CAMPUS REVIEW

MACQUARIE
UNIVERSITY SYDNEY

The LAMS Revolution

E-learning system captures imagination of educators, students

Just over one year since its release as freely available open source software, LAMS – the revolutionary Learning Activity Management System – is being taken up with a passion by educators across the globe.

LAMS is a major breakthrough in e-learning. An innovative tool for designing, managing and delivering online collaborative learning activities, it provides teachers and lecturers with a highly intuitive system for creating sequences of learning activities.

These activities can include a range of individual tasks, small group work and whole class activities based on both content and collaboration.

"LAMS is used around the world in all areas of education, especially schools and higher education. There has been considerable uptake in Australia, New Zealand and the UK, and growing interest in the US," says Professor James Dalziel, inventor of LAMS and head of Macquarie University's E-Learning Centre of Excellence (MELCOE).

"Evaluations of LAMS have been very positive. These have been conducted in several Australian states, by the New Zealand Ministry of Education, and in both higher education and school sectors in the UK," he adds.

Dalziel designed LAMS because he was frustrated with the prevailing content-centric approach to e-learning, which he believed to be a passive and unimaginative way of using technology. "The content approach doesn't connect with today's students, so I decided to build a system that works in a different way," he says.

With LAMS, teachers are able to design, manage and deliver online collaborative learning activities, while at the same time giving students a great interactive environment in which to do their work.

Its unique drag-and-drop interface transforms lesson planning into a simple, visual experience. Teachers can design a sequence of learning activities for students

that includes content and collaborative tasks. It then "runs" the sequence while allowing teachers to track and monitor student progress.

Today the system is being used in more than 100 schools and 50 universities, "but these are only the ones we know about – the true numbers are probably much higher, as the open source model means anyone is free to download and use the software without having to pay us or ask our permission".

LAMS has been integrated with the major learning platforms – Moodle, Blackboard, WebCT, Sakai and others – allowing teachers and lecturers to easily insert LAMS sequences into their class/course page within their chosen course management system.

In April this year came the public release of LAMS V2.0 alpha, a major milestone for LAMS, as it represents the initial release of the new architecture and platform for future LAMS development for the next 3-5 years.

The new version is ready for software developers to download, compile and run, and to begin exploring how to contribute to development of LAMS V2. However, this version is not yet ready for teachers. After trials and testing, Dalziel expects the final version of LAMS V2 will be ready for all teachers later this year.

"The new version provides a platform for innovation and scalability for LAMS into the future," says Dalziel. "We're looking forward to continuing our development and working with developers around the world to build the next generation of e-learning innovation using LAMS."

One of its great new features is support for languages other than English – "we have more than 15 translation efforts now underway, and many more expected in the coming months".

Over the past year the LAMS team has been evaluating feedback from teachers, lecturers and students about the system, which has been receiving enthusiastic support.

"LAMS has an unusually strong impact on teachers and learners. Teachers feel it is the first e-learning system that really supports rich pedagogy, while students love the variety of opportunities for collaboration and interaction," reports Dalziel.

"To this day, it remains the only system in the world ready to use in the classroom or lecture hall that supports re-usable sequences of collaborative activities."

Dalziel adds that a consistent theme from independent evaluations is that LAMS helps teachers to reflect on their own teaching theories and practice in a very positive way.

"Even where teachers don't use technology to run their classes, the experience of using the LAMS visual authoring environment for designing lesson plans has a big impact on them. They often describe it as helping to make conscious a process that has often been just below consciousness.

"Teachers have commented that when LAMS runs the main lesson activities on their behalf, it gives them more time to focus on individual students who may be struggling or need other help. LAMS gives them more opportunity to mentor individual students."

There is strong evidence that LAMS encourages increased student motivation and enjoyment, and greater levels of participation and interaction from all students in a class, not just the loud or bright ones, Dalziel says.

"Students really enjoy the opportunity to use familiar tools like chat and online discussion forums to discuss educational topics in the safe, secure environment provided by LAMS."

Dalziel says today LAMS remains the world's leading system for digital lesson plans and is widely regarded as one of the most important innovations for the next generation of education and technology.

To find out more about LAMS go to: www.lamsfoundation.org.

Case Study: LAMS for tutorials

A growing number of higher education lecturers are trialing LAMS. But few have integrated LAMS as a core technology. Leanne Cameron and Nick Hutchinson, from the School of Education at Macquarie University, have implemented LAMS intensively in one of their pre-service teacher education courses.

They wanted to improve the level of discussion and study of the compulsory course readings. Leanne said that assessing discussions of the readings rarely worked satisfactorily in traditional face-to-face tutorials. So they designed a series of LAMS activities to address the problem. The authoring interface of LAMS assisted in the design process, providing a visual representation, or sequencing, of the tutorial activities.

Students were given three opportunities to chat online in small groups. In the first session, students familiarised themselves with the various LAMS tools and the discussion process, but weren't assessed. The second and third discussions were assessed a number of weeks later. The 'chatting process' in or out of class gave students space to present arguments and reflect on theoretical issues in a dynamic and lively way. Before each discussion students are expected to study the readings, and come ready to defend their ideas. The small group discussion is recorded in LAMS. The monitoring function in LAMS provides access to student records as the activities proceed. LAMS tutorials can become an interesting blend of delayed and real time exchanges, with students debating issues via the computer, and across the classroom. As a result of the LAMS activities these students now prepare better for tutorials and are really engaging with the theory. According to Leanne and Nick, the debates are quite intense at times, and the level of interaction of a higher quality than

LAMS International Services

LAMS International is the services company dedicated to supporting LAMS with a range of products to assist organisations implement and use LAMS. Whatever support an organisation needs, LAMS International has a range of fee-based products to match. These include:
- Training
- Support
- Hosting
- Software development and integration services

For more information go to:
www.lamsinternational.com/product/

previously. They also now have readily accessible evidence of students' understanding of prescribed readings.

LAMS Community

The LAMS Community, launched in September 2005, is a free website for LAMS users to come together to share the sequences they have built and to discuss how they are using LAMS.

This website supports communities of practice around the world (generally teachers and lecturers) who are learning from each other about how LAMS benefits education.

Through the LAMS Community, educators can share the sequences they have created in LAMS so that others can use them, build on them, and adapt them.

James Dalziel says: "We have one case where an educator from India posted a message to a teacher in Australia to thank her for sharing her LAMS sequences, which could now be used in India, not just Australia, as a result of the sharing supported by the LAMS Community."

The LAMS Community has more than 1200 members from 82 countries, and a library of around 80 shared sequences. **For more information go to www.lamscommunity.org.**

First International Conference

The first International LAMS Conference will be held in Sydney from the 6th to the 8th of December 2006. **For more information go to www.lamsfoundation.org/lams2006/index.htm**

What's on your free LAMS CD?

The CD contains the latest resources on how to use LAMS, case studies, videos, articles and other background information. It also contains the LAMS software and instructions on how to install it if you have the technical skills to set up a web server. For those who don't know how to install their own LAMS server, there is a link to a demonstration server where you can get a test account to try out.