

### **Open Learning**

- Long associated with distance learning
  - correspondence schools 1880sff
  - 1915, creation of the National University
    Extension Association(NUEA)
  - U.S. radio broadcasting licenses to 202 colleges, universities, and school boards – 1920s, 30s
  - 1926, historian J C Stobart wrote a memo advocating a 'wireless university' while at BBC

### Open Institutions

- Open University opens in 1971
  - did not insist on prior educational qualifications
  - required students to take two foundation courses
- New York State's Empire State College
  - commenced operation in 1971
- Athabasca University (1970/72), Indira Gandhi National Open University (1985)

## Open Learning (2)

- Over time enhanced accessibility
  - distance learning
  - reduction of financial barriers
    - tuition reductions
    - subsidies
  - progressive pedagogies
    - Creation of distance learning pedagogies Moore,
      Merrill, Gagne

### Open Resources

- Project Gutenberg
- Open Archives Initiative
  - BOAI
  - DSpace
- Wikipedia
  - Curricki
  - Wikiversity
  - WikiEducator Commonwealth of Learning

# The OERu Logic Model



Students awarded credible degree or credential



Participating institutions grant credit for courses





Open assessment from participating institutions





Open student support via "Academic Volunteers International"

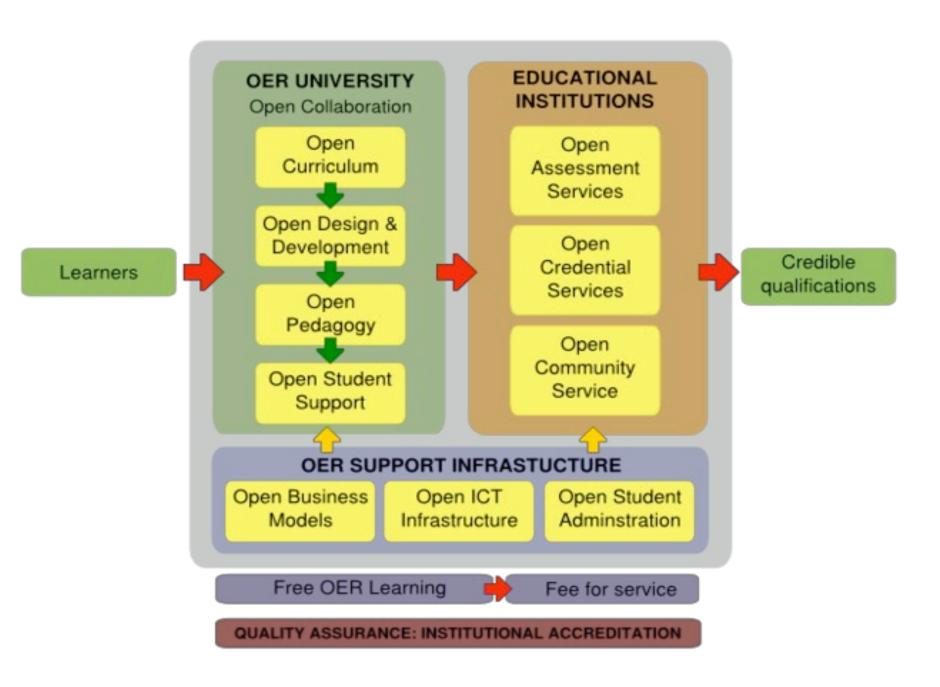




Learners access courses based solely on OER



Taylor, J.C. 2007. Open courseware futures: Creating a parallel universe. e-Journal of Instructional Science and Technology (e-JIST), Vol 10, No. 1. Online: http://www.ascilite.org.au/ajet/e-jist/docs/vol10\_no1/papers/full\_papers/taylorj.htm



### Criticism of the Logic Model

- Traditional Curricular based approach
  - a focus on articulation & credit transfer
  - closed federation of traditional institutes
- Tight link to traditional credentials
- The Black Box problem 'open' this or that (eg. 'open business model') unstudied and undeveloped

