Technology meets learning:
Immersing staff in e-learning development in a blended learning course

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Overview

- Context
- Developing staff capability
- The first course
- The second course
- What we achieved, learnt and changed
- Considerations for the next course
Our students’ world
Monash University

- 63,300 enrolled students, 7,600 staff, 4,500 coursework units
- Educational approach - cross-disciplinary, multi-campus, multi-national — blended learning and teaching, focused on student experience and engagement pre-class, in-class and post-class

- Italy: Prato Centre
- India: IITB-Monash Research Academy
- Monash South Africa
- Malaysia: Sunway Campus
- Victoria: 6 campuses
- China: Southeast University-Monash Joint Graduate School

Technology meets learning: THETA 2013
Monash University Library and (e)learning

**Library guides**

Electronic resources

1 year: 3.9 million database searches; 3.8 million library visits

Online tutorials

900 research and learning skills programs for 48,000 students; 20% use blended learning

Search discovery layer

Learning spaces

1 year: 3.9 million database searches; 3.8 million library visits

Library blog

Past exams

Web 2.0

SMS alerts

Facebook

Twitter

Equella

bX Recommender

Moodle

e-learning modules

Online reading lists

Lectures Online

Web site

1 year: 3.9 million database searches; 3.8 million library visits

Past exams
What does this all mean?

*For students, the University and Library....*

- Learn (and teach) anytime, anywhere, any way
- Student is central, technology is central
- Information and resource overload
- Skills to navigate, understand, manage, create and excel are crucial
- Expectation of learning resources and tools that are interactive, engaging, collaborative and high quality
Developing staff capability

- Training
- Peer learning
- Providing tools and standards
- Consultation

- Blended learning course to 
  *Design and develop an e-learning module*
The aims of the course were to:

- Build capability through a course that
  - mirrors student experience of blended learning
  - provides ‘real world’ project experience with authentic outcomes
  - requires collaboration

- Develop a suite of e-learning modules for use in blended and e-learning and teaching, using methods that
  - focus on quality, effectiveness and sustainability
First course

- Created and facilitated by e-Learning Coordinator
- Focused on using Captivate software
- Run during 2011 with 12 Library staff
- Developed 3 e-learning modules

http://monash.edu/library/skills/resources/tutorials/citing/
http://monash.edu/library/skills/resources/tutorials/holds/
http://monash.edu/library/skills/resources/tutorials/searching/
What did we achieve?

- Developed staff capability
- Increased opportunities for staff collaboration
- Produced quality learning artefacts for blended teaching and learning
What did we learn?

- **Less**
  - focus on one technology

- **More**
  - stakeholder input throughout projects
  - opportunities to practice e-learning development skills

- **Improve**
  - course design to reduce cognitive load

- **Provide**
  - pre-course introduction to improve understanding of course and technology requirements
  - blocks of time from daily work to complete intensive course tasks
Second course

- Run during 2012-13 with 7 Library staff
- Developed 3 e-learning modules

- What did we change?
  
  *Revised course design and processes*
  
  - Reordered twelve tasks *integrated with...*
  - Four workshops *into stronger blended learning approach*

- More
  
  - e-learning development tools
  - collaboration

- Improved
  
  - pre-course work

- Provided
  
  - a reading activity
Welcome to the Design and Develop an e-Learning Module online course. Please read the course description and learning goals before commencing the course tasks. Check the upcoming events and calendar on the right to keep up to date with the task dates.

Course duration: 27 days (8 October 2012 - December 2012)

- News forum
- Course description
- Learning goals
- "Important" Task timelines

<table>
<thead>
<tr>
<th>Workshops</th>
<th>Tasks</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-course work: Establish Project Goals</td>
<td>Task 3: Plan Topic Structure using Freemind</td>
<td>Task 6: Write an Educational Design Storyboard</td>
</tr>
<tr>
<td>Workshop 1: Introduction to Moodle and e-Learning</td>
<td>Task 4: Write an SME Storyboard</td>
<td>Task 10: Assemble Final Module and Develop Media</td>
</tr>
<tr>
<td>Task 1: Outline your Project</td>
<td>Task 5: Review SME Storyboard</td>
<td>Task 7: Review ID/ED Storyboard</td>
</tr>
<tr>
<td>Task 2: Meet with Project Stakeholders</td>
<td>Workshop 3: Work with Development Tools</td>
<td>Task 11: Release to Small Target Group for Feedback</td>
</tr>
<tr>
<td>Workshop 2: Using Freemind</td>
<td>Reading Activity: Learning and Interactive Activities</td>
<td>Task 12: Publish and Create Accessibility Documents</td>
</tr>
<tr>
<td>Task 9: Review Prototypes</td>
<td></td>
<td>Course evaluation</td>
</tr>
</tbody>
</table>
Components

- **Pre-course work**: Establish project goals
- **Workshop 1**: Introduction to Moodle and e-learning
- **Task 1**: Outline your project
- **Task 2**: Meet with project stakeholders
- **Workshop 2**: Using Freemind
- **Task 3**: Plan topic structure using Freemind
- **Task 4**: Write a subject matter expert storyboard
- **Task 5**: Review subject matter expert storyboard
- **Workshop 3**: Work with development tools
- **Reading activity**: Learning and interactive activities
- **Task 6**: Write an educational design storyboard
- **Task 7**: Review educational design storyboard
- **Workshop 4**: Use development tools - intermediate
- **Task 8**: Develop a prototype
- **Task 9**: Review prototypes
- **Task 10**: Assemble final module and develop media
- **Task 11**: Release to small target group for feedback
- **Task 12**: Publish and create accessibility documents
## Evaluating the course:
What did we learn and how?

