



National  
Teaching  
Fellow 2012



EDEN fellow 2013



Ascilite fellow 2012

# New approaches to designing for learning

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Open University, FutureLearn Seminar

# Outline

- Importance of e-learning
- E-learning timeline
- OER and MOOCs
- A new MOOC classification
- Pedagogical approaches
- Learning Design



# Institute of Learning Innovation

<http://www.le.ac.uk/ili>

- Research
- Teaching
- Supervision
- Consultancy
- Visiting scholars
- Institutional advice

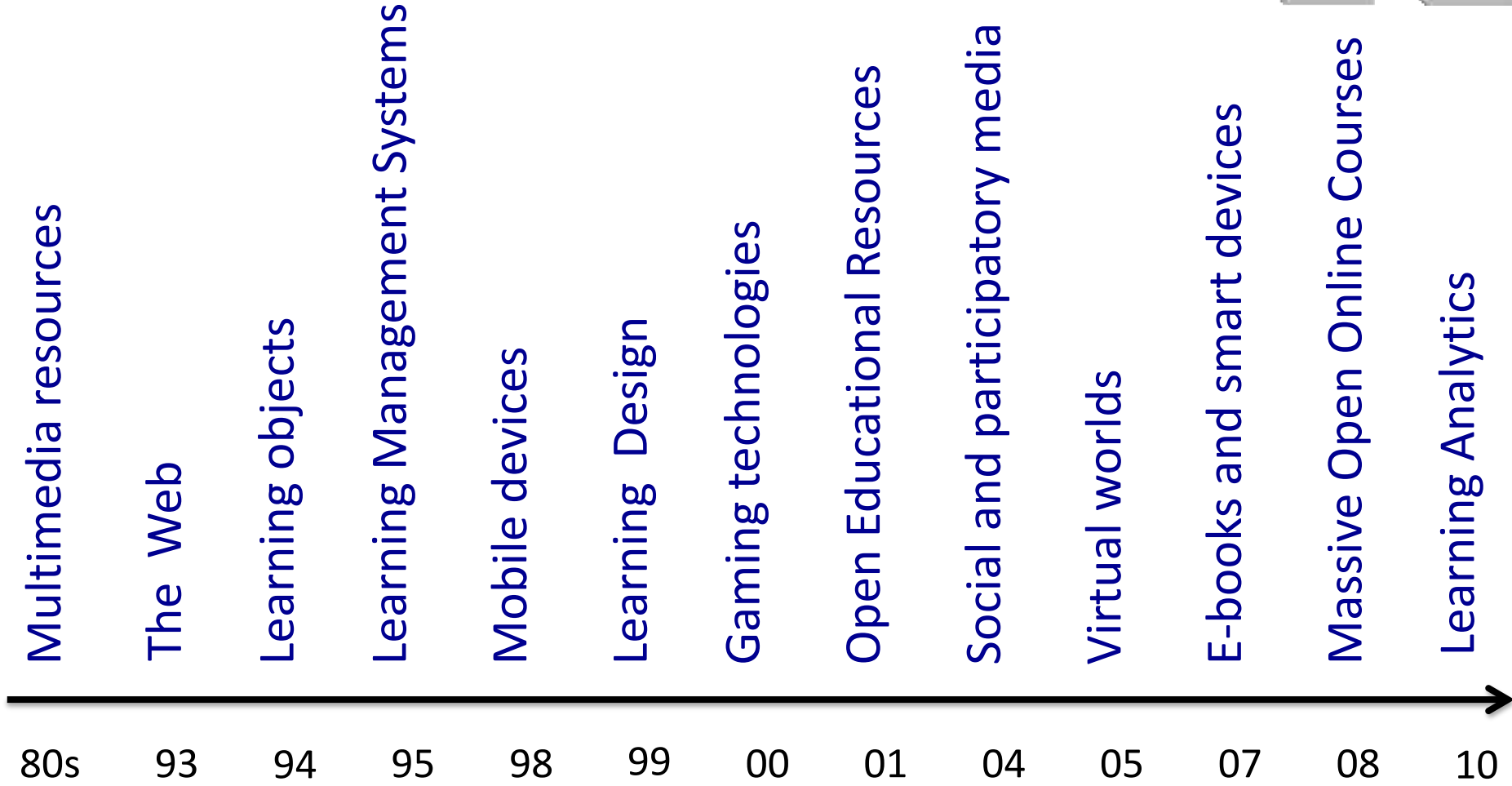


# The importance of e-learning



- For **learning**
  - Potential to support **interaction, communication and collaboration**
  - Developing **digital literacy skills**
  - Promoting different **pedagogical approaches**
  - Fostering **creativity and innovation**
  - Connecting students **beyond the formal course**
- For **life**
  - Preparing students for an **uncertain future**
  - Improving **employability** opportunities
  - Increased importance of **technology in society**

