How the Web changes the World & Universities (or not)

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With thanks to Professor Hugh Davis,

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Web Disruption at University?

• How much difference does the Web make to your education?
  – *See my spreadsheet from 5 years ago*

• What would happen if the following blew up
  – the University’s web servers?
  – the University’s connection to the Internet?
  – Southampton’s connections to the Internet?
  – the UK’s connection to the rest of the Internet?
Expansion of the Web

• The Web spread the conditions of its initial creation throughout the whole of society as it underwent an initial inflationary phase.

• The academy
  – government patronage
  – large-scale co-operation
  – sharing of intellectual property

Remember I actually said this “We got the web of the researchers”
Directions for Academics

• MOOCS, Open Science, Open Data, Open Educational Resources
  – Web Technology joins the High Moral Ground
• *vs* the established economic model for ensuring continuity of information production
  – trading of privately held information through payment and subscription products such as journals or magazines
Directions for Businesses

The key commercial differentiating advantage of the web: It’s porous.

1. NETWORKED
The web is us, dummy.

2. SEAMLESS
No structural barriers.

3. OPEN
Social engagement and consensus. Led by users.

4. COMPELLING
Don’t be dull or merely important.

5. PURPOSE BEYOND PROFIT
Multidimensional value

The Web helps us to break down external and internal barriers
DTCs & Graduate Education

- Higher education is more than
  - Acquiring advanced knowledge
  - Acquiring advanced skills

- It is also
  - Acquiring a leadership position within the digital economy
  - By a mentored program of networked industry engagements/relationships

- Don’t just write a thesis, form an impressive network and take advantage of it
MOOC

LEARNING FOR LIFE

Enjoy free online courses from leading UK and international universities.

Browse our courses
What is a MOOC?

**Massive** - some have 10,000s registered.

**Open** = free
anyone can register

**Online** although many have a parallel blended incarnation

**Course** - that runs at a given time with a given cohort
(but not necessarily accredited for anything)

- Short (often 4-8 weeks, 3 hrs /week)
No formal assessment and feedback
Rely on Social Learning
What are MOOCs made of?

Most MOOCs consist of:

- Many short videos
  - Some talking heads
  - Some “worked examples”
  - Some experiments etc.
- On-line papers etc.
- On-line activities
- Links to external resources
- Discussions on platform
- Off platform activity
Assessment and Feedback?

Assessment (and feedback) will need to be:

- Objective (multiple choice etc.)
- Peer review
- Self evaluation

The emphasis must be on the student as a self-motivated learner.

No “Conversational Framework” here!
MOOC Providers

**Udacity** the first “democratizing education” but still for profit. Started at Stanford.

**Coursera** for profit but business model only just emerging 2,000,000 people have taken a course, from the catalogue of around 200. Only 7-9% complete.

**EdX** not for profit MIT, Harvard, Berkeley

**Futurelearn** for profit Based in UK at OU aspires to include top 30-40 universities Director is Simon Nelson - responsible previously for BBC digital strategy
FutureLearn platform (Sept 2013)
FutureLearn MOOC Structure

**Learning Units**: 1-6 with Up to 10 hours study time

- **miniMOOCs** have 2 or 3 Learning Units

- **Weekly Learning Units**: 2-6 hours study time
- Meaningful title, clear learning goals, end-of-unit assessment
- Each with 2 or 3 self-contained Learning Blocks

**Learning Blocks**: Sequence of elements
(This is just one example)
<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unique visitors</td>
<td>8,226</td>
</tr>
<tr>
<td>Page views</td>
<td>296,052</td>
</tr>
<tr>
<td>Pages per visit</td>
<td>14</td>
</tr>
<tr>
<td>Visits</td>
<td>21,236</td>
</tr>
<tr>
<td>Visits per learner</td>
<td>2.6</td>
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<tr>
<td>Time per visit</td>
<td>22 mins</td>
</tr>
<tr>
<td>Joined course</td>
<td>13,183</td>
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<tr>
<td>Marking steps as complete</td>
<td>4,361</td>
</tr>
<tr>
<td>Completed steps per learner</td>
<td>14</td>
</tr>
<tr>
<td>Comments</td>
<td>5,677</td>
</tr>
<tr>
<td>Social learners</td>
<td>1,720</td>
</tr>
<tr>
<td>Comments per learner</td>
<td>3.3</td>
</tr>
<tr>
<td>% of active learners</td>
<td>39%</td>
</tr>
</tbody>
</table>
Top 10

