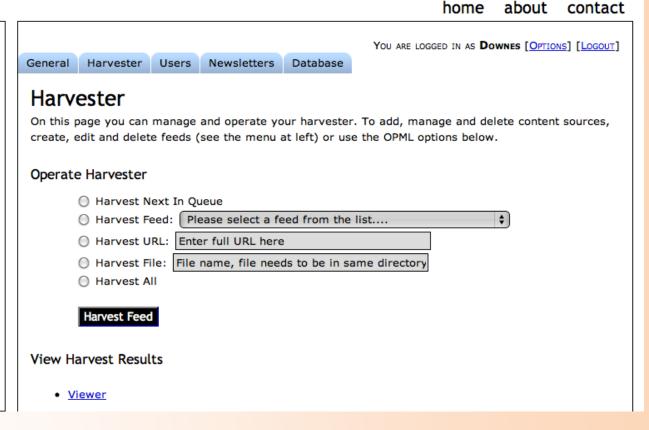
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Creatorname	Gillian Palmer		
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Html	http://learningandqualifications.wordpress.com		
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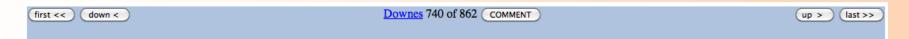
### Harvester

### Connectivism and Connective Knowledge 2011

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### Viewer



#### Are you MOONing or MOOCing?

Source: Janus, by Susan O'Grady. noreply@blogger.com (Pandora) A cynic is simply a disillusioned idealist

Date: March 20, 2011

#### Description

While belatedly establishing some links in my MOOC <u>Live Binder</u>, I returned once again to the eminently practical, critically thinking, <u>Sean Fitzgerald's Blog</u> where he ruminated on the Semantic challenges of courses, PLEs, PLNs. learning etc.

".....From the beginning of this course I stated (I'm baaaack! And I'm reviving this blog for the PLENK2010 MOOC) that my intention was to explore how we can use the MOOC model and principles to engender the "large-scale and rapid social transformations I believe we need in this time of change, challenge and crisis. (I'm not so much interested in the content of #PLENK2010 – PLEs & amp; PLNs – as I am in the process.)..."

#### and

"..... If the goal is to extend the MOOC model beyond a strict learning or education focus then shouldn't we come up with another name for it? Wouldn't calling it a "course" hold it back from its full potential? Suggestion? What about Massive Open Online Network? (MOON) or Massive Online Network (MON), since it's only open in relation to historically closed courses anyway? Or what about Massive Network (MN), since the "online" is a given and therefore superfluous? What about just Network, as they can be small or large, depending on need? Does it really even need a name?......"



#### 

#### which directed me to:

Cris Crissman's comment on Sean's blog directed me to Ulises Mejias blog. He suggests:

The lack of a critical approach to understanding digital networks is partly due to the fact that most analyses have theorized the digital network only from within (what I call a 'nodocentric' approach), while I am also interested in looking at the social, political and economic impact of the digital network as it looks from the outside (except that in networks, the outside is everywhere)

### Commenter

### Connectivism and Connective Knowledge 2011

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#### **Participating**

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Read Daily Newsletter

Newsletter Archives

**Browse Blog Posts** 

Add a New Blog Feed

View List of Blogs

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Edit Post				
Full text of the link you are commenting on is located below the form				
Title	#CCK11: Earning a Place in the Network			
Link	http://idst-2215.blogspot.com/2011/03/cck11-earning-place-in-ne			
Journal	1154 - Communications & Society			
Author	keith.hamon			
Description				
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### Newsletter

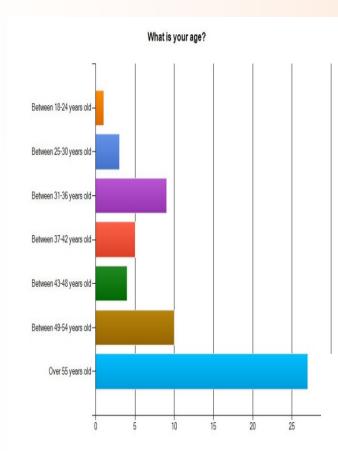
### Connectivism and Connective Knowledge 2011

