

TNC-CUC 2003

**How
Technology
Changes Our
Universities**

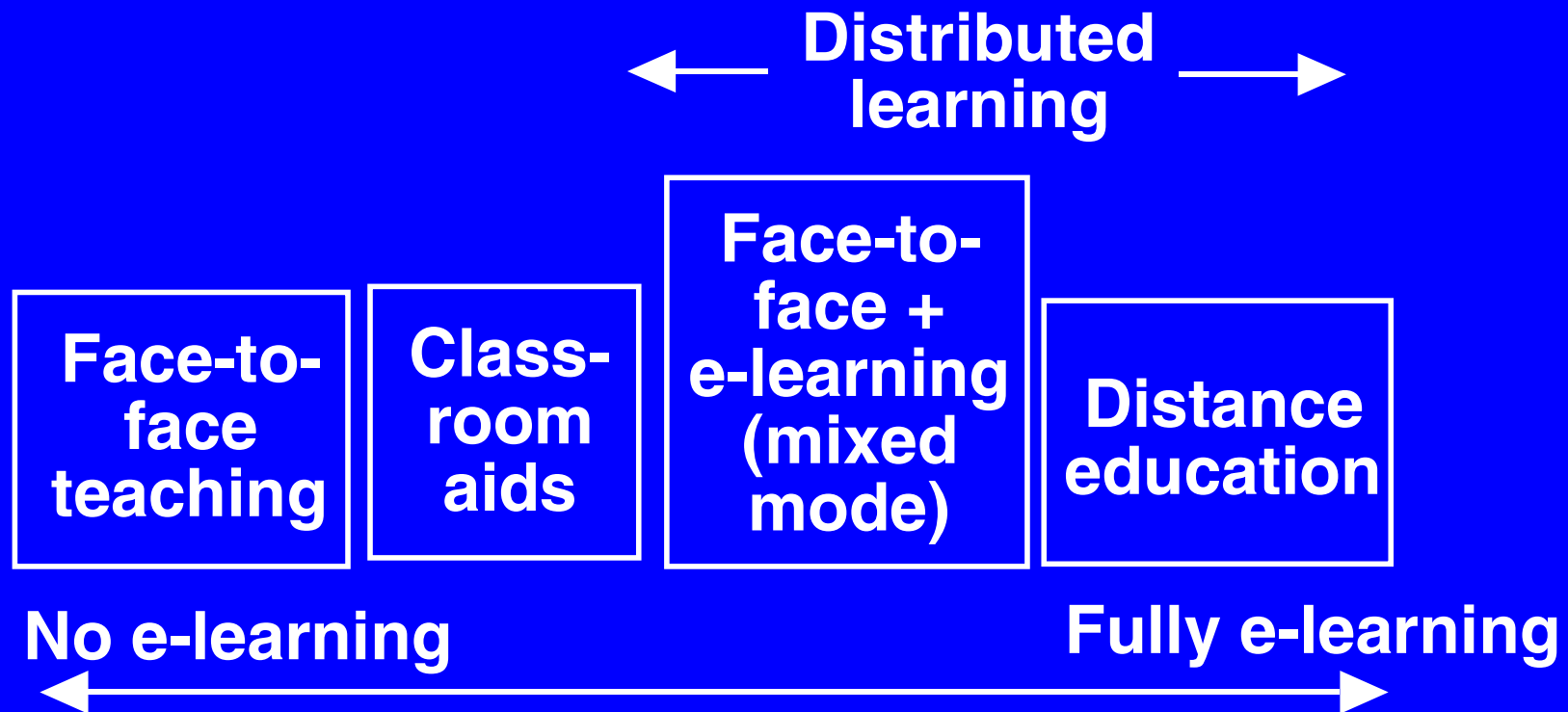
Overview

- 75 universities worldwide
- strategies for e-learning
- what is happening?
- what is changing?
- what needs to be done?

Why use technology?

