



The Integrated Campus: Observations from the US and Canada About MOOCs' Impact on Physical Campus

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4 July 2013

Agenda

- Study Tour and Outcomes
- We didn't start the fire...
- Everything old is new again
- What's MOOCs got to do with it?
- The times they are a-changin'
- Implications for an Integrated Campus

(Apologies in advance to all music lovers...)

The study tour: Financially Sustainable Technology Infrastructure

- The Study Tour Rationale and participation objectives
- March 2013
- Three physical site visits:
 1. San Jose State University: President Mo, CIO and Online Faculty
 2. UC Berkeley: new CIO and entire team of direct reports
 3. UBC: Centre for Teaching and Learning and Acting CIO
- Two virtual site visits:
 1. Duke University (Cisco EBC)
 2. Indiana University (Citrix EBC)
- Participation:
 1. 9 university representatives including CIO and above level
 2. 6 institutions
 3. 3 states (Vic, SA & WA)
 4. 3 Vendors

Takeaway Summary

- Learner and industry expectations are changing fundamentally
- There is a recognition that incremental change won't be enough
- The changes are attacking the very core of a university's model, including their business models, sources of revenue and sources of differentiation
- In an ironic way MOOCs have forced universities to look more closely at the physical campus
- There are 2 drivers of funding for technology:
 1. Creating value
 2. Controlling costs

There are 2 drivers of funds for technology: Creating value and Control of costs

1

Create Value (outside IT Departments)

- Improve learning outcomes through investments in technology, staff training and learning analytics
- Improve the student experience to increase satisfaction and achieve higher rates of completion
- Increase the relevance and value of centralised services (including ICT) to faculty members and other university staff
- Adapt curriculum to respond to industry requirements

2

Control Costs (focus of IT Departments)

- Exploit opportunities for shared services and scale economies
- Take advantage of new technologies such as cloud and virtualisation to change the economics of service delivery
- Automate appropriate functions
- Focus on asset utilisation including network, compute and storage
- Invest in more flexible and scalable infrastructure that can be scaled up and down with demand
- Technologies that manage security risks

“Managing costs on its own is not enough. You can’t save your way to success.”

– Lyle Nevels, CIO, UC Berkeley

Guttenberg, Dewey, World Wide Web and IT
Siemens, Downes and MOOCs for free

We didn't start the fire
It was always burning
Since the world's been turning

With apologies to Billy Joel (“We didn’t start the fire”)

In 2013 incremental improvement may not be enough!

- Universities visited on the study tour acknowledged that the global financial crisis, availability of free content (including MOOCs) and changing learner expectations had forced them to ask questions such as:
 - How does a university differentiate if not on content?
 - Where will future demand come from when being 'local' is no longer a significant advantage?
 - Are there opportunities to increase throughput / drive efficiencies as traditional revenue sources dry up?

***“95% of people talk about innovation, but only 5% of people actually do it.
The biggest risk to institutions is no action at all.”***