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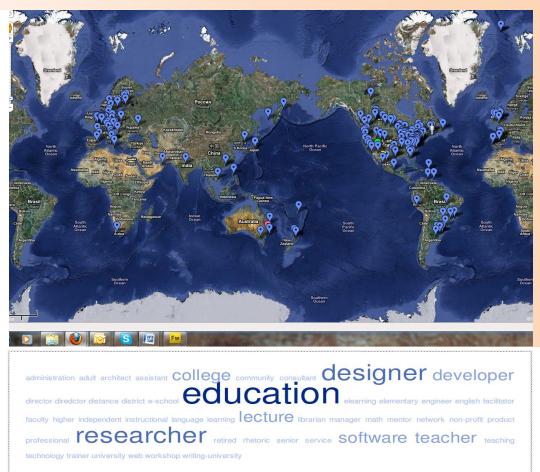
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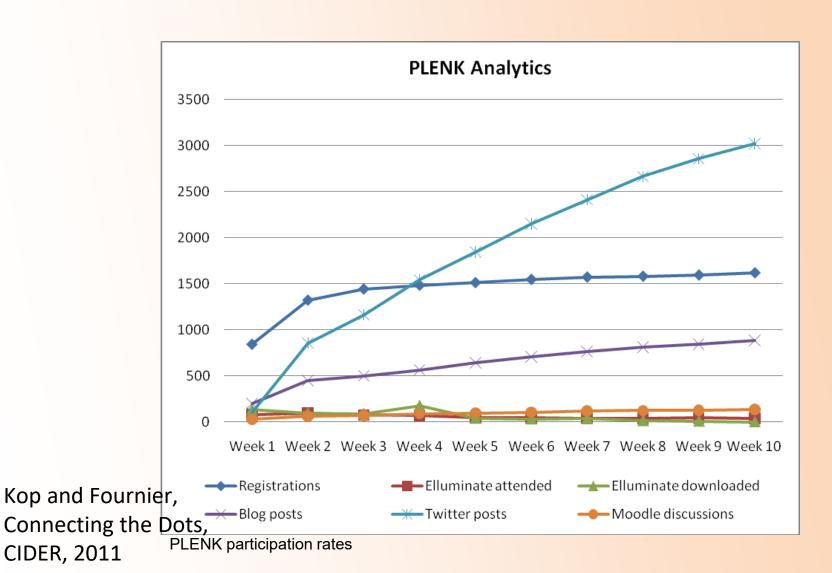
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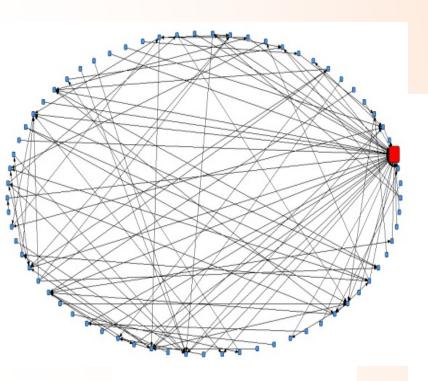
 Publish to Twitter
 Publish RSS
 Update Record Code ab=post;number=30;type=iink;source=aamin;tormat=iink\_email;expires=40; all;sort=crdate DESC> <h2>Participants' Blog Posts</h2> This is a list of the blog posts mentioning the CCK11 keyword or tag harvested from the list of blogs submitted by participants. <br/>
<br/>| <a href="http://cck11.mooc.ca/cgi-bin/page.cgi?action=viewer">Browse all Blog Posts</a>| <keyword db=link;title,description,category,content~cck11;expires=40;truncate=500;all; type~html;format=email;sort=crdate DESC>



