



National
Teaching
Fellow 2012



EDEN fellow 2013



Ascilite fellow 2012

Expertise for the future: harnessing the power of digital technologies

Gráinne Conole, Bath Spa University

Shaping the future of food safety, together conference

Milan, 15th October



Outline

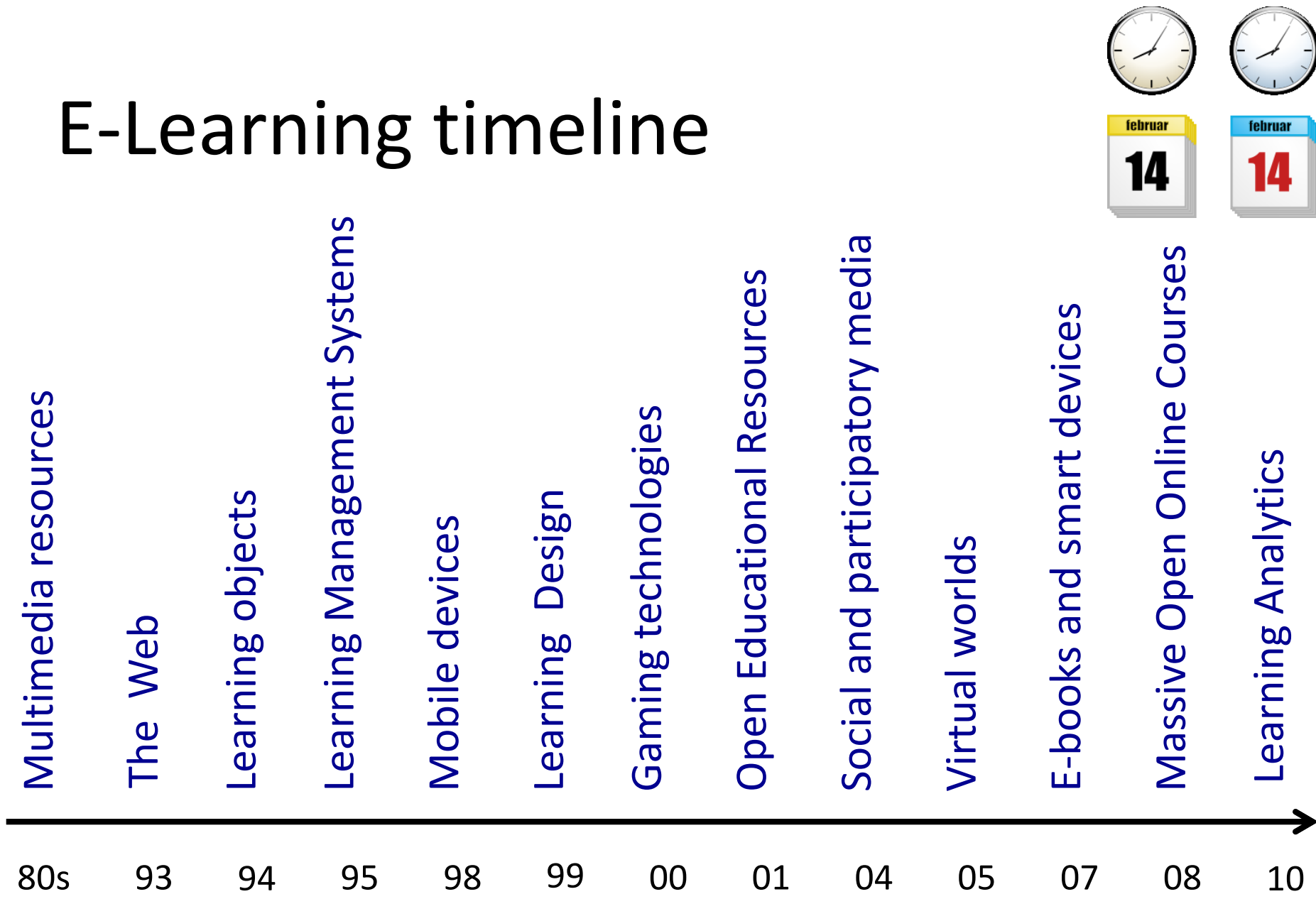
- The importance of e-learning
- E-learning timeline and emergent technologies
- E-Pedagogies
- Facets of e-learning
 - Openness
 - Mobile learning
 - Social media
 - Digital identity
 - Distributed cognition



Education 2020



E-Learning timeline



Barriers to adoption

- Lack of digital literacy skills
- No reward for teaching
- Competition from other providers
- Scaling innovation
- Democratisation



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**



CHALLENGES

SOLVABLE

- > Blending Formal and Informal Learning
- > Improving Digital Literacy

DIFFICULT

- > Personalized Learning
- > Teaching Complex Thinking

WICKED

- > Competing Models of Education
- > Rewards for Teaching

TRENDS

SHORT-TERM

- > Increasing Use of Blended Learning
- > Redesigning Learning Spaces

1-2 years in each direction

MID-TERM

- > Growing Focus on Measuring Learning
- > Proliferation of Open Educational Resources

3-4 years in each direction

LONG-TERM

- > Advancing Cultures of Change and Innovation
- > Increasing Cross-Institution Collaboration

