

Ministry of Education, Columbia/
Universaria

New technologies for education
Video-conference from Vancouver
19 August 2008

New technology and
strategic planning: the
challenge for universities

Tony Bates Associates Ltd

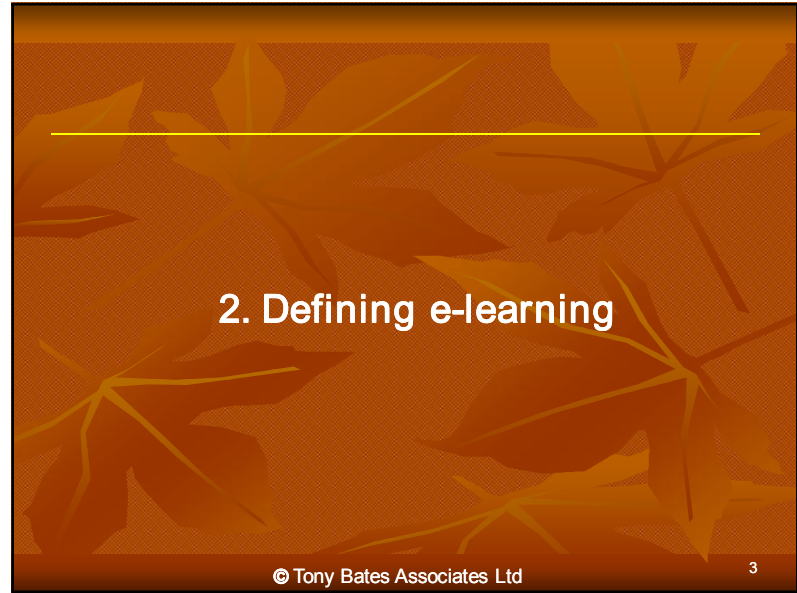
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Overview

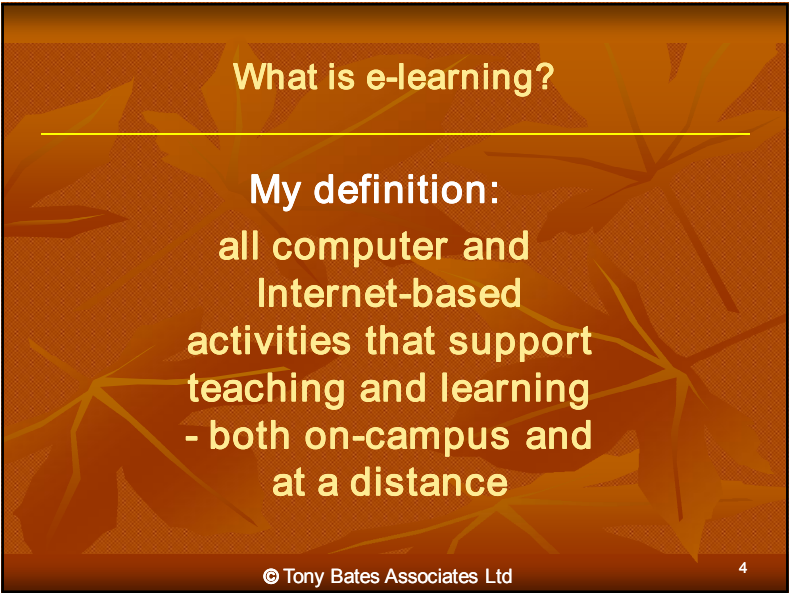
1. Introduction
2. What is e-learning?
3. Why use ICTs for teaching/learning?
4. Meeting the needs of the workforce
5. Strategies for universities
6. Conclusions