Kop and Fournier, Connecting the Dots, CIDER, 2011

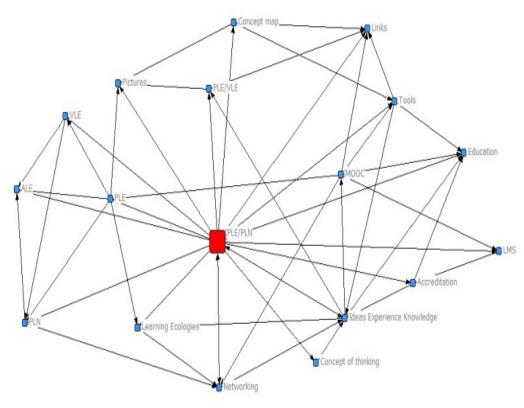




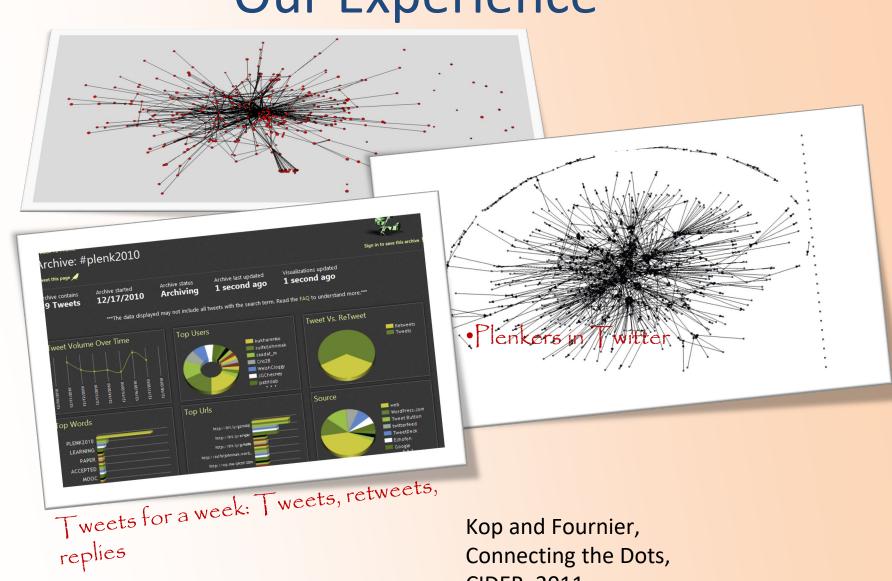


The complex network a facilitator's post generated

Kop and Fournier, Connecting the Dots, CIDER, 2011

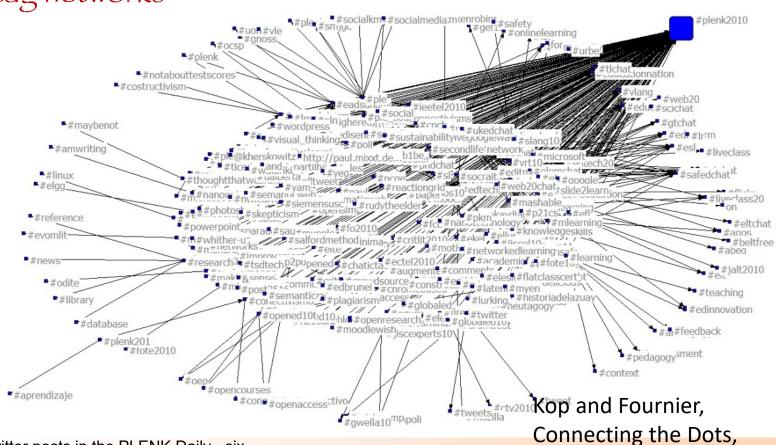


Relationships between topics in a discussion in week 1



Kop and Fournier, Connecting the Dots, CIDER, 2011

Twitter PLENK connections to hash-tag networks



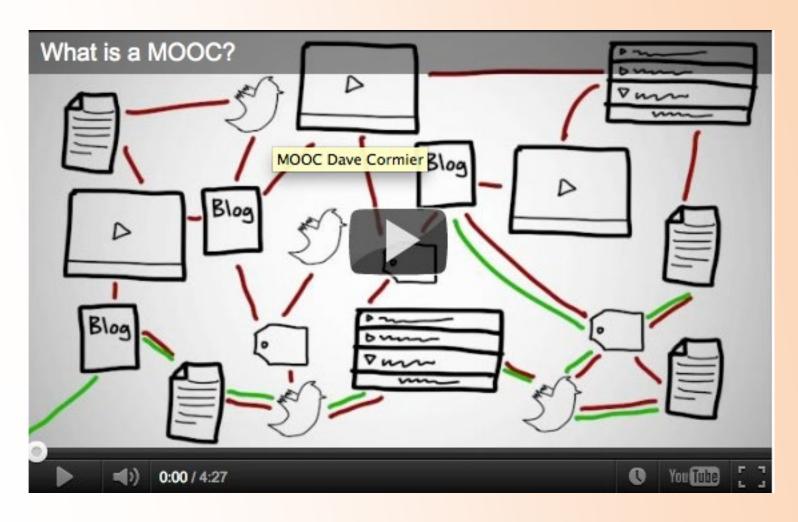
CIDER, 2011

#tags related to Twitter posts in the PLENK Daily - six weeks duration

# 4. Improving MOOCs

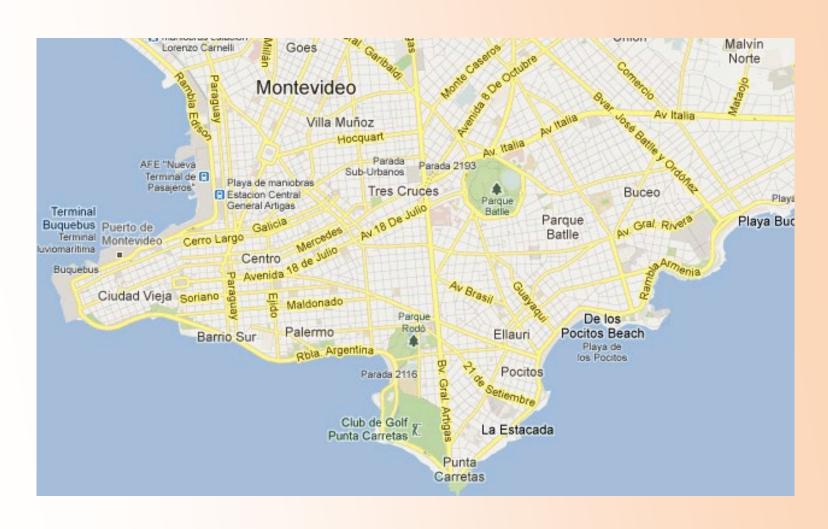


# The Bootstrap Problem

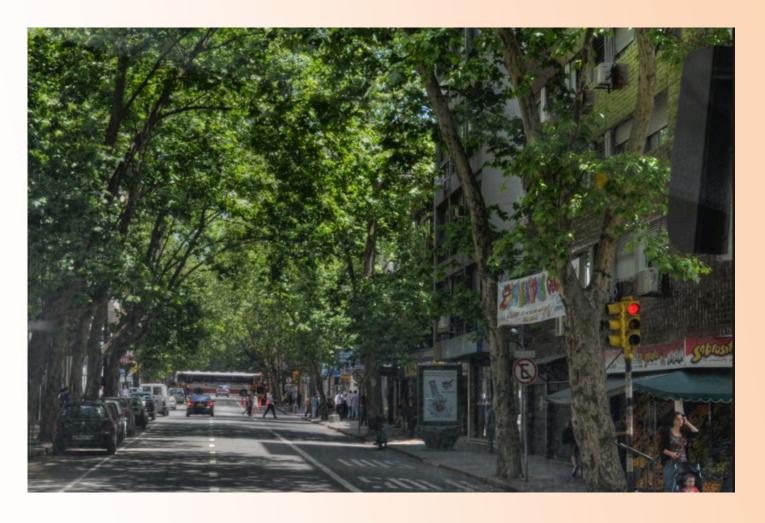


