Strategies for Learning Technology

ocTEL Webinar Week 1
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Sharing approaches to and strategies for what we do and how we do it.

– Wider context of learning technology
– Specific areas to consider
– How to make sense of ‘overwhelming choice’
– Theoretical approaches practically applied
– Approaches for how to implement
WIDER CONTEXT OF LEARNING TECHNOLOGY / TEL / BLENDED LEARNING / DISTANCE / E-LEARNING
Before defining strategies and approaches to learning technology

Why are they needed?

Can we not continue to teach and research as in the past?
What is the wider context?
Drivers for Learning Technology Use – A Holistic Model

- **Changes in Society/Uptake of technologies**
- **Education System/ Employment**
  - Purpose of HE
  - Primary & secondary
- **Educational Theories**
- **Policies**
  - Government
  - ALT
  - JISC
  - HEA
- **Commercial/External Interests**
  - Products
  - Solutions
  - Innovation

**Education**

Internal and between HEIs
Drivers for Technology Use – A Holistic Model

Change

Economic System / Employment
- Purpose of HE
- Primary & secondary

Politics

Commercial / External Interests
- Products / Solutions / Innovation

Technology / Uptake

Government

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HEA

JISC

ALT

Changes in Society
Drivers for Learning Technology use

UCISA Survey Distilled (22 drivers):

- Enhancing the quality of learning and teaching
- Widening participation/inclusiveness
- Attracting/impressing students
- Creating or improving competitive advantage
- Achieving cost/efficiency savings

- Should cover Teaching and Research activities
- Enhance quality of teaching and resources (3E’s):
  - Enhance
  - Extend
  - Empower

3Es from:
http://staff.napier.ac.uk/services/academicdevelopment/TechBenchmark/Pages/3E.aspx

www.ucisa.ac.uk/groups/ssg/surveys.aspx
Academic Perspective?
What do you think – A selection of views?

• “Change isn't ‘coming’
  – it's already here and it's going to continue!”

• “Skills gap created for staff”

• “Not enough time to catch-up!”
Student Perspective?
What do you think – A selection of views?

• “technology is used ubiquitously and should be in education”
• “not all student have the same relationship with technology”
• “technology should just work”
What has changed?

• Learning takes place the same way
• Changes in learning contexts, expectations and practices
  – Increasing availability of ICT (internet, mobile devices etc.)
  – Increasing range of places where students can learn
  – Expectations of greater flexibility in educational provision

• What does that mean for educators and students?
Current Students’ Experiences

• Expectations gap between previous educational experiences (primary and secondary school)
• Expectations of use but not sure how to *actually* use technology for learning
• Where does learning take place... classroom or outside...
SPECIFIC AREAS TO CONSIDER
Combination of 3 areas:

**Pedagogical:**
- Deeper focus than technology
- Who/why/what/learning outcomes
- Enhance existing methods
- Create or enable new methods

**Personal Development/Self Awareness:**
- What skills do I have?
- What skills may I need?
- How can I achieve these?

**Digital Skills:**
- Everyday
- Enhanced / Blended
- Fully online
Digital Skills – ‘Everyday’

• Skills and knowledge that have become embedded in everyday work-life. No longer ‘new’:
  – E-Mail
  – Word Processing
  – Internet Browsing
  – Presentations

• Tensions between what students may consider everyday and staff experience.

• Awareness that students may use certain skills everyday but not in an educative context.
Digital Skills – Enhanced / Blended

Thematic understanding, rather than a focus on particular technology (one tool may be used in many ways):

A focus on the **purpose of education** rather than the tool:

– Using and creating digital resources
  (Screencasts/Images/Video/Creative Commons)
– **Collaboration** (Google Documents/Social Bookmarking/Wikis)
– **Communication** (Skype/Blogging/Social Media)
– **Copyright and digital literacies for academia**
  (Plagiarism/Turnitin/EndNote/Library resources/Diigo/Google Scholar)
Digital Skills – Distance Learning

• A combination of all of the previous plus the experience and knowledge in how distance-learning may differ from face-to-face.
• Experience of being an online student as well as tutor.
• Specific experience with online environments:
  • Blackboard / Moodle / VLE
HOW TO MAKE SENSE OF OVERWHELMING CHOICE
Available Technologies