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2

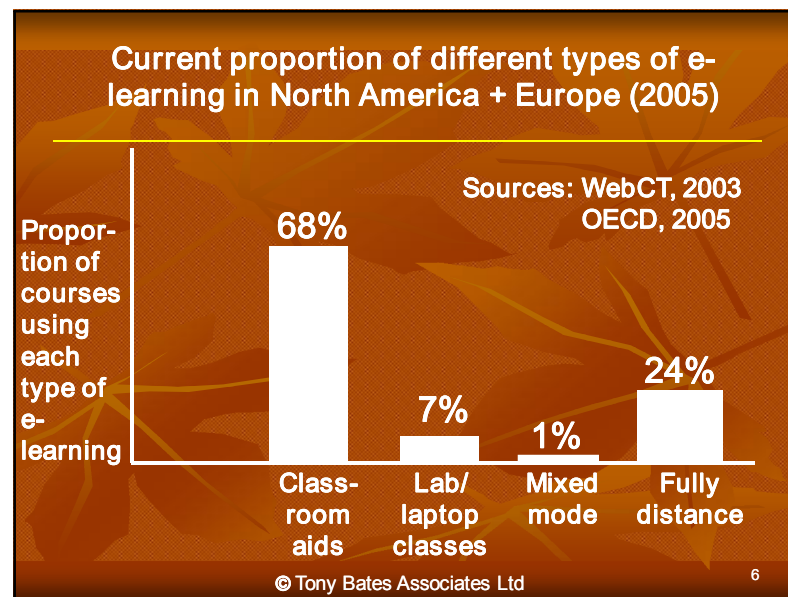
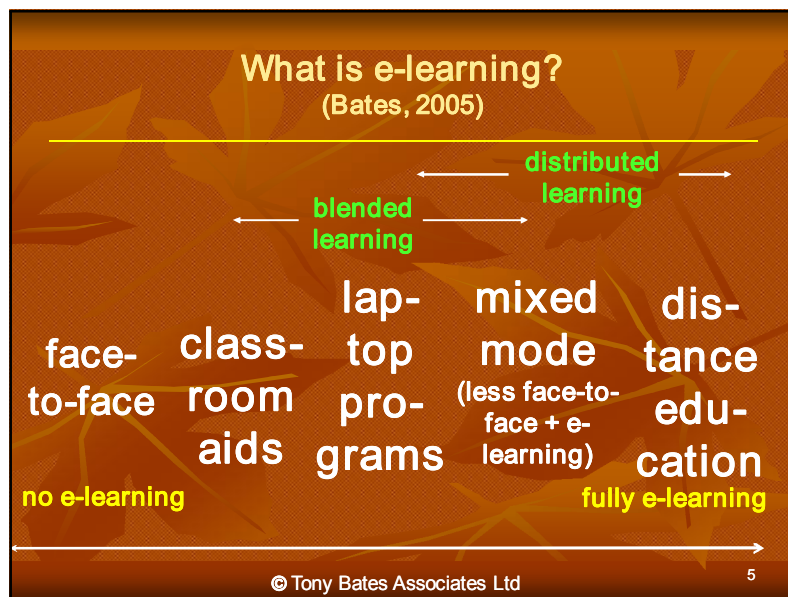


2. Defining e-learning



What is e-learning?

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



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

3. Why use ICTs in higher education?

Different economies

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

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

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

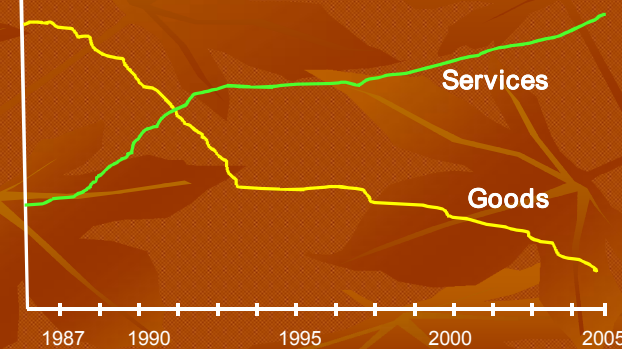
All three economies in parallel

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Shifting economy

% share of Canadian industrial employment



Source: Globe and Mail, 27 April 2006, B9

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10

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 traditional
continuing education

on-going education/learning 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

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
Learners/employers willing 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. Strategies for universities

Strategies to exploit fully the use of ICTS for teaching and learning

1. Leadership: review mission;
develop a plan
2. Visions for teaching and learning
3. Technology infrastructure
4. People strategies
5. New course designs
6. Learner support

Strategies to exploit fully the use of ICTS for teaching and learning

7. Sustainable budgeting; new business models
8. Collaboration and partnership
9. Research and evaluation

Leadership

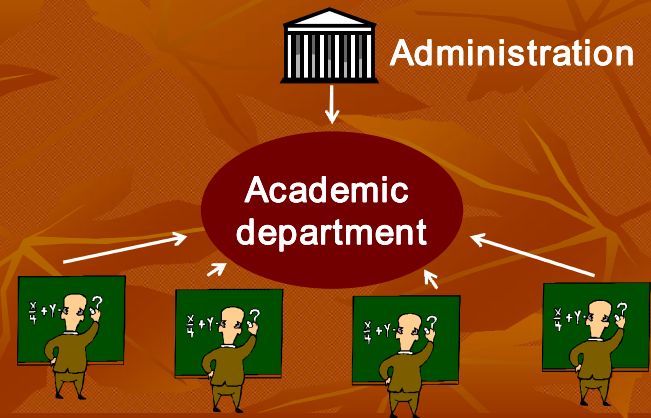
1. Promote change
2. Review mission: link use of ICTs to needs of country; positioning within HE system; get buy-in for mission change
3. Develop plan for use of ICTs: mandate, deadline, delegation
4. Involve all key stakeholders in the plan