# E-Learning timeline



# OER and MOOCs

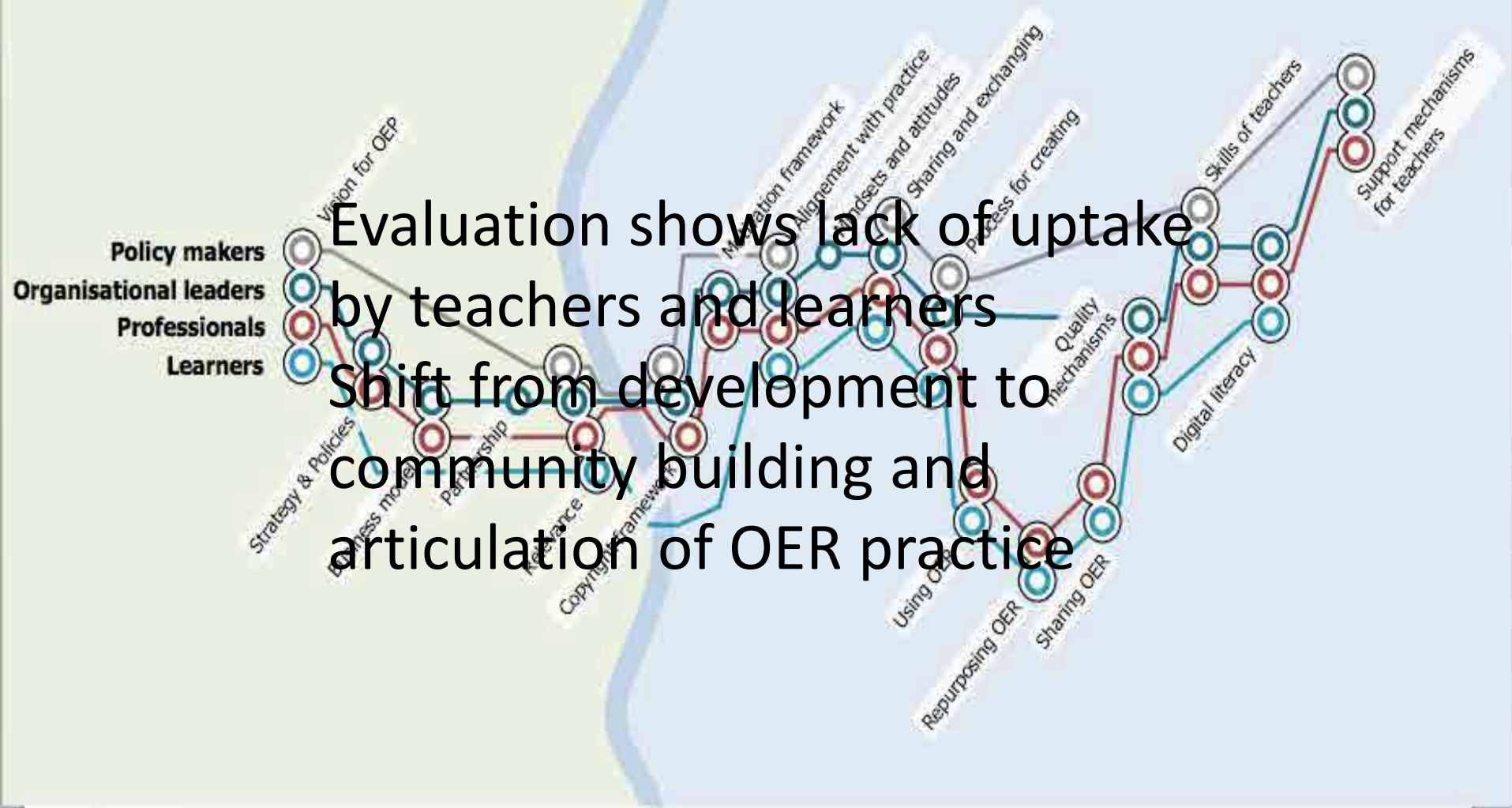
- Over ten years of the Open Educational Resource (OER) movement
- Hundreds of OER repositories worldwide
- Presence on iTunesU
- 2012 Times year of the MOOC



