Demand for eLearning content

- Student expectation
  - eLearning content 'expected' by students
- Student advantages
  - Greater flexibility (time, location)
  - Self-paced learning with revision
  - Self-test capabilities
- Pedagogical benefits
  - Blended-delivery/eLearning as/more effective than traditional teaching methods?
  - More engaging, self-paced, revision, self-test

Barriers to in-house development

- Sourcing options
  - Pre-existing publisher content
    - Tied to textbooks / Cost
    - Inflexible
  - In-house
- Required technical knowledge
  - Programming/web-development skills?
  - Working with multiple file formats?
  - New application(s)?
- Time
  - Initial construction
  - Ease of re-purposing existing material
- Flexibility of re-use
  - Ease of revision
  - Interoperability: Moving content between platforms

Consequences

- An academic 'digital divide'
  - Tech-savvy → Have skills, prepared to invest time
  - Technophobe → Larger learning curve, less motivation
  - Discrepancy in student experience across units

- Necessity of auxiliary staff (eLearning technical officers)
  - More costly
  - Increased development time (content vs technical expertise)

Development environments

Development environment	Capabilities	Tech. knowledge	Time	Flexibility of re-use
Programming/ web-coding	High	High	Intensive	• Time-consuming to revise. • Good platform interoperability
Flash/Shockwave	High	Moderately high	Intensive	• Time-consuming to revise. • Web-standard
LMS-based tools	Low	Low	Minimal	• Often poor
Dedicated applications (e.g. Adobe Captivate)	Moderate/ High	Low/ moderate	Minimal/ Moderate	• Good (outputs in standard formats)

Plugins to existing applications

- Microsoft Office Suite
  - Ubiquitous and widely used
  - Potential for wider range of application

- Plugins: Examples:
  - PowerPoint: *Articulate, AuthorPoint, PowerPointForce, iSpring*
  - Word: *WordForce, Wimba Create*

Plugins enable...

- Add engaging content
  - Easily add/edit video/audio narration
  - Add quizzes and other interactive exercises

- Utilise existing tools: PowerPoint
  - Audio/video import and playback
  - Graphics, text-formatting, slide transitions, animations
  - User-triggered navigation and animations

- Easy publishing
  - Export to a variety of standards-based formats
  - Easy upload to LMS
  - SCORM: Basic integration with LMS grade-books

Advantages: Technical Knowledge

- Familiar environment
  - Majority of content development builds upon existing skills
  - Learn a new menu, not a new application
  - Familiar environment --> Reduced technophobic/anxiety barrier

- Flexibility
  - Simple --> Complex
  - Add elements to increase engagement
  - Narrated lecture + self-test quizzes + video/audio clips + animation + user-interaction (e.g. roll-overs) + simple experimental demonstrations (questionnaires, time-controlled stimulus presentation)

Advantages: Time

- Builds on existing skills

- Quick re-purposing of existing material
  - Variety of output forms (video, CD-ROM, web, SCORM, direct-to-LMS)

- Reduced dependency on technical support

- Carry-over benefits of further training

Advantages: Flexibility of re-use

- LMS interoperability
  - Web-standard formats (html, flash)
  - SCORM

- Ease of revision
  - Material source = original PowerPoint/video/graphic/audio files

Conclusion

- No excuses any more!

- Acknowledgements
  - Narrated lecture: Tamara Watson, Brett Marriage
  - Experiment: Gabrielle Weidemann