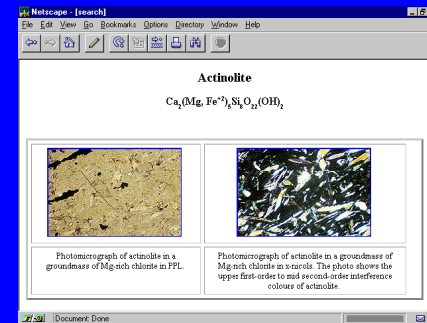
- increase access/market share
- improve quality of learning
- higher level skills
- knowledge/skills for knowledge-based society
- save/make money

Technology and flexible learning



Change depends on use

- classroom aids
- add-on
- increases cost
- distributed learning
- replaces something
- changes what we do



+echnology and choice

- increases flexibility
- brings new resources
- facilitates skills development
- offers more choice
- so: what do we want to do?

Vision

- UBC: traditional public research university (35,000 students)
- how do we want to teach?
- faculty workshops
- scenarios
- summary video

Vision: mandate

- academic plan/strategic goals:
- learner-centred
- research → teaching
- problem/inquiry based
- collaborative
- community linked

Vision: mandate

- lifelong learning
- assume large classes
- exploit existing campus
- use known technology (exists or coming)
- realistic re costs

+eaching with technology

- @ vision for teaching with technology

So what?

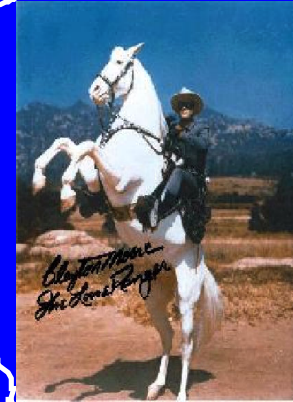
- technology under-exploited
- need to think strategically:
- new markets: lifelong learning
- new learning outcomes: PBL
- improve Quality: Pew
- re-organise to support e-learning

Models of course design

- Lone Ranger
- boutiNue
- collegial materials development
- project management

Laissez-faire planning: “Lone Rangers”

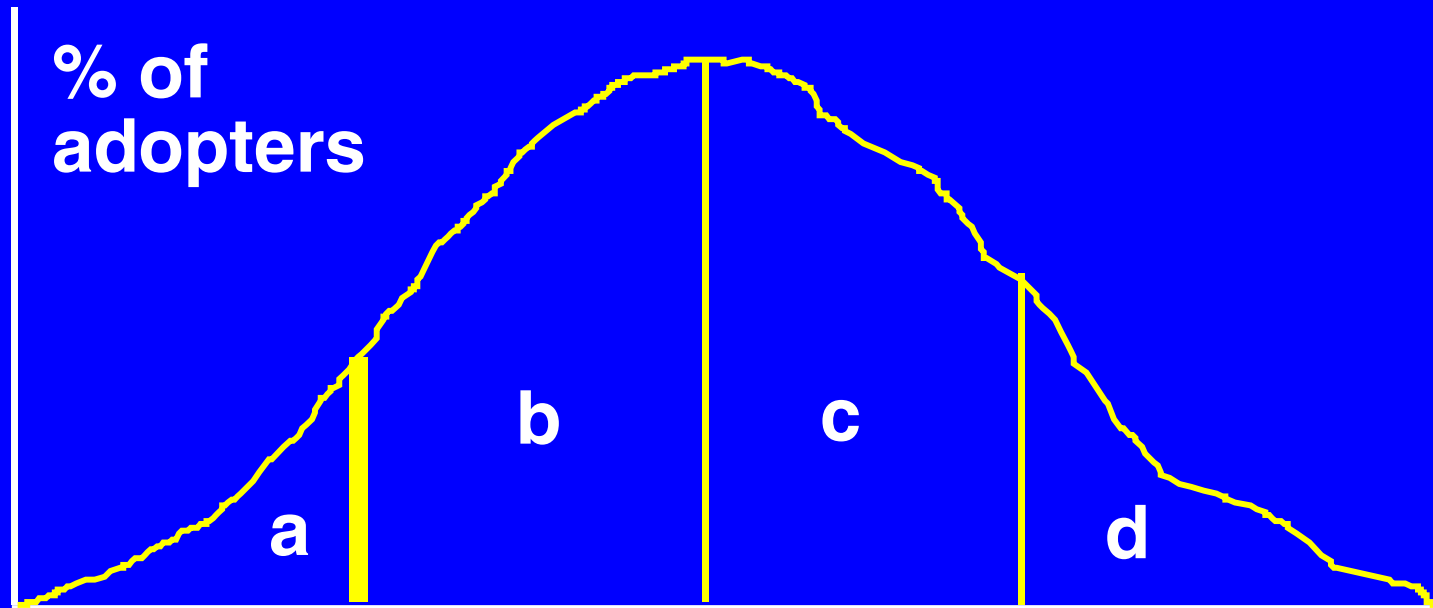
- main model everywhere
- early adopters
- essential for change
- dedicated
- no alternative