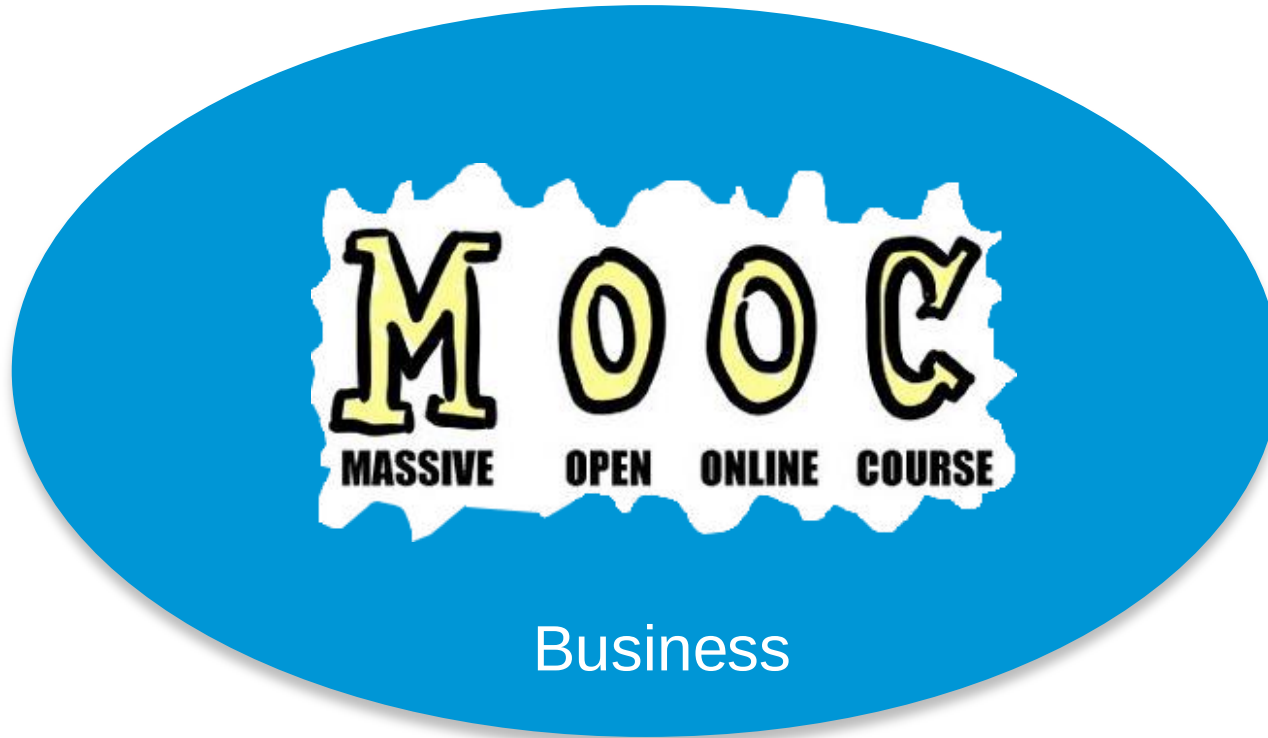
– President Qayoumi (President's Council)

Innovation ≠ Transformation

But how do we know the difference?

- Innovation
 - Improvements in teaching, learning, technology or services
- Transformation changes business and operational models
 - Revenue is no longer tied to a time-served model
