TEMPUS Joint European Project EQIBELT
1st Policy Workshop on
Creating University E-Learning Vision and Strategy

What must academic departments do to ensure success in e-learning?

Overview

1. The big picture
2. Why e-learning?
3. E-learning as a catalyst for change
4. Developing a vision for teaching
5. New models of course development
6. Professional development/training
7. Conclusions

The big picture

There are three main drivers of e-learning:

- a major shift towards a knowledge-based economy
- a major shift in teaching methods
- rapid development in technologies

All three are linked; successful e-learning takes account of all three

The shift to knowledge-based societies

- **Industrial economies:** mass employment: labour major cost
- High wage industrial economies cannot compete with low wage economies (outsourcing)
- **Knowledge-based economies:** based on intellectual capital: high level of education, higher wages

Skills of knowledge-based workers

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

AS WELL AS subject expertise

A knowledge-based society

- new jobs, higher incomes
- workers need to be lifelong learners
- lifelong learning essential for knowledge-based societies
- research universities are main developers of new knowledge
- but research universities serve lifelong learners badly

New markets in knowledge-based society

- Economic need to learn does not stop at graduation
- 70% of graduates in USA intend to return for more courses
- Canada: 50% of vocational college entrants are university graduates
- Lifelong learners need flexibility and different programs

New programs for lifelong learners

- Modules, certificates, professional masters
- Inter-disciplinary, 'topic-based'
- New knowledge since they graduated
- Flexibly delivered:
  - Part-time
  - Blended (face-to-face + online)
  - Fully distant

Change in universities

- USA, Canada, UK, Australia: 50% of cohort to post-secondary education
- From elite to mass higher education:
- Funding not matched enrolments
- So move to large classes, lectures, ‘information-transmission’, testing
- BUT: NOT skills or delivery needed in a knowledge-based economy

Implications for universities

- **new teaching methods**: from information transmission to **knowledge management**: information management, creative thinking, critical thinking, problem-solving, collaborative learning
- resulting in **learning how to learn** (after university)
- with **larger classes, flexible delivery**

Questions and discussion

- How important to Croatia is the move to knowledge-based industries?
- What proportion of your students are getting the types of teaching that develop the skills needed?
- Are you offering suitable programs for lifelong learners?

Why e-learning?

- E-learning supports skills needed in knowledge-based societies:
  - e.g. to seek, organise, analyse, apply information appropriately
- Using technology for learning prepares students for knowledge-based work
- Particularly good for lifelong learning

Implications for universities

In traditional full-time on-campus programs (in knowledge-based economies):

- move from large lecture classes to small group-work, project-based, inter-disciplinary
- integrating new technology:

  e-learning, allowing more independent AND group learning

Real rationale for e-learning

e-learning is a catalyst for change in teaching and learning:

e-learning supports new methods of teaching and learning that meet the needs of the workforce in an information-based society

