ICT: the end of the “brick and mortar” university?  

ACA Policy Seminar  
Higher Education in 2030. A Look into the Crystal Ball.  
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Looking back and looking ahead

Remember:
ICT and the university twenty years ago – online not yet started

Look around:
ICT and the university today – breakthrough of online education on and off campus, value to the mission is demonstrated

Imagine:
ICT and the university within twenty years – mainstreaming of online education in universities and higher education systems (diversity of solutions)

Piet Henderikx, ICT and Higher Education in 2030
All sectors in society are affected by innovations, based on ICT. Universities have felt a lot of fear of commitment for online education, but today we seem to face a breakthrough. Tomorrow “online” will be an organic part of teaching and learning and higher education systems with a diversity of solutions.
Three sections

What we see: significant developments as foundations

What will happen: three main activity areas for universities

What we can expect: a diversity of solutions for inclusive higher education
What we see

SIGNIFICANT DEVELOPMENTS AS FOUNDATIONS
Three significant developments

Open and flexible education, distance education, online courses

Virtual learning environments on campus

The growth of “open and free”
Open and flexible education

Strong European tradition in open and distance education: growth, changing student profiles and markets, shifting to online

Development of online education in the US: growth in universities, not only “private providers”

Developments in Asia, Latin-America and Africa: a solution for capacity problems
Lessons learnt from European ODL

- Student-centred teaching and learning models in a lifelong learning context, robust new pedagogies
- Scalable and flexible solutions for large audiences of students
- Multimedia curricula for self-directed learning, developed by course teams involving disciplines and expertise in education and media
- Interactive tutoring in blended systems (study centres)
- Future-oriented technology enhanced teaching and learning
- Research and development focusing on educational technology in major research institutes.
Virtual learning environments on campus

All universities are likely to have on campus VLE’s hosting rich learning resources and learning tools for their students (intranet)

Multi-campus VLE’s / Virtual universities / campus numériques

New learning tools and media with short term adoption horizons (Horizon 2012 report, NMC)
## Benefits of VLE’s on campus

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<tr>
<th>Benefit</th>
<th>Description</th>
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<td>Accessibility of curricula – enlarging the institutional teaching</td>
<td>Capacity - cost-effectiveness</td>
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<td>Flexibility: learning anywhere, anytime, individualisation /</td>
<td>personalisation (open programming)</td>
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<td>Knowledge and learning resources, learning tools, learning tasks</td>
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<td>Interactivity with teaching staff and peers, learning communities,</td>
<td>knowledge sharing and knowledge construction</td>
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<td>Innovation for higher quality teaching and learning serving an</td>
<td>increasing student population</td>
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The growth of “open and free”

• **Open educational resources**
  - MIT, Open Courseware Consortium
  - The OERu
  - The European answer

• **Massive Open Online Courses**
  - Distance education re-discovered by the Ivy League?
  - Classrooms moved to online or an experience to enhance teaching online?
  - The European answer
Opportunities of “open and free”

- Open knowledge sharing and informal learning
- Knowledge networks (user side): domain-specific, professional, regional
- Innovation in teaching and learning on and off campus
- Transition to formal learning through additional services
“Online” can enhance the quality of the learning environment and hence of teaching and learning.

“Online” not yet a theme for quality assurance and accreditation agencies in Europe (?).

Quality benchmarking tools and manual (e-xcellence)

[www.eadtu.nl/e-xcellence.label]
Current potential through “online”

“Online” is reaching the mainstream, new teaching and learning models

| Access to knowledge and services: all students can connect with courses, tutoring, assessments and to knowledge worldwide |
| More flexibility: time, place, pace, personalised curriculum |
| Innovation through technology, hence improvement of the quality of teaching and learning |
| Lifelong learning can be flexibly organised |
| Open knowledge sharing (OER, MOOCs, Open Access,…) as a spin off of the use of internet |
| Internationalisation can boost by “online”: open resources, networked courses and curricula, virtual mobility |
What will happen

THREE EDUCATIONAL ZONES IN MODERN UNIVERSITIES
In the next years

Because of its promising potential, online education will increasingly affect all educational activities of a university. The accessibility and flexibility, brought by the use of ICT and new media, will create new activity areas, which are entirely internet-based or to a large extent blended.
Three educational zones

- **Open Knowledge Sharing, free and public zone**
- **Customized Education and Training, courses and programmes, on demand, paying zone**
- **Degree programmes, regulated zone**
Three educational zones

**Open knowledge sharing zone**, pushing knowledge into the public domain: OERs, MOOCs, open media, open access/open innovation materials – preferably designed and arranged according to the needs of user groups/networks.

**Degree education zone**, backbone for the education for complex knowledge and skills: bachelor, master, PhD – higher education systems should include flexible solutions for lifelong learning.

**Education and training on demand**, valorisation of knowledge to support companies and public services with regard to innovation, based on new research and development. Various formats are online or blended such as (virtual) seminars, CPD, knowledge alliance and corporate university initiatives, short cycle programmes, master classes, expert schools, etc.
Three educational zones

- The zones largely correspond with informal, formal and non-formal learning
- The zones are interdependent
- The zones require different institutional policies and business models
Institutional diversity

University policies with regard to the development of the three zones will strongly differ according to their mission and institutional profile.

