

WORLD ACADEMY OF ART AND SCIENCE
World Academy Forum on the Future of Global Higher Education
October 2, 2013
UC Berkeley

DEEP DRIVERS OF CHANGE
IN
GLOBAL HIGHER EDUCATION:
TECHNOLOGY

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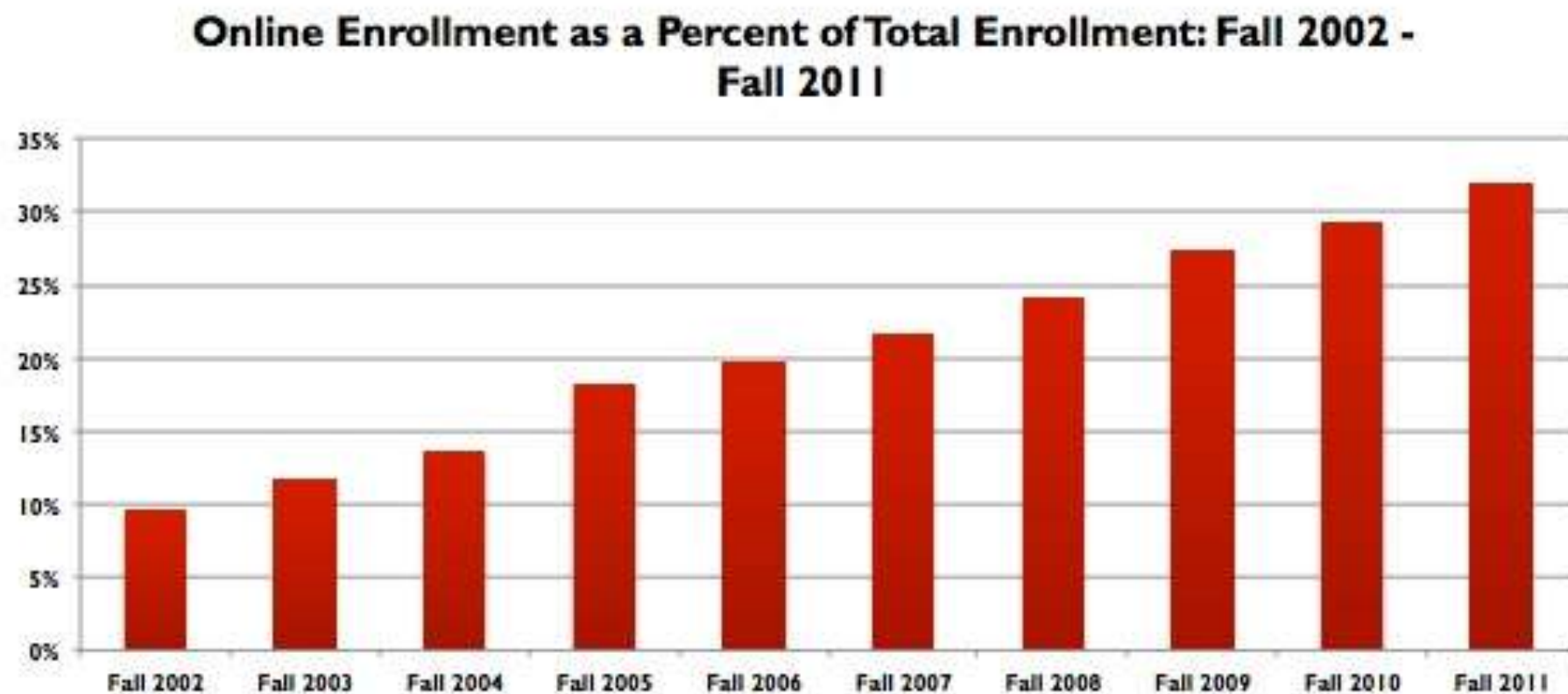
Overview

- LMS-based credit programs
- Blended/hybrid learning
- MOOCs
- Mobile learning
- Virtual labs
- Web 2.0/social media
- Implications for a World University



Credit-based online courses

United States (fully online), 2011:
7 million students (32%) taking at least one online course



Source: Allen and Seaman, 2012

The success of fully online credit programs

- 85-95% course completion rates for 24 Canadian (Ontario) universities' credit online courses: (5% less than face-to-face classes)
- 42% of Open University (U.K.) students graduate within 7 years (about the same as face-to-face students in U.S. state universities)
- But: must use best 'online design' practices

E-learning quality assurance standards, organizations and research

AUGUST 15, 2010 BY TONY BATES • 26 COMMENTS (EDIT)

 Listen

 +1 4



I am surprised how often academic colleagues argue that there are no quality standards for e-learning. Well, hello, I'm sorry, but there are and some of them are damned good. However, I was surprised to find while doing some research for a client that there is no single source where one can go to compare different quality standards for e-learning. So I'm starting a list here, and would appreciate it if readers could direct me to ones that I may have missed. (For more detailed information on some of these, see comments below).