### Contrasts in Design

- Learning objectives
  - concrete and stated Learning Objectives vs.
    unstated and multiple objectives
- Organization of subject matter
  - knowledge of vs knowledge about
  - linear organization vs knowledge community

#### Contrast in Assessment

- Subject and content-focused assessment, vs. performance-based and networked-based
- Assessment against external criteria vs. selfassessment
- Assessment by-instructor vs. 3<sup>rd</sup>-party assessment

### Free Learning

- Based on the principles of connectivist, or network, learning
- Network design principles: distributed, disintermediated, dynamic
- Design based on the 'semantic principle':
  - autonomy
  - diversity
  - openness
  - interactivity

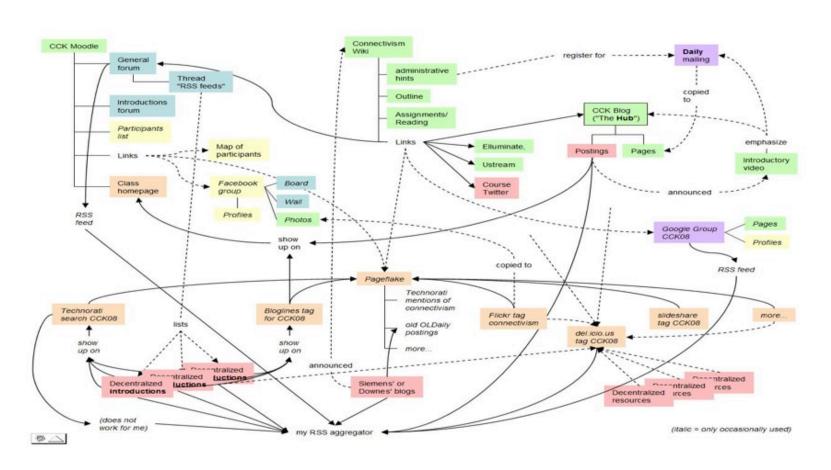
### Connectivist Learning Design

- 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

### But... why

- It's a formal recognition that people have different destinations, different tastes
- Based on an understanding that knowledge varies according to these
- Expresses the principle that networks communities – are stronger with multiple diverse perspectives
- Knowledge learned is better indeed, known

## A Map of the Community



Connectivism: A Theory of Personal Learning Stephen Downes, December 3, 2008, Educational Development Centre, Ottawa http://www.downes.ca/presentation/208

#### The MOOC Model

- MOOC: Massive Open Online Course
- There is no central core feature no core content, group, etc
- Course design is a network, or a map, or a community
- Resources are distributed, and aggregated
- Participants are encouraged to create their own resources, communities, groups

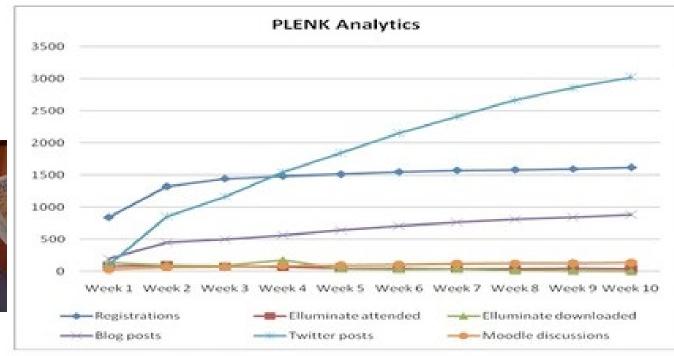
## 2010: Stephen Downes, Rita Kop Critical Literacies & PLENK 2010



