New modes of delivery ... e-learning

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Main points

- e-learning / ICT base learning / digital learning – in higher education
  - Potential for enhancing learning & teaching in HE
  - some examples
- consequences for HEI and its members
- QA
E-learning in HE?

- “e” hype end 90’s: end of brick and mortar universities
- Until recently: little attention to e-learning by at conventional universities:
  - Some departments, individual champions
  - Little attention by institutional QA
- More important for open/ distance universities
- QA approaches for “elearning” developed by the e-learning community (EFQUEL, EADTU)
2012 - MOOC catalyst

- 2012 arrival of MOOCs
- US: “avalanche”, “tsunami”, “end of degrees”
  - game changer: affordable quality education for all
  - more quality & quantity at lower cost (economic crisis)
  - democratisation of learning
  - “a new business model”: HE as a global enterprise
- Reactions:
  - MOOCs controversial, but more interest than concern
  - broad consensus on importance of ICT based learning
  - Growing attention to learning & teaching in HE

...4...
ICT based learning: enhanced institutional take up

- top priority for institutions – 2nd to internationalisation
- e-learning strategies: 71% have or develop it
- 60-75% offer blended and on-line learning
- Continued interest in MOOCs
- New staff profiles: vice-president information, data management etc.
- capacities & infrastructure: 40% have e-learning centers - upgraded, new functions?
- Quality assurance for e-learning emerging
  - Internal QA: **29% have it – 35% discuss it**
  - External QA: **23% have it – 28% discuss it**

Source: E-learning in European HEI 2013, 250 institutions
TRENDS 2015, 450 institutions...
Institutional motivation for e-learning

- **Flexible** learning
- Increase **effectiveness** of classroom time
- More learning opportunities for **students on & off campus**
- **MOOCs**: international visibility & recruitment

Source: E-learning in European HEI 2013, TRENDS 2015
## Benefits of e-learning

**Perceived benefits of e-learning**

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Agree/Somewhat agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree/Somewhat disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revision of teaching methods</td>
<td>87%</td>
<td>7%</td>
<td>3%</td>
</tr>
<tr>
<td>Education of large numbers of students</td>
<td>77%</td>
<td>16%</td>
<td>4%</td>
</tr>
<tr>
<td>Monitoring study progress and creation of data on student learning</td>
<td>75%</td>
<td>16%</td>
<td>5%</td>
</tr>
<tr>
<td>Interactive collaboration among students</td>
<td>75%</td>
<td>20%</td>
<td>3%</td>
</tr>
<tr>
<td>Students work in small learning groups</td>
<td>68%</td>
<td>23%</td>
<td>7%</td>
</tr>
<tr>
<td>Developing students' reflective learning and critical thinking</td>
<td>61%</td>
<td>30%</td>
<td>6%</td>
</tr>
<tr>
<td>Enhancing learning and teaching in foreign languages</td>
<td>56%</td>
<td>32%</td>
<td>9%</td>
</tr>
<tr>
<td>Facilitating traditional in-class learning without significantly altering it</td>
<td>54%</td>
<td>23%</td>
<td>20%</td>
</tr>
<tr>
<td>Devoting more of the teacher's time to individual students</td>
<td>52%</td>
<td>28%</td>
<td>17%</td>
</tr>
</tbody>
</table>

- **Postive**
- Revision of teaching methods
- Monitoring learning progress
- Educating large numbers students
- But: flipped classroom?
How it is used: some examples

- replacing lectures by recordings – or online modules
- replacing courses by online courses
- full online degree courses
- modulised study offer (with option to accumulate into a master – continued professional development)
- guided self-study modules – using classroom for teacher / peer interaction (flipped classroom)
- online/blended peer study groups
- online examinations
- virtual labs – student research projects
Ability to scale up - teaching to many?

- University of Applied Sciences Brandenburg
- 3000 Students
- MOOC on Storytelling
- 30,000 learners
“History of Thucydides”
philological, historical, social aspects

- International Consortium: USA, Brazil, France, Germany, Croatia, Bulgaria, Georgia
- 8 Universities and 1 Research Center
- 3 hours per week (2 hours by local lecturers - 1 hour online by lecturer from a partner institution);
- GoogleHangout; physical and virtual (skype, social media) working groups
- 5 ECTS, 45 contact hours, 80 hours independent work

Courtesy to **Irine Darchia, TSU/MES, Georgia**

MIT Unveils ‘MicroMaster’s,’ Allowing Students to Get Half Their Degree From MOOCs

The Massachusetts Institute of Technology will begin allowing students to earn half of a master’s degree through online courses, then cap it off with a single semester on the campus. The university’s president, L. Rafael Reif, announced the pilot program on Wednesday.

