

Review of USyd eLearning

December 2005-April 2006

Executive summary

This report is the outcome of a review of 'USyd eLearning' carried out between December 2005 and April 2006. 'USyd eLearning' is the banner under which many of the University's recent developments in the use of information and communications technologies (ICT) for learning and teaching have taken place. A central place within USyd eLearning is occupied by the University's Flexible Online Learning Team (FOLT). Some of the recommendations in this report concern FOLT. But the report also makes recommendations about wider aspects of the management of, and support for, the use of ICT in academic work.

The terms of reference for the review were as follows:

1. To identify the key aspects of USyd eLearning and their objectives.
2. To evaluate the outcomes of the USyd eLearning in relation to the objectives.
3. To provide recommendations on the most appropriate place to provide leadership for eLearning across the University.
4. To evaluate the appropriateness of funding a centralised eLearning initiative.
5. To provide recommendations for future sustainability and scalability, and especially for better integration of ICT into learning and teaching.
6. To make recommendations about policy development in the area of eLearning.

The review team considered submissions and reports from individuals, faculties and other organisational units within the University. It also conducted a number of interviews with individuals and held focus group meetings with members and clients of FOLT. Names and further details are given in the body of the report.

The three colleges have been a significant part of the architecture of USyd eLearning. The decision to dispense with the colleges was announced and implemented in the later stages of our review. Coupled with current uncertainties about the number and organization of faculties, this has had an effect upon the review process, making it impossible to formulate recommendations that depend upon a known set of organisational structures and arrangements. This has the virtue of causing us to focus on organisational arrangements for USyd eLearning at a higher level. The *principles* of organisation and management in the report can be implemented within the new faculty arrangements, whenever their shape becomes clear.

The review team gave a verbal report to the eLearning Governance Group on 26th April and feedback from that Group has informed aspects of the final drafting of this report.

The report includes a number of recommendations which are listed in Annex 2 and explained in the body of the report.

In summary,

- While labels like 'eLearning', 'mLearning' or 'blended learning' come and go, the use of ICT in learning and teaching is here to stay. It is now core to the business of higher education and needs continuing strategic management and investment.
- Leadership for eLearning is a distributed activity, necessitating close co-operation between a knowledgeable, flexible and strategically-led central team (FOLT) and other key personnel located in faculties and in other academic support services. Strategic leadership for the central team should be located in the Office of the PVC T&L. There are strong arguments for co-locating FOLT with staff of the Library, with potential benefits for the provision of a more integrated service to students and staff, better career development opportunities for FOLT personnel and efficiencies of scale in the provision of administrative and logistical support for FOLT activities.

- Faculty and central University investment in ICT for learning and teaching is very substantial. Investment in the part which is concerned with furthering strategic development, innovation and organisational learning (including USyd eLearning) is just a small fraction of the whole. Investment in USyd eLearning will need to continue at at least the current levels. It is a lower level of investment than can be found in our main Go8 competitors. Any reduction in funding of USyd eLearning will incur greater though less visible costs in the faculties.
- The University's vision for eLearning is coloured by recognition of the distinctive character of the University and its physical environment (the 'campus experience'). We argue for a shift in perspective. Students' experience of being part of a vibrant intellectual community is much more important than their experience of the built environment. The two should not be in competition. Rather, our vision needs to prioritise ways of using technology, and physical space, so that students become more knowledgeable about, and more active participants in, the broader intellectual work of the University.
- Strategic leadership of ICT for learning and teaching needs to be complemented by strategic leadership of the use of ICT for research. Indeed, the University's performance is suffering for lack of integrated leadership of ICT for academic purposes. Separate strategic leadership of (a) learning and teaching (b) research, results in unnecessary fragmentation of academic work and missed opportunities for strengthening the links between research and teaching (with consequent loss of market advantage for a research-intensive institution). The Office of the Provost offers a new opportunity for integrating academic leadership, including in providing academic leadership for ICT. eLearning and ICT strategy are intimately bound up with the management of our physical plant. We cannot afford to have four silos for research, learning and teaching, ICT, physical space/plant. A more integrated approach to academic leadership of ICT and the management of the University's physical learning spaces is an urgent necessity.

5th May 2006.

Introduction

The University's vision of learning for the 21st century includes appropriate, well-integrated use of information and communication technologies (ICT). The University has been developing its capability to make effective educational use of ICT in a number of ways university-wide since 2000, with an expanded model, launched in late 2003, now known as 'USyd eLearning'.

Using WebCT as the LMS (learning management system), over 2000 websites have been developed since WebCT was installed in late 2000. USyd eLearning is a centrally driven approach characterised by (i) a focus on quality assurance processes and (ii) a partnership-based management approach which has devolved decision-making about strategic projects to college, faculty and school levels.