# The OPAL metromap

Creating a Vision of openness and a strategy for OEP in an organisation

Implementing and promoting OEP to transform learning





# POERUP outputs

- An inventory of more than 300 OER initiatives  
[http://poerup.referata.com/wiki/Countries with OER initiatives](http://poerup.referata.com/wiki/Countries_with_OER_initiatives)
- 11 country reports and 13 mini-reports  
<http://poerup.referata.com/wiki/Countries>
- 7 in-depth case studies
- 3 EU-wide policy papers



# The emergence of MOOCs



- CCK08
  - Connectivist MOOC (cMOOC)
  - Siemens, Downes and Cormier
  - Evaluation (Fini, 2009)
    - <http://www.irrodl.org/index.php/irrodl/article/view/643/1402>
- What are MOOCs?
  - <http://www.youtube.com/watch?v=eW3gMGqcZQc>
- Emergence of large-scale xMOOCs
- Recent developments
  - UK-based FutureLearn
  - Launch of Massey on Open2Study
- List of MOOCs
  - <http://www.mooc-list.com/>
- EFQUEL series of blogs
  - <http://mooc.efquel.org/>
- ICDE list of MOOC reports
  - <http://tinyurl.com/gconole-MOOC>



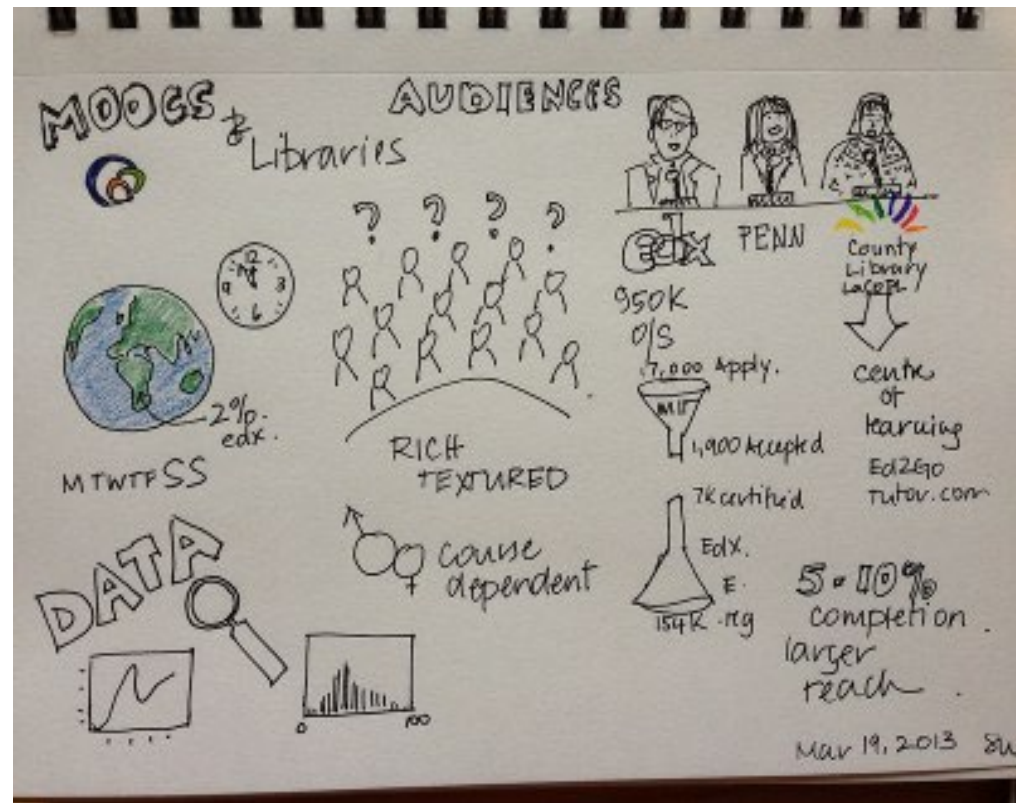
UDACITY





# The eMundus project

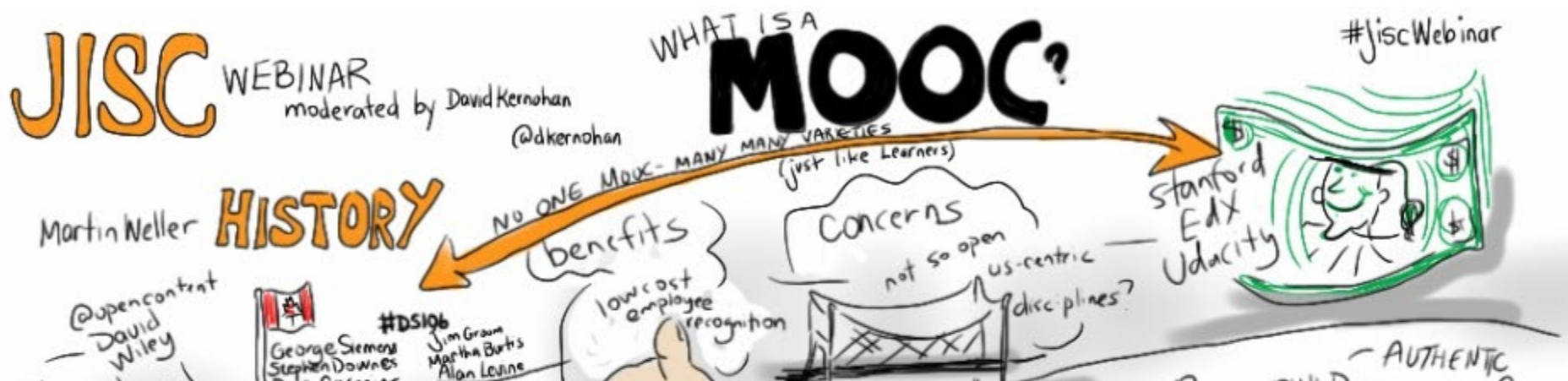
- Aim
  - Strengthen cooperation and awareness amongst EU and strategic partners of exploiting potential of MOOCs and virtual mobility to support long-term, balanced, inter-cultural partnership



<http://wikieducator.org/Emundus/Home>

# Objectives

- Map state of the art of MOOCs and Virtual Mobility
- Sharing of knowledge, tools and practices around MOOCs and their implications
- Promote and mainstream MOOCs and VM
- Help institutions, networks and policy makers to develop effective MOOC strategies