 - Student achievement is recognised in terms of outcomes, competence and measurable attributes
 - Recognition of learning outside formal education becomes mainstream
 - Alternative accreditation is embraced and integrated (eg badges, certifications, etc)

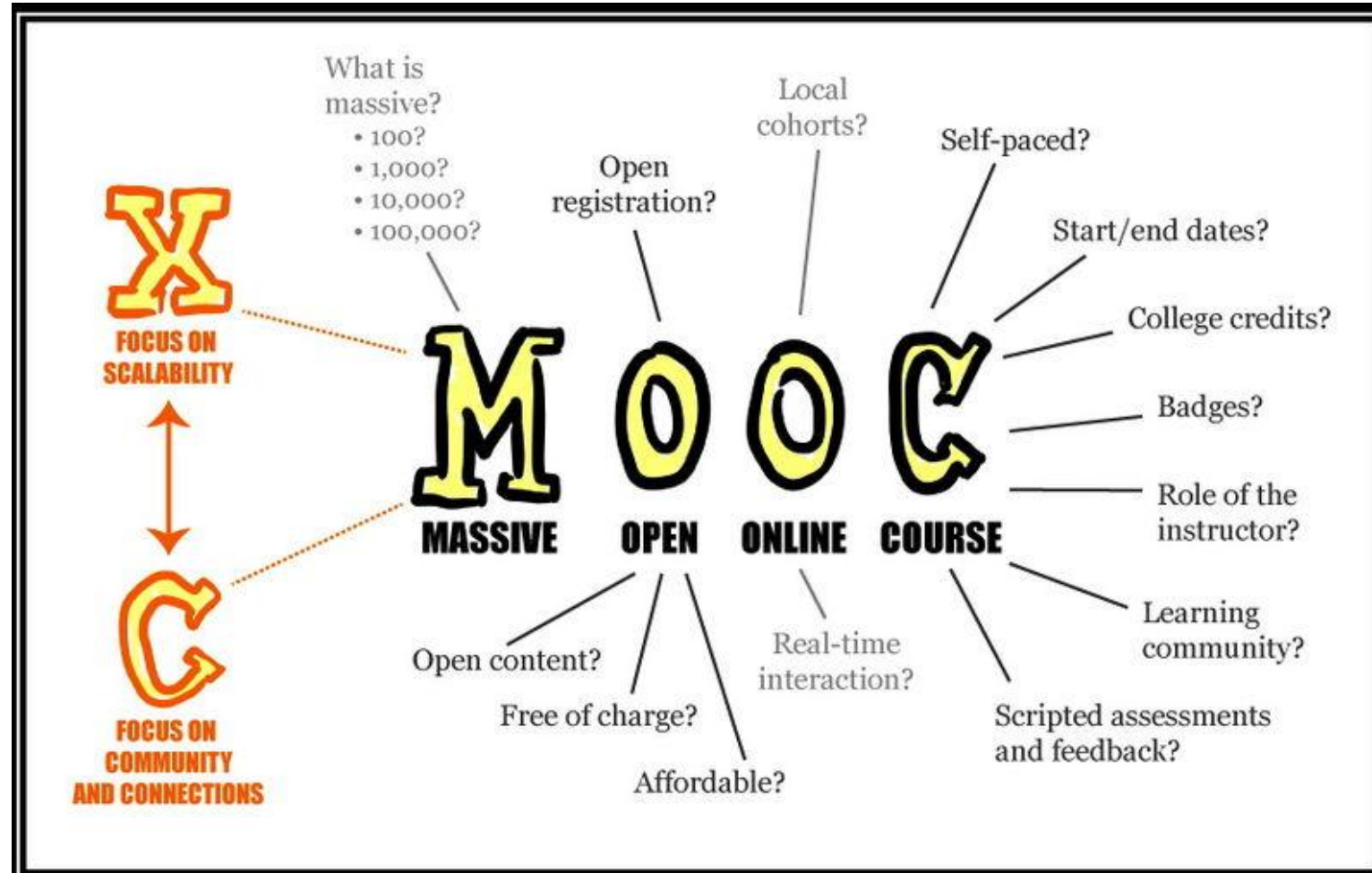
So... What about MOOCs?