http://www.tonybates.ca/2012/03/03/more-reflections-on-moocs-and-mitx/

# Navigation



#### Size versus Connectedness



Lisa Chamberlin and Tracy Parish
<a href="http://elearnmag.acm.org/featured.cfm?aid=2016017">http://elearnmag.acm.org/featured.cfm?aid=2016017</a>

# Elitism



#### Effectiveness



What is learning if it isn't learning content?
 How can we assess it, credentialize it?

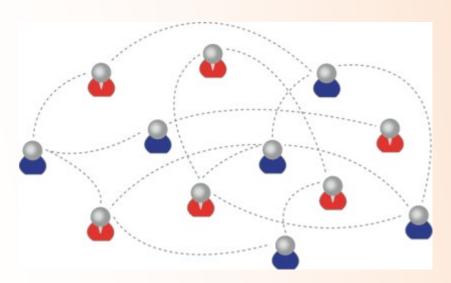
#### Assessment and Analytics

It makes no sense to rely on quizzes and tests

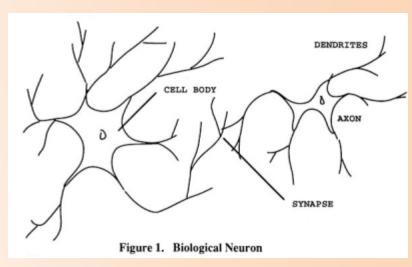


- Big Data, Web of Data, Semantic Web, RSS, Geo, FOAF...
- Mash-ups, APIs, the Cloud, Social Network

