Cleaning Up Our Act – Enterprise Solutions in Support of Webcasting to Offset Infrastructure Requirements for Delivery of Lectures

University of the Sunshine Coast
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Video is here now!

YouTube

SciVee

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Agenda

- Historical contexts
- Technical contexts
- Implementation issues
- Examples
- Green musings
- Questions

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USC

- Australia's newest and smallest University
- Servicing fastest growing region
- ~ 4500 students
- Green fields site
- Small research base
- Poor access to fast backbone
- Slow development of local infrastructure

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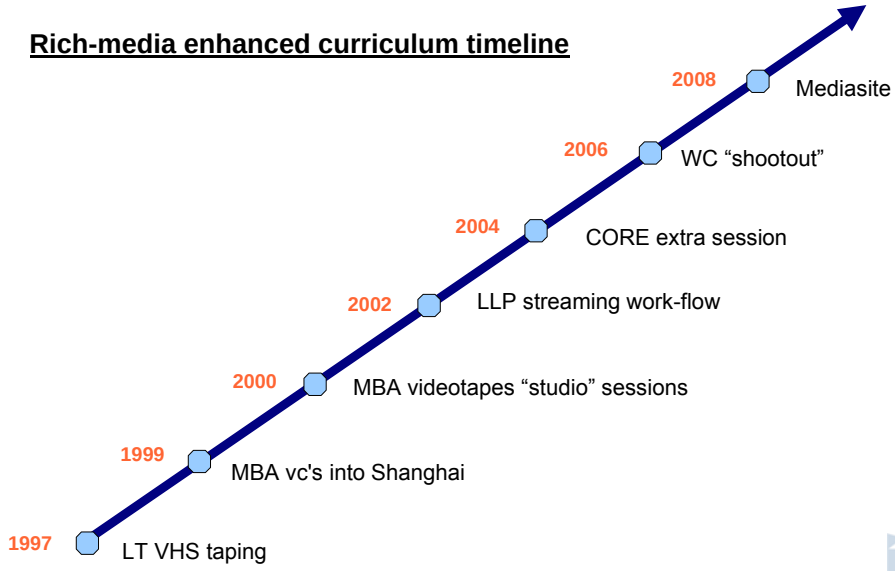
The checkered road to video “bliss”

Rich-media enhanced curriculum timeline



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Lecture recording

- VHS
- Library provides tape to lecturer
- Lecturer returns tape
- Library places in closed reserve
- Student views on library system
- Intensive tape handling

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Video conferencing

- ISDN
- Remote student audience
- Local lecturer
- Weekend only
- One technician in attendance
- Very costly to main client base

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Video “sessions”

- Council room
- Consumer grade equipment
- Each session requires one attendee
- 2 hour post production
- DVD publication

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Liberated Learning Project

- Real-time lecture captioning
- One camera operator
- Two hour post
- Real Networks (Producer, SMIL, etc)
- Real Enterprise Player (MOE conflicts)
- ASR transcription requires significant training, editing and review – typically three to six hours

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CORE unit requirements

- Staffing difficulties for extra session
- Push for large theatre construction
- LLP provides interim solution
- Costly - typically 3 to 5K per lecture series
- Additional cost incurred by FoB staff
- TARS to “provide” lecture recording – as per consultant recommendations

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What others are doing

- Lehigh University Medical Education
- Florida State University
- MIT Open Courseware Initiative
- And, of course, Lectopia (with caveats)

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Webcasting pilot

- Four systems initially – Accordant, Lectopia, Starbak, Mediasite
- Narrowed to two pilots – Accordant & Mediasite
- Lectopia – architectural issues (Mac OS)
- Pilots to solve immediate requirements
- Mediasite & Accordent provide demo units

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Architectural issues

- Windows, MSSQL, .NET standards
- Pre-existing Helix on Linux at end-of-life
- No DRM (Helix DRM acquired, but not implemented)
- Content management not well developed
- Blackboard system Windows based
- Buy, not build

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System selection

- Selected by DVC and CORE units
- No process or criteria established
- Cost is post facto consideration
- ITS to implement for next semester
- Installations limited to three main theatres
- Target group limited to CORE units
- Online Public Heatlh courses added (but not timetabled into main theatres!)

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Mediasite features

- ✓Windows / MSSQL / .Net
- ✓Content Management (AD – LDAP)
- ✓Blackboard integration (Windows only)
- ✓Turnkey semester scheduling
- ✓Automated start and stop
- ✓AMX control

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Mediasite 5 features

- Silverlight (presentation flexibility)
- Timeline based editing
- Pause button on recorder
- Auto-push PC video to video window
- Course catalog management by instructors
- More integration with calendaring
- Fast advance with audible cueing
- Vodcasting (RSS channels – iTunes)

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Implementation

- Vendor installation
- Four week timeline
- Three theatres (rack mounted and AMX control)
- One mobile unit for studio and backup
- Topology challenges (recorder FQDN's)
- Crucial support from Sonic Foundry

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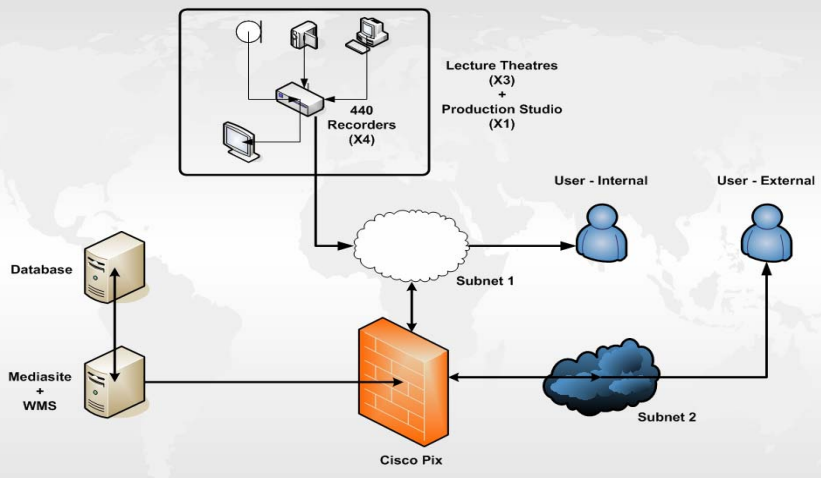
Network Topology



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Issues

- Some vendor inexperience, eg Blackboard, AMX and Mediasite (VideoPro)
- Firewall – RTSP protocol analysis must be disabled on Pix
- Heterogeneous networks with public IP's and security subnetting requires FQDN tweaking
- Blackboard building block – WSE2 SP3
- The “YouTube” problem

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The good stuff

- Scheduler provides effective semester long management of ALL lectures without ANY staff overheads (in theory)
- Resilient to human error
- Extendable
- Flexible
- Scalable – both horizontally and vertically

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Still to do

- Complete AMX integration (V5)
- Service Level Agreement
- Training and support model
- Workflows, processes
- Policies – copyright and IP!
- Content lifecycle management
- The HARD work, really.

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Summary

- System “just works”
- Resolved nagging issues around CORE
- Found LOTS of other uses
- Resilient to human error
- Need work on production values
- Lots of policy, process work TBD
- Does everything we need, nothing more, nothing less

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Demo

- Curriculum
  - Core Units
  - Design
  - Nursing
  - Science
  - Education

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Demo con't

- Service and Support
  - Student Services
  - Human Resources
- Community
  - Portal
  - Plagiarism Workshop
  - Graduation
  - World Environment Day

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So where does the environment come in?

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Questions?

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