# A taxonomy of MOOCs

Dimension	Characteristics
<b>Context</b>	
Open	Degree to which the MOOC is open
Massive	How large the MOOC is
Diversity	The diversity of the learners
<b>Learning</b>	
Use of multimedia	Extent of use of rich multimedia
Degree of communication	Amount of communication incorporated
Degree of collaboration	Amount of collaboration incorporated
Amount of reflection	Ways in which reflection is encouraged
Learning pathway	Degree to which the learning pathway is supported
Quality assurance	Degree of quality assurance
Certification	Mechanisms for accreditation
Formal learning	Feed into formal learning offerings
Autonomy	Degree of learner autonomy

# A new MOOC classification

Dimension	Connectivist Siemens MOOC
<b>Context</b>	
Open	3
Massive	2
Diversity	3
<b>Learning</b>	
Use of multimedia	2
Degree of communication	3
Degree of collaboration	2
Amount of reflection	3
Learning pathway	1
Quality assurance	1
Certification	1
Formal learning	1
Autonomy	3

For each dimension, give the MOOC a score:  
**Low=1,**  
**Medium=2**  
**High=3**

# A new MOOC classification

Dimension	Connectivist Siemens MOOC	How to rate Open?
<b>Context</b>		
Open	3	It's free = 1
Massive	2	At least some CC materials = 2
Diversity	3	
<b>Learning</b>		
Use of multimedia	2	All materials CC, and non-registered students can view materials=3
Degree of communication	3	
Degree of collaboration	2	
Amount of reflection	3	
Learning pathway	1	<b>How to rate Massive?</b>
Quality assurance	1	
Certification	1	Under 500=1
Formal learning	1	500-10,000=2
Autonomy	3	Over 10,000=3

# Associative

Associating a stimulus with a response – operant conditioning.  
Create a new stimulus response.