• Many, many available!
• Seemingly ever-expanding!
• Match educational purpose with technology choice
Available Technologies

A small sample

• Some Institutionally supported:
  – Virtual Learning Environment (Blackboard)
  – Lecture Capture
  – MS Office
  – EndNote

• Some available for you to use ad-hoc on your computer or online:
  – Screen casting
  – Audio feedback
  – YouTube
  – Diigo

• Group-Experience:
  – MOOCs
  – Google Hangouts
Technologies in Context in Education

Physical Learning Spaces

Mobile and Immersive Learning Environments

Institutional VLEs

Personalised learning environments

* Interpreted from: www.jisc.ac.uk/whatwedo/programmes/elearning/tele.aspx
THEORETICAL APPROACHES TO APPLY PRACTICALLY
How Technology is Used

Digital Residents vs. Digital Visitors
(not immigrants versus natives*)

• The ‘Resident’
  – The resident is an individual who lives a percentage of their life online.

• The ‘Visitor’
  – The Visitor is an individual who uses the web as a tool in an organised manner whenever the need arises.

* The idea that because you were born after a certain date you are a digital native

Oxford / JISC http://www.tall.ox.ac.uk/research/current/visitorsresidents.php
The SAMR Model

enhancing technology integration

Ruben R Puentedura, Ph.D.

Redefinition
- technology allows for the creation of new tasks, previously inconceivable
- create a narrated Google Earth guided tour and share this online

Modification
- technology allows for significant task redesign
- use Google Earth layers such as panoramic and 360 cities to research locations

Augmentation
- technology acts as direct tool substitute, with functional improvement
- use Google Earth rulers to measure the distance between two places

Substitution
- technology acts as a direct tool substitute, with no functional change
- use Google Earth instead of an Atlas to locate a place

http://www.hippasus.com/rrpweblog/
The 3 E’s Approach (Edinburgh Napier)

- **Enhance**: Adopting technology in simple and effective ways to actively support students and increase their activity and self-responsibility.

- **Extend**: Further use of technology that facilitates key aspects of student’s individual and collaborative learning and assessment through increasing their choice and control.

- **Empower**: Developed use of technology that requires higher order individual and collaborative learning that reflect how knowledge is created and used in professional environments.

http://staff.napier.ac.uk/services/vice-principal-academic/academic/TEL/TechBenchmark/Pages/3E.aspx
Critical Voices

• A gap between the rhetoric in the literature and how technologies are being implemented (Njenga & Fourie, 2010)
• Paradoxes in the implementation of technologies (Guri-Rosenblit, 2005), e.g.
  – preparedness and readiness of HE institutions to realise the potential of technologies
  – cost consideration
  – personal issues, such as the impact of the new technologies on students
  – the human capacity to adapt to new learning styles
IMPLEMENTING AND SHARING APPROACHES
IMPLEMENTING APPROACHES

EMBEDDED & LOCAL
Learning Technologists can be... **A Bridge!**
Skills and Roles:

A Journey of Development:
• Take you from the familiar to the unfamiliar
• Enable confidence and competence so you can do the same with students
• Evaluate and interpret solutions backed up by pedagogical theory and frameworks
• Provide teaching/training/staff development on specific tools
• Enable students and staff to be creative, critical and inquisitive!
IMPLEMENTING APPROACHES
ACROSS AN INSTITUTION
Create A Community of Practice...

Learning Technologists @ Leeds
Blended Learning Committees
Academic Champions / Faculty Teams

Central Policies and support and
Embedded/Local Context Teams

Some centrally supported tech:
Articulate Studio / Adobe Connect
SHARING APPROACHES
ACROSS A REGION
Create A Community of Practice...

UK-Based
SHARING APPROACHES
WIDER
Create A Community of Practice...
Summary

• Pedagogy over technology
• A focus on the **purpose of education** rather than the tool:
  – Can be considered at unit/module, programme or curricula levels
  – Should be ideally considered at the start rather than being bolted on
• Apply theories to aid in selection
• Be aware of own, students and organisational current context
• Draw on multiple approaches
• Share and gain ideas through multiple networks
Thank You

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