Essence and detail …

• Core principles are transferrable.
• Details? Maybe or maybe not …


Outline

• Changing educational context in HK
• Complexity of innovation and change
  \( J + S + CC(3) \)
• A small study at CUHK
• The way forward: Evolution or revolution?
• Institutional strategies
• Ss are probably well-disposed 😊
Our education systems, especially in HK, are changing! … in deep and fundamental ways

Web 1.0
"the mostly read-only Web"
250,000 sites
45 million global users
1996

Web 2.0
"the widely read-write Web"
80,000,000 sites
1 billion global users
2006

Web 3.0?
"the smart read-write Mobile Web"
published content
user generated content
interconnected
published content
user generated content
http://web2.socialcomputingmagazine.com/
2010 …???
Old

- 9 years basic education, government-funded
- System is '2+2' with two public examinations
- Students can enter post-secondary education and training (post-sec. E&T) earlier than year 12
- 8 government-funded HEIs for ~18% of school-leavers

New

- 6 years primary + 3 years junior secondary
- 4 years senior secondary
- A range of post-sec. E&T - vocational, professional & liberal arts
- 3 years senior secondary
- 3 years undergraduate degree
- 4 years undergraduate degree
- A total of 40-50% of students receive post-sec. E&T; much is self-financed
- 8 government-funded HEIs for ~18% of school-leavers

Range of postgraduate options

3 → 4 but 4 ≠ 3 + 1

Assume no attrition
No. in 3-year programme = X₃
No. in 4-year programme = X₄

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>X₃</td>
<td>X₃</td>
<td>X₃</td>
<td>X₃ + X₄</td>
<td>X₄</td>
<td>X₄</td>
<td>X₄</td>
</tr>
<tr>
<td>Year 2</td>
<td>X₃</td>
<td>X₃</td>
<td>X₃</td>
<td>X₃ + X₄</td>
<td>X₄</td>
<td>X₄</td>
<td>X₄</td>
</tr>
<tr>
<td>Year 3</td>
<td>X₃</td>
<td>X₃</td>
<td>X₃</td>
<td>X₃ + X₄</td>
<td>X₄</td>
<td>X₄</td>
<td>X₄</td>
</tr>
<tr>
<td>Year 4</td>
<td>X₄</td>
<td>X₄</td>
<td>X₄</td>
<td>X₄</td>
<td>X₄</td>
<td>X₄</td>
<td>X₄</td>
</tr>
</tbody>
</table>

Extra year for broadening – language, General Education, experiential learning, capstones, etc.
The Education Reform is a mammoth and complex task. Reform proposals spanned across areas which are interrelated. Adjustments in one area may have significant impact on other areas. Changes will inevitably give rise to anxiety, difficulties and challenges.
The J-curve

• Things get worse before they get better!

Productivity/
Value/
Return

Time

The S-curve

Level of adoption

Innovation
Growth
Maturity

Time

After Couros (2003)
CC(3): Three-stage conceptual-change model

1. Evidence of the need for change
2. Confronting the situation – in a face-saving way
3. Reconstruction of a new approach

### Understanding the drivers

**McNaught & Lam (2009)**

<table>
<thead>
<tr>
<th>Factor</th>
<th>Drivers for coordinated &amp; supported T&amp;L</th>
<th>Drivers for laissez-faire approach</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Senior management</strong></td>
<td>Internal Evidence of institutional research</td>
<td>Internal Culture of a traditional F2F university</td>
</tr>
<tr>
<td></td>
<td>External External quality audit</td>
<td>External Good external rankings</td>
</tr>
<tr>
<td><strong>2. Time</strong></td>
<td>Internal Changing student profile</td>
<td>Internal Changing curriculum (2012)</td>
</tr>
<tr>
<td></td>
<td>External</td>
<td>External University research life</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Frenetic city</td>
</tr>
<tr>
<td><strong>3. Ts' decisions about change</strong></td>
<td>Internal Local support</td>
<td>Internal Peer groups in departments (Research in T&amp;L as too 'soft')</td>
</tr>
<tr>
<td></td>
<td>External Change in promotion policy</td>
<td>External Benchmarking within the discipline</td>
</tr>
</tbody>
</table>
Source of cases for this study

- CUHK’s annual ‘innovations in teaching and learning’ conference. Commonly called the Expo
  http://www.cuhk.edu.hk/elearning/expo

N=13; two Ts appear in two Expo events in different years.
Interviewed Teachers A to H. ELE: ‘English language education’

1. Teachers and students used existing social media as T&L resources

- Readings from social-media sites (Biology)
- T used YouTube videos in class (linguistics)

2. Teachers created resources and shared them

<table>
<thead>
<tr>
<th>Restricted</th>
<th>Open</th>
</tr>
</thead>
<tbody>
<tr>
<td>* T recorded podcasts (ELE)</td>
<td>* T used a wiki to communicate with professionals and students (Teacher A – ELE)</td>
</tr>
<tr>
<td>* T gave further advice in blogs and on twitter (Teacher E – information literacy)</td>
<td>* T created digital stories for sharing (Teacher A – ELE)</td>
</tr>
<tr>
<td>* T provides learning objects (ELE)</td>
<td>* Podcast lectures were created and made accessible to public (Teacher F – law)</td>
</tr>
</tbody>
</table>

* Wikis as collaborative tools (Teacher D – engineering)
3. Students created resources and shared them