Canada

Barker, K. (2002) Canadian Recommended E-learning Guidelines (CanREGs) Vancouver BC: FuturEd/CACE (also available in French)

Barker, K. (2001) Creating quality guidelines for online education and training: consultation workbook Vancouver BC: Canadian Association for Community Education

BC Ministry of Education (2010) Standards for K-12 Distributed Learning in British Columbia v3.0 Victoria BC: BC Ministry of Education

Ontario Postsecondary Education Quality Assurance Board: Review Guidelines: Review of Capacity to Deliver Online Degree Programming Toronto ON: Ministry of Training, Colleges, and Universities

USA

Credit-based online learning: world



Internet usage worldwide

USA, Canada, UK, Northern Europe, Spain, Australia, New Zealand: extensive

East Asia (South Korea, Malaysia, India): rapid growth

Latin America, Africa: slow growth

NOT: France, Germany, Italy, Japan: China complex!

Credit-based online learning: world

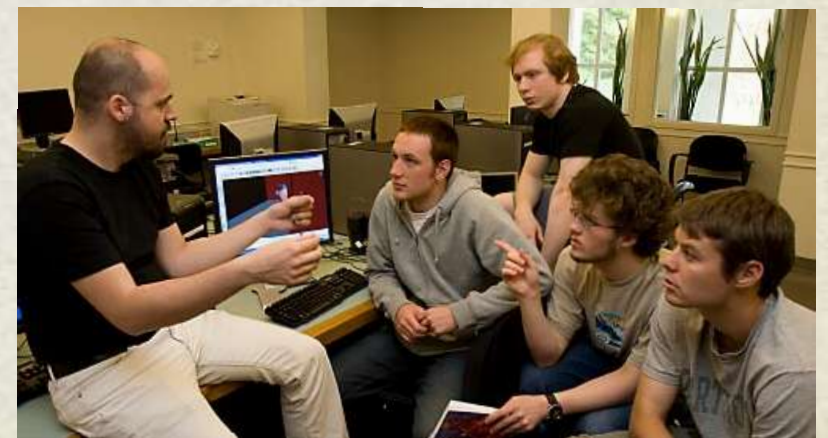


BUT:

- Mexico: only 32% households have Internet access; socio-economic groups D and E: no access; 10 years maybe
- Africa: <5% Internet access: US\$1 to download YouTube video (one day's income)

Blended/hybrid learning

- Mix of online/classroom teaching
- Last 12 months: big move to hybrid learning (in Canada)
- ‘Flipped’ classroom
- BUT: it can be so much more; re-design/re-think the campus experience



MOOCs

The good:

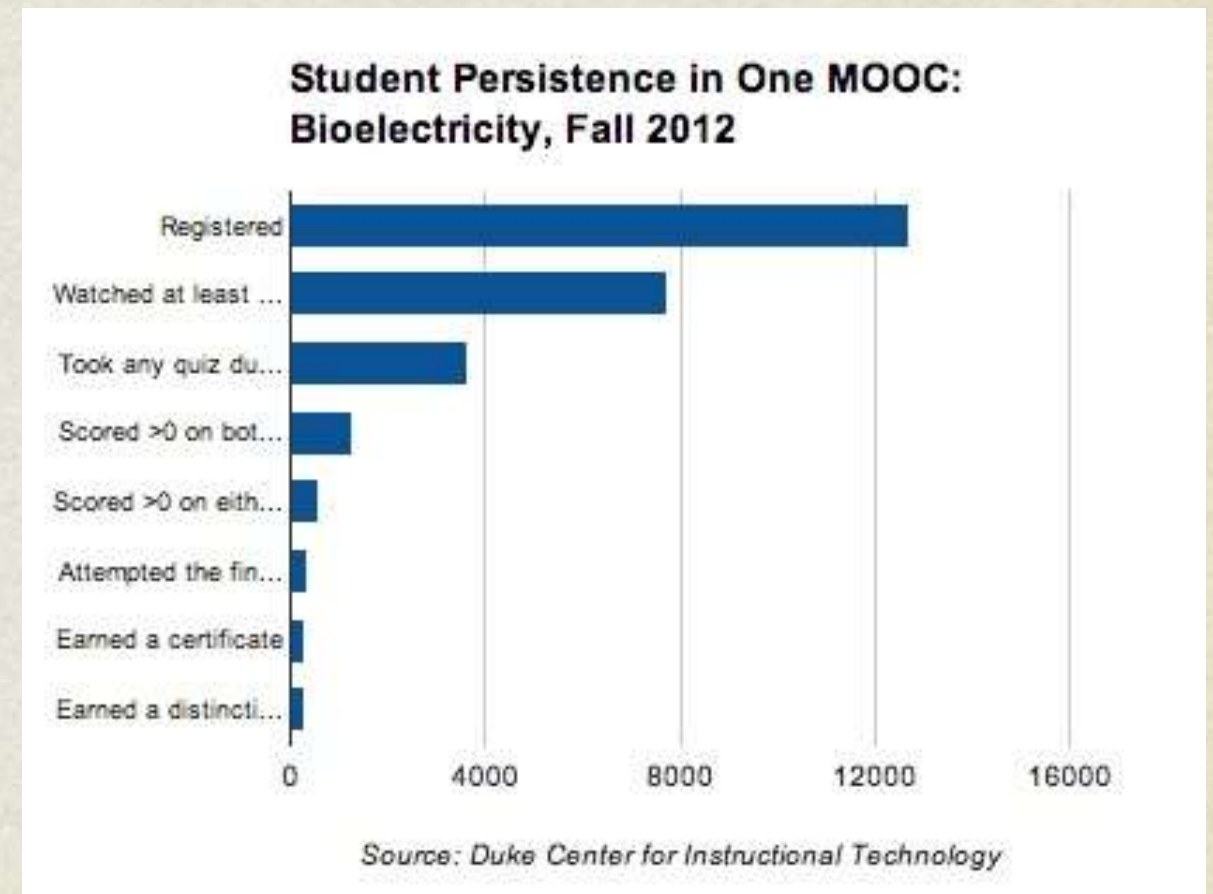
- Easy to access
- Minimal cost to learners
- High quality content
- Massive numbers
- Great educational broadcasting
- Great PR (Ivy League/media)