<table>
<thead>
<tr>
<th>Methods</th>
<th>Instruments</th>
<th>Functionality</th>
<th>Usability</th>
<th>Appeal</th>
<th>Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Course output</td>
<td>Task artefacts</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>2) Learner feedback</td>
<td>Questionnaire</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td></td>
<td>Focus group</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>3) Expert evaluation</td>
<td>Expert rating form</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>4) Observation</td>
<td>Participant observation</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>5) Records</td>
<td>Implementation log</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

Emphasis on qualitative feedback and task artefacts
Evaluation participants

- Course participants
- Expert reviewers
- Participant observer
Artefacts

Mind maps
Artefacts

Subject matter expert storyboards

The importance of effective note taking and summary techniques for business and economics law units

1. Active revision

For any unit it is important for you to revise the material. For BusEco law units you are expected to be familiar enough with the material that you can recognise legal issues in a problem, recognise the area of law that you need to apply, and understand the steps you may need to work through to reach a reasonable conclusion.

It is useful to understand how we process information to assist us with our revision strategies.

[Explain information processing model in relation to study]

Retaining information

- Sensory memory
  - Our sensors are exposed to a lot of input
Artefacts

1. Beyond the Library: Using the internet for academic research

Screen Text
By the end of this tutorial you will be able to:
• Identify when you need to use the web in your research
• Find academic literature on the web
• Evaluate web-based resources
• Organise information you have found on the web

Instruction: Check your knowledge. Try out this quiz to see which module will be most helpful to you. Or skip straight to the tutorial menu by clicking next...

Interactions/Media

Check your Knowledge
Quiz to direct students to appropriate modules for their needs (pre-quiz)

Questions
1. Which of these items used in your research would be best found on the internet?

Answers
a. Government reports. (Correct)
b. eBooks (Incorrect)
c. Journal articles. (Incorrect)

Feedback: Books and journal articles are best found in the library as the library pays for access to these resources.

Educational design storyboards - Captivate
Artefacts

Placing material on Monash websites

Duration: open

Please answer these questions before using materials for commercial activities or activities unrelated to higher education courses, and before placing any material on a Monash public-access website

Tools/Resources

Lesson: Can I place this material on the Monash website?
Description: Answer the questions by applying your current situation to get relevant feedback

place-material-online
-moodle-lesson.docx

Educational design storyboards - Moodle
Artefacts – peer reviews

Developing a Search Strategy

1. Introduction

Are you overwhelmed with too many search results? Can’t find enough articles on your research topic? This tutorial will show you how to develop an effective search strategy and retrieve relevant material from a database.

2. Module Objectives

By the end of this module you will be expected to be able to:

- Identify key concepts in a research topic
- Create a concept set by listing related words (synonyms)
- Link terms within a concept set with OR
- Link concept sets with AND
- Select a relevant database – Business Source Complete
- Use Advanced search to enter search terms
- Interpret the search results

Comment [b1]: We don’t know how you were going to display this page but we felt that a series of questions (maybe in buttons) would look nice

Comment [b2]: Make this a more pithy sentence by saying either “Too many search results” or “Overwhelmed by too many search results?”

Comment [b3]: We wondered if this phrase might be replaced by “assignment topic” and another sentence saying “Want to find more material for your thesis”

Comment [b4]: Have this separate
Artefacts

2 Using photos of people

Using photos of people

Graeme works in HR and is putting together an internal flyer to promote a new service. He is worried that the design is a bit dull and decides to use a photograph he took a couple of years ago of some colleagues.

Graeme can’t ask these individuals if it’d be okay to use the photo because they no longer work at Monash. Besides, he knows they wouldn’t mind!

Captivate module embedded in Moodle
Participants – questionnaire comments

Course environment: “We did not have the technology to get started on the software part of the project well into the course itself, making it extremely difficult to try to catch up. :(

Course tasks: “This was a difficult choice. The hands-on is best when learning something completely new, which was my case. However, not having the technology was frustrating. Reviewing other work is a close second and was very beneficial to 'see' what you can do with the software.”

Learning: “I found the feedback from other participants and [facilitator] very useful. After working on something so intensively it's easy to be 'too close' to it and no longer see it objectively.”
The Kitchen sink conversation.....
Overall the reviews matched intended design goals and implementation.

“Elements of both instructional and constructivist approaches are used in this course. Largely, however, the instruction is aimed at guiding the participants. The use of templates is excellent as a guiding resource, it might, however, prove to restrict the participants thinking - depending on their level of expertise. Provided the instructor is happy to allow alternatives to the resources provided, there are some excellent materials provided.”

Design decision: Acknowledge and include more software instruction and provide more alternatives for participants.
What did we achieve from the second course: the story so far...

- Developed staff capability ✓
- Markedly increased opportunities for staff collaboration and stakeholder input throughout projects ✓
- Produced quality learning artefacts for blended teaching and learning ✓
The second course: the story so far...

- Demonstrated integration of various technologies (i.e. Moodle and Captivate)
  - ✔
- Opportunities to practice e-learning development skills impacted negatively by software installation delays
  - ✗
- Cognitive load improved, but can be improved further by to previous visual design and retaining other changes
  - ✔
- Improved course introduction with fewer participant questions
  - ✔
- Blocks of time had no significant impact?
Things to consider for the next course

1. Emphasise time commitment to participants
2. Review blocks of time
3. Incorporate more synchronous versus asynchronous activities
4. Include greater variety of software skills workshops
5. Ensure all required software is installed
Things to consider for the next course

6. Explore incorporation of Research Skill Development framework

7. Acknowledge a more balanced constructivist/instructivist learning design and reflect in design goals

8. Provide a wider variety of templates and processes to align with the variety of ways staff work

9. Using a single discussion forum instead of multiple fora
Thank you

Discussion, questions

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