

MOOC: #Change11: Education, Learning and Technology

# Transforming teaching and learning through technology management

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# Overview

- Importance of technology for teaching
- Need for management, which includes:
  - Leadership and planning
  - Organizational structure
  - Quality assurance
  - Resource management
  - Removing barriers to change
- Conclusions

# Questions

1. Has HE teaching changed much in the last 100 years?
2. Is the current model the best for 21<sup>st</sup> ©?
3. Should technology *enhance* the current teaching model or *transform* it?

# The importance of technology

- ◆ Changes in HE
- ◆ Importance of digital technology
- ◆ Learners have more control
- ◆ Basic delivery model unchanged since 19<sup>th</sup> ©
- ◆ Need to rethink how we teach in HE

# Current practice

- ◆ Technology management in 36 institutions: 11 case studies
- ◆ Very different approaches
- ◆ Also some common features
- ◆ Ranked institutions

# Current practice

Main goals for technology:

- ◆ Modern IT infrastructure
- ◆ ERP systems for admin
- ◆ Enhance classroom teaching
- ◆  $\leq$  fully online (10-20%)
- ◆ LMSs main technology

V. conservative + adding cost

# Questions

1. Do you have a strategic and an academic plan?
2. Do you have an e-learning plan? Integrated or separate?
3. At what level is such planning done?

# Leadership and planning

Senior management team  
critical

For learning technologies:

- ◆ Shared vision
- ◆ Set measurable strategic goals
- ◆ Develop governance mechanisms



# Leadership and planning

Goals (examples):

- ◆ Flexible delivery
- ◆ 21<sup>st</sup> century skills
- ◆ Subject-relevant IT skills/  
knowledge
- ◆ Improving cost-effectiveness

Goals need to be communicated and resourced; need for a plan

# Leadership and planning

Planning for LTs at several levels:

- ◆ Institutional
- ◆ Schools/Faculties
- ◆ Program

Strategic thinking vs  
detailed plans

- ◆ Visioning for instructors
- ◆ LT Centres

# Organization: case-study results

- ◆ Projects not part of broad strategy
- ◆ Committees with weak mandates
- ◆ Growth of LT support units
- ◆ Gaps and duplication
- ◆ Instructors decide on use of technology

# Organization: best practices

1. High-level technology committee with sub-committees
2. Clear mandates for committees, schools, LT centre(s), instructors: who can decide/do what
3. Formal communication channels

# Organization: best practices

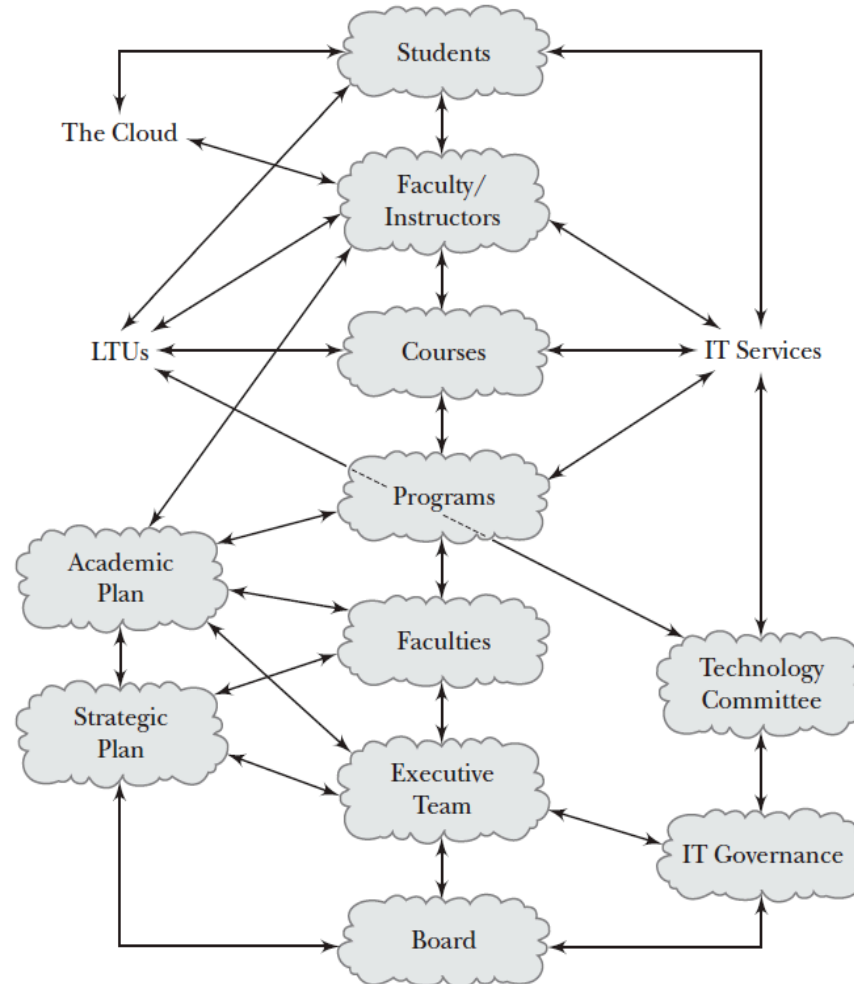
- ◆ Choice of 'core' technologies for teaching: program level
- ◆ Innovation: three stage process:
  - ◆ Exploration
  - ◆ Pilot and evaluation
  - ◆ Adoption