Lone Rangers

- often never ‘finished’
- many mistakes, lengthy production
- poor interface/graphics
- limited use: lost revenues
- put off other professors

The diffusion of innovation



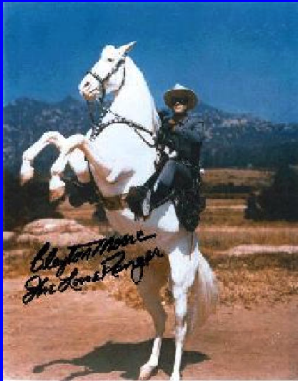
**Resistance to adoption
(from Rogers, 1995)**

Project management

- establish projects
- work in a team
- subject expert + course developer + web designer
- schedules/budgets/courses
- funding linked to PM



Lone Rangers vs project management



Continuum



class- **distributed** **distance** **multi-**
room **learning** **education** **media**
aids
less _____ **technical help** _____ **more**
change in methods

People infrastructure

- technical:
- networks/hardware
- production:
- interface designers
- graphics designers
- instructional/management

The cycle of online development

- 1. Lone rangers
- 2. Central project grants
- 3. Rapid unco-ordinated expansion
- 4. Focus/policies/funding
- 5. (uality and sustainability

)ssues: high activity, low importance

- networks + terminals
- wireless
- computer labs/learning commons
- learning objects
- 5 eb streaming

)ssues: low activity, high importance

strategy for e-learning goals

**quality
teaching**

**cost-
effectiveness**

funding

priorities

policies

learner support

(quality teaching and learning

- outcomes-based
- skills for knowledge-based society, e.g.
- critical thinking
- problem-based learning
- quality assurance process

Cost-effectiveness and quality assurance

- high quality learning at reasonable cost
- planning: strategic goals
- market research
- project management
- instructional design
- accurate budgeting

Integrating teaching/admin

- back-end to student admin systems
- class lists/grades/e-mail addresses
- portals
- ‘push’ to students
- customisable

Integrated 7-strategy

- student recruitment/ marketing/fund-raising
- admission/registration/ materials handling
- courses + student record
- portals (user focused)
- needs 'middleware'/strategy

5 ill universities change?

- Some have:
- 8 pen University of Catalonia
- Tec de Monterrey
- University of Central Florida
- University of South Australia

5 ill universities change?

- Most won't, because:
- 1. Research is king
- 2. No incentives
- 3. Senior administrators lack knowledge/skills
- 4. Necessary changes disruptive

Conclusions

- role of professors must change
- pedagogy + organization the issues
- not ready yet: still new
- change will be slow: but necessary

Further information

- www.learningtechnologies.ubc.ca
- <http://bates.cstudies.ubc.ca>
- Bates, A (2000) 'MANAGING LEARNING TECHNOLOGIES IN CALIFORNIA' San Francisco: Jossey Bass
- tony.bates@ubc.ca