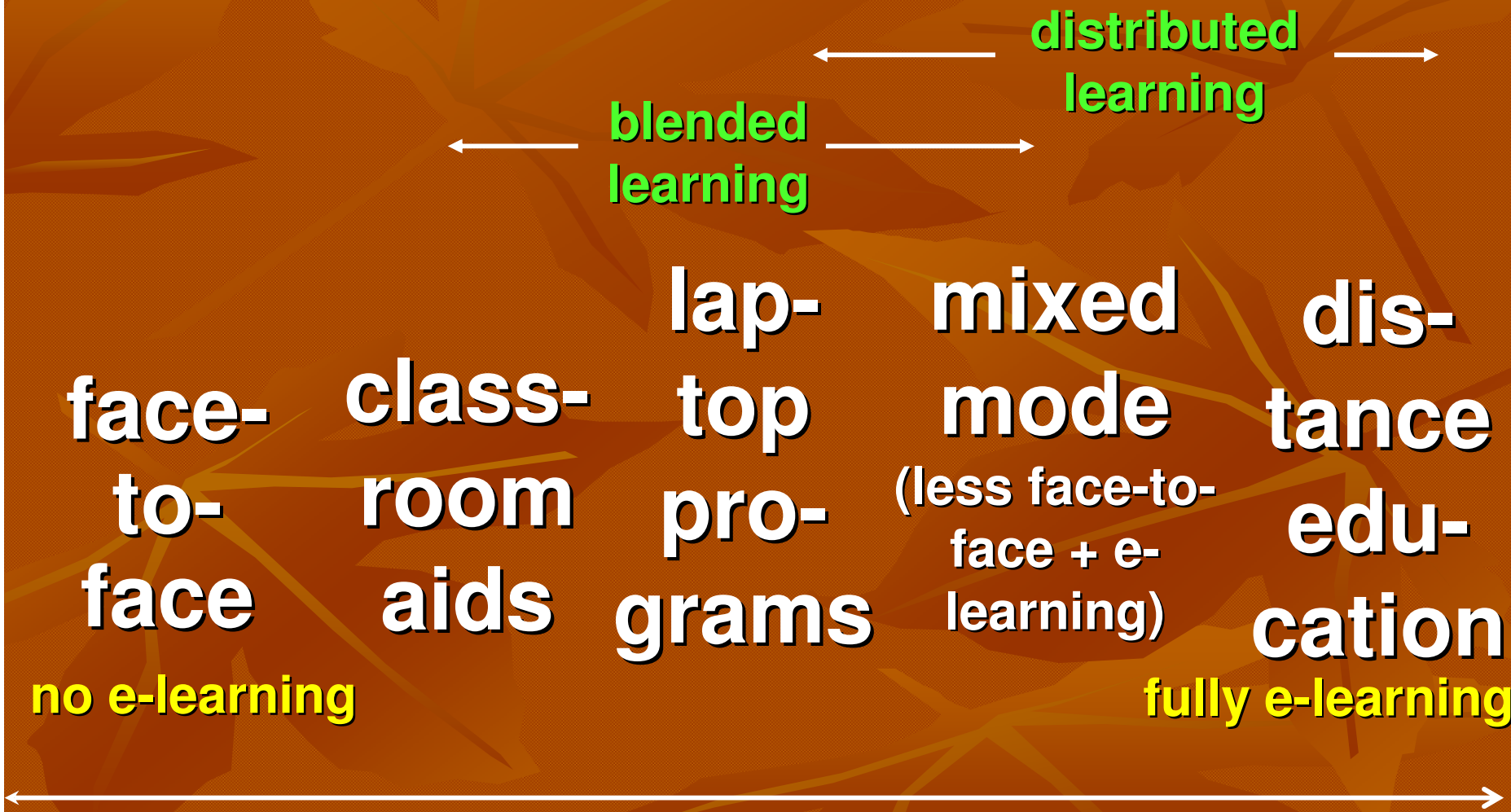
The move to e-learning is a strategic not a technological decision

What is e-learning?

