Who Controls the Demand Pull and Supply Push in e-Learning?

or is Everyone Doing Both at the Same Time?

SURF / WTR - Leo Plugge

Plenary session: Future Perspectives

Dr. Richard Straub:
How many believe that the control over e-learning is shifting?
Just about everyone!
SURF is the Dutch higher education and research partnership organisation for network services and information and communications technology (ICT).
Since 1985

SURFnet serves:

- 170 Organizations
  - Such as: Universities, Academies, Research institutes, Corporate research centres and Academic hospitals.

- 750,000 users
  - Researchers, Faculty, Staff, Students, etc.

SURFnet6 ‘light wave’ network

Images courtesy SURFnet © 2006
Research Network Innovation
Definition of ‘Innovation’

“The successful exploitation of new ideas”

OFCOM regulator and competition authority for the UK communications industries

Innovation is the adoption of new ideas

Snowboard bumper, US Patent Issued In 2000

SURFnet’s Exploitation of Innovations

Next generation is not a simple extrapolation of current networks

Images courtesy SURFnet © 2006
SURFnet Development Schedule

Coordination model
Demand Pull and Supply Push

SURFnet's users

A: Most users low level connection
B: Several users medium level connection
C: Few high level users

GigaPort Project
But how about Education and e-Learning?

Are we progressing?
Pushed by what / whom?
Pulled by what / whom?
Towards what?

HE Participation in The Netherlands increased 7x

Higher Education Participation in The Netherlands 1950-1998
(1950 = 100%)

Data courtesy CBS - StatLine 2006
Our wealth pushes

Person Income and Higher Education Participation in The Netherlands 1950-1998 (1950 = 100%)

Government pushes ..or pushed

Expenditure Public Universities %GNP and University participation since 1956 = 1 (100%) in The Netherlands
Education Research Pushes

Theories:
- Behaviourism
- Cognitivism
- Constructivism
- Connectivism
- …

Work forms:
- Problem based
- Project based
- Case based
- Competency based
- Product based
- …

But complaints about the quality of education are increasing

- Connectivism
- …
Theories:
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- Connectivism

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Are researchers aware of customer needs?
- Connectivism
- Competency based
- ...
ICT Monitor 2003 – some findings

- Teaching staff wants:
  - ICT for administrative support, Technical support, Training.
- Teaching staff is not very interested in ICT for communication and in their lessons.
- Students want ICT for:
  - Communication with their teachers and to facilitate working together on assignments.
- Students don’t want to use the pc as a (formal) discussion platform, they want to meet.

SURFnet survey 2006

- Staff uses corporate mail.
- Students use Hotmail or Gmail.
- 69% of the teachers does not want their lectures to be recorded.
- 57% of the students would like to watch lectures at their own convenience.
- Need: online work environment for storage, sharing and information exchange.
- Teachers want: online tests.
Education Paradox:

Educators with yesterday’s skills teach today’s students for an unknown tomorrow.

Permanent education for teachers

How can we increase the effect of educational research?
Implement the innovation chain in education

To-do (1/3)

- Katherine Laux (Epic)
  - User research & tests
  - Wider stakeholder engagement

- Peter Scott (OU UK)
  - Don’t experiment: study / analyze reality
  - (Knowledge) work = learning

- Christine Voightländer (Uni Hannover)
  - Take a customer orientation
  - (Private/public) partner networks
  - E-Learning technology
To-do (2/3)

- Monika Weber (Worldbank)
  - Set clear goals (better healthcare, better water management)
- Nick Nunnington (CETL)
  - Generation gap
  - Designing in the customer
  - Partnerships

To-do (3/3)

- Focus on adoption
- Use (system) design principles
  CATWOE: (Checkland & Scholes, 1990)
  - Customers
  - Actors
  - Transformation process
  - World view
  - Owners
  - Environmental constraints
- Orchestrate the innovation
Orchestrate innovation with all stakeholders to win this game

Thank you for your attention!