5+ years in each direction

2016

2017

2018

2019

2020

NEAR-TERM

1 year or less

- > Bring Your Own Device
- > Flipped Classroom

MID-TERM

2-3 years

- > Makerspaces
- > Wearable Technology

FAR-TERM

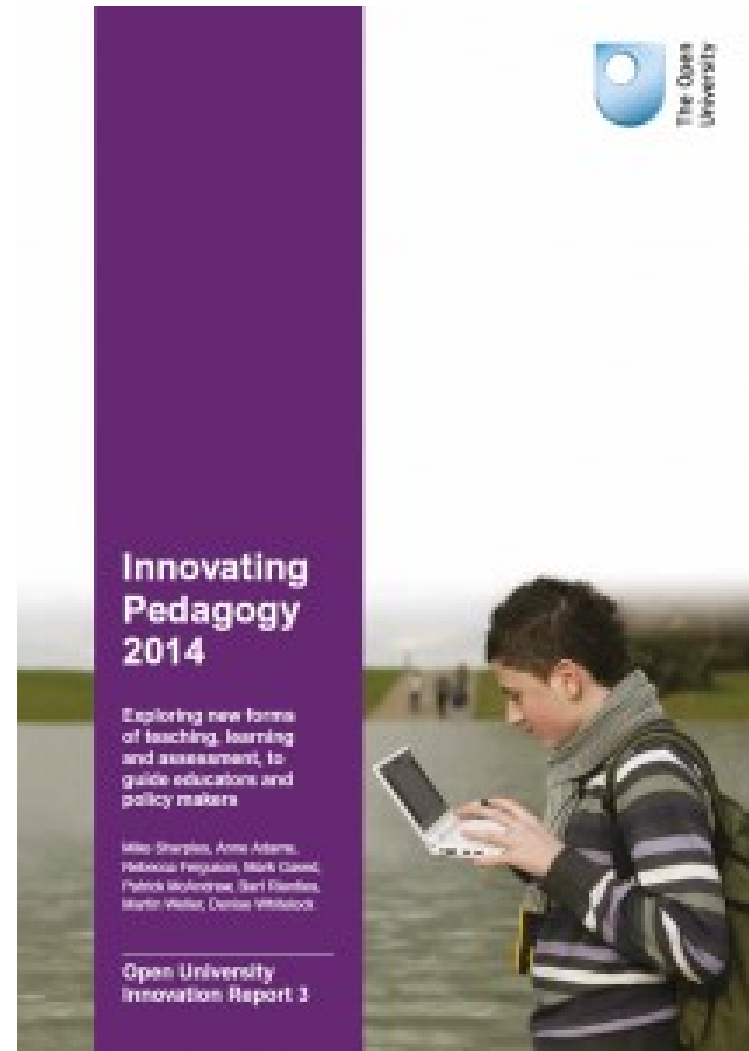
4-5 years

- > Adaptive Learning Technologies
- > The Internet of Things

TECHNOLOGIES

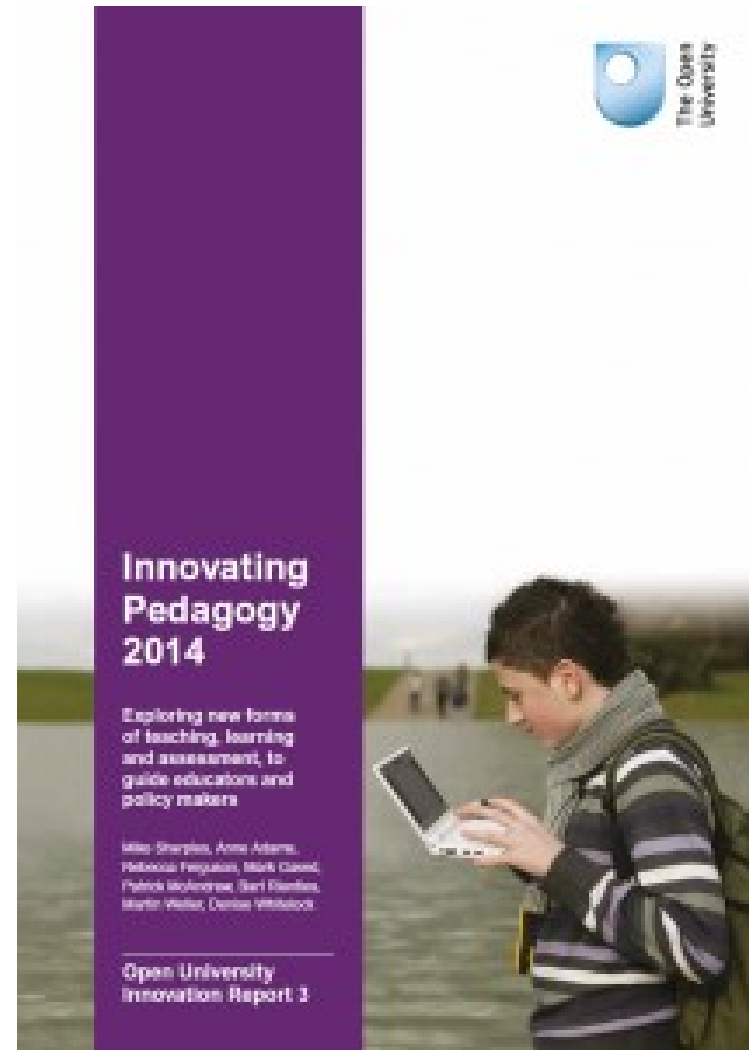
Innovating pedagogy

- Massive open social learning
- Learning design informed by analytics
- Flipped classroom
- Bring your own devices
- Learning to learn



Innovating pedagogy

- Dynamic assessment
- Event-based learning
- Learning through storytelling
- Threshold concepts
- Bricolage