PLENK 2010 involved a significant research effort

http://connect.downes.ca/

### **PLENK Analytics**



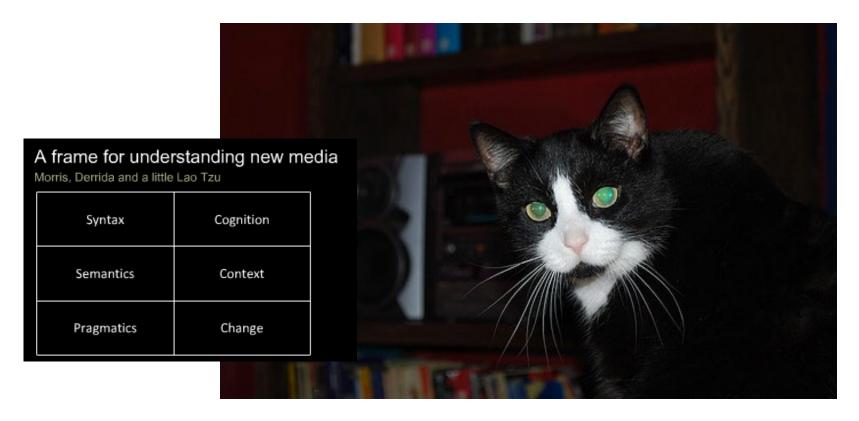
Rita Kop

Chart 2. PLENK participation rates.

Supporting ongoing MOOC participation

http://www.irrodl.org/index.php/irrodl/article/view/882

#### **Critical Literacies**



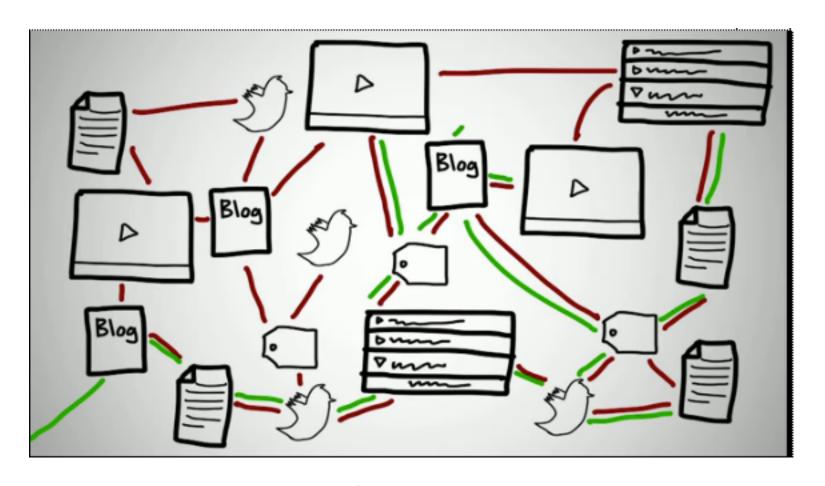
Understanding how we use artifacts to communicate in online and other learning networks

http://www.downes.ca/presentation/232

### 2011: Year of the MOOC



### Connectivism & Connective Knowledge



CCK11: How to Learn in a MOOC

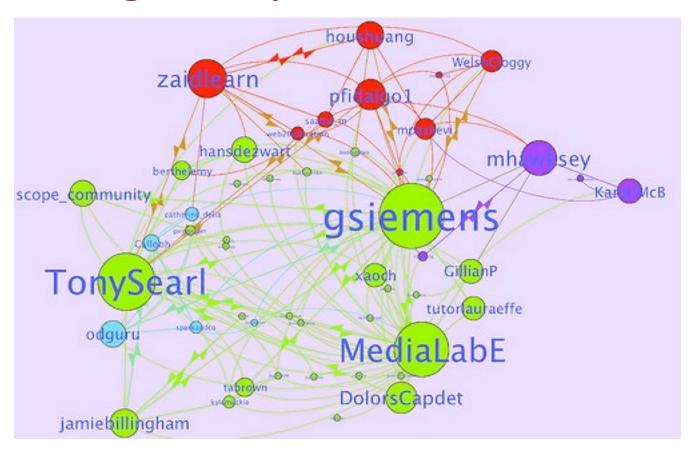
http://www.youtube.com/watch?v=eW3gMGqcZQc