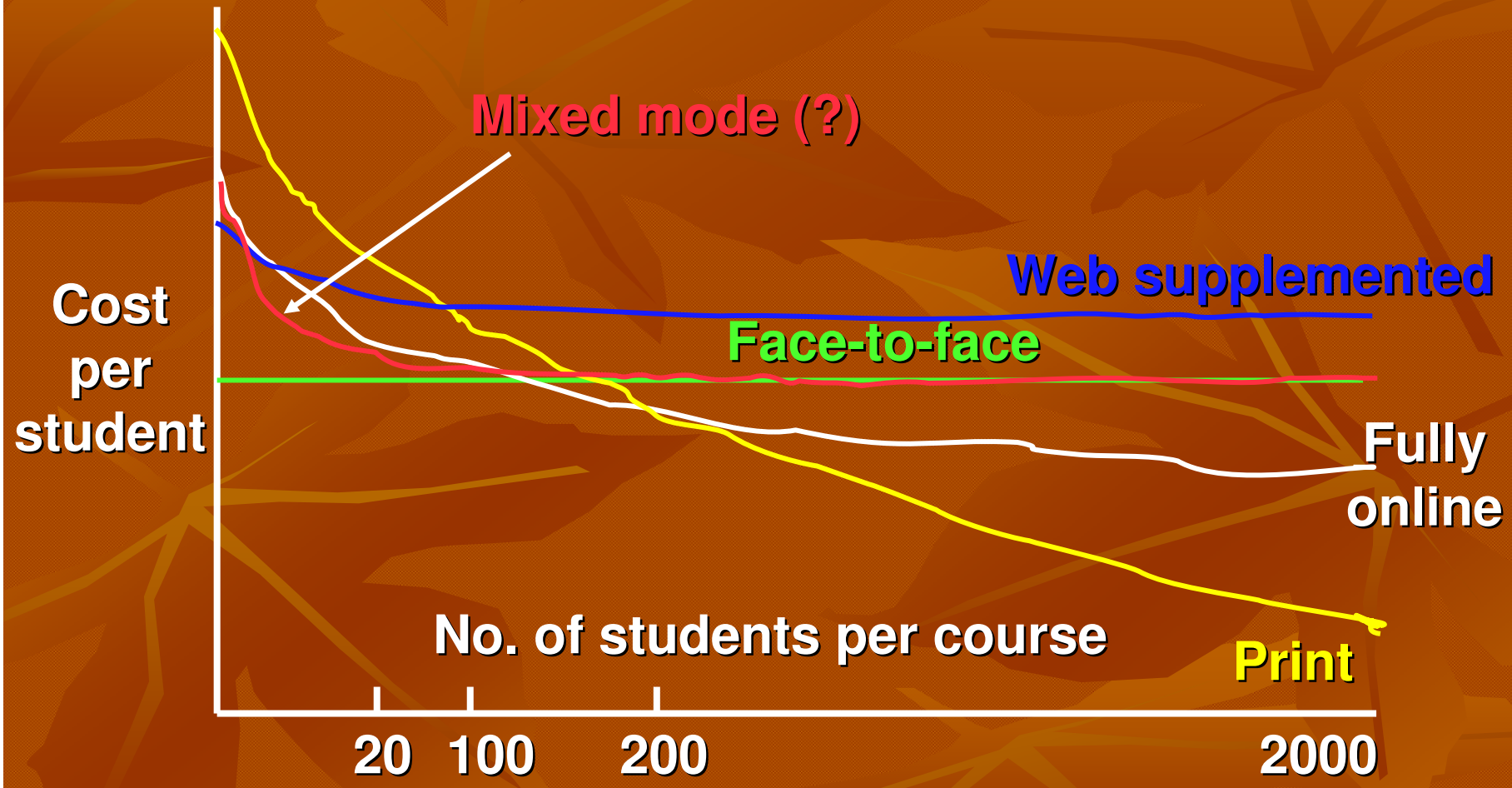
My definition:

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

What is e-learning?
(Bates, 2005)



Economics of technology-based teaching



Assume same quality, e.g student/tutor ratio

Questions and discussion

- What type of e-learning are you doing?
- How is it decided how to use e-learning?
- Questions/comments about the economics of e-learning?
- How effective is e-learning in your institution?

E-learning as a catalyst for change

Why technology is not enough

- Just putting in technology will NOT provide the learning needed in a knowledge-based society
- teaching has to change
- new programs and methods of delivery
- New operational systems, such as registry, timetabling, and use of classrooms must change

The importance of academic departments in change and innovation

Two typical approaches to change:

- top down: Rectors or governments decide a strategy then try to implement it

  universities like graveyards; autonomy of the professor

- bottom up: early adopters; Lone Rangers

The ‘natural’ development of e-learning

1. Lone Rangers - all alone
2. Grants for Lone Rangers
3. Rapid expansion; low quality
4. A strategic plan
5. Focused, sustainable, high quality e-learning

Why strategic planning is needed

Third stage:

- multiple platforms
- poor quality
- duplication
- faculty (and student) workload increases
- increasing costs
- disillusion grows, growth stops

The context for planning

Internal

- strong leadership
- pressure from professors

External

- funding crisis/opportunities
- government/employers
- keeping up with the others

Timing is critical

The role of the academic department

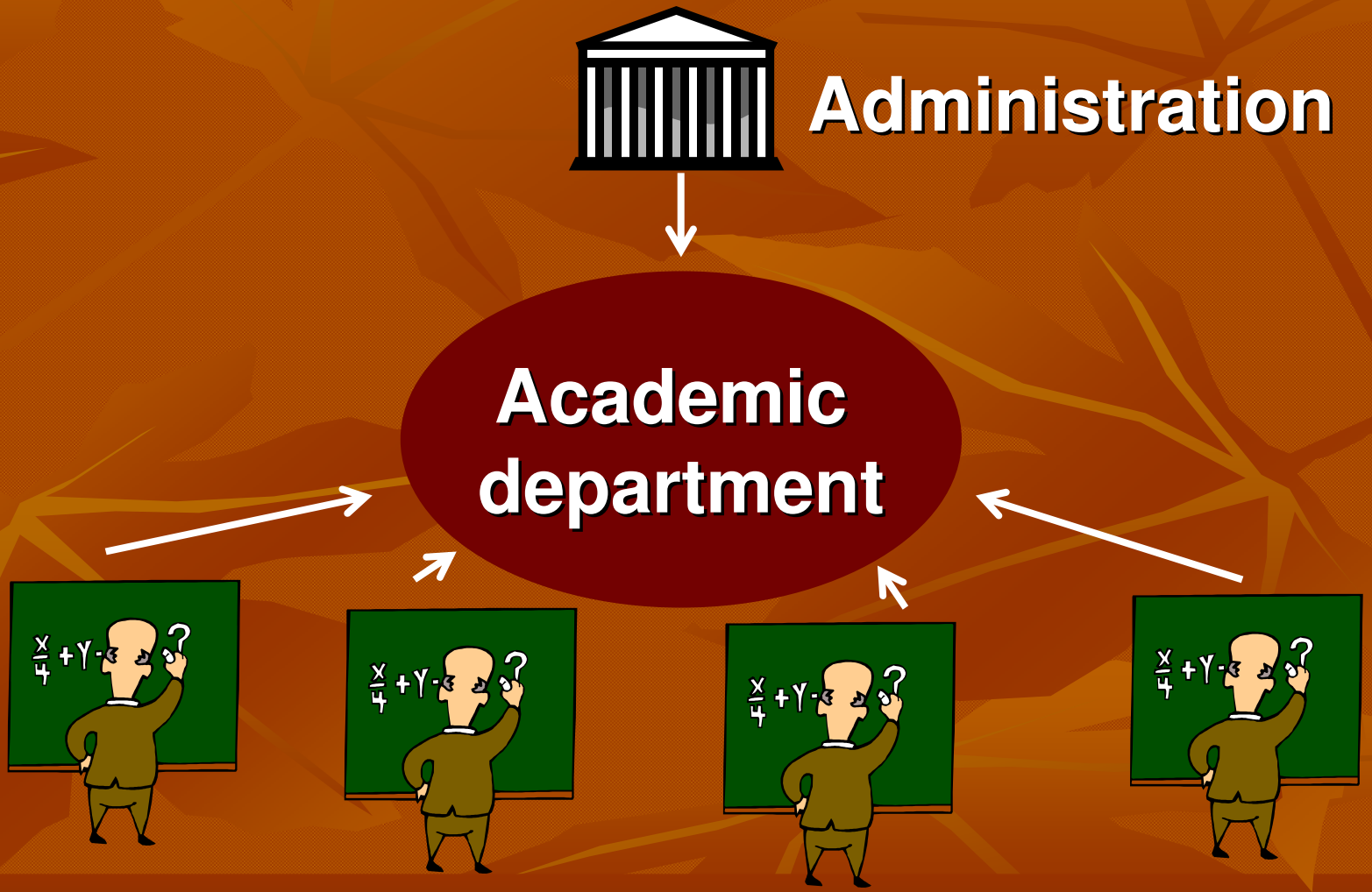
Faculty = collection of subject disciplines (e.g. Humanities)