1. United Kingdom (77%)
2. United States (2%)
3. India (2%)
4. Ireland (2%)
5. Spain (2%)
6. China (1%)
7. Australia (1%)
8. Italy (1%)
9. France (1%)
10. Greece (1%)
Level of education

- University / college (degree level)
- University / college (masters level)
- High school / secondary school
- University / college (doctorate level)
- Less than high school / secondary school
- Missing Data

23/01/2014
Area of employment?

- IT and information services
- Teaching and education
- Business, consulting and...
- Public sector
- Health and social care
- Charities and voluntary
- Engineering and...
- Accountancy, banking and...
- Media and publishing
- Hospitality, tourism and...
- Retail and sales
- Creative arts and culture
- Marketing, advertising...
- Science and...
- Transport and logistics
- Energy and utilities
- Law
- Armed forces and...
- Environment and...
- Property and construction
- Recruitment and HR

Missing Data
Patterns of engagement

**Auditing:** Just interested. Not looking for credit.

**Completing:** Looking for credit – either passive or actively engaged with discussions etc.

**Sampling:** Looking for interesting material
How do MOOCs make money?

The Fremium Model
You get added value if you pay e.g.
  • Statements of participation, or attainment – or actual credits?
  • Tutoring – the eBay model

Sponsored MOOCs
  • Someone pays me to make the MOOC I want (for their marketing purposes)
  • Someone pays me to make the MOOC they want – but I can use too.

Access to student data

But this is all money for the Platform Provider. Why do Universities and Academics do this?
1. Enhancing Reputation (particularly for the flagship subjects)
   - being good world citizens in *democratising education*

2. Reaching new markets
   - (International Markets)
   - (The CPD market)

3. Increasing Our Capacity on-line
   - (building a unit to create on-line)
   - (educating our staff in the possibilities)

4. Trying to move our F2F experience further from Content Delivery and more to using it for achieving deeper understanding
   - flipped classroom
   - flipped MOOC

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**Georgia Tech Model**
$6600 per year per person
(cf $45000 for campus based)
400 students in first paying cohort (actually not open)
The Cost of Making a MOOC?

According to Edinburgh - £30,000 each.
There seems to be some consensus around this, although few people are sharing any figures.

At Southampton we have recorded figures much higher, including costs for Legal, copyright clearance, marketing, management time, teaching assistant, etc.

The ScHARR MOOCs Diaries: Part X – The cost of developing a MOOC (Chris Blackmore, University of Sheffield)
Want to be a MOOC Star?

We had a team of around 15 academics, 15 research PGs, 6 CITE staff, 2 legal staff and a librarian on WS MOOC
Cost? “£30k” and the rest

Opening conversation: the future of Web Science

In this discussion it is suggested that computer science is a branch of science fiction, allowing a new world to be built with powerful
Structures

**Steering Group** (every 2 months)
- Chief Financial Officer
- PVC Ed
- Director of Centre of Innovation in Technologies and Education (CITE)
- Director of Marketing and Communications
- Legal Services
- Director of iSolutions
- The Librarian
- Head of QA

**CITE** (weekly)
- Learning design
- Project management
- Video and Multimedia Production

**Consultants**
- External production company

**Academic Team** (with CITE every week)
- No established model yet
- Our Web Science MOOC is involved a team of around 12 academic staff and 6 PGRs over last summer

**The Library and Legal** (weekly)
- Resource Discovery
- Rights clearance
- Licences

**Futurelearn Liaison** (monthly ++)

**Reporting/QA**

**Run Time Team**
- Runtime Manager
- Academics/Postdocs/PhDs social media & comment handling
HE Context

Fees going up faster than value of degree
Increased demand for flexibility of study (particularly CPD)
Need for universities to globalize or specialize
Challenge from alternative educational providers (particularly for MSc’s/CPD) becoming real

All these things imply a greater engagement with on-line
Changing Business model for higher education

MOOCs are the vanguard for on-line programmes