#### How to be Successful in a MOOC



http://www.youtube.com/watch?v=r8avYQ5ZqM0

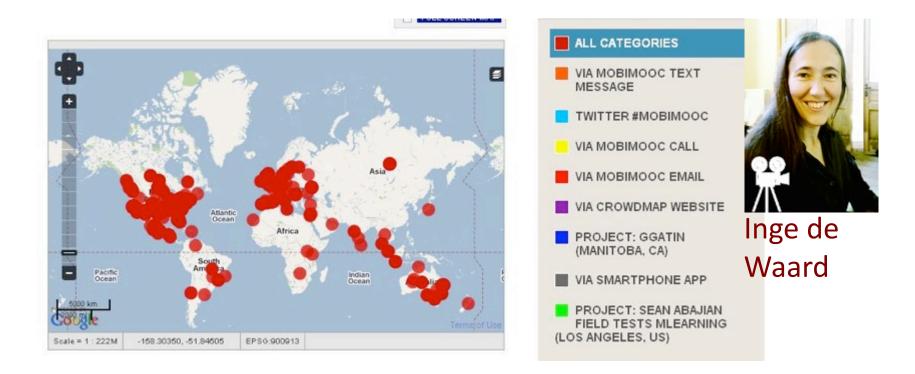
### **Learning Analytics**



LAK11: How to measure success in a MOOC

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

#### MobiMOOC



#### Supporting Mobile Learning Technology

http://mobimooc.wikispaces.com/

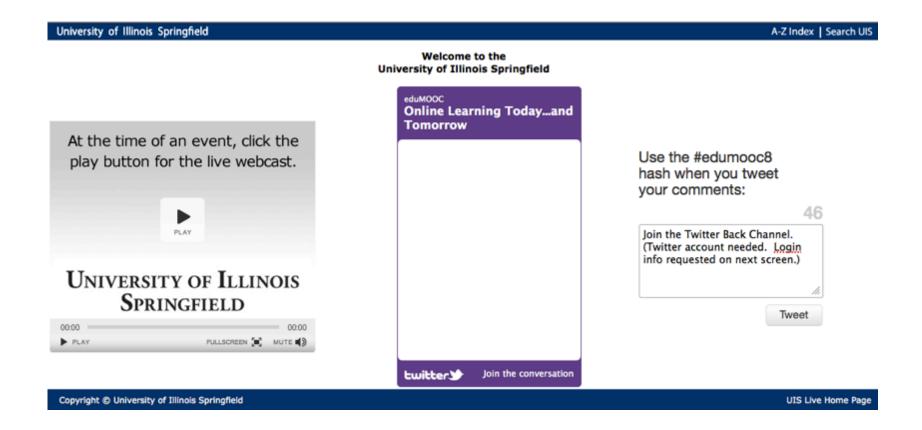
# The madness and mayhem of



DS = Digital Storytelling DS106 redefined activities and participation

http://ds106.us/

#### eduMOOC



#### Large, well publicized, but not very interactive

http://sites.google.com/site/edumooc/

### eduMOOC underground

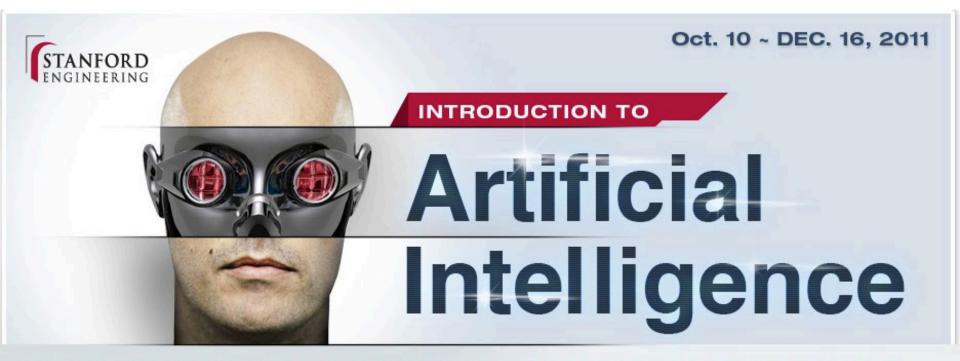




Jeff Lebow

Jeff Lebow, Google+ hangout, and Livestream: Taking something ordinary, and making it something special – YOU make the MOOC <a href="http://www.livestream.com/jefflebow/">http://www.livestream.com/jefflebow/</a>

### Al-Class: Redefining Massive



In partnership with the Stanford University School of Engineering. You can join this online worldwide class this fall.

