

Management of e-learning within a university setting through partnership with industry

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Increasingly, learning management systems such as WebCT are being regarded by the university community as mission critical enterprise level applications. Australian Catholic University (ACU National) is no different. What does set ACU National apart is the approach taken to managing the WebCT LMS. A strategic decision was taken at the outset to partner with industry to achieve a robust and reliable system that would scale rapidly and still be very cost effective. The end result has been that this outsourcing arrangement has been one of the smoothest and most successful projects ever undertaken by the university. It has allowed the staff within ACU National to “concentrate on what we do best” - quality education and training.

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Introduction

E-learning is often viewed as being separate to normal university activity and much of this has to do with the fact that it is, in real terms, a relatively new concept. As Kelly (2003) points out “the underpinning philosophy behind e-learning is that it should be considered a normal activity undertaken by professionals in the modern teaching world and not to be the preserve of the fearless or privileged few”. Additionally, Bates (2000) contends that “learning in the 21st century will be increasingly integrated with work and everyday life and organised in a way that suits the life style and needs of individuals”. These two principles are consistent with the underlying philosophy and mission statement of Australian Catholic University (ACU National) and has guided the development of its online learning platform.

To achieve this goal ACU National made a strategic decision to pursue a partnership with industry that provided a seamless and rapid adoption of an enterprise level learning management system. This industry partnership model undertaken on this scale is considered unique within the Australian tertiary education sector and has attracted interest from other universities in the sector.

Background

Australian Catholic University (ACU National) was formed in 1 January 1991 following the amalgamation of four Catholic tertiary institutions in eastern Australia - the Catholic College of Education Sydney in New South Wales, the Institute of Catholic Education in Victoria, McAuley College of Queensland, and Signadou College of Education in the Australian Capital Territory. There are now approximately 12,500 students spread over 6 campuses in Victoria, New South Wales, ACT and Queensland.

One of the key objectives for deploying suitable technology for use within the university was to ensure a level of standardisation across the university as a whole. In terms of online education there were pockets of expertise throughout the university, each using their own online platform. At any one time various cohorts were either using Blackboard, WebCT, or Virtual Campus. The fact that the university did not have a single supported online platform meant that the individual licenses were not cost effective to the university as a whole and their limited term inhibited their broad adoption.

There was a wide recognition within the university community that a single supported online platform was the best way to improve the diversity and flexibility of courses delivered at ACU National. It was widely recognised that a single supported platform could increase course delivery options for both students and academic staff. In moving to a single supported platform the university had to be cognisant of the fact that there were already existing courses on other platforms. The School of Education in New South Wales had been trialing Virtual Campus within their school while other groups were using WebCT extensively in Canberra and in New South Wales, and ACU Web was providing postgraduate online courses through its outside service provider NextEd (Blackboard). It was clear that a single platform had to be established which was centrally funded and would be available to all staff and students of the university.

Even though authors like Bates may argue against the adoption of a single e-learning platform the realities of a modern university are that they often conduct across faculty teaching and as is the case with ACU National teach across state borders. This, along with the cost of maintaining multiple platforms, led to the need for a single supported platform that would support multiple learning styles.

Following a review in 2002 of the widely used Learning Management Systems (LMS's) in Higher Education in Australia, ACU National made the decision to adopt WebCT for its enterprise wide LMS. By August, 2004 and just 20 months since its adoption, ACU National has 518 courses in WebCT and nearly 15,000 unique users (students, staff, other accounts).

The way this rapid growth has been planned and managed makes for an interesting case study particularly in the Australian context. Following on from its decision to go with the WebCT LMS, ACU National took the bold step of outsourcing its management (servers, system administration, integration services, and help desk) to a private company, NetSpot Pty Ltd.

NetSpot is an established e-learning company in Adelaide whose Managing Director, Allan Christie, was a senior academic for nearly 20 years before starting NetSpot in 1998. NetSpot's high level of experience and expertise in e-learning, particularly WebCT, combined with its intimate knowledge of the Higher Education sector made it an ideal partner for ACU National.

The initial drivers for outsourcing the WebCT 'back office' systems and services to NetSpot were to:

- Improve the quality of service delivered;
- Focus on core competencies and mission;
- Reduce implementation time; and
- Reduce costs.

These benefits needed to be weighed against risks (real and perceived) such as service level quality, server reliability and redundancy, integrity of student information, privacy concerns, and so on. Of course, these risks are also present for internal management but are often perceived to be greater when engaging a third party.