Intermediate Chinese from Open University of China on iTunes U  
<http://tinyurl.com/chineselang>

iTunes U > 国家开放大学



Subscribe Free

Get All

Category: Chinese  
Language: English  
国家开放大学





# Cognitive

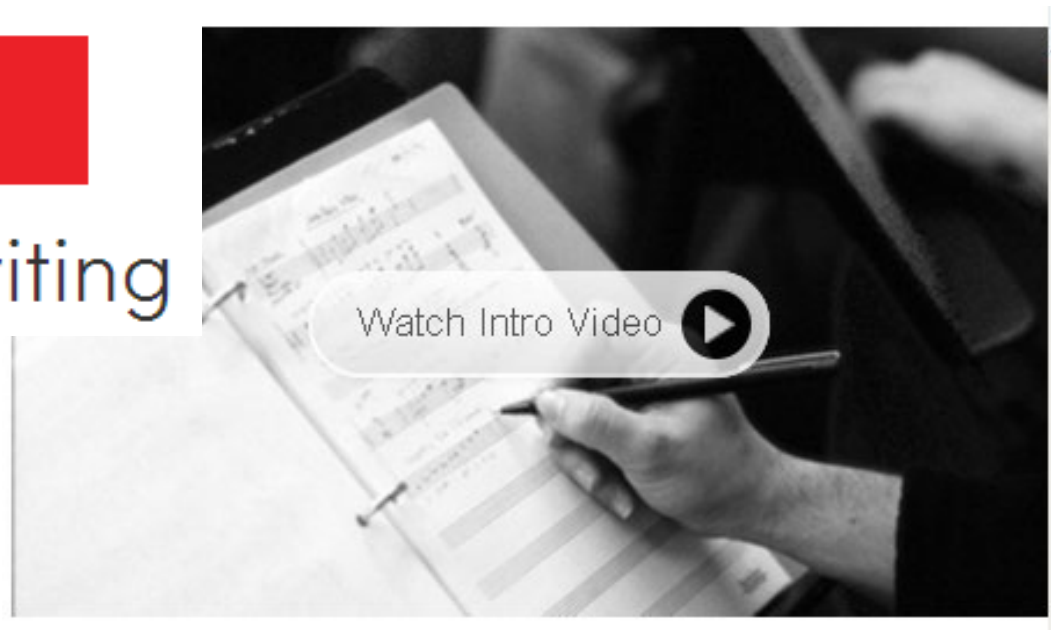
Learning by experiencing a stimuli. The way in which a person is encouraged to contemplate.

## Coursera Songwriting

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

Berklee  
college of  
music

Songwriting



# Constructivist

Adding meaning to, and building on what I  
already know

**Open University Course Design MOOC 'OLDS'**

**<http://www.olds.ac.uk>**



# Situative

Learning that occurs in the same context in which it will be used.

## Coursera Introduction to Clinical Neurology

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

**coursera**



University of California  
San Francisco

### Introduction to Clinical Neurology

by Wade Smith, MD, Daniel Lowenstein, MD, S. Andrew Josephson, MD



[Home](#)

## Announcements

### Week 5 – Introduction to Clinical Neurology

Welcome to Week 5 of Introduction to Clinical

# Connectivist

About who or what learning resources we have access to. People as resources.

**George Siemens original Connectivist MOOC**

<http://cck11.mooc.ca/>

This longer interview with [George Siemens](#) and [Howard Rheingold](#) is also a [very](#) helpful (introduction to connectivism)



# MOOCs by pedagogical approach

Dimension	Associative Chinese	Cognitive Songwriting	Constructivist OLDS	Situative Neuro	Connectivist Siemens
<b>Context</b>					
Open	1	1	3	1	3
Massive	1	2	1	2	2
Diversity	1	2	2	2	3
<b>Learning</b>					
Use of multimedia	3	2	2	2	2
Degree of communication	1	1	2	2	3
Degree of collaboration	1	1	2	2	2
Amt of reflection	1	1	2	1	3
Learning pathway	1	1	2	2	2
Quality assurance	2	2	2	2	1
Certification	1	2	2	2	1
Formal learning	1	1	2	1	1
Autonomy	3	3	3	2	3

