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# The Massive Course Meets the Personal Learner



Stephen Downes

Istanbul, April 3, 2014

http://www.downes.ca/presentation/336

### World-Renowned Competencies

**Analytical Techniques and Advanced Photonic** Advanced **Materials Characterization** Components **Photonic** Communications **Technologies Optical Testing Semiconductor Foundry Services** Gallium Nitride GaN **Printable** Electronics **Functional** Technologies & Electronics **NRCICT Devices Materials** earning and **Portfolio Gollaborative Functional Devices Echnologies Cognitive Modelling Functional Imprinting** Advanced Individualized Analytics & Learning Machine-Based **Data and Text** Machine **Technologies** Reasoning Learning/Reasoning **Mining** Statistical-Based **Decision Support Machine Translation Systems** 

3D Interactive Visualization

**Natural Language Processing** 

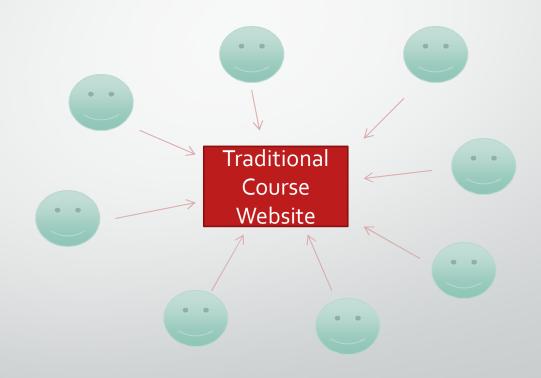
Human-Computer Interface Usability

# The Skills Shortage



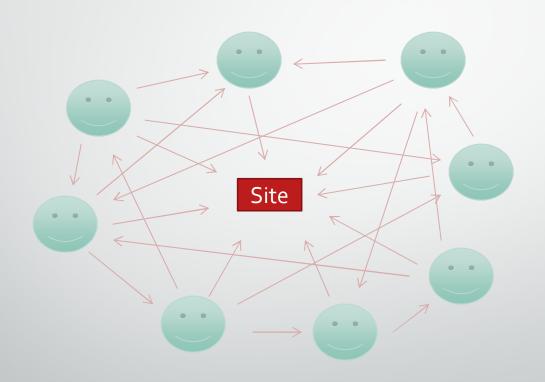
#### Traditional Course

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

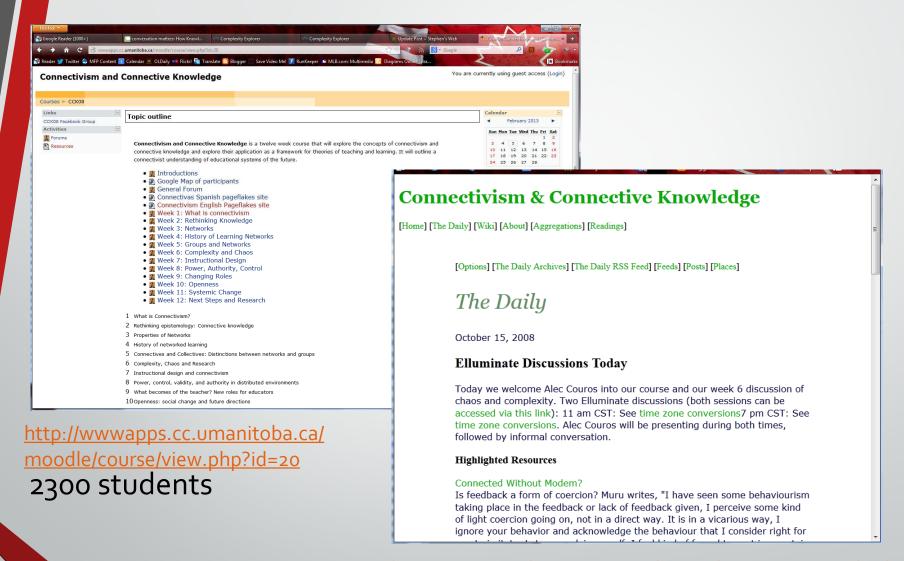


Most online courses are based on content-based websites (even Coursera, Khan and Udemy)