Outsourcing might be viewed simply as another method of improving quality of service, and of strengthening the capability of the institution beyond what might be possible within given budgetary or time constraints.

Campus academics and IT leaders can view IT outsourcing as either an opportunity or a threat, but they should be prepared to use outsourcing as one of many techniques to provide the highest quality IT services to the campus (McCord, 2002).

An in-depth Research Study from the EDUCAUSE Centre for Applied Research (Hassett et al, 2002) reports a number of interesting statistics:

- Forty two percent of the US colleges and universities reported they engage in IT outsourcing;
- Amongst research institutions, e-learning was the most (60%) favoured for outsourcing
- The overwhelming key driver of the IT outsourcing decision is a real or perceived lack of in house skills, and;
- IT services outsourcing in the higher education sector is forecast to grow at a compounded growth rate of 17 percent per year over the next 5 years.

While traditionally it has been the more established IT operations that have been deemed suitable for outsourcing, e-learning has been singled out despite being a relative newcomer. This is perhaps due to the exponential demand from students and staff and the rapidly evolving nature of the software and its associated services. E-learning has a well established presence but compared with other areas, the tools that support it are still rapidly evolving. This makes successful implementation and support more difficult.

Improved quality of service

As mentioned above, one of the key drivers behind outsourcing was to increase the quality of service delivered. Outsourcing has improved the quality of service for ACU in several ways – by providing access to highly skilled resources, enabling demand to be handled, providing redundancy across the operational staff responsible for WebCT, enabling more comprehensive integration solutions to be considered, faster upgrade cycles to the software and hardware, and access to larger pools of experience and wisdom.

An outsourcer is more likely to have a stable pool of resources and redundancy across several staff so the risk of staff turn over is reduced. An outsourcing company can afford to have more dedicated staff to specific WebCT operations than can most institutions and this provides clear benefits to the institution which adopts an outsourced approach.

In the area of integration, the level of complexity is now increasing to a point where in house staff may struggle to satisfactorily implement solutions due to a lack of requisite skills. This is supported by Hassett et al (2002) who stated that “the size, cost, and complexity of integration [of e-learning] will outpace the capabilities of an increasing number of *institutions to perform in house*”.

In the past when WebCT might have been considered a sideline operation, integration and the quality of integration were not a priority, however as WebCT becomes mission critical, high quality integration is necessary. Outsourcing this aspect of WebCT operation can provide benefits through quicker, more robust, and professional implementation of solutions.

Handling peak demand on helpdesk is also another clear area where an outsourcing organisation can help an institution improve the quality of service. Rather than burdening higher level in house staff (such as Instructional Designers, or Software Engineers) with such responsibilities during peak periods, outsourcing this operation can enable these staff to focus more on keeping systems running and pedagogical issues.

Additionally, an outsourcing organisation which is dealing with magnitudes more helpdesk support than an institution will be able to handle issues more efficiently and be able to provide more extended coverage.

Focussing on core mission

Focusing on the core mission of the institution was another key driver behind the initiative to outsource WebCT. To many institutions, online learning is an essential part of providing a quality education to students, however supporting the technical infrastructure of WebCT is not a core capability and can distract institutions from focussing on their core competencies and mission. Being a relatively young university we have been able to leverage off the experiences of other universities and have taken the conscious decision to “concentrate on what we do best” – quality education and training.

Reduce Implementation Time

A proposal for managing the WebCT LMS was received from NetSpot in October 2002 and after review and due diligence a Service Level Agreement (SLA) was signed and the project implementation commenced in November 2002. The SLA encourages the service delivery to be maintained at the highest possible level providing the SLA is developed as a collaborative effort between the institution and the outsourcing organisation.

The following table is a summary of key milestones during the first 12 months of the project and reflect the rapid growth of the use of WebCT during this time.

November 2002	○	Initial Planning
December 2002	○	Migration from existing servers
	○	Backups/recovery procedures implemented
	○	Staff professional development workshops
January 2003	○	Launch of LMS platform known as ACU National Online
	○	Basic integration with Student Record System
	○	Student and Staff Helpdesk operational
February 2003	○	Semester 1 commences
April 2003	○	Helpdesk Ticket System / Knowledge Base operational
June 2003	○	More advanced integration with SRS
July 2003	○	Semester 2 commences
October 2003	○	Course request procedure improvements
December 2003	○	Migration to WebCT 4.1

Table 1: Summary of key milestones during the first 12 months

To manage the expected rapid growth it quickly became apparent that an automated system of course and student account creation was needed. As a result integration with the Banner Student Record System (SRS) was undertaken as a priority and previous experience with SRS integration allowed NetSpot to complete the work in a timely fashion with the cooperation of key stakeholders such as the IT Services, Student Systems, and Human Resources.