May = Transformation

What is a MOOC?

Every letter is negotiable!



Matthieu Plourde, Educational Technologist, University of Delaware
http://en.wikipedia.org/wiki/File:MOOC_poster_mathplourde.jpg

And don't throw the past away
You might need it some other rainy day
Dreams can come true again

When everything old is new again...

(With apologies to Peter Allen)

Fill in the blanks...

“ Will the
classroom be abolished, and the child of the future be stuffed
with facts as he sits at home or even as he walks about the
streets with his portable in his pocket?”

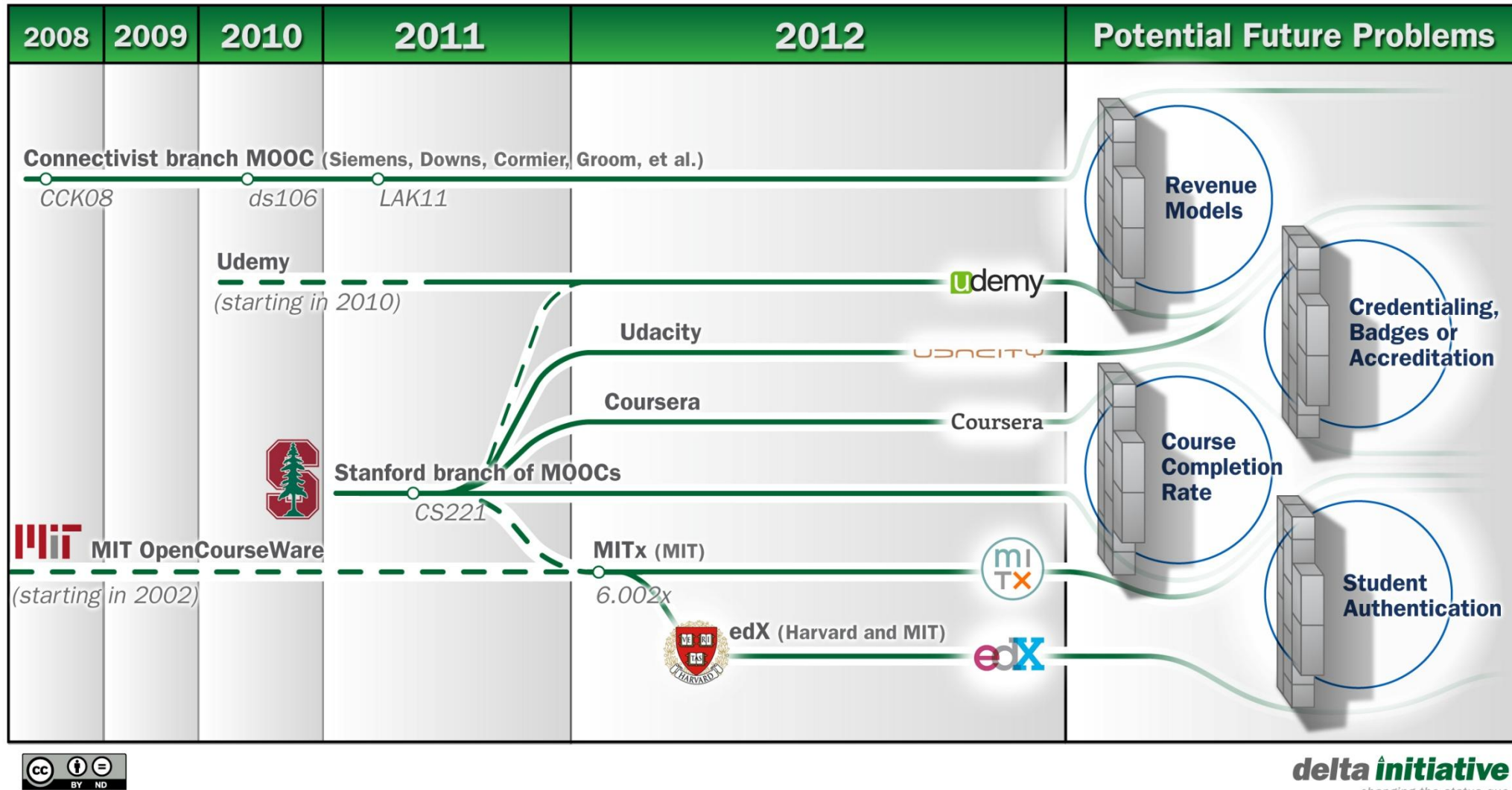
http://chronicle.com/blogs/conversation/2013/04/23/before-moocs-colleges-of-the-air/?cid=at&utm_source=at&utm_medium=en

Mass Education Precursors to MOOCs (2)

When	What
2012	“The year of the MOOC”
mid 90’s	Web-based
1960’s –	Educational Television
1920’s - 1940	Radio
Pre-broadcast	Correspondence schools

Unfortunately, the biggest noise is made around the “free”, mass education capability of xMOOCs rather than the educational value and transformational capability of cMOOCs.

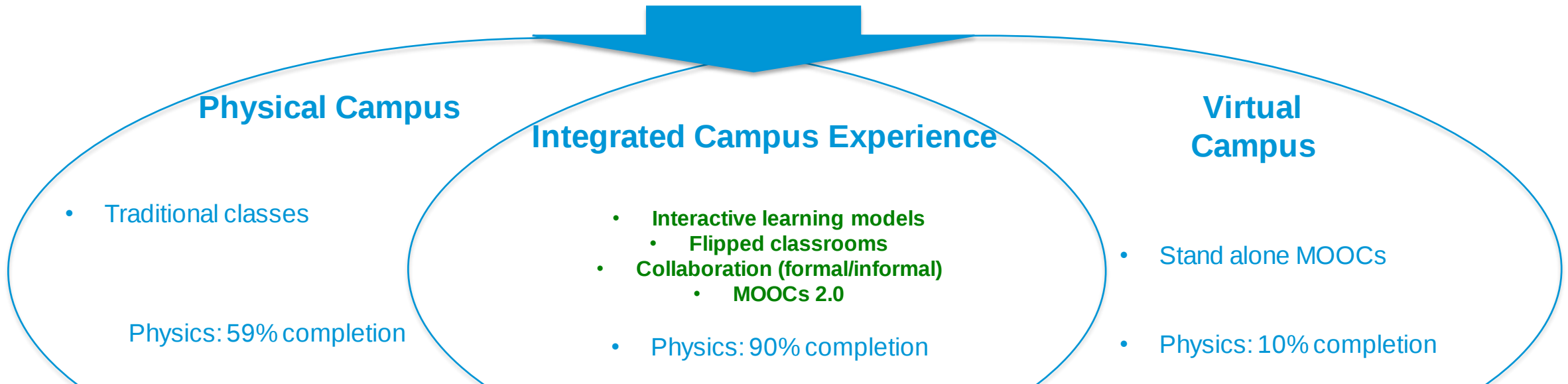
Evolution of MOOCs



Phil Hill, Industry Consultant and eLiterate Blogger <http://mfeldstein.com>

“In an ironic way MOOCs have forced universities to look more closely at the physical campus” (President Qayoumi, SJSU)

Technology is driving integration between the virtual and physical campuses



“Infrastructure has the potential to be a *Platform for Innovation* as well as meeting our basic needs”
– President Qayoumi

What's MOOCs got to do with it? What's MOOCs but a second-hand solution?