Department = subject discipline (e.g. History)

School = professional area (e.g. education)

Program = degree, certificate (e.g. Masters in Computing Science)

The critical role of academic departments



The importance of the academic department

- Academic departments determine programs and curriculum
- Bridge between autonomy of professor and institutional objectives
- Place where consensus can be built
- Academic departments determine the success or failure of e-learning

Questions and discussion

- Is this true for Croatian universities?
- How many institutions have a university-wide strategic plan? Is it effective?
- How many academic departments have a curriculum plan,e.g. programs?
- How many have a plan that includes methods of teaching?

Developing a vision for teaching and learning

Determining the role of e-learning

- e-learning is one way of teaching
- where does it fit in the department?
- what new markets can we serve?
- what new programs do we need?
- how will e-learning change the way we teach?
- what do we need to support e-learning

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

The planning process

inclusive process: involve key stakeholders:

- professors
- students
- educational technology specialists
- student service departments
- employers?

First steps:
SWOT analysis

Analysis of current academic programs

- Strengths; Weaknesses; Opportunities; Threats
- brainstorming
- topics: external factors, students, employers, programs, current professors, IT, other support services, funding
- identifies issues that must be addressed

First steps:
Determine core values and principles

To ensure stakeholder support. e.g.

- no job losses
- time for training/course development
- controlled work-load
- professors decide use of e-learning
- best practice in e-learning to be used
- cost-effectiveness
- student costs will be controlled

Why visions for teaching are so important

Vision: 2000

UBC: public research university (35,000 students)

new strategy for e-learning

workshops for professors

how do we want to teach?

scenarios

summary video

Vision 2000

Workshop for department:

- environmental scan
- examples of teaching with technology
- discuss teaching methods
- brainstorming in small groups

Brainstorming task for teachers

- Develop a vision of how you would like to teach students
- Make it concrete: imagine a day in the life of a student and/or professor
- Assume university will support your vision

Brainstorming task for professors

Your vision should:

- define the target group and meet its needs
- define clear academic goals and show how they will be met
- show how the potential of the technology is exploited

Mandate for video (2000)

fit academic plan: goals:

- learner-centred teaching
- research into u.g. teaching
- inquiry-based learning (PBL)
- collaborative learning
- community-linked

Mandate for video

include lifelong learning
assume large classes
exploit existing campus
use ‘known’ technology
realistic about cost
8 minutes length

Vision of teaching

QuickTime™ and a
Sorenson Video decompressor
are needed to see this picture.

UBC end of 2003

38% of classes blended WBL

70 fully online courses

joint global Masters in Educational Technology (English and Spanish)

whole medical program content web-based

university wide e-strategy

Academic planning process

Each faculty/department to develop a three year curriculum and teaching plan

- markets to be served
- what programs will be offered
- how they will be delivered
- resources required

E-learning to be an integrated component of the plan

Questions and discussion

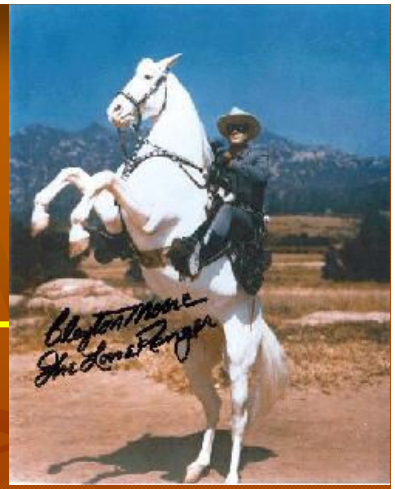
- Does your university or department have general, specified academic goals? Is this a good idea?
- Does your department discuss markets and teaching methods as well as curriculum?
- Is a visioning session a good idea?