# Massive Open Online Course



A MOOC is a Web, not a Website



http://connect.downes.ca/cgi-bin/archive.cgi?page=thedai

#### Other Courses

CHANGE.MOOC.CA

home

YOU ARE LOGGED IN AS **DOWNES** [OPTIONS] [LOGOUT]

about

contact



#### 1800 students

24TH OCTOBER 2010

31ST OCTOBER 2010

http://connect.downes.ca/

2800 students

If you would like to register for PLENK2010 there'

If you have subscribed to The Daily, then you will

Click here to Register

http://change.mooc.ca/

#### Contents



#### This Course

Home Page About This Course Course Outline How It Works Course Facilitators Your Privacy Contact Us

#### Your Account

Register Login



#### Announcements

**Terry Anderson Session Recording** Terry Anderson's week35 session recordings:

Week 35: Terry Anderson

Change in formal education systems

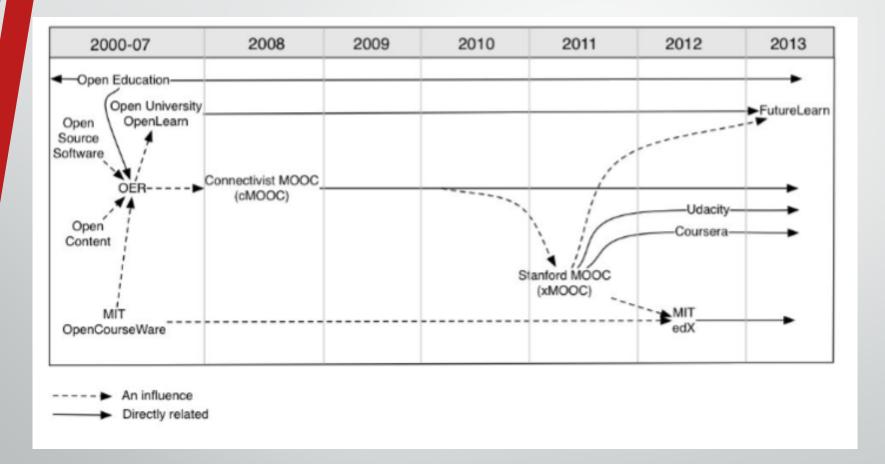
- MP3 Audio
- Elluminate Recording
- Slides

Week 35: Terry Anderson

#### **Live Session Today**

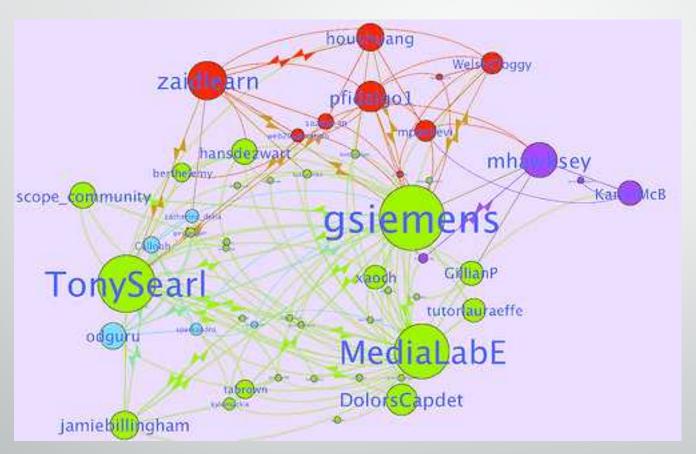
This is the last week of the Change11 course and we are pleased to welcome Terry Anderson. Our live session is TODAY.