With good communication and cooperation established with all key stakeholders and effective systems in place, the manager of ACU National Online was available to focus his attention on the provision of professional development services for staff to facilitate and support their use of the WebCT LMS.

The net result of this partnership was that in three months ACU National went from dispersed and uncoordinated infrastructure and technical expertise in WebCT to providing an integrated and robust delivery system for this LMS combined with staff development programs and Help Desk support. By the start of Semester 1, Feb-03 there were 167 courses online with approximately 5,000 unique users. In the period since then, use has trebled and the rollout of the WebCT platform within ACU National has been one of the smoothest and most successful projects ever undertaken by the university. The following figures further illustrate this growth.

Essential to the success of the outsourcing arrangement has been the close collaboration between ACU and NetSpot. The relationship has been considered by both parties as a valuable partnership and key connections between staff within the university and within NetSpot have been established and continually fostered. Indeed, many aspects of the WebCT operation require close collaboration between ACU staff and NetSpot staff, including integration of the Student Record System and operation of the WebCT Help Desk.

The partnership is also constantly changing to ensure that the best possible outcome is provided. For example, staff support in the use of WebCT tools was provided by NetSpot after initial face to face professional development before the commencement of semester, however beginning in 2004, ACU has positioned 2 support staff on the ground at several campuses to provide additional face to face support for staff. This is provided in close collaboration with NetSpot and these support staff provide first point of contact for academics when they have issues with WebCT. Day to day issues are resolved at a local level and only the more complex issues are escalated up to the NetSpot Help Desk.

The success of the outsourcing relationship has been partly due to the flexibility of NetSpot in providing services where needed, and not duplicating internal capabilities, and working with ACU staff to ensure that the overall operation runs seamlessly.

Cost benefit

In conjunction with the rapid and successful deployment of the WebCT LMS has been the cost benefits achieved by partnering with NetSpot. The current level of use (500+ courses, 15,000 unique users) has been achieved through the investment of approximately \$150,000 per annum which covers the WebCT license and outsourced services (hardware infrastructure, integration services, Help Desk services for staff

and students). To provide a comparable service ‘in house’ would require as a minimum the following resources:

WebCT License	\$40,000
Hardware	\$75,000 yearly
System Administrator x1	\$78,000
Help Desk x3	\$165,000
Programmers (integration, higher level support) x1	\$72,000
	\$430,000 per annum