Trad. campus courses

DL courses

**Formal**

Blended courses

DL+ social media

APEL  
ePortforlios  
OERu  
Badges

**Individual**

**Social**

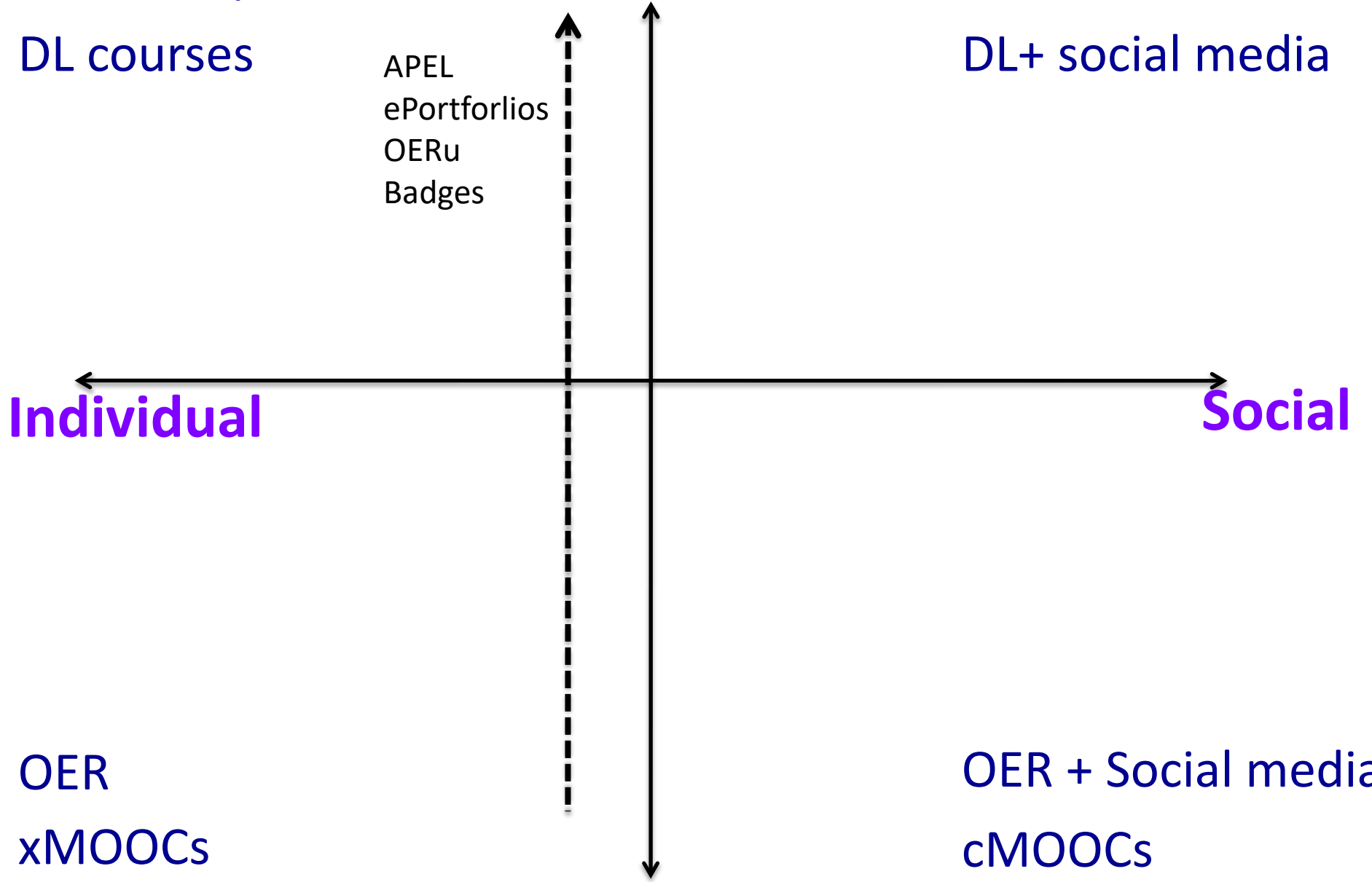
OER

xMOOCs

**Informal**

OER + Social media

cMOOCs



# Promise and reality

Social and participatory media offer new ways to communicate and collaborate

Wealth of free resources and tools



Not fully exploited

Replicating bad pedagogy

Lack of time and skills

# The 7Cs of Learning Design

**Vision**

Conceptualise

**Activities**

Create

Communicate

Collaborate

Consider

**Synthesis**

Combine

