

The E-Learning Framework

- What is ELF, and why was it started?
 - common e-learning infrastructure issues
 - a means of finding a solution: the service oriented approach
 - some basic concepts
- ELF in practice
 - task: formulate an e-learning infrastructure requirement in one of five different domains
 - assessing requirements in ELF terms

Some e-learning infrastructure issues

- Policy
 - separating the what (e-learning development priorities) from the how
 - address specific priorities cleanly
 - discuss priorities with others coherently
- Institutions:
 - a new requirement is not supported by any system, custom solutions are too expensive
 - replacing one system causes major disruption across the network / expense

Some more e-learning infrastructure issues

- Institutions:
 - hard to share tools between institutions
 - hard to share information between systems and institutions
 - current systems duplicate functionality
 - bundled functions in current systems vary in quality
 - systems need to be replaced too often

Some more e-learning infrastructure issues

- Teachers and learners:
 - most current systems try to be all things to all men; “pedagogically neutral”
 - tools or functions to support your pedagogy are too expensive
 - every time a new systems comes in, you have to learn a new interface
- Vendors:
 - cost of entry to the e-learning market is very high
 - little scope for differentiation

Service Oriented Approach

- Is there anything that can solve all these issues now? NO!
- There is something that helps address all these issues in a way that is more
 - coherent
 - manageable
 - collaborative
- How?
 - shifting focus from applications to functions
 - developing standard interfaces

The E-Learning Framework

- A service oriented approach to e-learning infrastructure
- Collaboration between:
 - Department of Education, Science and Training, Australia
 - Industry Canada
 - Carnegie-Mellon Learning Systems Architecture Lab, U.S.A.
 - Joint Information Systems Committee, U.K.

E-Learning Framework

- Some concepts:
 - Service:
 - high level description of the function and scope of a service provided by one system, and consumed by others
 - abstract model of behaviour and data
 - agreed data and behaviour specification
 - Framework:
 - A decision making tool; for development planning
 - A common vocabulary; of services, and technologies that can fulfil them

E-Learning Framework

- Some concepts:
 - Reference model:
 - a selection of services that are constrained further to fulfil a particular function or organisational goal
 - Design:
 - Blueprint for an implementation
 - Artefact:
 - Realisation of a design; a specific piece of code or process

ELF in practice

- In each of your 5 groups, formulate a single e-learning practice that you would want to do, but can't with the systems you've got.
- Aspects to consider:
 - who is involved
 - what are the assumptions
 - what kinds of information is involved
 - what kind of process is involved
 - what would the practice sound like as a story

- Assessment
- Repositories and using Digital Content
- Personal Development Planning and ePortfolio
- Learning Activities (lesson planning etc.)
- Institutional information integration (person, group student records, etc.)