

**Ministeriet for Videnskab  
Teknologi og Udvikling**

**IKT-støttet læring  
på universiteterne  
København 27 februar 2008**

**New technology and  
market positioning: the  
challenge for universities**

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## Overview

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- 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**

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## 1. Defining e-learning

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## What is e-learning?

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

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## Why use ICTs in higher education?

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

## Access: distance

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**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

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**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

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**Jury still out**

**Depends on:**

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

## Productivity

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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

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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'

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## 3. Meeting the needs of the workforce

## Different economies

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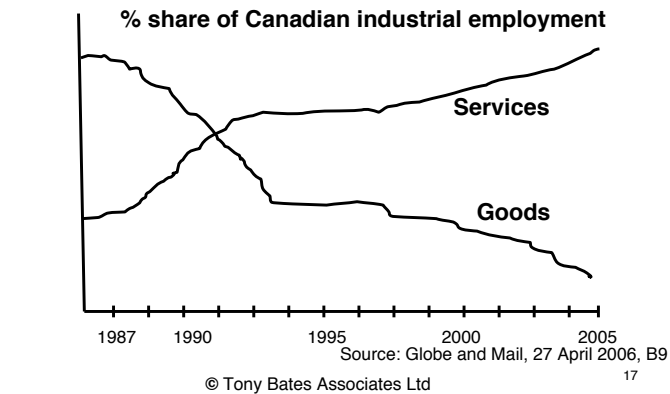
**Resource-based: agricultural, mining,  
fishing:** land/sea-based, local

**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



## 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**

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## 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**

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## 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%**

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## Profile of lifelong learners

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**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

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**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)

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## 5. New business models

## The need for new business models

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**All citizens should have chance of a state-funded higher education**  
**Universities designed mainly for young full-time, campus-based students: still this need**

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**Graduates need to go on learning**  
**Professors don't want more teaching**  
**New models of funding needed**

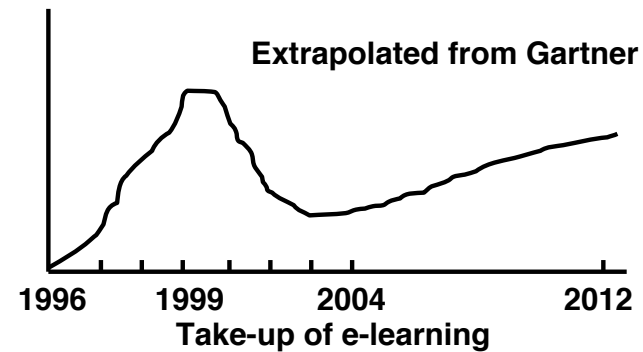
**The big myth: e-learning will make money and globalize the market**

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**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.)**

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**Where e-learning has succeeded**

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

**Where e-learning has succeeded (cont.)**

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**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**

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**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.)**

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**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.)**

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**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.)**

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**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**

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#### **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?**

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**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?**

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#### **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?**

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#### **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?

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### Expenditures: variable costs

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

## Balancing the budget

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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

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- 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

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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)**

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**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**

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**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**

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**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**