Drupal for eResearchers

Monash University eResearch eXPO, 2010

Lev Lafayette, Victorian Partnership for Advanced Computing vpac.org
About Drupal

Inspired by Dries Buytaert in 2000 to create a small news site and bulletin board system. Became an opensource project in 2001.

Drupal experienced massive growth from 2007 onwards. One of the largest content management systems on the web. Used by the Whitehouse, the UK Government, Yale University, Penn State University, Yale, Duke University, VPAC, eRSA etc.
About Drupal

Lightweight, easy to install, fast loading, uses standard technologies (Apache, PHP, MySQL) and is modular in design (core plus contributions). Very good for developers. W3C Compliant “out of the box”.

Thousands of contributors. In very active development with very good documentation and user communities.
About eResearch

eResearch is – indirectly – the result of realising how knowledge is acquired. Traditional theory was focused on the individual. Contemporary theory looks at proximal knowledge. Individual assessment and knowledge has is important in some circumstances, especially where real-time knowledge is important, but in most cases knowledge is a combination of the individual and immediate and the social network that can be drawn upon.

Using traditional IT tools for eResearch will not work!
Drupal and eResearch

eResearch is about collaboration, shared access to data. It is very “web 2.0”. Drupal can facilitate this by not being just a website, but a space where researchers can meet and develop content.

(Image from http://www.e-research.ca/content/chap1.html)
Drupal and eResearch

Top level content is Nodes. Pages, stories, forums, 'blogs, comment systems, collaborative books, RSS aggregation and publishing, file repositories, WYSIWYG editors, printer, e-mail and PDF versions, 'chat' modules, embedded media.

Drupal has fine-grained access permissions to content, menus, modules based on ACL lists and roles. Very useful for collaborative content generation, forum and comment moderation and workflow.
Drupal and eResearch

But wait there's more especially for eResearch. Events and RSVP and Calendar, Minutes, Captcha, Share Alike, Twitter feeds, Glossify, Sticky Notes, Gradebook, Daily Planner, Assignment Studio etc..

The real challenge is knowing what the modules are and combining them. Make sure you have a person running the system!
Drupal Elaborations

Taxonomy is one method administrators use to organise content in a web site. Taxonomy is created from 'Vocabularies' that contain related 'Terms'.

The Views module provides a flexible method for Drupal site designers to control how lists and tables of content are presented.

The Content Construction Kit allows you to add custom fields to nodes using a web browser.
A Caveat and Conclusion

Drupal, like any other web-based content management system, primarily provides asynchronous content, whether collaborative or non-collaborative. There are some tools which allow for “stream of consciousness” web-based collaboration but these are generally inferior to video-conferencing, instant messaging etc.

**Core Point:** Careful management of the user contact, user-generated content and aggregation features from various modules in Drupal allows for highly effective and efficient collaboration.