Ministeriet for Videnskab
Tecnologi og Udvikling

IKT-støttet læring
på universiteterne
København 27 februar 2008

New technology and market positioning: the challenge for universities

Overview

1. Introduction
2. What is e-learning?
3. Why use ICTs for teaching/learning?
4. Meeting the needs of the workforce
5. New business models for HE
6. Conclusions

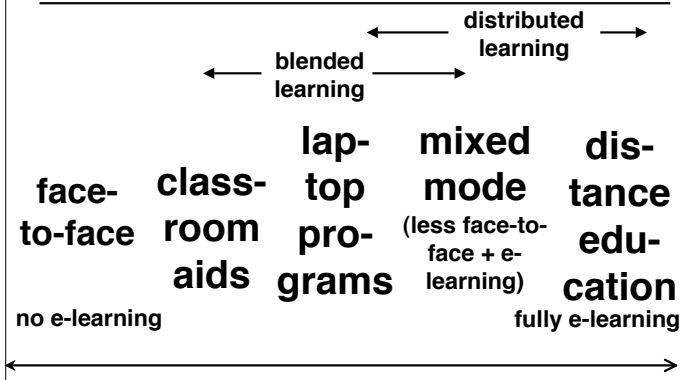
1. Defining e-learning

What is e-learning?

My definition:

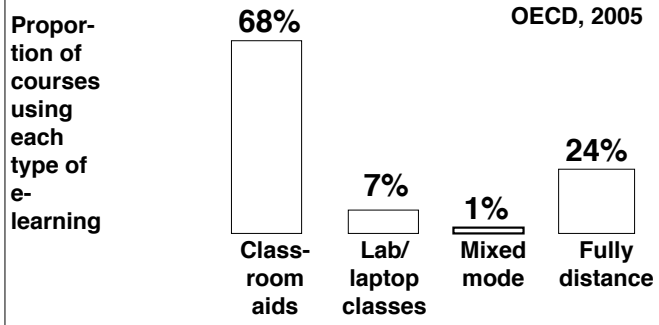
all computer and Internet-based activities that support teaching and learning - both on-campus and at a distance

What is e-learning?
(Bates, 2005)



Current proportion of different types of e-learning in North America + Europe (2005)

Sources: WebCT, 2003
OECD, 2005



Making choices

For any program:

Where on the continuum of e-learning should this program be?

Should this continuum reflect course sections or students?

Who should make this decision?

To answer these questions, we must look at the reasons for e-learning

2. Why use ICTs in higher education?

Why use ICTs in higher education?

1. Access/distance
2. Access/flexibility
3. Quality
4. Productivity
5. Market positioning

Access: distance

Not strong rationale for Denmark except:

- specialized subjects not available locally
- poor quality of local provision

e.g. distributed learning in B.C. school system

Access: flexibility

UBC: 83% DE students live <1 hour from campus

Shift of time/location away from campus

- full-time students working part time (countries with high tuition fees)
- part-time students (18-27)
- older lifelong learners (27+)

Quality

Jury still out

Depends on:

- learners (readiness/independence)
- subject matter
- pedagogy used
- quality standards: design, professional web support, etc
- major course re-design

Productivity

e.g. simulations for problem-solving; integration of academic and administrative services (UBC)

More administrative than academic

Same conditions as quality +

- strategic investment in ICTs
- major institutional re-organization

Market positioning

To differentiate from other HE providers (same market e.g. Tec de Monterrey)

To attract new or un-served markets

E-learning not attractive as 'core' function of prestigious research universities

More attractive to lower status institutions for 'positioning'

3. Meeting the needs of the workforce

Different economies

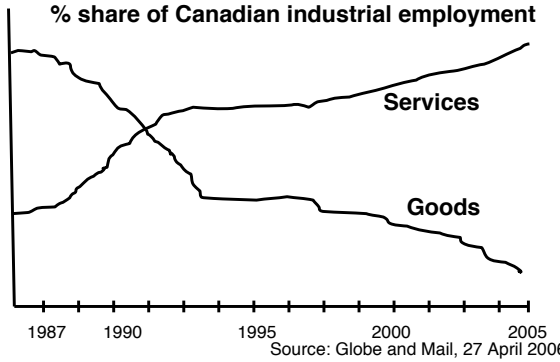
Resource-based: agricultural, mining, fishing: land/sea-based, local

Industrial: manufacturing: urban, factories, hierarchical, economies of scale, specialist skills

Knowledge-based: financial, bio-technology, ICTs, telecoms, entertainment: 'virtual', global, networked, multi-skilled

All three economies in parallel

Shifting economy



Source: Globe and Mail, 27 April 2006, B9

Skills of knowledge-based workers

- problem solving, critical thinking
- communication skills
- computing/Internet skills
- independent learners
- entrepreneurial, initiative
- flexibility/adaptability
- team-work/networking

AS WELL AS subject expertise

Lifelong knowledge workers: a major new market

- NOT the same market as folkeskole
- Graduates in workforce who need professional up-dating: essential for economic survival
- 3 months training over five years
- In Canada, nos. = univ. entrants from school
- They need access to latest research
- They do NOT want traditional offers

Lifelong knowledge workers: a new market?

