Drivers for change

“…providing the 100,000,000 university places now needed by young people in emerging economies desperate for HE. This will double by 2025…” (Diana Laurillard, Professor of Learning with Digital Technologies, University College London)

“The demand for education will continue to rise; we cannot afford to scale up at the current per student cost, in any sector, in any country.” (Laurillard)

“Our sectors…should consider working more closely with employers to develop and promote all graduates with the wherewithal and confidence to be digital entrepreneurs” (JISC report, Technology for Employability)

“The new global market in education-at-a-distance will greatly shift the educational powers”. (Marcel Bullinga, Futurist and author)

Digital technologies alone can’t solve these problems
Digital development at scale

Enhanced Education
- Flipped classrooms
- Open educational resources
- Massive open online courses

New Education
- Seamless learning
- Embodied learning
- Learning analytics
- Dynamic assessment
- Social networked learning

Sustainable Education
- Blended learning
- Hybrid courses
Enhanced education: MOOCs

 MASSIVE OPEN ONLINE COURSES

- 35 million course enrolments worldwide
- Coursera (18 million learners)
- EdX (5 million learners)
- FutureLearn (3 million learners)
- 75% of courses in English
- MiriadaX (Spanish)
- FUN (French)

Source: ClassCentral
Enhanced education: MOOCs

Example: Understanding IELTS from British Council

270,000 learners

From 190 countries

For many, their first time learning online

35% contributed to discussions

25% on mobile devices
Social networked MOOCs

Exams and me

Meet Rob, the video tutor for this course.

In this video, Rob talks about how people feel about exams. Watch Rob and the other speakers.

Note: For all the videos on the course, you can download the transcript PDF by using the 'View transcript' link under the video player.

- Did you agree with any of the speakers in the video?
- How do exams make you feel?
Exams and me

Meet Rob, the video tutor for this course.

In this video, Rob talks about how people feel about exams. Watch Rob and the other speakers.

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- Did you agree with any of the speakers in the video?
Getting started with MOOCs

Education ministries:  
Adopt an open source MOOC platform, e.g. Open edX, to produce free online courses

Support local software companies to develop innovative online courses – e.g. Geekie in Brazil

Institutions:  
Join a MOOC provider (e.g. Coursera, edX, FutureLearn) and create open courses

Learners:  
Find courses through an aggregator site such as ClassCentral (www.class-central.com)
New education

**Enhanced Education**
- Flipped classrooms
- Open educational resources
- Massive open online courses

**New Education**
- New curricula
- New credentials
- New pedagogies

**Sustainable Education**
- Blended learning
- Hybrid courses
## New education

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<th>New in the 1990s</th>
<th>New in the 2010s</th>
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<td>Technology-enhanced learning</td>
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<td>(Blackboard, WebCT)</td>
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<td>Media-equipped teaching rooms</td>
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<td>Desktop computer rooms</td>
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<td>Re-usable learning objects</td>
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<td>Personalised learning</td>
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<td>Evaluation of learning gains</td>
<td>Evaluation of learning transformations</td>
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New education

www.open.ac.uk/innovating

Annual Innovating Pedagogy report
Explores new forms of teaching, learning and assessment for a digital world
To guide teachers and policy makers in productive innovation
New education

**INNOVATING PEDAGOGY 2015**

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<tr>
<th>Crossover Learning</th>
<th>Learning Through Argumentation</th>
<th>Incidental Learning</th>
<th>Context-Based Learning</th>
<th>Computational Thinking</th>
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<td>Learning in informal settings, such as museums or meetups</td>
<td>Learning by establishing and refuting claims</td>
<td>Unintentional learning that contributes to longer-term learning paths</td>
<td>Learning from experience by interpreting new information by relating it to what we already know</td>
<td>Learning that breaks large problems down into smaller ones</td>
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<th>Learning by Doing</th>
<th>Embodied Learning</th>
<th>Adaptive Teaching</th>
<th>Analytics of Emotions</th>
<th>Stealth Assessment</th>
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<tr>
<td>Learning with authentic tools and practices</td>
<td>Learning that involves self-awareness of the body interacting with the real or simulated world</td>
<td>Uses data about a specific learner’s previous learning to create personalized path</td>
<td>Understanding student mindsets in cognitive and non-cognitive aspects, including frustrations, distractions, even eye tracking</td>
<td>Automatic data collection in which actions are continually collected to then present new, appropriate challenges</td>
</tr>
</tbody>
</table>

Sustainable education

Enhanced Education
- MOOCs as pathway
- MOOCs as resource

New Education
- MOOCs for credit
- MOOCs for research
- New curricula
- New credentials
- New pedagogies

Sustainable Education
- Blended learning
- Hybrid courses
Sustainable education

Hybrid courses

Learners take an open MOOC course linked to a degree program

New alliance of 6 universities from Australia, Europe, US, Canada to accredit MOOCs

Pay a fee to take an exam and get course credit

Courses at much lower cost than standard university tuition fee

Pay for additional services such as online tutoring

Progress onto a campus or online degree course
Sustainable education

Blended learning

The following courses are taught only through blended learning, which means that some sessions are face-to-face on campus and others are online. The online elements involve collaborative discussion groups, online lectures and tasks you do by yourself or with other students remotely. The blended nature of the courses means that there is a wide mix of students on them: teachers who are studying part-time while working and full-time campus-based students.

- Education for All
- Collaborative Working in Children’s Services
- Specific Learning Difficulties: Dyslexia
- Specific Learning Difficulties: Co-occurring Difficulties
New landscape for education

- Hybrid courses
- Blended learning
- Connecting formal and informal education
- Social networked learning
- Adaptive learning technologies
- Learning analytics
- Global marketplace
Drivers for change

“...providing the 100,000,000 university places
MOOCs, hybrid courses, blended learning

“promote all graduates ... to be digital entrepreneurs”

Social networked learning

“The new global market in education-at-a-distance will greatly shift the educational powers”.

Learning analytics, adaptive learning