Across devices

Open



Mobile

Free

Dynamic



Intuitive

Personalised

Connected

Interactive

Ubiquitous

Global

Robust

Battery life

Insecure



Unreliable

Privacy

Cost



Accessibility

Training

Transitory

Time consuming

Quantity

Connectivity

Quality

Trivial

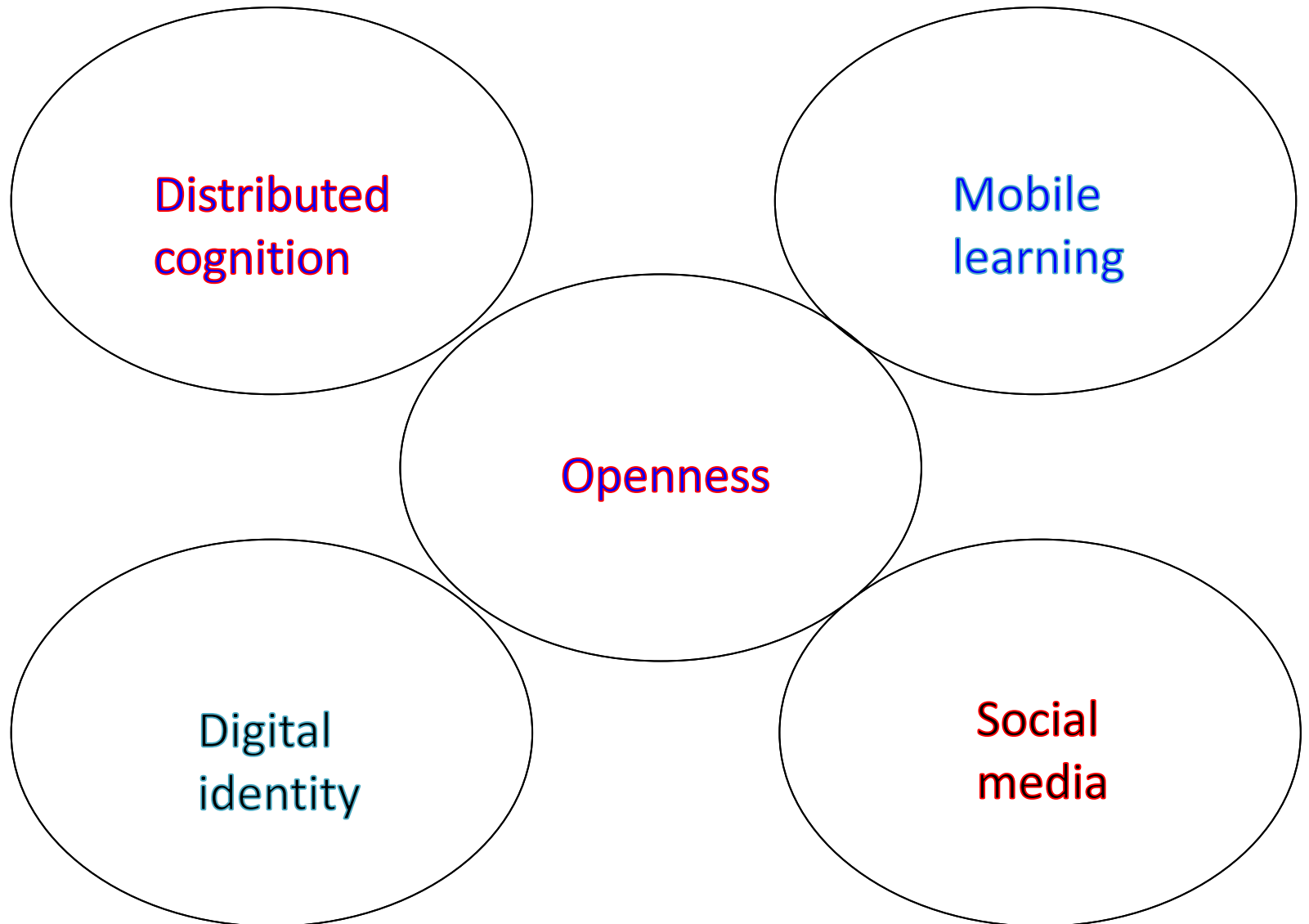
Intrusive

Technologies... two sides of a coin

- Enhance
- Augment
- Supplement
- Replace
- Enrich
- Expand
- Empower
- Detract
- Lessen
- Confuse
- Overwhelm
- Infringe
- Time consuming
- Addictive



Facets of digital technologies



1. Openness

- Digital technologies enable more open practices
- Emergence of OER and MOOCs
- Increase of free resource and expertise, via Webinars, blogs, open repositories and journals, social media

Some Tools...



The good and the bad...