#### **Evolution of MOOCs**



http://publications.cetis.ac.uk/wpcontent/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=36

#### MobiMOOC



#### Supporting Mobile Learning Technology

http://mobimooc.wikispaces.com/

# The madness and mayhem of DS106



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/

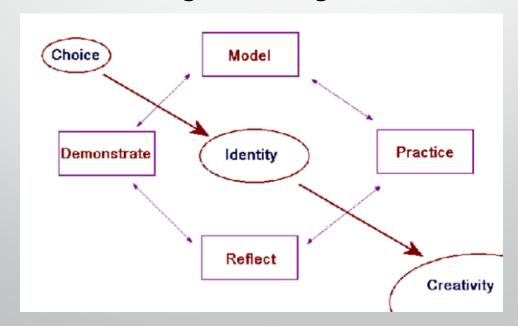
# Currently



MOOC REL 2014 http://rel2014.mooc.ca

# Pedagogical Models

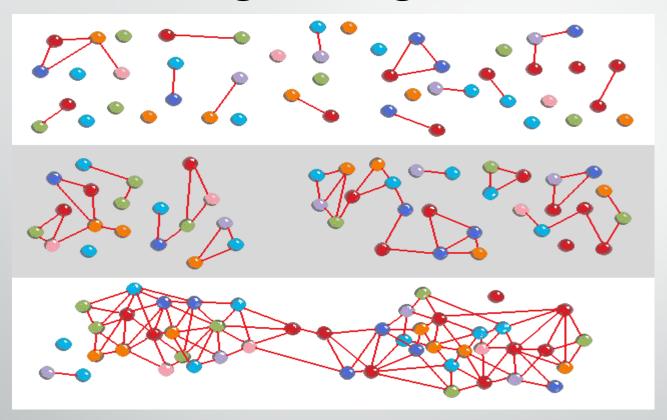
- Instructivist knowledge as transmission
- Discovery knowledge as experience
- Constructivist knowledge as representation
- Connectivist knowledge as recognition



# 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

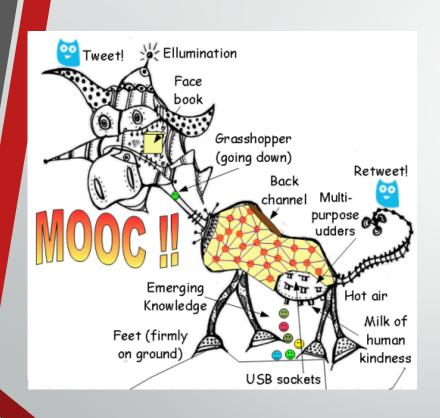
#### Diversity

- Multiple tools
- Individual perspective
- Varied content

#### Interactivity

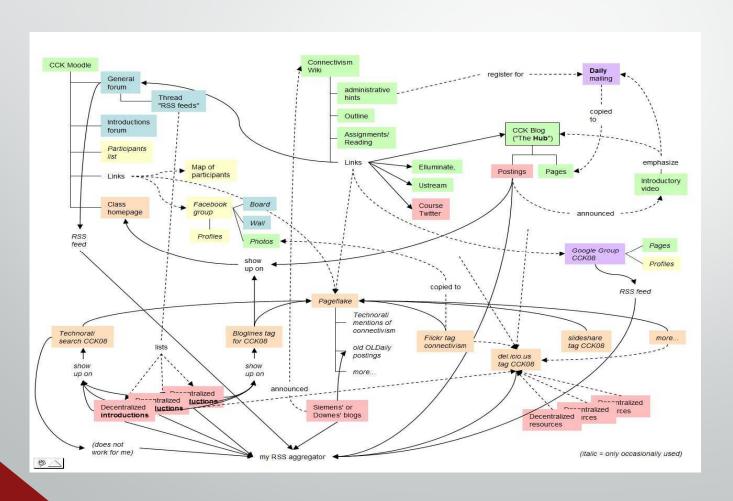
- Encourage communication
- Cooperative learning
- Emergent knowledge