New models of course development

New models of course development

1. Lone Rangers
2. boutique
3. collegial materials development
4. project management

Lone Rangers



- main model everywhere
- early adopters; essential for change
- dedicated; no alternative
- too much effort: no boundaries
- poor interface/graphics/more time than professionals
- idiosyncratic: no economies of scale
- deter other professors; greater cost

Boutique model of course design

on demand technical support
technology not educational design
high cost
difficult to manage
not scalable

Collegial materials development

- academics work together
- mainly learning objects, but also courses (California)
- share materials (e.g. MERLOT, Harvey, CAREO, Ariadne)
- collaboration between universities essential

Project management

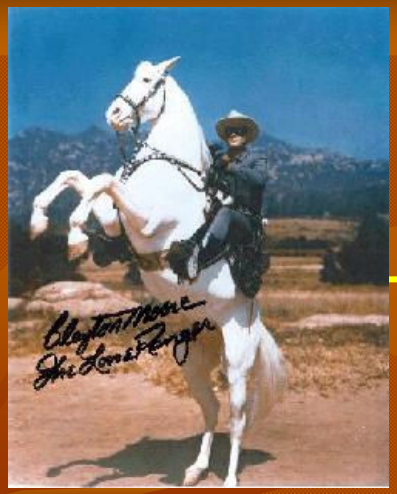
establish projects

work in a team

- professor + course developer + web designer

schedules/budgets/product

funding linked to project management



The continuum of design

face-to-face | class-room aids | laptop pro-grams | mixed mode | distance education

technical help

less —— change in methods —— more

more up-front money

What do course developers do?

- curriculum and/or instructional design
- scheduling/tracking/ commissioning work
- managing budgets
- course maintenance
- course meetings and minutes

What is a course developer?

A new knowledge worker

project manager

instructional designer

B.Sc. in informatics

Masters of Education

taking Ph.D., specializing in learning objects

Implementation strategies

Learning technology support units:

- faculty development
- IT technical support (WebCT?)
- centre for distributed learning
- library

Local or central?

Need to co-ordinate

Questions and discussion

- What model of course development is being used in your department/ institution?
- Do you have specialist support for professors? Are they used well?
- Does project management impinge on the academic freedom of professors?
- Other ways of ensuring high quality e-learning?

Professional development and training for e-learning

Three ways to help professors move to e-learning

- Professional support (e.g. project management)
- Faculty development
- Pre-service qualifications
- ALL THREE ARE NEEDED!

Faculty development

- e-learning raises the skill level
- most professors unready for e-learning: lack of understanding of new teaching/learning methods
- Ph.D. training for research, not teaching
- training of professors needs to be systematised

Professional development

- Professional development should be part of regular work of professors
- more regular/flexible delivery of training in teaching for professors
- workshops, online modules: role of CARNet?
- annual professional development plan for each instructor

Questions and discussion

- What is the best way to prepare professors for e-learning?
- Should professional development/ training in teaching methods/ technology be compulsory?

Conclusions

- e-learning requires fundamental changes to way teaching offered
- dependent on re-training of professors and re-organization of teaching
- increased costs initially; eventually stable funding through increased enrolments/cost-effective practices

Conclusions

- a strategy for the future: new teaching methods, new technology, linked to needs of knowledge-based economy
- a strategy for expansion: increase existing market, new markets

Questions and discussion

- Is e-learning worth the effort needed to succeed?
- Does e-learning challenge the fundamental principles of a university?
- How do we ensure that professors are rewarded and encouraged to use e-learning?

Further information

Bates, A. (2000) Managing Technological Change San Francisco: Jossey-Bass

Bates, A. and Poole, G. (2003) Effective Teaching with Technology in Higher Education San Francisco: Jossey-Bass

Bates, A. (2004) Upravljanje Tehnoloskim Promjenama Zagreb: CARNet/Naklada Benja

Bates, A. (2005) Technology, e-Learning and Distance Education London: Routledge