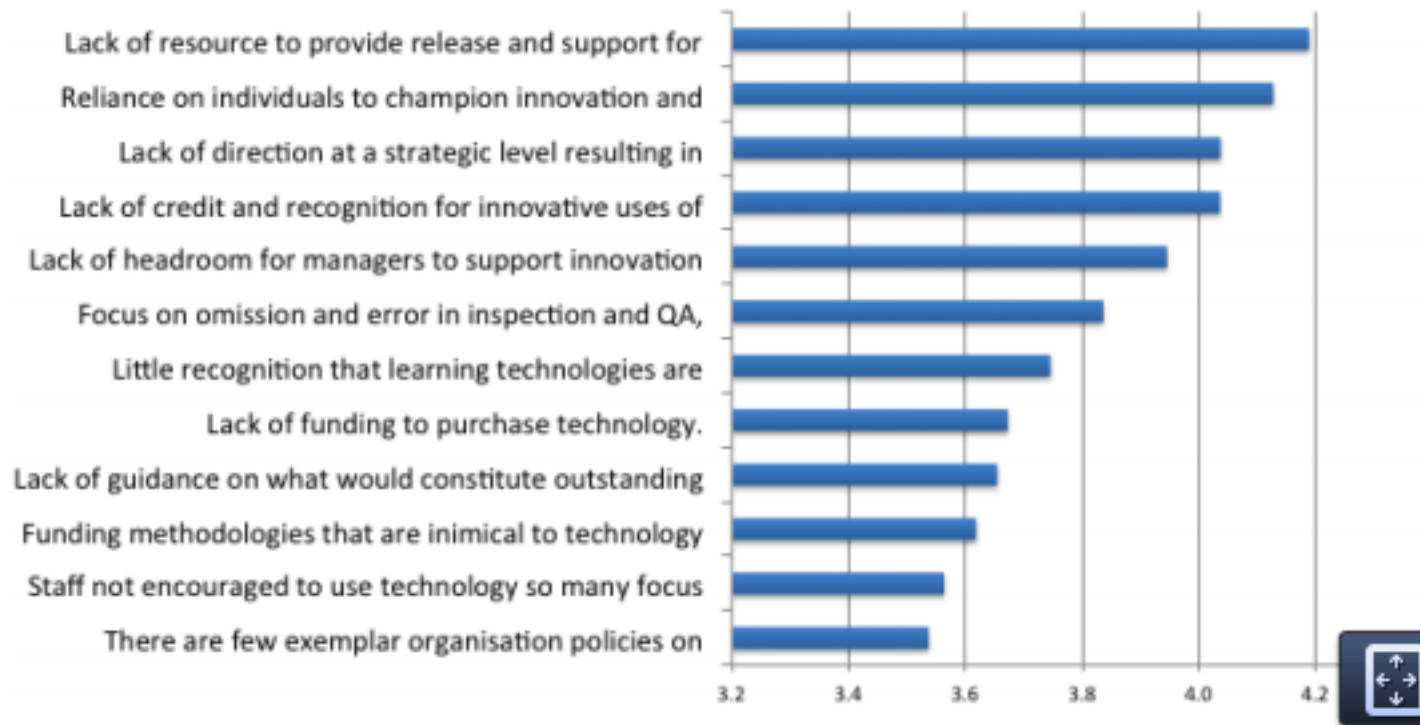
- Transparency
- Greater reach
- Equity and social inclusion
- Challenging existing business models
- Disaggregation of education
- “Laying yourself bare”
- Surveillance
- Misuse of data
- Misinterpretation
- Issues re quality and accreditation
- Ownership



The promise and the reality

New forms of interaction, communication and collaboration. Lots of free resources

Not fully exploited
Bad pedagogies
Teachers don't have the time or the skills



What is learning design? (1)



What is learning design? (2)



What is learning design? (3)



Sharing



The Larnaca Declaration on Learning Design

<http://www.larnacadeclaration.org/>

- What is Learning Design?
- Teachers need help with making effective design decisions that are pedagogically based and make appropriate use of digital technologies

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



Guidance and Support

Student-choice
Active-
Individualised
discovery
Student-autonomy
Guided
Scaffolded

Peer-
support

Content-and-Experience

Innovative-
for-participants

Chaos-and-serendipity
Online
Authentic Research-based
Accessible Practice-based
Theory-based
Applied-concepts
Reused-and-found Linked

Reflection and Demonstration

Student-generated-content
reflective-log
portfolio
peer-assessment
self-assessment

Communication and Collaboration


Collaborative
Social
Professional-
community
Debate

The broader context: The Larnaca Declaration

larnacadeclaration.org

Gmail My google bookmar Scoop it Memonic WebCite® this page Import to Mendeley Diigolet PortableApps.com

Home Page ALTC Fellowship




The Larnaca Declaration on Learning Design
&
ALTC National Teaching Fellowship
"Success Factors for Implementing Learning Design"
James Dalziel 2011-2012

Welcome!

This website provides information about the Larnaca Declaration on Learning Design - a document arising from a meeting of Learning Design experts in Larnaca, Cyprus in September 2012. The initial version of the Larnaca Declaration was released in December 2012. Following further meetings and edits, a new version: "The Larnaca Declaration on Learning Design - 2013" is now available.

Click below to download the Larnaca Declaration.

 LarnacaDeclarationDec2013Final.doc
3.5 MB

<http://larnacadeclaration.org>

Accreditation of non-formal learning

Many learners wish to have formal transferable recognition of their knowledge & skills

Challenges:

Open learning recognition is a recent topic, lack of guidelines for interested actors