#### Learning Outcomes



We are using one of these



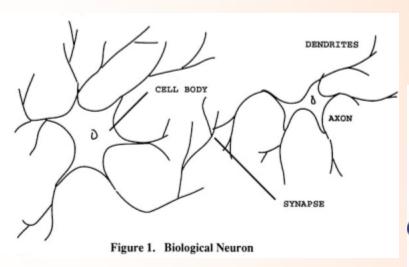
To create one of these

Personal knowledge consists of *neural* connections, not facts and data

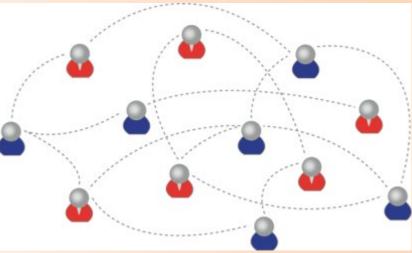
#### Learning Outcomes

- Learning a discipline is a total state and not a collection of specific states
- It is obtained through *immersion* in an environment rather than acquisition of particular entities
- It is expressed functionally (can you perform 'as a geographer'?) rather than cognitively (can you state 'geography facts' or do 'geography tasks'?)

#### **Learning Outcomes**



We recognize this



By perfomance in this

There are not specific bits of knowledge or competencies, but rather, personal capacities (more on this later)

## 5. Reconceptualizing MOOCs



#### Open

- everybody can participate but more importantly, there are many ways to participate
  - 'open' means being able to watch
  - 'open' means being able to participate at your own level
  - 'open' means participating publicly, so others can watch

#### Online

- means that it is connective, interactive
- You can't put a MOOC on a DVD
- The MOOC is the process
- It is a process that is greatly aided by being online
  - many tasks are automated, scaffolded
  - much greater communicative capacity
  - more access to data, calculations

#### Connective

- To the extent that a MOOC is about content, the MOOC fails
  - it's like confusing the learning of a game, or the playing of a game with memorizing the rules of a game
  - it's like confusing enjoying food and knowing how to cook with the memorization of recipes
  - it's like confusing the experience of travel with knowing where things are on a map

#### Restating the Problem

- our MOOCs are insufficiently connective, and tend to slip toward an emphasis on content
  - the form of connectivity online conversation is at once too simplistic and too complex
  - looking for other ways to connect eg., artwork (a la ds106) or activities/projects (but these have been *very* poorly defined in our courses)

#### Rediscovering Process

- As we fail to provide process, the courses revert to their old ways
  - people think the course is about the content
  - they gravitate toward dependence on the leadership, and away from personal participation
- It's not that we don't scaffold enough, it's that there are not opportunities for participants to 'play'

#### MOOC, Meet Game

- The MOOCs we have offered have been very high level, involving professional presentations and conversations – but what would a MOOC look like for a 10-year old?
- My answer: it would look like a game



### Searching for Chess Net





Chess.net

http://www.chess.net

#### **Budget Simulators**

#### Choices NEXT

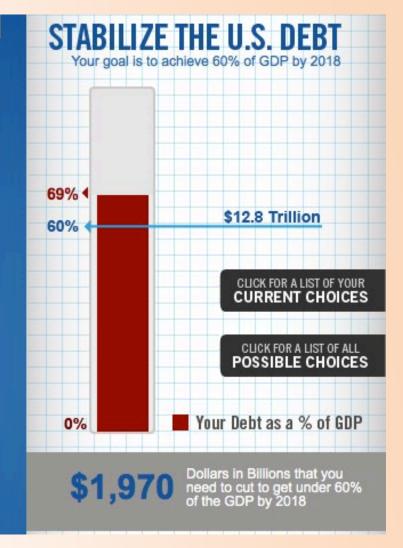
baseline as well as figures for many options and added sults. Try it even if you have done the simulator before.

#### YOUR CHALLENGE:

Stabilize the U.S. Debt at 60% of GDP by 2018.

To begin the simulation, click the "Next" button above. There are 8 categories where your choices will affect the debt. Negative numbers next to a choice indicate how much the debt will be reduced, positive numbers add to the debt. Use the "Next" and "Back" buttons to navigate to each section; do not use your browser's navigation arrows. Click the "Done" button when finished making all the choices you want. The bar graph on the right will chart how your choices affect the debt-to-GDP ratio relative to the 60% goal. Visit the FAQ page for more on how the game works.

