

# **Delivering Academic Program Resources in a Web 2 Environment**

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## **Introduction**

The Australian Institute of Police Management conducts leadership and management programs for senior police, fire and emergency services personnel. It delivers both accredited and non-accredited courses. All accredited programs have a distance component as well as a residential component to the courses. For the past six years distance course information along with support materials have been delivered using a course management system (CMS) known as MasterFile. Up until now MasterFile has served us well. However, the availability of Web 2.0 tools has created an expectation for a more interactive learning portal.

The need to comply with higher education accreditation standards, together with the need to ensure that the AIPM remains competitive as a tertiary education provider is demanding greater functionality from our ICT systems. We have been looking at maximizing the functionality of our MasterFile system and more recently commenced using SharePoint as a means of sharing and disseminating information with participants on some of our non-accredited programs.

Course and student information is currently maintained on three separate databases, Sharepoint and a number of drives on two AIPM servers. Consequently there is significant duplication of effort in entering and maintaining data. Locating information is sometimes challenging. Cross-functional access to information must be maintained, while still securing levels of use to safeguard integrity and authority of official documents.

## **Recent Trends in Higher Education**

Australian and New Zealand universities are now introducing E-Portfolio, a trend that has been evolving in United Kingdom, USA, Canada and the Netherlands. E-Portfolio integrates the functionality of content management systems (CMS), learning management systems (LMS), assessment management, and personal professional/career development. It provides a collaborative framework where students can receive both teacher and peer assessment feedback, and reflective style self-assessment, in addition to accessing online resources and preparing and submitting their own work. The E-Portfolio is designed to support and promote an adult learning and continuous education environment. "The Australian ePortfolio Project – Final report", published in August 2008 emphasizes need for an integrated learning environment that enables 'learner mobility', enhances "quality of learning and teaching" and fosters "scholarship and research". It also recommends that Australian institutions of higher education adopt international information standards.

## **Implications to the AIPM**

- The AIPM needs to move towards an integrated ICT framework which will increase interoperability between systems and eliminate duplicate data-entry.
- The AIPM educational portal should be a 'one-stop-shop' for students, alumni and faculty staff.

- The AIPM needs to maintain a competitive edge within the educational environment.
- Our current ICT systems may not be capable of providing the full functionality required to deliver the new forms of computer assisted learning. It may be necessary to introduce new systems.
- The AIPM is a small college with a small budget

## **Current and Future Developments**

In the short term, we are working on a number of different projects which we hope will ease these issues. These fall primarily into four categories: the organization of Masterfile, our current e-learning portal software, alterations to our library website, an authentication program, and, finally, the introduction of a CMS to manage our website as a whole.

### **Masterfile**

Masterfile is currently used as our learning management system and as a document repository. It provides discussion forums for each of our course groups, and is now also being used as an information sharing portal by the newly formed Australasian Policing Forum which has been brought together as a research group made up of police officers and academics to undertake new research in policing.

### **Website Updates**

Another important facet of our service is our website, which is currently a sub-area of the main AIPM website. We have focused on making the website a more user-friendly, professional design, with improved information access. The new design has been written primarily in CSS, which means that the entire design can be changed without the need to edit the HTML on each page. This means that, should we elect to change it again in future, only the CSS file will need updates. The design has also been written to be standards compliant, meaning that it should appear exactly the same across all standards compliant web browsers (sadly, Internet Explorer is not one of these).

The other main aspect of this process has involved the migration of our web and journal links from a basic HTML page to Delicious. The idea behind this was twofold. First of all, Delicious is easier to keep updated – links could be added at the click of a button, rather than requiring fiddling with the HTML page. Secondly, it allowed for better organisation through the use of a tagging system. An additional advantage is the fact that there is available software that will check the Delicious links for dead or inactive URLs, eliminating the need to check each individually.

Ideally, in the long run, the links will be automatically downloaded to our server on a daily basis, thereby giving us full control over the display of them, while allowing Delicious to do the hard work. Unfortunately, this requires a MySQL database, something our current server is not set up for, so for the moment, the links are run through Delicious, and displayed in each page via an RSS feed. This is slower than would be ideal, as they need to be downloaded each time the page is loaded, but is nonetheless more efficient than the old system, and gives us definite benefits in the form of the tagging, and easy updates.

<http://delicious.com>

<http://freshdelicious.googlepages.com/>

### **Authentication**

Our IT staff is currently rolling out an authentication programme. This system will allow the sharing of data between systems – primarily user login data. When implemented, user data will need to be added only once. The authentication programme will then share that data across the network to

other databases. Data can then be updated from any access point. This will save staff a great deal of data entry time; it will also be better for the students, as they will need to remember only one username and password, and can be assured that their information will be correct across the systems, as long as it gets changed in one place.

## **SharePoint**

More recently academic staff at the AIPM has been experimenting with using SharePoint as a means of sharing information and collaborating on program development work. Some efforts have also been made to use SharePoint for delivering course programs, however, this has proved to be rather labour intensive in the initial stages, as staff learn the best methods of organising and displaying data.

Sharepoint is being instituted, in part, to allow better document control, reducing the potential for the existence of multiple documents in multiple places. It is intended that, in time, Sharepoint will replace the more traditional file server setup currently in place.

Sharepoint also has an excellent indexing function, allowing users to search across – and within – all documents, as well as external services. It may, in the future, be possible to search across the content of our electronic journals, as well as Masterfile, much like a federated search service. These capabilities will be explored further as experimentation with the capabilities of this software continues.

## **Longer Term Plans**

Longer term, the library is looking to replace the current static HTML website with one maintained through a Content Management System. In this case, we are looking at an Open-Source solution called Drupal. With hundreds of modules available, and more help guides than we could ever possibly need, this system would be able to anticipate future needs, and thus be expanded as necessary to suit them.

Ideally, we would like a library page that does more than just deliver static content – for example, we would like to track the RSS feeds from our journals and other useful websites in one place, and allow our staff and students to subscribe to these feeds, receiving results that match their individual preferences via e-mail. The other benefit of using a CMS is that updating content does not require any knowledge of HTML, thus meaning that, once it has been set up, anyone with the permissions to do so could update content.

At this time, our plans for introducing this system are on temporary hold, as, again, our IT systems are not at this time set up to allow for this kind of installation.

<http://www.drupal.com>

## **Conclusion**

If the AIPM is to retain its position as a leading educational institution in the field of management and leadership, it needs to ensure that it has the necessary infrastructure to support leading edge information management systems. This can be achieved by:

- preparing for the future by developing an integrated ICT plan
- remaining aware of innovations in the delivery of educational programs
- be alert to any collaborative/partnership opportunities that may present themselves