(With sincere apologies to Tina Turner, Terry Britten, Joe Bihari, Riley B. King)

So what's different?

MOOCs are a contributor to the “unbundling” of [higher] education

From this...

Enroll in qualification (bundle)

- Core curriculum with approved electives
- Provider delivers courses and content
- Tutorials, Practicals, Labs, etc
- Provider has some responsibility for progress
- Provider's information resources are included
- Provider examinations and assessments
- Accreditation with an award
- Variable Fees (20k – 38k per year)
- Additional Fees may be charged

To this

- Register in a subject, course, module, certification
- Self-guided according to personal goals
- Access content from anywhere (free – fee)
- Fee-based; simulations; experience (incomplete)
- Responsible for own progress and motivation
- The web
- Variable – badges, vendor & other certifications
- Relies on consortia or RPL
- Unbundled; from free to service-based fees
- Consumer driven

The tipping point in transformation

Not one thing on it's own but a collection of things in synergy

- Employer acceptance of alternative credentials (badges; certifications)
- Mechanism to provide robust quality standards for “badges”
- Alignment of badge frameworks to employer requirements
- Development of “layered” badges for learner and workplace maturity
- New career and recruitment models
- “The future is already here, it’s just not evenly distributed” (William Gibson)

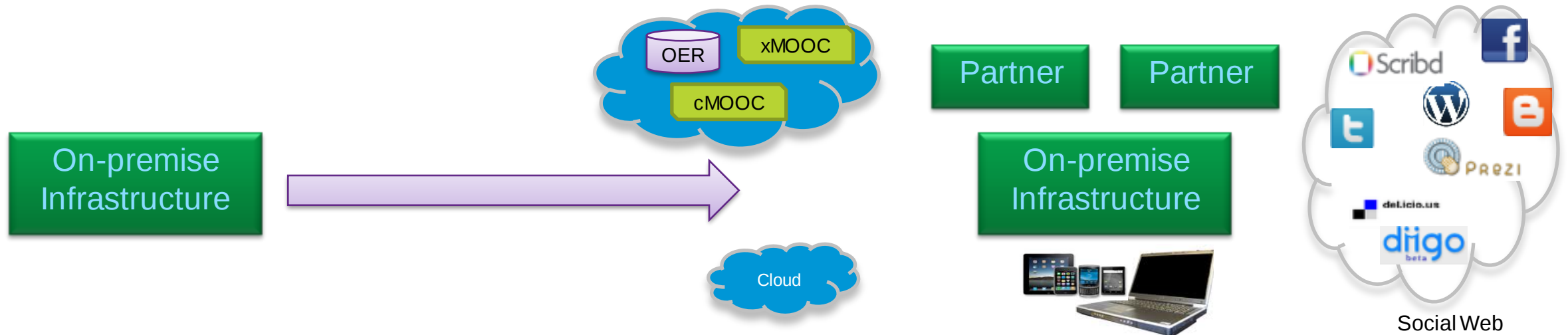
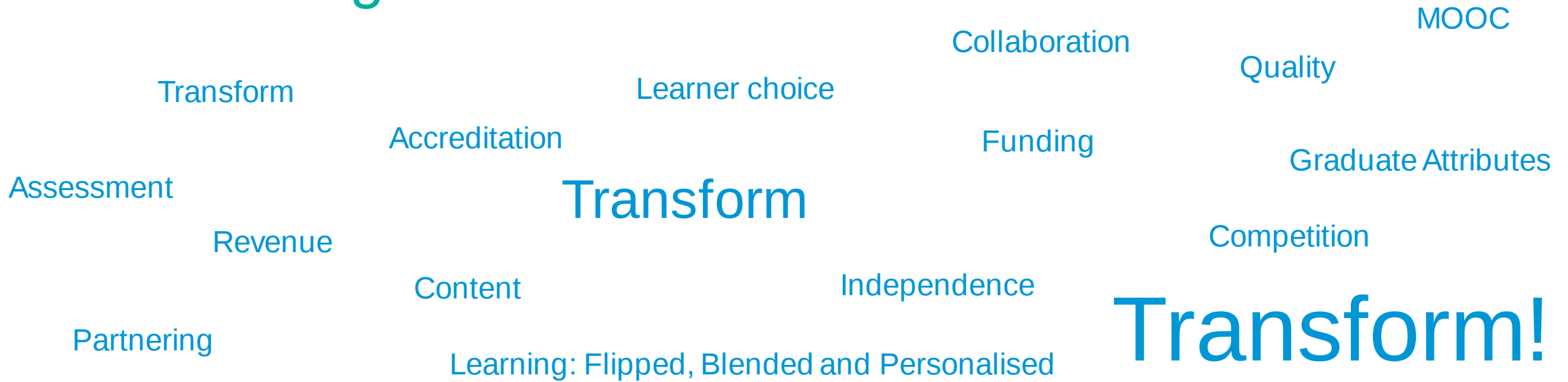
Comparison of “Short List” Topics