The importance of academic departments in change and innovation

Two typical approaches to change:

- **top down:** Presidents or governments decide a strategy then try to implement it
- **bottom up:** early adopters; individual professors working alone

The critical role of academic departments



The importance of the academic department

Academic departments determine programs and curriculum

Bridge between autonomy of faculty and institutional objectives

Place where consensus can be built

Academic departments determine the success or failure of e-learning

BUT: mandate must be clear: how, not if

Departmental vision

e-learning a tool, not a panacea

need to identify where it will bring most benefit

depends on type of students, nature of topic

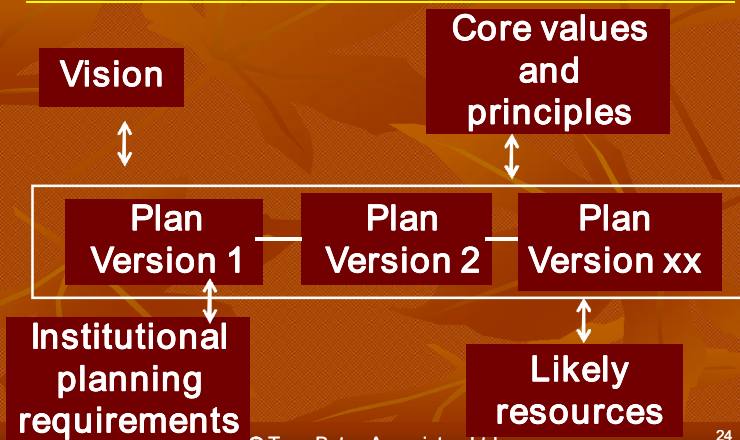
departments to develop vision of teaching/learning + role of e-learning that drives funding

Planning goal for academic departments

Academic departments:

Each program will develop a vision and plan for teaching and learning, including the appropriate use of e-learning

Building a planning blueprint



Developing vision

- discipline-based workshops
- show-and-tell brown bag sessions
- consultants/external experts
- conferences

Current situation: SWOT analysis

Strengths/Weaknesses/ (internal)

Opportunities/Threats (external)

- brainstorming
- external people
- leaders

Identify issues that **MUST** be addressed: honesty essential

SWOT analysis (cont.): some issues

- students: same or changing? new markets?
- curriculum/employers needs
- professors' readiness for e-learning
- technology (hardware, software)
- educational and technical support (instructional design, web design)
- financial: inc. new revenues?

Core values and principles

Arise from SWOT analysis:
what issues must be addressed if e-learning is to be successful?
Example: job losses, extra work, lack of training, no money
What core values/principles will address these issues?

Examples of core values or principles regarding use of e-learning

- only used when it adds value
- e-learning decisions made by academic departments
- not to replace professors but to improve learning
- no extra work by using best practices

Markets

What are your markets?

- undergraduate
- graduate (research)
- graduate (lifelong learners)
- men/women

Who will benefit most from online learning? Why?

What teaching roles are suitable for online learning?

Face-to-face or online?

- transmitting information
- collecting data/finding information
- preparation for lab work
- designing experiments
- doing experiments
- discussing best ways to do things
- problem solving.....

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31

A decision matrix for teaching

Identify course

Identify teaching activities

Activity	f2f	online
Information transmission		x
Lab experiments	x	
Lab preparation		x
Data collection	x	
Data analysis		x

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32

A decision matrix for markets

Identify market:

Identify best delivery method:

Market	f2f	online
Undergraduate	70%	30%
Graduate: on-campus	50%	50%
Graduate: off-campus	10%	90%

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33

For each program:

1. Identify what kind of students to be taught
2. Identify basic content
3. Identify what kind of teaching approach to take
4. Describe how teaching will be delivered and how students will learn using e-learning

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34

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

Where e-learning has succeeded

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.)

Masters in Educational Technology
(for teachers - school or HE)

University of British Columbia (public)
+ Tec de Monterrey (private)

fully online; international

certificates + master (single or joint)

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.)

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

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

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

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