#### The MOOC

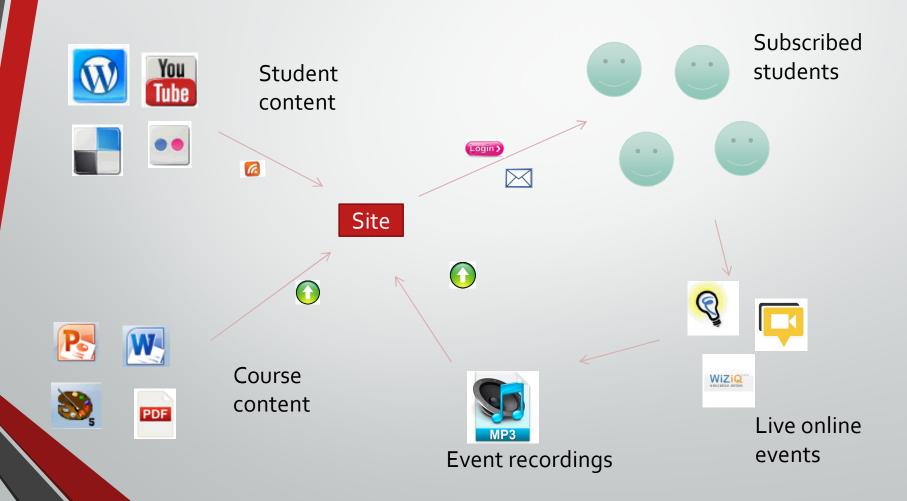


- Massive by design
- Open gratis and libre
- Online not blended, not wrapped
- Courses not communities, websites, video collections, etc

#### Connectivist MOOCs



### Course Provider Perspective



# Underlying MOOC Support

1. First student creates resource and sends info to course



Second student accesses the resource directly

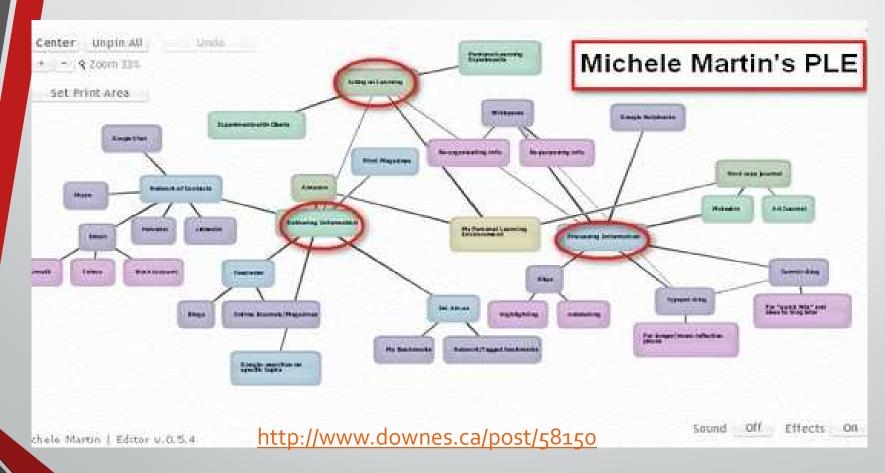
2. Second student sees resource info in newsletter and RSS feed





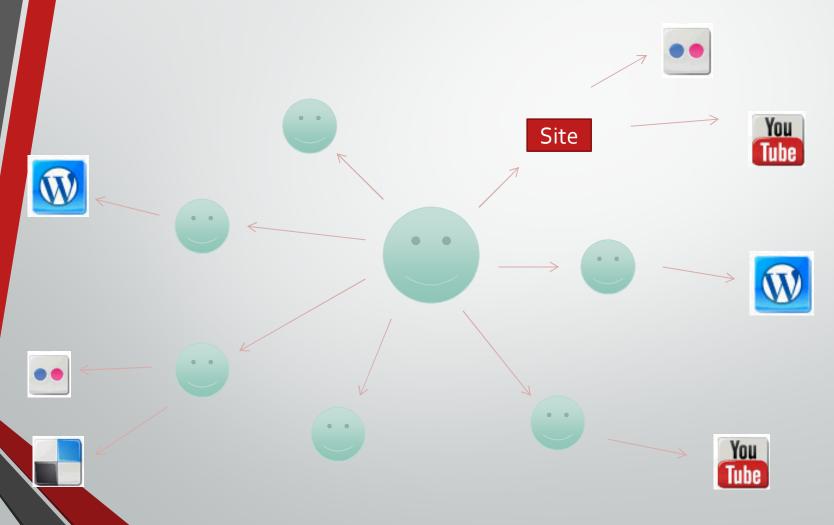
4. Second student finds link to third student's resource