**Implementation**

Consolidate



# Course features

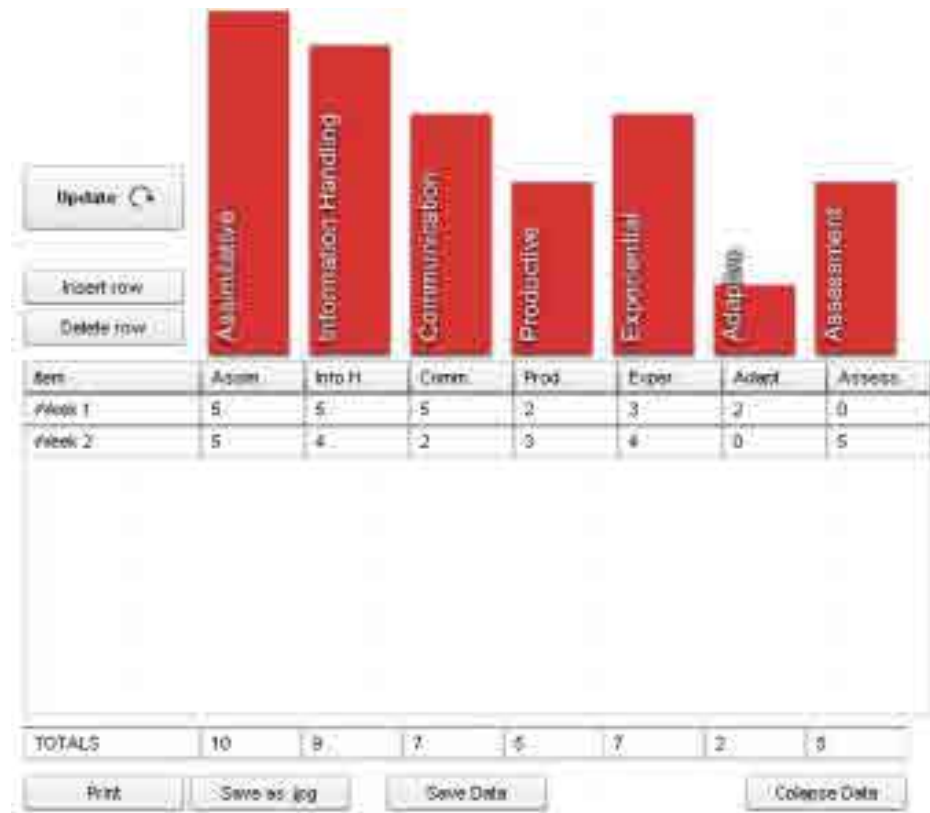
<http://cloudworks.ac.uk/cloud/view/5950>

- Pedagogical approaches
- Principles
- Guidance and support
- Content and activities
- Reflection and demonstration
- Communication and collaboration



# Activity profile

- Types of learner activities
  - Assimilative
  - Information Handling
  - Communication
  - Production
  - Experiential
  - Adaptive
  - Assessment



Week 1  
Topic 1

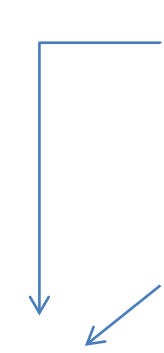
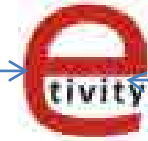
Week 2  
Topic 2