# Governance: lessons from case studies

- ◆ Technology permeates organization
- ◆ Line management/silos inappropriate
- ◆ Collective decision-making
- ◆ Clear mandates needed
- ◆ Senior admin + CIO to monitor



# New model of governance





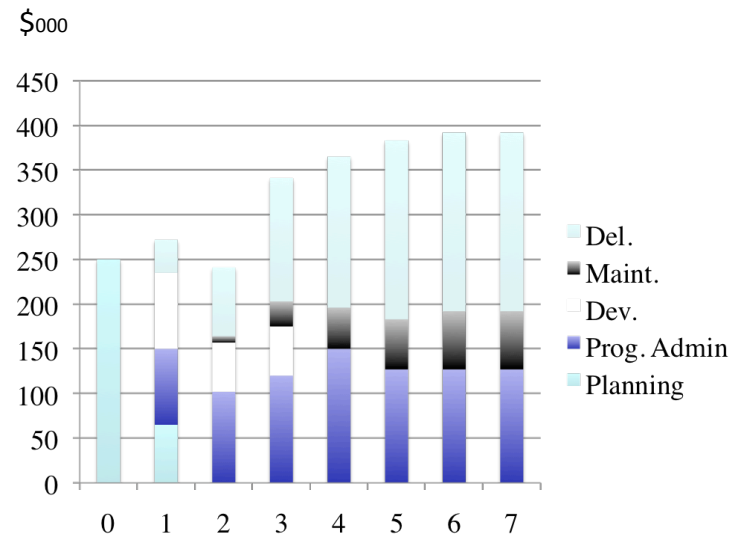
# Quality assurance: best practices

- ◆ Standard program approval process
- ◆ Follow guidelines on best practices for e-learning
- ◆ Program teams decide what will be taught and how
- ◆ Instructors work with instructional and media designers
- ◆ Evaluate

# Questions

What's the cost of an online course compared with a classroom course?

What are the important factors that influence the cost of online courses?



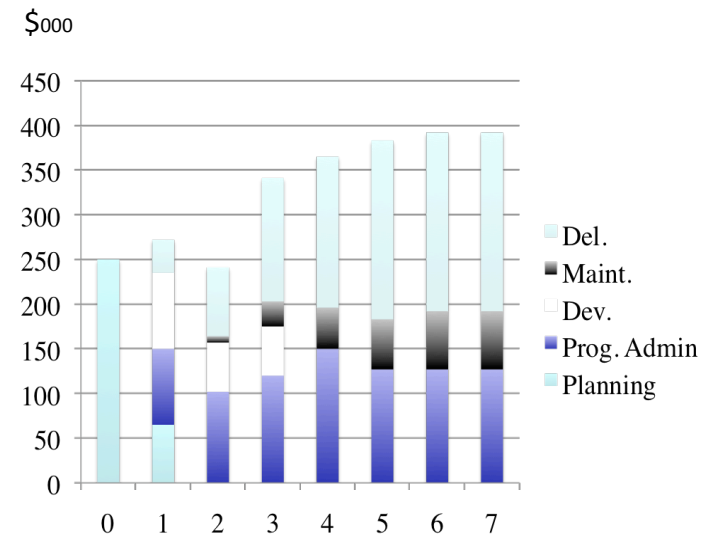
# Resources

Costs not known

Two main costs: instructor time  
+ instructor support (LTUs)

Main factors: course design;  
no. of students; method of  
working

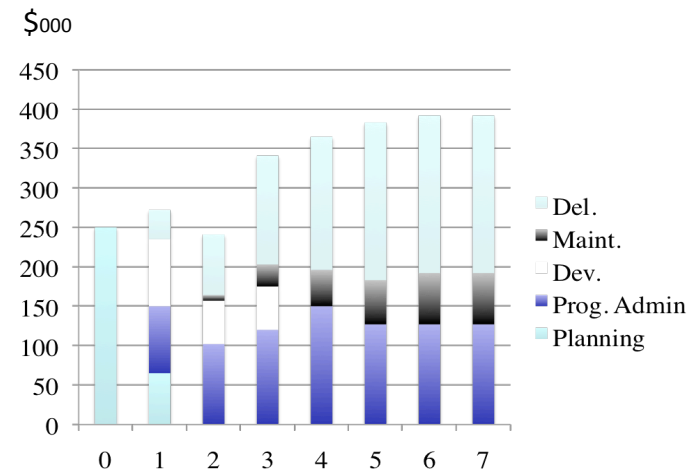
Costs going up: technology an  
add-on



# Resources

Ways to control costs:

- ◆ Course redesign:
  - ◆ Replace existing activities
  - ◆ Transfer 'work' to students
- ◆ OERs
- ◆ Pre-service instructor training



# Barriers to change

- ◆ HE 'culture', especially the Socratic myth
- ◆ Reward system
- ◆ Lack of pre-service training in teaching for instructors
- ◆ Lack of training for administrators

# Questions

1. Does the existing classroom model have to change? If so, why?
2. How can technology help – or does it make it worse?
3. What can you do to bring about the necessary changes?

# The ultimate questions

1. Can universities or colleges change from within, or do we need new institutions for 21<sup>st</sup> century learning?
2. What would reformed or new universities/colleges look like?

This is the topic of this week's  
MOOC

# General discussion

## Reference:

Bates, A. and Sangrà, A. (2011) *Managing Technology in Higher Education: Strategies for Transforming Teaching and Learning* San Francisco: Jossey-Bass

## Web sites:

<http://tonybates.ca>

<http://batesandsangra.ca>