More than 100,000 people signed up for preregistration

http://www.ai-class.com/



Downes, Cormier and Siemens try again

Image: <a href="http://steve-wheeler.blogspot.com/2011/04/running-mooc.html">http://steve-wheeler.blogspot.com/2011/04/running-mooc.html</a>

http://change.mooc.ca

#### New Roles for Government

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

### The Digital Infrastructure

- Public high-speed backbone networks
  - used not only for education but for other public services: police, fire and emergency, hospital, municipalities, etc.
- Local Access
  - eg. CAP Centres
- Legal Framework
  - policy on digital rights and copyright
  - net neutrality and similar regulations

### A Note on Sustainability



### Sustaining Infrastructure

- Support for existing programs and services
  - cost reductions in communications overhead
  - improved efficiency of public service delivery
- Overhead on entertainment and commercial infrastructure
  - similar to broadcast 'CanCon' requirements

### Open Educational Resources

- Traditional Resources
  - Already developed and paid for by government
  - Open access initiatives
- Public Policy Resources
  - design to serve a public end or objective
  - focus on basic literacies & community empowerment

### 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 Rsources, ijklo.org/Volume3/IJKLOv3p029-044**Downes**.pdf 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

### Software and Service Support

- Software and environment support
  - eg. Public Knowledge Project,
  - Open Journal Systems, Moodle, et
- Service networks and support
  - JISC / CETIS, EdNA, etc.
  - Common Services eFramework

### Sustaining Support Systems

- Development and systems research support
- Public adoption of open licensing
  - FLOSS
    - GNU/GPL, BSD, etc
    - Creative Commons
  - directs resources toward multi-sector development
- Community service requirement for commercially sourced software

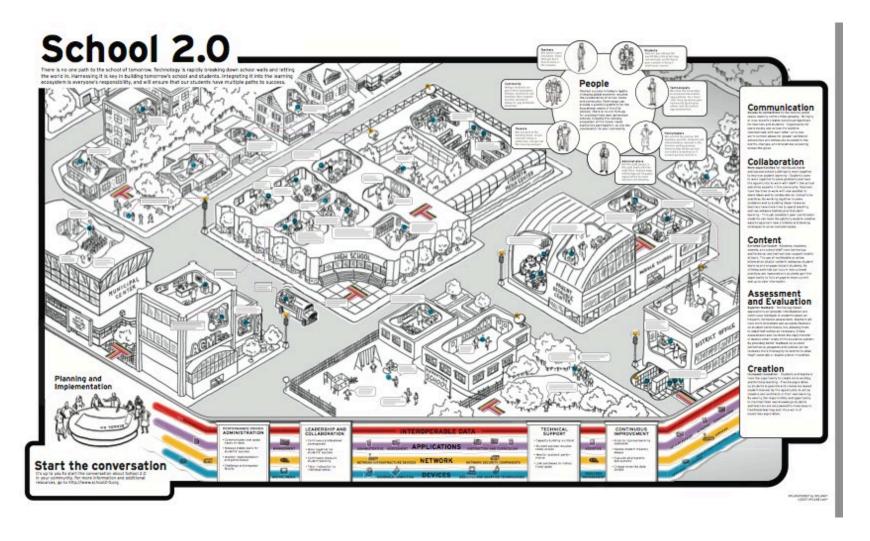
### Assessment and Credentialing

- Major policy initiatives
  - separation of delivery and assessment
    - an end to Digital Diploma Mills
  - management of credentialing by professional associations under a regulatory framework
  - development of community-based assessment metrics and infrastructure
    - move away from simple testing, toward authentic community engagement and referrals