Week 3  
Topic 3

Week 4  
Topic 4

Learning  
Outcomes

LO1  
LO2  
LO3  
LO4

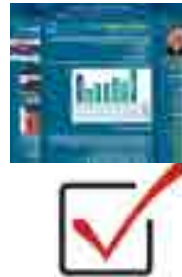


Start

End



LO1  
LO2



LO3

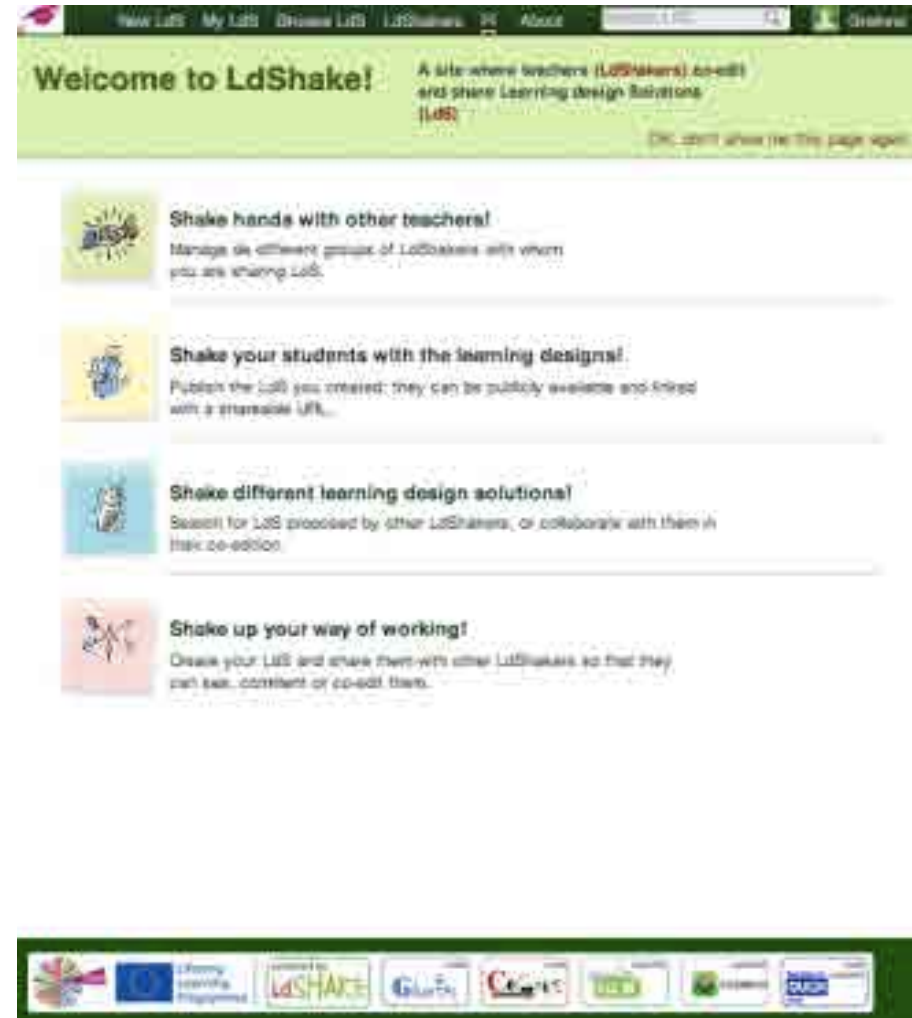


LO4

Assessment

# METIS ILDE

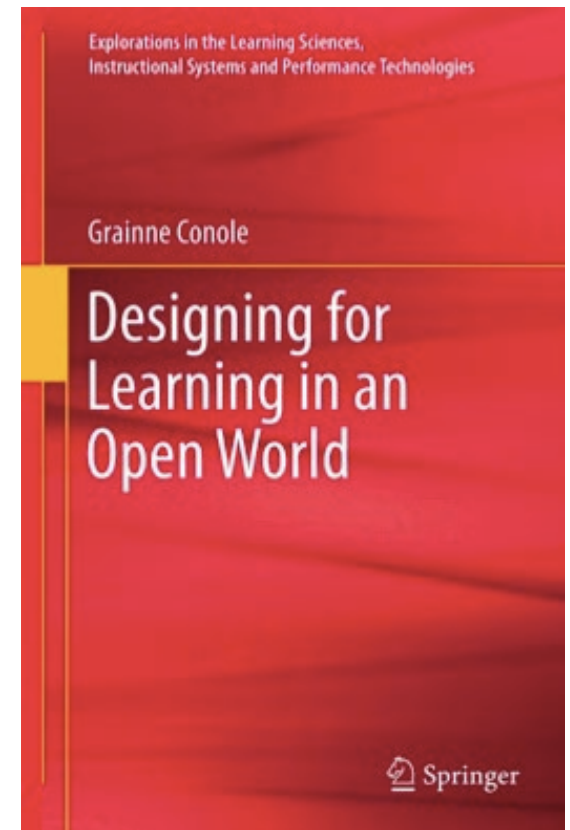
- Integrated Learning Design Environment
- Create designs:
  - Conceptualise
  - Author
  - Implement
- Share and adapt designs



# Conclusion

- Disruptive technologies are challenging traditional institutions
- New business models emerging
- New approaches needed for designing and delivering MOOCs
- Need for appropriate pedagogies
- Disaggregation of education
  - High quality resources
  - Learning pathways
  - Support
  - Accreditation





<http://www.le.ac.uk/ili>

<http://www.slideshare.net/GrainneConole>

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<http://e4innovation.com>

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