MOOCs

The bad

- Massive non-completion rates
- Lack of learner support
- Difficulties with assessment
- Poor online pedagogy (lectures)
- Not learned from credit courses
- Massive hubris



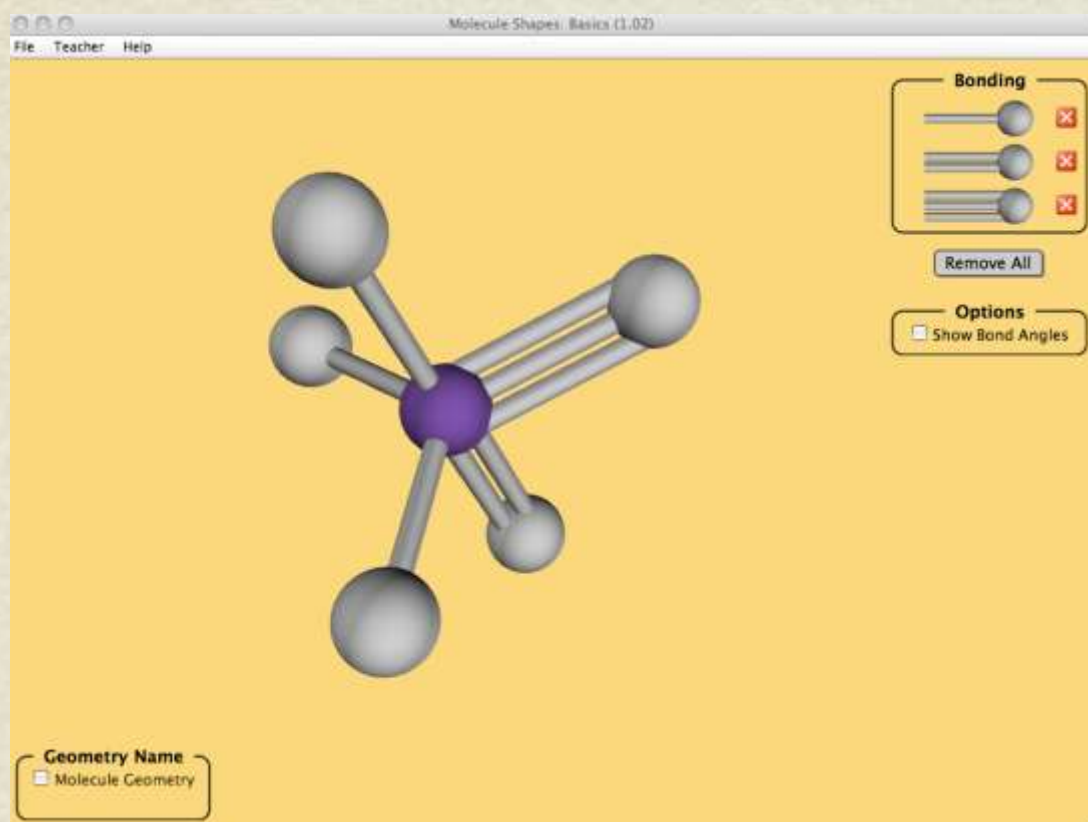
Mobile learning

- The future: tablets; mobile phones
- Africa: 40-70% of all adults have mobile phones
- CoL: lifelong learning for farmers in Africa (68,000)
- Aakash tablets in India (US\$20)
- BUT: narrow bandwidth; courses need careful design



Virtual labs

Animations and simulations



Molecule shapes simulation: phET,
University of Colorado at Boulder

Remote labs



Colorado Community College System remote labs

Web 2.0

- blogs/WordPress
- wikis
- video and audio, e.g. showing dynamic change, talking through images
- e-portfolios
- open educational resources



Educational implications of web 2.0

- Greater self-management of learning by learners
- Peer-to-peer collaboration
- Access to open content
- Learning demonstrated by creating multi-media materials (e.g. e-portfolios)
- Development of 21st century skills: historiography



Implications for a World University

It should:

- Be a world leader in ed. tech
- Use course design principles based on research into how students best learn
- Use accessible media
- Support learners and adapt to local circumstances (local partners?)