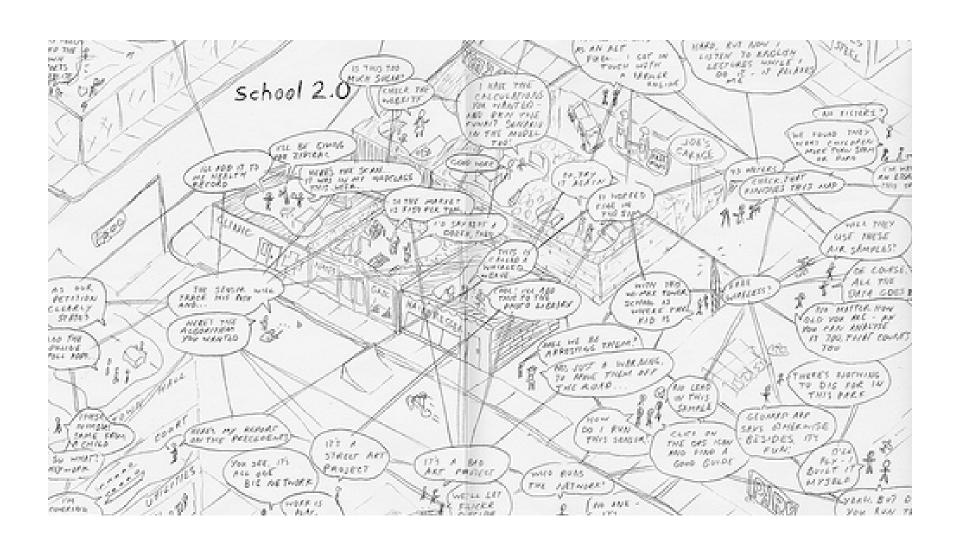
### Assessment and Credentialing (2)

- Support for Personal Learning
  - provision of personal learning environments and frameworks
    - promote lifelong learning
    - link to skills database, corporate training registries
    - direct support for employment and funding
  - personal portfolios and credential banks
    - voluntary, self-managed
    - optional identity frameworks

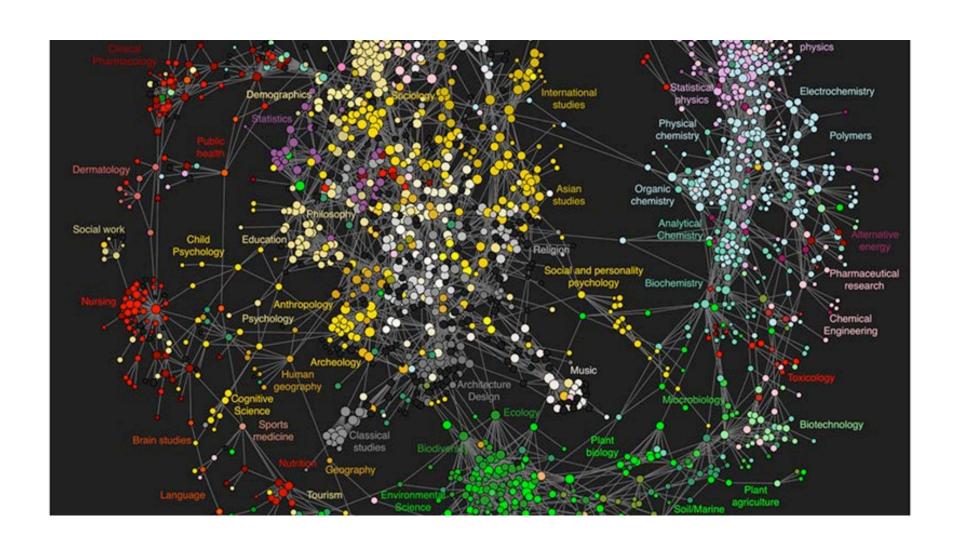
#### The Old School 2.0



#### New Models for Schools



### New Roles for Research



### Community = Interactions

- Not 'spreading the word'
- Not 'amplification'
- But rather, the creation of our own society, together
  - emergent from the free actions of each of us
  - not based on the ideas of one (or a small number)
    of individuals

## Open Communities are Free



Dave Pollard, the Metamovement http://howtosavetheworld.ca/2011/10/20/the-metamovement-moving-beyond-marches-and-people-in-the-street/



Stephen Downes http://www.downes.ca