<table>
<thead>
<tr>
<th>Restricted</th>
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</tr>
</thead>
<tbody>
<tr>
<td>* Ss shared learning portfolios <em>(Teacher B – biochemistry)</em></td>
<td></td>
</tr>
<tr>
<td>* Ss shared video-recorded presentations <em>(Teacher C – ELE)</em></td>
<td></td>
</tr>
<tr>
<td>* Ss shared thoughts in blogs <em>(physical education)</em></td>
<td></td>
</tr>
<tr>
<td>* Cases were created by Ss and shared <em>(Teacher G – pharmacy)</em></td>
<td></td>
</tr>
<tr>
<td>* Ss’ thoughts were kept in a wiki/ Twitter/ Facebook <em>(Teacher H – tutor training)</em></td>
<td></td>
</tr>
<tr>
<td>* Ss created digital stories that were made public <em>(Teacher A – ELE)</em></td>
<td></td>
</tr>
</tbody>
</table>

**Interview findings: Advantages**

- Motivating
- Sharing with a wider audience, professionally and internationally
- Engaging – more ‘time on task’
- Facilitating student–student collaboration
- Convenience in managing materials (e.g. sharing, tagging)
- A fashionable thing to do! *(It is HK, after all!)*
Interview findings: Disadvantages

- Investment of time and energy for Ts *(Ts in category 3 overall more +ve)*
- Additional workload for Ss (in some cases)
- Ts want additional support and resources
- Fairness in grading if assessable
- Ss (& Ts!) shy to share in a public way
- Evaluation of actual learning benefits difficult

Decision point!

- Do we take a pragmatic approach, providing limited support to teachers who ask for more service?
- Or a proactive approach where we more actively sell the benefits of using more innovative technologies?

Evolution vs Revolution?
Implications for ‘learning designs’

• Bringing technology and pedagogy together

Lockyer, Bennett, Agostinho, & Harper (2009)
Aims of CUHK eLearning Strategy


1. Clarify the role of eLearning in OBA
2. Research for planning infrastructure, e.g. University-wide eLearning systems
3. Educational design and technology in the four-year undergraduate curriculum
4. Staff training, support & collaboration strategies
5. Student induction to eLearning & student IT competence training
6. Benchmark eLearning at CUHK against ...

Components

1a Faculty OBA roadmaps (also 3a, 3e)
1b ELearning OBA webpage
1c Students’ future career needs

2a WiFi coverage
2b New CUHK portal
2c EPortfolio system & tools (also 3d)
2d Review of eLearning platforms
2e Mobile technology
2f Learning Object Repository
2g Video & audio servers
2h Learning spaces & teaching spaces (also 2a)

3a Level of use of eLearning
3b Courseware development
3c EAssessment
3d Formal & experiential learning – ePortfolios (also 2c)
3e QA for blended courses

4a Staff ‘training’: Ts & TAs
4b ELearning Assistants (eLAs)
4c ELearning liaison persons (eLLPs)
4d ELearning Expo
4e ELearning newsletter

5a Students’ perspectives
5b Student IT competence
5c Information literacy
5d Independent learning

6 ACODE 8 benchmarks
### Building Institutional Capacity for the Use of Social Media

<table>
<thead>
<tr>
<th>ELearning Service strategy</th>
<th>Action at department or faculty level</th>
<th>Action at institutional level</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELearning systems review</td>
<td>All eight faculties involved</td>
<td>Web 2.0 features are important criteria</td>
</tr>
<tr>
<td>A range of support services</td>
<td>ELearning assistants (Lam et al., 2009)</td>
<td>New criteria for evaluating teaching</td>
</tr>
<tr>
<td>Professional development (PD)</td>
<td>Showcasing examples</td>
<td>Ts can gain credits for Web 2.0 sessions for a PD certificate in T&amp;L</td>
</tr>
<tr>
<td>Courseware development</td>
<td>Courseware development grants</td>
<td>E.g. the podcasting service and the learning object repository</td>
</tr>
<tr>
<td>Promotion of eLearning</td>
<td>A pragmatic approach</td>
<td>Programme reviews of the ‘new’ curriculum (2012) include innovation in eLearning (McNaught &amp; Young, in press)</td>
</tr>
<tr>
<td>Research on new strategies &amp; technologies</td>
<td>The scholarship of T&amp;L (Boyer 1990)</td>
<td>Involvement of the Academic IT Steering Committee</td>
</tr>
</tbody>
</table>

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Our students appear to be well-disposed to interactive uses of eLearning (inc. social media) IF technology supports learning which is assessed.

---

![Image of students with bunches of flowers]
Survey of 1438 students at CUHK, representative of gender, year level & discipline

Positive (mostly) expectations of eLearning

Further, students with HIGHER use of eLearning were MORE positive about BOTH the usefulness of the eLearning strategies AND their own personal gains in learning

Lam, Lee, Chan, & McNaught (2010; 2011)

Relationship between eLearning experiences and expectations

Ordinary least squares (OLS) multiple regression analysis

Model A

<table>
<thead>
<tr>
<th>Frequency of technology use</th>
<th>Frequency of eLearning strategies use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usefulness of eLearning strategies</td>
<td>0.18 ***</td>
</tr>
<tr>
<td>e1</td>
<td>0.41 ***</td>
</tr>
</tbody>
</table>

Model B

<table>
<thead>
<tr>
<th>Frequency of technology use</th>
<th>Frequency of eLearning strategies use</th>
</tr>
</thead>
<tbody>
<tr>
<td>eLearning benefits</td>
<td>0.10 **</td>
</tr>
</tbody>
</table>

** significant at the 0.005 level
*** significant at the 0.000 level
Patience is a virtue

• Effective change takes time.
• Monitoring over time is needed for evidence to be convincing.

References

References