The nature and extent of the three zones in universities will depend on institutional strategies related to their programmes and student profile, research and development, type of teaching and learning, role in the region and in knowledge exchange, international policy, their lifelong learning policy, etc.

Conventional universities will use increasingly blended or hybrid educational formats, because of the benefits in quality of teaching and learning and of changing business models.

This diversity will likely include single mode online distance universities or online university networks (not only private providers).
Partnerships and online education

• With ICT, universities can create high quality borderless education. For the digital generation it is their natural environment.

• Strategic partnerships and knowledge alliances

• The role of “online”

• New types of curriculum collaboration and related mobility
Collaborative Curricula and Related Mobility

- Exchange curricula and courses
  - Individual exchange mobility
- Networked curricula and courses
  - Networked mobility
- Integrated curricula and courses
  - Structured or embedded mobility
### Specific Benefits of Virtual Mobility

- It can engage all students in a classroom, as there are no physical barriers for trans-border education. More students are involved, if not all in a class.

- It is flexible, as it can be applied just in time, even asynchronously, from any place and within smaller personalised learning spaces and communities.

- Multiple universities and different countries/continents can be engaged simultaneously.

- Students for any reason not involved in physical mobility, can be involved in virtual mobility.

- Part-time and employed students, mature students and students with special needs can participate conveniently, as the learning material is conceived for independent, but supported self-study.

- It is very cost-effective for the student and it contributes to the “green campus”.
Special Cases of Virtual Mobility

Virtual or blended seminars and projects

Virtual internships
Mainstreaming online education in different blends will support university strategies concerning open education, flexible degree education and education on demand. Institutional responses will be diverse.

It will also enhance international partnerships and collaborative courses /curricula and mobility.
What we expect

HIGHER EDUCATION IN 2030
A University is a place … whither students come from every quarter for every kind of knowledge; … a place for the communication and circulation of thought, by means of personal intercourse. … It is the place to which a thousand schools make contributions; in which the intellect may safely range and speculate. It is a place where inquiry is pushed forward, … discoveries verified and perfected, and … error exposed, by the collision of mind with mind, and knowledge with knowledge. … Mutual education, in a large sense of the word, is one of the great and incessant occupations of human society…

(John Newman, The Idea of a University, 1852)
A **university** is an institution of **higher education** and **research** which grants **academic degrees** in a variety of subjects and provides both **undergraduate education** and **postgraduate education**. The word "university" is derived from the **Latin** *universitas magistrorum et scholarium*, which roughly means "community of teachers and scholars."[1]
New university concepts

Universities of the 21th Century will gradually reinvent themselves. Sometimes disruptively, but in most cases gradually. The concept will be driven by change factors as the student and staff profile, the nexus with research and development, employment needs, society at large. Universities reflect society rather than technology.
Online education and innovation

Online education *in se* doesn’t change the university. It changes the teaching and learning environment, the access to knowledge and education worldwide and the academic culture. It will enhance the accessibility to education and the quality of teaching and learning. Technology is a tool for educational innovation, it is not so much a driver of change.
New challenges through “online”: 10 issues

- Smart learners require smart learning environments: access, flexibility, personalisation, integration of informal and formal learning
- How to anticipate on increasing student numbers and probably lower funding? Is blended or online answer on failing quality and on non-sustainable business models?
- Which competencies and skills / professional profiles (in digital environments) are needed in the knowledge society in 2030?
- Who will develop online learning materials / activities: a teaching staff or a course team? Does the student (group) contribute on line to knowledge? Will study paths after assessments be adjusted during the course?
- Does the student choose his curriculum (at different universities) or is the curriculum the (final) responsibility of the university?
- Will the focus of teaching be on individual learning or on teaching and learning communities online?
- Willbadging be an alternative for current academic degrees? Or do we envisage LLL portfolios?
- Do students leave definitely the university at 25 (lifelong learning) and what does the university do to see them back in education later?
- Does the university push knowledge into the public domain and does it connect with users/professionals/alumni and knowledge networks (OER, MOOCs, Open Access, Open Innovation,...)?
- Will higher education be truly border-less (interacting with other sectors in society and internationally)? At all edges of the knowledge triangle?
Outlook 2030

• Will be determined by university institutions and the profiles they will develop.

• Yes, it can be reasonably expected that also in the developed world, universities will teach more online to attain higher quality teaching and learning, to reach students during their lifetime (open knowledge sharing; flexible degree education; education on demand) and to keep their business models sustainable. There will be less brick and mortar on conventional universities campuses in 2030.

• On a global scale, universities will teach much more online, in open and distance mode or blended form to meet the needs of students. There is no other way to enlarge the educational capacity of universities problems worldwide.
Related EADTU projects

- University Strategies and Business Models for Lifelong Learning (USBM)
- Quality Benchmarking in Online and Distance Education (E-xcellence)
- Networked Curricula (NetCu)
- Virtual Mobility (EPICS)
- Open Educational Resources (MORIL, OER-HE)
- University-Business Cooperation (OEI, CVBI)
- StudyPortals Distance Education (StudyPortals)
Thanks

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References

Frans van Vught, *University Profiles. International rankings, institutional maps and the need to discuss the structure of Dutch higher education*. Opening Academic year 2012/2013, Maastricht University, 3 september 2012, 41 p.


Thank you for listening !!!

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