Aula Virtual

.LRN implementation in the University of Valencia (Spain)

http://www.uv.es - http://pizarra.uv.es

Vicente Cerverón
VicePresident for Information and Communication Technologies
Universitat de València
The University of Valencia (Spain)

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- Based on the Mediterranean coast, UV offers competitive undergraduate, masters and doctoral programs, being the first in Spain by number of international students attracted.

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The University of Valencia (Spain)

• Academic areas
  – Sciences, Technology & Engineering
  – Social sciences
  – Health sciences
  – Humanities and Education

• Some figures
  – 47,000 graduate and 3,000 PhD students
  – 3,500 professors and lecturers
  – 92 departments and 16 research institutes
The learning process at UV

• Classical (traditional classroom and laboratories learning) and multidisciplinary
• Concerned about efficiency of the learning processes
• **Context**: convergence process towards Higher Education European Space
• Promoting participation of all knowledge areas
Improving the learning process at UV

- Educative innovation experiences conducted in several degrees, diversifying learning activities
- Interested in enhancing traditional classroom learning by use of I&C Technologies
- Interested in sharing and/or coordinating learning platforms
- Looking for a learning management system to enhance the learning and communication processes for the whole university
LMS platform selection process

Survey of the available platforms (by early 2004) with the following criteria (1):

• Functionality
• Stability and reliability
• Usability
• Scalability
• Multilingual support
• Established standards
LMS platform selection process

Survey of the available platforms (by early 2004) with the following criteria (2):

• Open source solution
  – Adaptability
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Survey of the available platforms (by early 2004) with the following criteria (3):

• Used for supporting learning and research communities in leading universities of similar size and characteristics than UV

Decision:

• Adopt the .LRN technical solution
• Join the .LRN project
.LRN at UV: implementation process

• Analysis: October 2003 – February 2004
  – 14 man-months (analysts)
• Implementation (& translation): Feb.-June 2004
  – 15 man-months (analysts, programmers and translators)
• Start-up: academic year 2004-2005
• Development and maintenance: since Feb. 2004
• Users instruction: courses, user’s manual, online attention and FAQ
• Users support: 1 person full-time
.LRN at UV: implementation

Installation
- Documents - WebDAV
- Calendar
- News
- Forum - Chat
- Learning Object Repository System
- Email and notifications
- Wimpy Point (Web Ppt)
- Weblogs
- PhotoAlbum
- FAQ’s
- Evaluation & Assessment

Personalization
- Frontpage
- Authority
  - LDAP(UV), LOCAL, EXTERNAL
- Rename pages and move portlets in the new classes
  - Class Home
  - Calendar
  - Resources
  - Communication
  - Activities
  - Information
- User can personalize pages
.LRN at UV – Own developments

**Aula Virtual**: .LRN implementation at UV
- Integration with production databases
- Single Sign-On by LDAP
- Creation package “siuvadmin” in .LRN
  - Request data to Secretaría Virtual by HTTP
    - Users: Students & Professors
    - Entities: Faculties, Courses, Classes & Subgroups
- Creation package “asiginfo”
  - Request information of classes to Secretaría Virtual by HTTP
  - Show this information in classes in Aula Virtual
  - Public and private access to information
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- Package “dotlrn-chat”
- Package “cards and dotlrn-cards”
- Integration in .LRN of the procedure to convert Latex to MathML.
- Interface translation to Spanish and Valencian-Catalan language
- System help for students and professors
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**.LRN at UV - Current architecture**

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Technical staff: 1 analyst, 2 programmers, 1 operator
• Maintenance and update through openacs.org
  – CVS rama oacs-5-1 & .LRN 2.1
• Development and integration
• Participation in .LRN project through openacs.org
  – Error detection and solving
  – Translation
  – Contributing new packages
• Technical user’s support

Support and Pedagogical staff: 7 people in IE projects
• Pedagogical user’s support
• User’s applied manuals
Aula Virtual – Current figures

Academic year 2005-2006

- 50,000 students
- 3,500 professors and lectures
- 6,300 courses

- 23 communities
  - (research groups sharing information and communication resources)
Aula Virtual – .LRN implementation at UV

Points that have gone well

• Overall positive perception
  – from web pages, e-mail, distribution lists, …
  to an integrated LMS for the whole institution

• Users’ point of view
  – easy and intuitive use
  – simplified technical requirements for the users
  – private documents, calendar, students’ lists and e-mail
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• Technical point of view
  – easy to personalize, integrate portlets in classes,
    and setup different configurations through parameters
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Points that have not gone well

• Overall perception
  – hard to determine the optimal setup for the current (increasing) users’ load

• Users’ point of view
  – errors or mistakes found in the application
  – time response sometimes too slow
  – teachers need more pedagogical hints on using a LMS

• Technical point of view
  – many errors in different modules
  – database structure too restricted (low flexibility)
  – platform dependency to webserver Aolserver (hard to tune for non Aolserver experts)
Aula Virtual - Relevant facts

• Universitat de València is the largest in Spain adopting an open source platform linked to educative innovation for blended learning

• University of Valencia is the world largest .LRN implementation fully open source (.LRN on top of PostgreSQL)
Conclusions and Future work

Situation analysis
• About 200 connected users simultaneously

Future work (technical)
• Tuning Aolserver and Postgres
• Solve small application errors
• Improve synchronization with academic databases
• Create new package datamanager (in collaboration w. e-lane)
• Copy, move and delete objects among different classes (forums, FAQs, assessment, etc.)
• Automatically import class schedule in calendar

Pedagogical work …
Acknowledgements

• SIUV: University of Valencia Computing Services
  – Salvador Roca
  – Agustín López
  – Darío Roig
  – Sergio Cubero
  – Jose Antonio Vázquez
• UV-OCE: European Convergence Bureau at UV
• UNED-Spain, particularly Jesus G. Boticario
• .LRN community, particularly Rocael Hernández
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