For more information on any choice simply click the icon to the left of that choice.



http://crfb.org/stabilizethedebt/

## What's Wrong With The Simulators

- they try to 'teach' but instead become propaganda
- they reduce complex problems to simple fixes



#### 6. The Education Platform



## Critiquing the games



http://www.downes.ca/post/57523

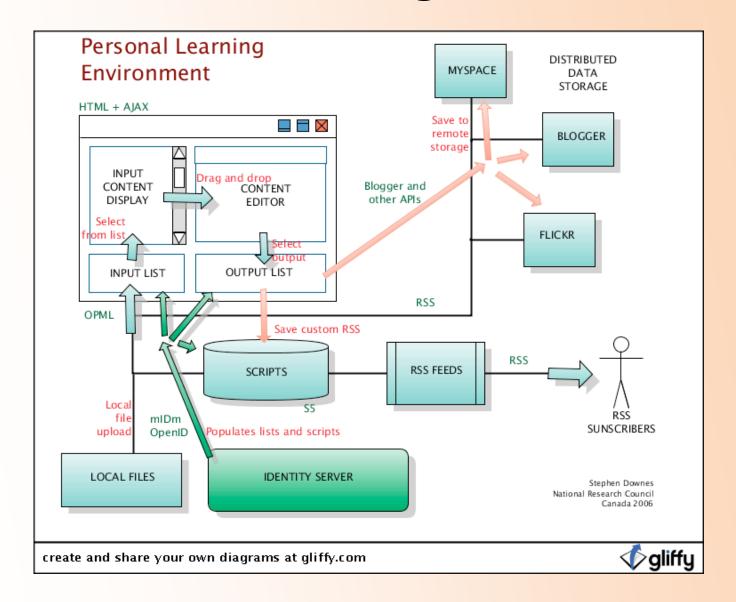
# The Paucity of Badges



## The Emptiness of Analytics

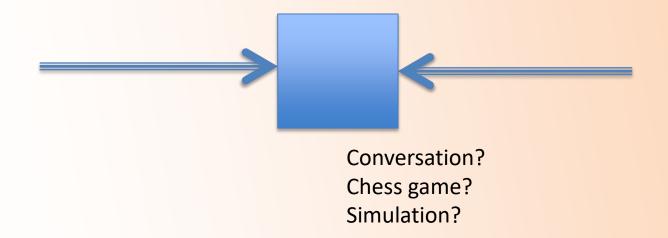


### Personal Learning Environment

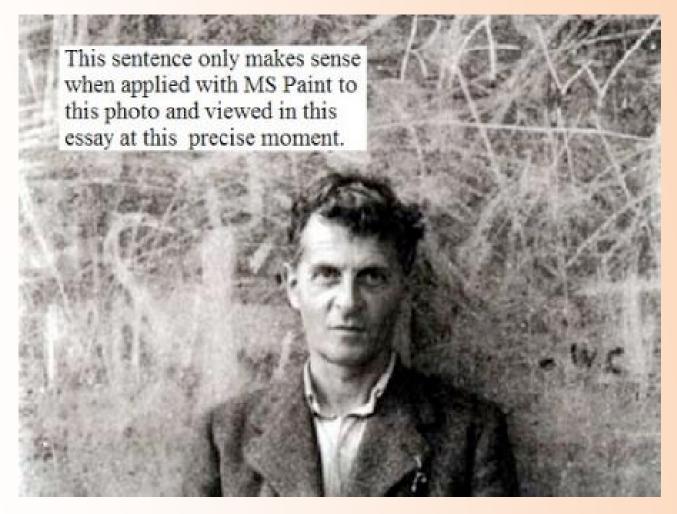


#### The Connectors

- Things events, games, arenas, etc., to 'connect' individuals with each other
  - either as plug-ins on individual PLEs, or
  - as third-party services, like scrabble.net



## Language Games



http://www.popmatters.com/pm/post/65550-games-as-language-systems

#### Ladders, Vectors, Networks

- Chess and other person-to-person games rank people in 'ladders' (people want to ran schools this way too)
- One way to think of a network is as a multidimensional ladder
- Ranking is therefore 'position' in a network



http://www.downes.ca