Assessment and recognition might become a business model for OER and MOOCs

**Information from
OER provider (HEI)**



**Information from
learner**



**Information from
assessing/certifying
institution**

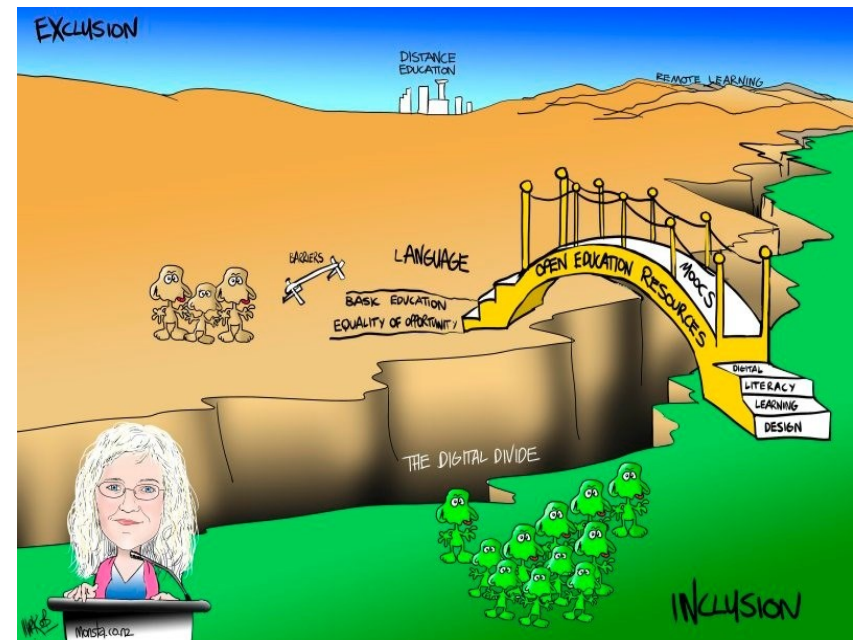


Learning Passport for accreditation



MOOCs

- MOOCs are challenging formal education
- New business models emerging
- Ways to accredit informal and non-formal learning
- EFQUEL MOOC blogs
 - <http://mooc.efquel.org/>



Beyond cMOOCs or xMOOCs

cMOOCs

- Weekly centred
- Participant reflective spaces
- Social and networked participation
- Hashtag: #etmooc
- Use of a range of social media



xMOOCs

- Linear learning pathway
- Mainly text and video
- Formative feedback through MCQs
- Individually focused



A taxonomy of MOOCs

Dimension	Characteristics
Context	
Open	Degree to which the MOOC is open
Massive	How large the MOOC is
Diversity	The diversity of the learners
Learning	
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



Enjoy EMMA!

The European Multiple MOOC Aggregator

PROJECT



Get to know the EMMA team

[Learn](#)

MOOCs



Enroll in a MOOC today

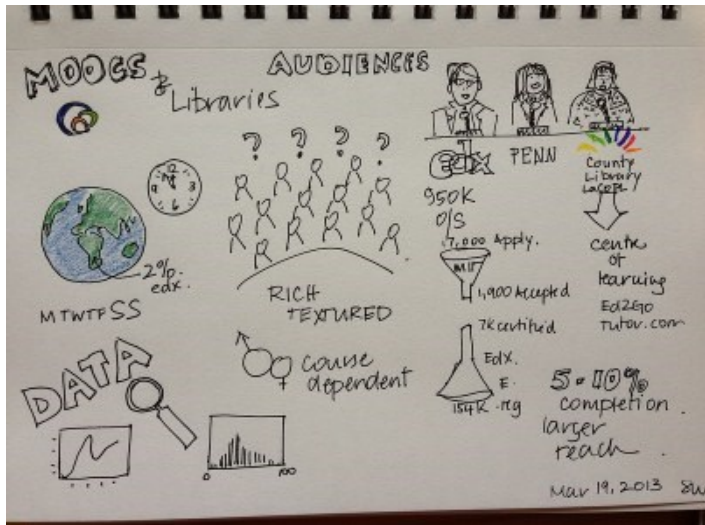
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NEWS



Read the latest updates

[Learn](#)



MOOCs & Libraries

MTWTFSS

2% ed.

AUDIENCES

RICH TEXTURED

course dependent

950K OLS

7,000 Apply.

1,400 Accepted

7K certified

EdX. E. 154K .reg

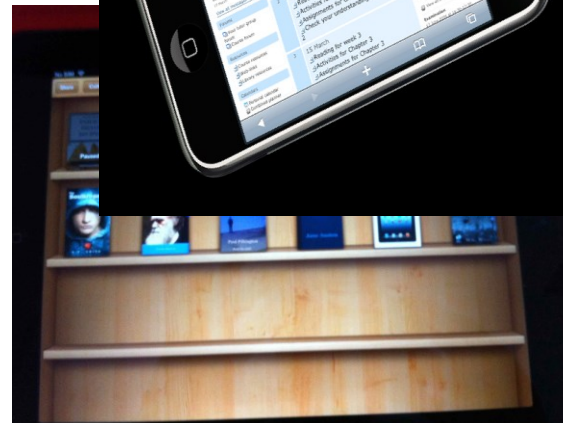
5 = 110% completion. larger reach.

Mar 19, 2013 SW



2. Mobile learning

- Smart phones and tablets almost ubiquitous
- Feasible and affordable because of good size, weight, screen, battery life and cost
- Range of excellent Apps to support communication, productivity, curation and learning



The good and the bad...