# Personal Learning



http://dmlcentral.net/blog/howardrheingold/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



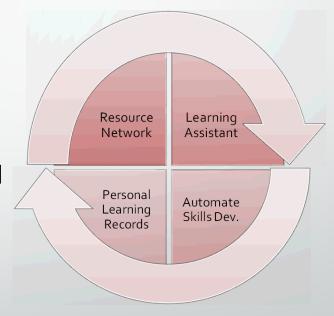
- Individual learning path
- Context-aware support
- Searchable and verifiable
- Tailored to industry needs
- Always available

### 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

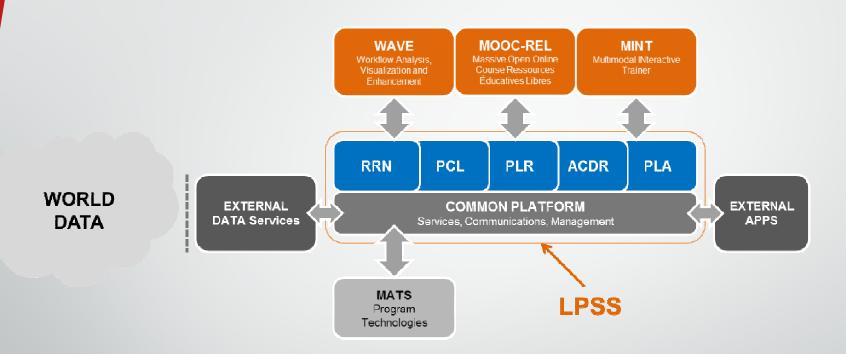


 Learning as a cloud service and deep integration with external systems

# 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?

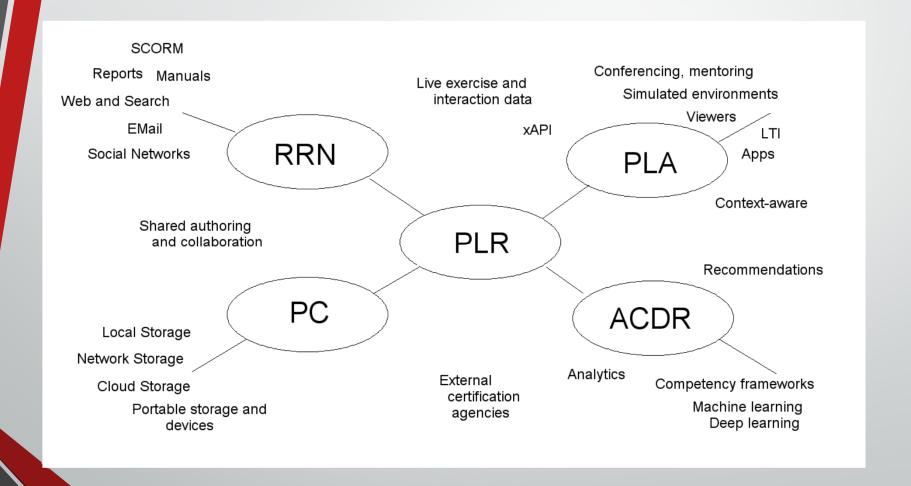


- It's a network of personal learning environments...
- ... connected to a large array of learning services

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**



#### 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 <a href="http://jaaga.in/study/">http://jaaga.in/study/</a>





### http://www.downes.ca

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