Under the program, any online student who completes the first semester’s worth of courses in MIT’s supply-chain-management master’s program, earning good grades and passing a “comprehensive proctored examination,” will have a leg up in gaining admission to complete the program in a single semester on the campus.
Multiple choices for media use & learning design

- web-based - computer-based;
- video/audio tape
- movie clip, reading, game
- online - blended
- synchronous - asynchronous
- Instructor-led - self-study
- Peer contact/ collaboration
- Interactive, adaptive
- programmed – self-paced

Different learning situations
Challenges: identity check, assessments

- communication situation
- use of internet – other means?
- Reliability of technical devise
- Control
  - proctored exam
  - video-recording
  - Face and typing recognition
  - Legal, technical, and pedagogical aspects
How can e-learning improve learning?

Student centred-learning - diverse student body
- students can learn on own pace, independent from place & time, repeat, learn at their own interest
- different learning needs, styles and fill knowledge gaps
- mass higher education, working/parent students, continued professional development

Educational approach
- flipped classroom: listen to lectures at home, work through learning materials – discuss and collaborate in classroom
- active learning – better chance to active participation
- connected learning: working with others
- Virtual mobility/collaboration

Real-life/application
- medicine: visualisation, trial surgery
- geography: use of smartphones: compass, altimeter, mapping etc.
E-learning - different styles

BLOOMS TAXONOMY

- **Knowledge**: Recall of information; Discovery; Observation; Listing; Locating; Naming
- **Comprehension**: Understanding; Translating; Summarising; Demonstrating; Discussing
- **Application**: Using and applying knowledge; Using problem solving methods; Manipulating; Designing; Experimenting
- **Analysis**: Identifying and analyzing patterns; Organisation of ideas; recognizing trends
- **Synthesis**: Using old concepts to create new ideas; Design and Invention; Composing; Imagining; Inferring; Modifying; Predicting; Combining
- **Evaluation**: Assessing theories; Comparison of ideas; Evaluating outcomes; Solving; Judging; Recommending; Rating
Conclusions (and assumptions)

- **mainstreaming ICT use in higher education learning**
  - pervasive technology – in all parts of the mission
  - strategic institutional approaches & leadership
  - more systematic exploration of e- and on-line learning
  - Consequences for infrastructure, staff, budgets, data rules etc.
  - Internal QA

- **Learning and teaching**
  - end of the juxtaposition of e- and book-learning
  - reflection on learning goals & smart contemporary use learning approaches and resources (phones)
  - potential for student-centred learning
  - teaching content production and delivery process changes
  - portability & replicability of learning programmes/ modules
  - Potential commodification or open educational resources
  - inter-institutional collaboration: course sharing?
  - collaboration with external (for profit) providers
Conclusions (and assumptions)

- **Role of teachers**
  - Teaching as team work & shared responsibility (pedagogics, learning design, technical know how, student learning support etc.)
  - Different profiles of teachers

- **Role of students**
  - Digital skills, data use, ethics – for academia, profession, citizenship
  - Co-creator
  - Ability & responsibility for learning autonomy

- **HE mission shift?**
  - Potential for LLL, continued professional education
  - Third mission: service to society – e.g. outreach to schools, communities etc.
  - Recognizing learning from other places (unbundeling)
  - Profiling against other “learning providers”
Consequences for QA

- What does it mean for IQA & EQA?
- NOT: QA for e- and online learning
- But:
  - Quality of the instruction & materials
  - Quality and robustness of the learning environment and infrastructure
  - + transparency, data protection, digital stalking ...
- Developments and impact not fully predictable
- Whatever happens: it has to be considered by QA
EUA publications

**EL2014: E-learning in European higher education institutions**
- 249 HEI from 39 European HE systems
- Respondents: “those responsible for ICT-based learning”
  - Different type and use of e-learning (incl. MOOCs)
  - Impact on learning & on the institution

**T2015: TRENDS 2015 - Learning and Teaching in European Universities**
- Conducted in Jan.-April 2014
- 449 HEI from 47 European HE systems
- Respondents: Rectors, vice-rectors, rectors’ offices
  - Bologna Reforms, changing environments for European higher education, incl. e-learning

**2013 + 2014: MOOCs in European HE (Occasional papers)**

http://www.eua.be/Libraries/Publication/e-learning_survey.sflb.ashx
Open issues

- Flexibilisation in place and time? on-off campus to disappear?
- Not end of degrees, but new diversity: micro-credits, certifications, short learning programmes (EADTU)
- Unbundeling? Learning recognition in addition to learning provision
- definitions, taxonomies, standards, protocols for e-learning?
- Inter-institutional collaboration
  - Supplement mobility
  - Use of open educational resources
- Global players? Global networks?
Other learning providers

- ALISON – professional enhancement
- Udacity – service learning, industry demand, ICT
- Open HPI – a German platform for free professional courses
- Coursera – MOOCs produced by HEI
- FUTURE Learn – UK MOOC platform
- FUN – French MOOC platform
- IVERSITY – German MOOC platform