- Learning anywhere, anytime
- Mobile ready websites and Apps
- Learning across contexts and devices
- Ubiquitous connectivity
- Social inclusion
- No 'down time'
- Dependency
- Info in the Cloud
- Battery life
- Lack of digital literacy skills to use effectively



From E-Learning to M-Learning

- More than just mobile e-learning
 - Anytime, anywhere for the learner (efficiency)
 - Enables learning in special location (i.e. fieldwork)
- New affordances of mobile
 - Small and compact
 - Personal
 - Capturing sound, video, image
 - New tech i.e. augmented reality
 - Wearable tech



Peacekeeper student using supplied iPad and course app – Security, Conflict & International Development Masters Distance

Flexibility and mobility

Small, compact size

Continue reading, Bookmark

Portability

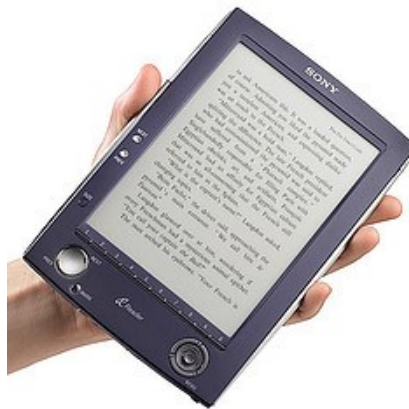


Photo by Kzeng on Flickr

Capacity

Readability

Access from a single device without internet

Easy on the eyes

Long battery life

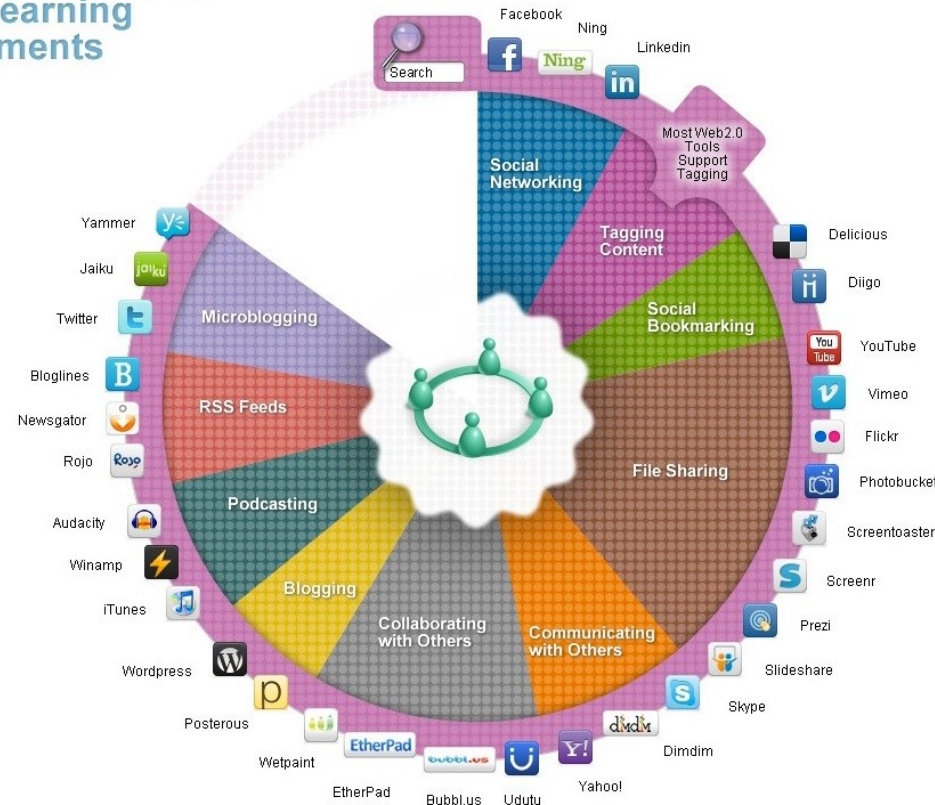


Photo by Yummy Pancake on Flickr

3. Social media

- Shift from a passive web to a participatory, interactive and social web
 - Distributed, networked, dynamic, participatory, complex, open
- Range of tools to communicate and collaborate
- Being part of a global community of peers

Elements for Constructing
Social Learning
Environments



The good and the bad...

- Rich ways to communicate and collaborate
- Part of a global community of peers
- Access to vast amount of information
- Rapid dissemination of information
- Crowd sourcing
- Lack of privacy
- Negative digital traces
- Misuse of data
- Cyberbullying and trolling
- Privacy and security
- Corporate control
- Time consuming
- Addictive



facebook

My network

Grainne Conole



Grainne Conole



Edit profile

119 SlideShares
769 Followers



EndNote X4



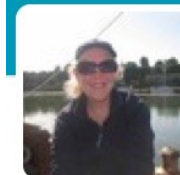
Gmail

LinkedIn



e4innovation.com

E-learning innovation: research, evaluation, practice and policy



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@gconole

TWEETS
21.6K

FOLLOWING
2,290

FOLLOWERS
8,099

The dark side...