Table 1: Comparison of “Final 12” Topics Across Three NMC Horizon Research Projects

NMCHorizon Report 2013 Higher Education Edition	Technology Outlook for Australian Tertiary Education 2013-2018	Technology Outlook for Australian Tertiary Education 2012-2017
Time-to-Adoption Horizon: One Year or Less		
Flipped Classroom Massive Open Online Courses Mobile Apps Tablet Computing	Learning Analytics Massive Open Online Courses Mobile Learning Social Media	Cloud Computing Learning Analytics Mobile Apps Tablet Computing
Time-to-Adoption Horizon: Two to Three Years		
Augmented Reality Games and Gamification The Internet of Things Learning Analytics	3D Printing Badges Information Visualisation Location-Based Services	Digital Identity Game-Based Learning Open Content Personal Learning Environments
Time-to-Adoption Horizon: Four to Five Years		
3D Printing Flexible Displays Next Generation Batteries Wearable Technology	Flexible Displays The Internet of Things Virtual and Remote Laboratories Wearable Technology	Digital Preservation Massive Open Online Courses Natural User Interfaces Telepresence

<http://www.nmc.org/publications/2013-technology-outlook-australian-tertiary-education>

What's this got to do with us?



Come senators, congressmen
Please heed the call
Don't stand in the doorway
Don't block up the hall
For he that gets hurt
Will be he who has stalled
There's a battle outside
And it is ragin'
It'll soon shake your windows
And rattle your walls
For the times they are a-changin'.

- Bob Dylan (no apologies necessary...)

New models for...

- Sustainable technology that delivers value in transformational models
- Interoperability of content and data will be a key focus
- If you are going to outsource, make sure you manage it!
- New education-focused service providers will emerge and provide new value
- Make sure your own house is in order
 - Will your infrastructure cope with these challenges?
 - The study tour found a new importance for holistic infrastructure models as a “platform for innovation”
 - Staff and students demands for an integrated experience require strategic as well as tactical responses

Implications from study tour and other factors

- Financial

- Pressure from both demand- and supply-side
- Need to create value while reducing cost –notionally antithetical– therefore
- Prioritised investment in infrastructure mixed with cloud service and managed outsourcing

- People

- Learning and technology are becoming integrated around service delivery (teaching and research)
- The right tools and infrastructure are needed to respond
- Professional development around new models is critical to success

- Infrastructure

- Integrated campus environment requires robust, scalable and ‘future-proofed’ infrastructure
- Will need to be adaptive, scalable and support users independent of location
- Requires effective investment decisions in areas such as storage, compute, virtualisation and application management

With challenge comes opportunity

- [Next Generation Learning Challenges] educators are not simply using technology to supplement current practice; they are incorporating it as a foundational element in new learning designs aimed at generating the learning experiences suggested by the 10 [NGLC] attributes
- Doing more with less often increases the importance of infrastructure and technology as key enablers (but they must be strategically and practically relevant)
- Delaying decisions at a time like this often leads to increased risk, greater cost downstream and greater effort in fulfilling the needs of the organisation
- IT can reassert its importance to the organisation by delivering greater business value