Denmark demographics

Age-group	1990	2030
17-24	12.2%	8.8%
25-66	54.2%	53.8%
67-79	10.0%	12.3%

Source: Denmark Statistical Office

Average age of full-time students: 25
Completion rate: 45%

Profile of lifelong learners

- Graduates (already state-subsidized)
- Working, often with a family
- Maximum study time per week: 10 hrs,
- Strong life/work experience, specialist knowledge
- 'Virtual' learning essential, from home/work
- Leaners/employers willing/able to pay

New programs for lifelong learners

- Modules, certificates, industry accreditation leading to masters
- Inter-disciplinary, 'topic-based'
- New knowledge since they graduated
- Flexibly delivered:
  - Part-time (evenings/weekends/half-days)
  - Blended (campus + online)
  - Fully distant (home or workplace)

5. New business models

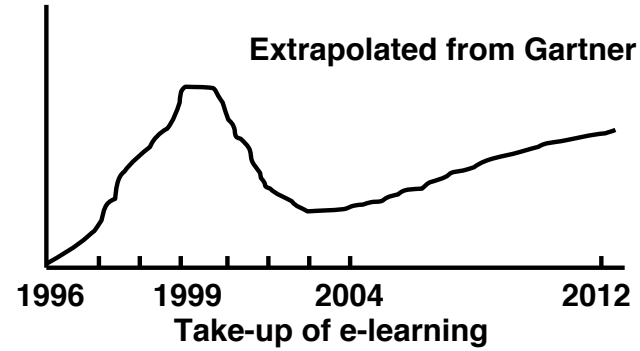
The need for new business models

- All citizens should have chance of a state-funded higher education
- Universities designed mainly for young full-time, campus-based students: still this need
- Graduates need to go on learning
- Professors don't want more teaching
- New models of funding needed

The big myth: e-learning will make money and globalize the market

- Late 1990's: e-learning frenzy
- e-learning for profit; global markets
- Many for-profit initiatives failed (e.g. New York University, Temple University, FATHOM, Open University in USA)
- US$20 million lost on average

Where e-learning has succeeded (cont.)



Where e-learning has succeeded

- Profit in niche markets, e.g.
- University of Phoenix Online: 26,000 students, vocational
- corporate e-learning
- MBAs (Queens, Athabasca, Canada)
- Continuing professional degrees
- A (limited) option for regular students
- Focus on knowledge-worker market

Where e-learning has succeeded (cont.)

- Masters in Educational Technology (for teachers - school or HE)
- University of British Columbia (public)
- fully online; international
- certificates + master
- 4 'core' courses + 6 electives from 12

Where e-learning has succeeded (cont.)
UBC Masters in Educational Technology

- certificates since 1996: masters opened 2002
- 80 students a year: 250 graduates (2007)
- fee: 675 euro per course, 6750 in total
- program financed as a loan
- new research faculty funded from program: full costs recovered

Where e-learning has succeeded (cont.)

Students choose known brands:

e.g. UBC's MET degree

UBC on-campus students:	20%
rest of province:	24%
rest of Canada	23%
international (31 countries)	33%

Where e-learning has succeeded (cont.)

Lessons:

- different financial strategies for different markets
- economies of scale are important
  - high development costs
  - lower delivery costs
- quality matters
  - new designs to exploit e-learning

Where e-learning has succeeded (cont.)

Lessons (cont.)

- students want the real thing: don't exclude the star professors from online programs (but protect them)
- integrity matters: don't dilute brand
- cost-effectiveness matters: project management + quality assurance
- institutional collaboration is difficult

Developing a business model for continuing education programs

Develop a business plan

- revenues as well as costs
- project management
- track, allocate and project costs (including time) over several years
- identify risks and options
- evaluate after five years

What's in a business plan/budget?

Depends on institutional methods

Best strategy: 5 -7 year budget plan

Key assumptions:

- academic and support staff time
- enrolments per course/semester
- student-teacher ratios

What's in a business plan/budget?

Revenues:

- allocated resources (staff time) expressed as cash (could be government grant)
- tuition fees
- special grants (e.g. for development)
- loans/other (sponsorship, alumni)

What's in a business plan/budget?

Expenditures (fixed):

- prior planning
- programme co-ordinator
- production costs
  - academic + support staff time
  - media production
- course maintenance (15-25%)
- LMS maintenance

What's in a business plan/budget?

Expenditures: variable costs

- • LMS licence fees
  - delivery: professors + tutors time
  - materials
  - student administration
- interest/capital repayment (if loan)

Balancing the budget

Calculating the 'break-even' point between revenues and expenditures (over six years):

Break-even when revenue = expenditure

Fee = expenditures (- grants)/no. of students over length of programme

Margin for safety (15%)

Useful even for 100% grant-funded

Possible strategy

- undergraduate degree: mainly on-campus (blended); a few courses fully online in last year; govt-funded
- 'traditional' masters/Ph.D.s: on campus; blended; govt-funded
- graduate education for knowledge-based workers: online; self-financing; modules, certificates, masters

Focused e-learning

e-learning a tool, not a panacea

need to identify where it will bring most benefit

depends on type of students, nature of topic

program teams to develop vision of teaching/learning + role of e-learning that drives funding

Determining the role of e-learning (at the academic dept. level)

- What new markets can we serve?
- What new programmes do we need?
- Where on the continuum of e-learning should this programme be?
- How will e-learning change the way we teach?
- What support do we need for quality e-learning?

The rationale for e-learning

- E-learning supports the development of skills needed in knowledge-based societies, e.g. how to seek, organize, analyse and apply information
- Using technology for learning prepares students for knowledge-based work
- E-learning is particularly good for lifelong learning

Further information

- Bates, A.W. (2005) Technology, e-Learning and Distance Education London: Routledge
- OECD (2005) E-learning in Tertiary Education Paris: OECD
- Bates, A. (2000) Managing Technological Change San Francisco: John Wiley
- Bates, A. & Poole, G. (2003) Effective Teaching with Technology in Higher Education San Francisco: John Wiley