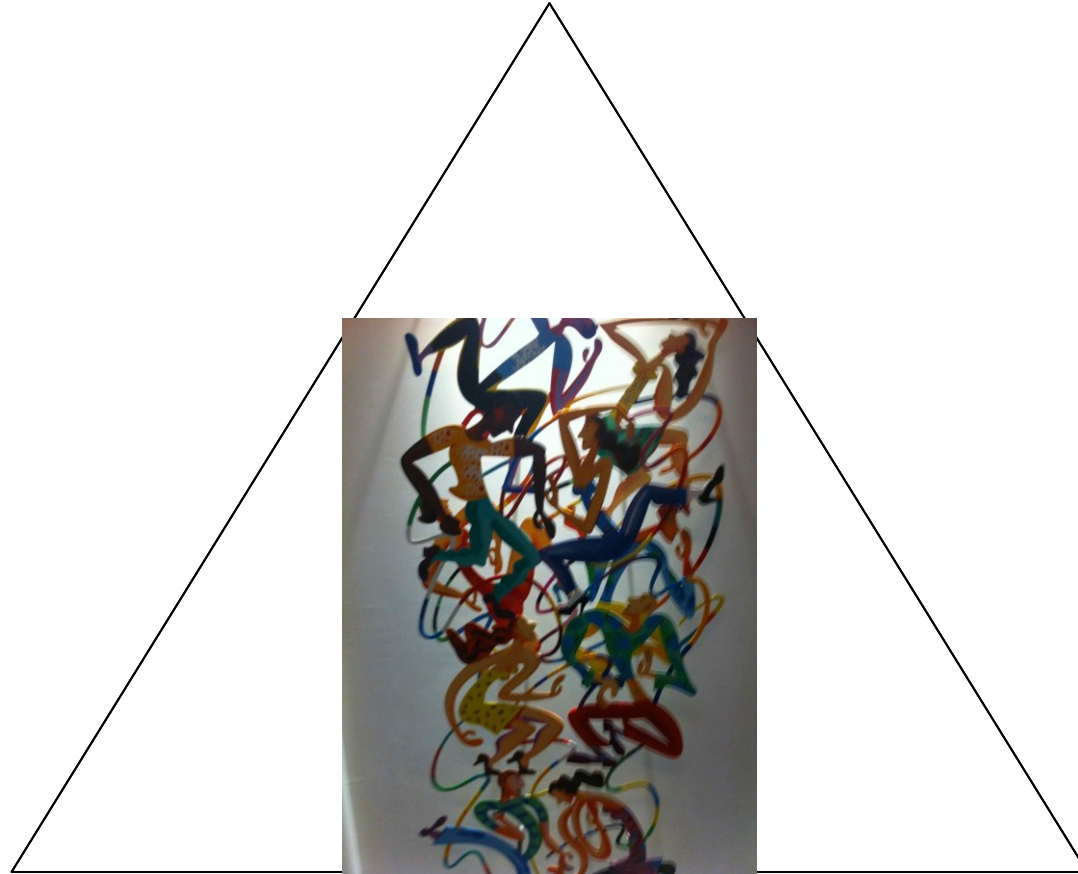
4. Digital Identity

- How you present yourself online
- How you interact and communicate with others
- Facets
 - Reputation
 - Impact
 - Influence
 - Productivity
 - Openness



Identity, presence and interaction

Interaction



Identity

Presence

Presence

- Presence (markchilds.wordpress.com)
 - Mediated presence
 - “being there”
 - immersion
 - Social presence
 - projection of ourselves
 - perception of others
 - Copresence
 - being somewhere with others
 - Self presence
 - or embodiment



The good and the bad...

- Extension of 'real' self – can be the same or different
- Extended reach
- Exploiting the medium
- “Laying yourself bare”
- Misinterpretation of identity
- Cyber-stalking
- Identity theft



Dangers of online interaction

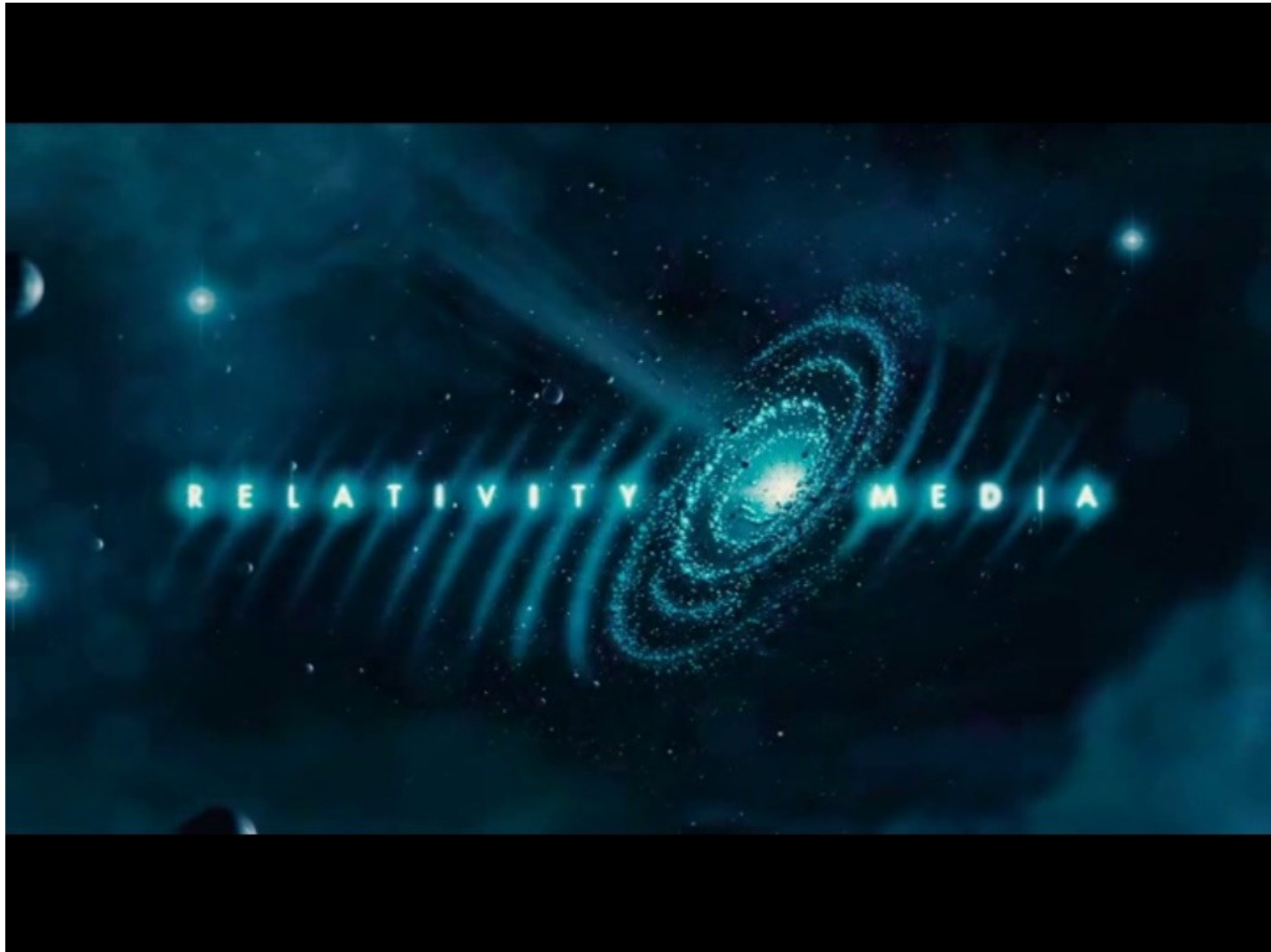
Online interaction and communication is great but there is a darker more sinister side... here is the story of my recent experience



