New Tools for Online Teaching

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Agenda/Topics
- Introduction
- LOs at UBC
- Social Software
- ePortfolios
- Implementation Issues
- Strategies for success

Key Themes
- Technology best transforms teaching and learning when it facilitates learning processes rather than merely delivers content
- Students can be producers of knowledge, not just consumers of content
- Communities of Practice build best practices
- Faculty buy-in is far more effective in creating change than buy-out of their time

Introduction
- University of British Columbia
- Dual Mode Institution
- 40,000 students, 6,000 enrollments through Distance Education
- 2,000 faculty/8,000 staff
- 12 Faculties
- Distance Education & Technology
Incubating new learning technologies at UBC
Office of Learning Technologies
http://olt.ubc.ca

- Communities of practice, learning objects, eportfolios, emerging technologies, and enterprise-level e-learning systems
- Site for low-risk incubation of emerging technologies, evaluation of pilot systems and integration to enterprise level systems

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Ongoing Learning & IT Projects

- Learning Objects
  - Cost effective
  - Reusable/interoperable
  - Content can be customized for individual learners
  - Standards make sharing and integration easy

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LOs paradoxes

"Specifications and applications that are truly pedagogically neutral cannot also be pedagogically relevant." — Norm Friesen

"The smaller designers create their learning objects, the more reusable those objects will be. On the other hand, the smaller learning objects are, the more likely it is that only humans will be able to assemble them into meaningful instruction. The supposed economic advantage of reusable learning objects has evaporated." — David Wiley
LOs Faculty Responses

1. "I get mad every time I use somebody else's canned software."
2. "Taking modules, and expecting them to assemble themselves into a smooth artful flow, is unrealistic."
3. "I need more fine-grained resources that can be manipulated in divergent ways."

Faculty response

A collection of mostly free, open source applications that build upon XML metadata as well as LO values relating to reuse, discovery and interoperability.

Facilitate communication and publication between individuals or groups, and often involve creative ways to represent presence, interaction and creative interfaces for viewing information.

Wikis, Weblogs, RSS feeds/News Aggregators, Photostreams, Social Bookmarking, etc.

From LOs to Social Software

Course premised on the notion that writing is a technology
How do developing technologies for writing (scroll, codex, hypermedia) modify human orientation to information?
Has been offered 3 times, each time with 40 students.
Highly constructivist course: students produce content and knowledge in collaboration with one another

Multiple writing environments: asynchronous forums, community web, social software

Faculty members, students and staff have taken to these tools with a great deal of enthusiasm

We don’t have to try to sell them on the benefits of Social Software: they seem to be buying into it because they are finding useful tools that help them create effective constructivist learning processes (or to organize a camping trip...)

From Push to Pull

facilitating learning and development

We have moved from a push to a pull model

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ePortfolios

Another technology, but one based on a well-established methodology

From social to individual constructivism: in most cases it is a very personal activity

What are portfolios

- Mirror
- Map
- Sonnet
Reflection

Student’s Reflection

"The ability to reflect upon the past and the ability to learn from past mistakes leads to exceptional growth. I learned how to reflect better through repeated writings of journal entries and feedback from my instructors. At the beginning of the course, I struggled with reflections and expressing how or why I felt a certain way.

"You also write about a lot negative feelings. How can the negative experiences be positive?" (Feedback in Iwebfolio, October 23). Not explaining my feelings on paper meant that I had not thought about what kind of feelings I was dealing with, and I was not making an effort to turn challenges into strengths. Taking my instructor’s advice, I reflected on my feelings more and more..."

Social Dialogue

AGSC

“The most challenging piece was teaching students how to reflect.”
AGSC496 Instructors

Benefits of ePortfolios

• Student
  • Meta-cognition
  • Self-regulation
  • Transfer learning
  • Empowerment
• Faculty
  • Authentic
  • Context rich
  • Personalized learning

Motivation

Extrinsic  Mixed  Intrinsic

Learner control

Helen Bennett (2004)
ETEC533: Technology in Mathematics and Science Classroom

- How do use and develop technologies that enhance the teaching and learning of science and mathematics?

- Students reflect on their own assumptions about the use of technology for teaching and learning.

- Students reflect on the impact of the use of current technologies in the teaching of science and mathematics.

- Students collaborate in the Design of Technology-Enhanced Learning Experiences.

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ePortfolios

- Technology
  - Dedicated and undedicated systems
  - Social Software
  - Vendor and Open Source
  - Implementation issues
ePortfolios

- What is the story about implementation
- UBC Projects
- Community of practice
- Buy in - Adoption
- Transformation of teaching and learning

Management of e-learning: development, delivery, implementation

- Technology learning curve and cost structure is low and ease of use is high. Not always easy to scale into enterprise level applications
- Intellectual Property: copyright, copyleft, creative commons
  - [http://creativecommons.org](http://creativecommons.org)
  - BC Commons/Creative Commons
  - [http://www.bccampus.ca](http://www.bccampus.ca)

What we’ve learned

- Technology best transforms teaching and learning when it facilitates learning processes rather than merely delivers content
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