Experiences of Technology Enhanced Learning: What Went Wrong?

Su White Hugh Davis
Learning Societies Lab
ECS
The University of Southampton, UK
www.ecs.soton.ac.uk/~hcd
Some views...

“If you want to succeed, double your failure rate.”

Thomas Watson, Sr
Ten million dollar mistake

the story of Thomas Watson, Sr. calling in a manager who had made a ten million-dollar mistake.

When the manager entered Watson’s office, he said

“I assume that you want my resignation”

Watson replied,

“You can’t be serious, I have just invested ten million dollars in your education.”
The Paper

- Presents 4 case studies
  - Microcosm and the Scholar Project
  - The Modular MSc
  - The e3an project
  - The DialogPLUS project

- In this presentation we will present just the first and the last.
Microcosm and the Scholar Project

Microcosm
- Open Hypertext System
- CS Research Project
- Educational applications

Scholar Project
- Campus wide structure for multimedia learning
- “Shift the culture of the university”
How do we do it?
Our Philosophy...
Enter real life -> change!

• 1993 -> WWW

• 1990’s -> multiple platforms
   -> technical advances

• University of anywhere -> academics careers
   -> personal agendas
   -> institutional priorities
   -> real classes
   -> real timetables
So…

Applications produced
Application used
Network of expertise
Trust bonds
Future collaborations

Systems becomes redundant
Colleagues move on
Migration cost time and money
Culture is complex
Projects have an end date
The DialogPLUS project

- “Digital Libraries in Support of Innovative Approaches to Teaching and Learning in Geography”
- Collaboration
  - Pennsylvania State University
  - University of Leeds
  - UCSB
  - University of Southampton.
- Started February 2003
- JISC/NSF funding £1.5M
Objectives

• Bring emerging technologies and available digital content into core teaching and learning
• Demonstrate how the pedagogical process needs to be adapted or developed to support the learning process when using technology (=blended)
• Examine the human and organisational issues associated with implementing new modes of teaching
• A primary objective of the DialogPLUS project was to investigate the practicalities of the joint design and sharing of learning activities based upon existing digital resources
What Went Right?

- Large volume of online learning material, re-using digital resources from multiple sources
- Majority continues to be used after the funding has ceased.
- Evaluation indicated that high quality online learning activities, as part of a blended approach, did enrich programmes of study.
- Participant departments now have a sound understanding of good practice in design for learning, e-learning and blended learning
- Continued collaboration between Leeds, Southampton and Penn State Geography departments
- Investigated multiple approaches to resource federation
What Went Wrong (Embedding)?

• Do you call this embedding?
  – Is re-use of existing resources “embedding”?
  – What we wanted to see was the Schools / Departments reconfigured to continue producing stuff
  – To quite a large extent this has happened at Soton and PSU.
What Went Wrong (Sharing)?

- We allowed the participants to define what they meant by “Nuggets” (Learning objects)
- They defined things far too large to be shareable
- They collaborated on the design – but did not share
- Rather than share they federated their students or their courses

- As a question to the workshop – Is this a failure or an outcome?
The DialogPLUS project

• “Digital Libraries in Support of Innovative Approaches to Teaching and Learning in Geography”
• Collaboration
  – Pennsylvania State University
  – University of Leeds
  – UCSB
  – University of Southampton.
• Started February 2003
• JISC/NSF funding £1.5M
Objectives

• Incorporate technology and digital content into core learning and teaching
• Demonstrate how the pedagogical process needs to be adapted to support the blended learning process
• Examine the human and organisational issues associated with implementing new modes of teaching
• A primary objective of the DialogPLUS project was to investigate the practicalities of the joint design and sharing of learning activities *based upon existing digital resources*
What Went Right?

- Large volume of online learning material, re-using digital resources from multiple sources
- Majority continues to be used after the funding has ceased.
- Evaluation indicated that high quality online blended learning activities did enrich programmes of study.
- Participant departments now have a sound understanding of good practice in design for learning, e-learning and blended learning
- Continued collaboration between Leeds, Southampton and Penn State Geography departments
- Investigated multiple approaches to resource federation
What Went Wrong (Embedding)?

- Do you call this embedding?
  - Is re-use of existing resources “embedding”?
  - What we wanted to see was the Schools / Departments reconfigured to continue producing stuff
  - To quite a large extent this has happened at Soton and PSU.
What Went Wrong (Sharing)?

- We allowed the participants to define what they meant by “Nuggets” (Learning objects)
- They defined things far too large to be shareable
- They collaborated on the design – but did not share the results
- Rather than share they federated their students or their courses

- As a question to the workshop – Is this a failure or an outcome?
Other Confounding Factors

- Legal and IP issues were difficult trans-Atlantic
- It is almost impossible to design and experiment with real students that demonstrates that long term “learning is improved”.
Other things that went wrong..

- In the Modular MSc – those in charge of operations did not understand the management mission
- In e3an – the technological challenges (of implementing standards) turned out to be much greater than anticipated
What makes a successful project?

• A final project report which shows that the objectives were met and the budget kept to?
• A class of happy students?
• An evaluation which demonstrates that a novel method improves the student experience?
• A change in institutional culture?