Disclosure, care and vulnerability in networked scholarship project

<http://e4innovation.com/?p=782>

5. Distributed cognition



The good and the bad...

- “Person-Plus”
- Exploiting vast amount of information
- Tools to curate, manage, filter
- Enhanced capacity
- Greater cognition
- Lack of digital literacy skills to use effectively
- Easy to get lost and confused
- Lack of permanency
- Machines taking over..
- Over dependency



Will machines make us extinct?



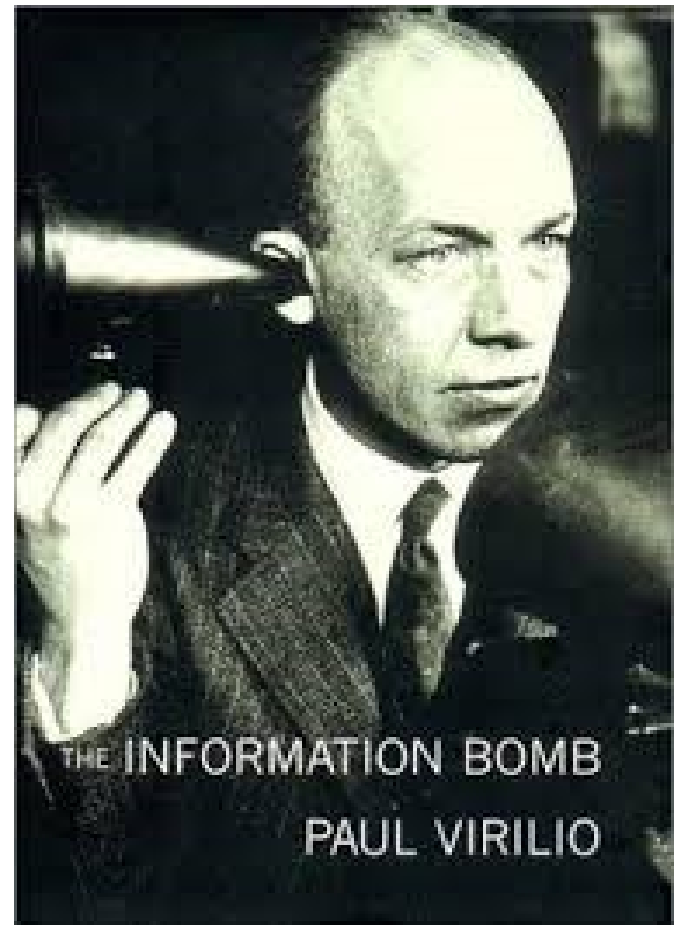
Future challenges

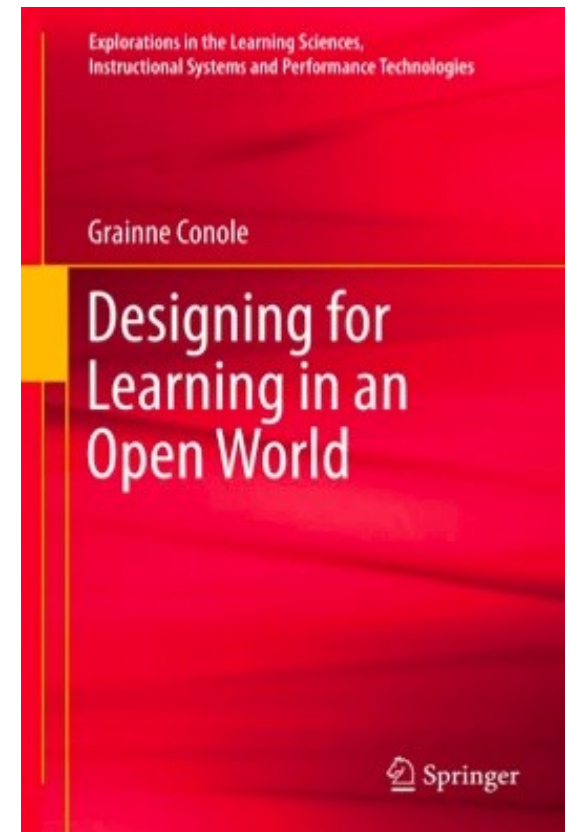
- Disaggregation of Education
- New Digital literacies
- Digital skills and jobs gap
- New business models and pedagogies
- Blurring of boundaries



The information bomb....

- Technologies cannot exist without accidents
- Technologies separate us from real time and space
- When, not if technologies fail....





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

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<http://e4innovation.com>

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