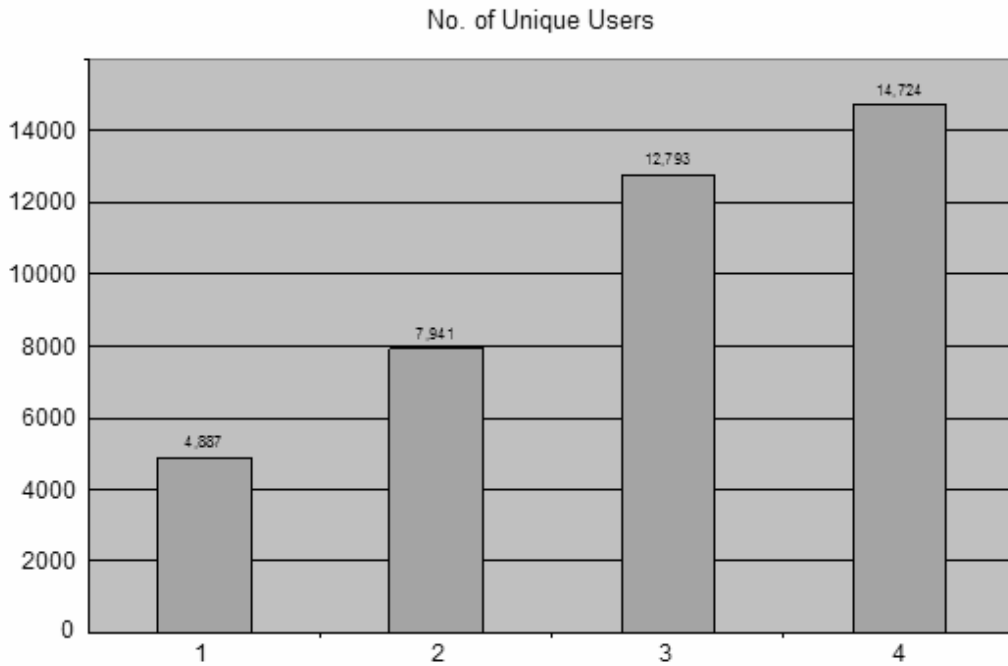


Fig 1: Statistical period: 1. Feb-03; 2. Aug-03; 3. Feb-04; 4. Jul-04

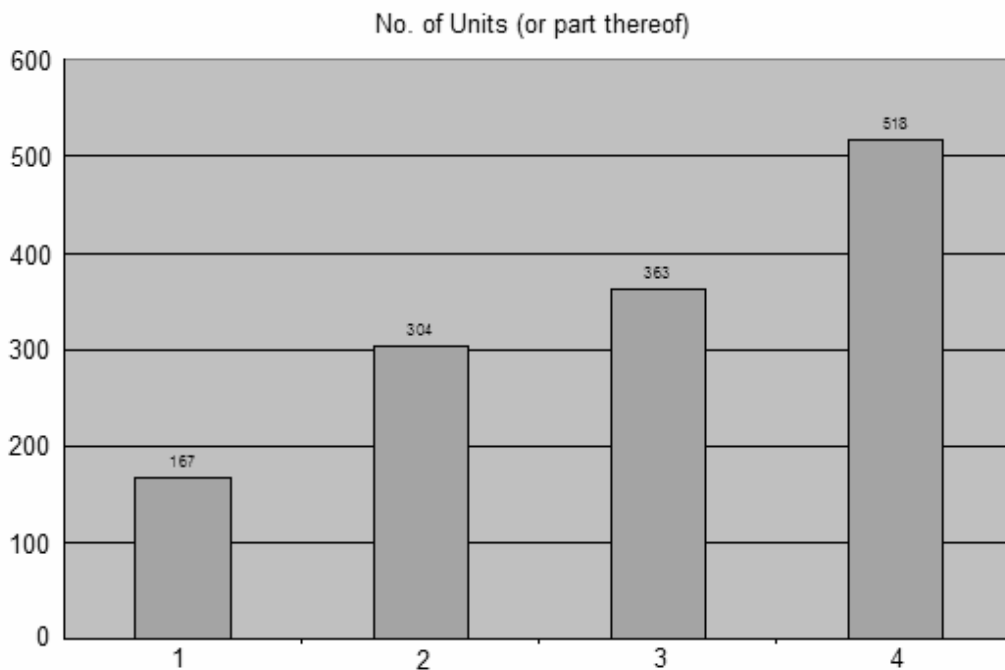


Fig 2: Statistical period: 1. Feb-03; 2. Aug-03; 3. Feb-04; 4. Jul-04

The staff costs are based on current Higher Education pay scales and include on-costs but do not include additional costs such as training, office accommodation and computing resources.

Moving forward

Now that essential systems have been put in place, further projects are being considered to improve the quality of service, including:

- Integration of WebCT with ACU's intranet and Single-Sign-On solution;
- Integration of voice tools into the WebCT platform;
- Integration of a Learning Content Management System;
- Implementation of real time Student Record System integration.

Other benefits from the partnership with NetSpot are now being seen. NetSpot is a distributor for several virtual classroom tools and a Learning Content Management System (LCMS). NetSpot is therefore moving beyond providing just hosting, management and support of a learning management system through to providing valuable additional tools that enable institutions to truly benefit from the potential that is offered by e-learning.

As enterprise level LMSs such as WebCT become mission critical there is an expectation from the modern tertiary student for accessible education. This means providing robust and reliable infrastructure for high availability of the LMS but also having support services available at all times. To this end, NetSpot is extending its Help Desk service to 365/24/7 live support from 1 Jan 2005.

Summary

The partnership of ACU National with industry has achieved an excellent result in enabling a high quality rapid deployment of an enterprise level LMS that is robust, reliable and cost effective. Importantly, it has also addressed the key criteria of seamless, accessible education with e-learning seen as part of the normal process of education within ACU National.

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