USyd eLearning is organisationally located in the Office of the PVC for Learning and Teaching. In October 2005, the PVC T&L asked for this review, with the following terms of reference.

Terms of reference for the review

1. To identify the key aspects of USyd eLearning and their objectives.
2. To evaluate the outcomes of the USyd eLearning in relation to the objectives.
3. To provide recommendations on the most appropriate place to provide leadership for eLearning across the University.
4. To evaluate the appropriateness of funding a centralised eLearning Initiative.
5. To provide recommendations for future sustainability and scalability, and especially for better integration of ICT into learning and teaching.
6. To make recommendations about policy development in the area of eLearning.

Organisation of this report

The rest of this section of the report provides an overview of the review process. After that come six sections – one for each of the ToRs listed above. ToR 5 is the most complex and future-oriented of the areas and this section of the report is more substantial and analytic than the others. We make a number of recommendations about the management and internal working of FOLT. These can be found, with accompanying analysis and justifications, in Annex 1. Annex 2 lists all of the recommendations.

The review process

The review team

The review was conducted by Peter Goodyear, Mary Jane Mahony and Peter Reimann with logistical support from Rachel Symons, Office of the PVC (Learning & Teaching).

Principal documents consulted

USyd eLearning: Management and Evaluation Report (September 2004 – December 2005)¹

Information and Communication Technology in Teaching and Learning at the University of Sydney ["The Sefton report"] (2003)

Academic Board resolutions: *Quality assurance and learning management systems* (effective 01. January 2005)

Written submissions from faculties and individuals

Other documents available at www.usyd.edu.au/elearning

¹ This self-evaluation report contains a great deal of useful detail about the nature and achievements of USyd eLearning. We have tested any significant claims that are noted in *this* report, but the details are not reproduced here.

Interviews and focus groups

Interviews were conducted with:

Judyth Sachs (PVC Learning and Teaching)

Rob Ellis (Coordinator, eLearning)

Stephen Sheeley (eLearning Administrator, Manager of FOLT)

John Shipp & Sue Hanfling (University Library)

Anne Forster (ITEV)

College Academic Directors: Nerida Jarkey (CHASS), Mary Jane Mahony (CHS), Mary Peat (CST)

FOLT project managers: Sue Atkinson (CHASS), Karen Scott (CST), Helen Wozniak (CHS)

Larger meetings were held with people from the following groups:

FOLT Educational Designers

Associate Deans Learning and Teaching

Faculty eLearning Representatives

Clients of the FOLT team from each of the colleges.

We are very grateful to these and other informants for giving up their time for this review.

Note on organisational changes during the review

The three colleges have been a significant part of the architecture of USyd eLearning. The decision to dispense with the colleges was announced and implemented in the later stages of our review. Coupled with current uncertainties about the number and organization of faculties, this has had an effect upon the review process, making it impossible to formulate recommendations that depend upon a known set of organisational structures and arrangements. This has the virtue of causing us to focus on organisational arrangements for USyd eLearning at a higher level. The principles of organisation and management in the report can be implemented within the new organisational arrangements, whenever their shape becomes clear.

In the closely-related reorganisation of senior management portfolios, the post of Provost has come into being. This offers an opportunity to rethink some of the issues surrounding integrated *academic* leadership of ICT. We allude to such possibilities in this report, while recognising that the remit of the Office of the Provost is still under development.

ToR1: What is USyd eLearning?

Defining 'eLearning' at the University of Sydney; identifying the key aspects of the centrally-funded activity known as 'USyd eLearning'; summarising its aims and objectives, recent history, achievements and alignment with the University's current needs.

Characterising USyd Elearning

'eLearning' is broadly defined at the University as student learning activities that are enabled through the use of information and communication technologies (ICT). 'USyd eLearning' labels both a concept and an operational strategy.

As a *concept*, it represents the University's commitment to embedding eLearning strategies appropriately on a University-wide basis.

As an *operational strategy*, USyd eLearning stands for the central processes and personnel now in place to achieve that commitment. In early 2006 these included:

- Providing a central enterprise level learning management system (WebCT) available across the University.
- A central eLearning helpdesk for students using WebCT.
- Just-in-time support to academic staff, provided through the central eLearning helpdesk.
- Workshops (beginner and some intermediate) to meet the needs of teachers for eLearning knowledge and skills.
- Support for college-prioritized strategic eLearning developments, using a common, structured project management framework.
- Trialing and reviewing strategies for eLearning support.
- A strong focus on quality assurance (including but not limited to the unit of study Application-to-Activate process).
- Benchmarking aspects of eLearning with other research-intensive universities.

Short history of USyd Elearning

Prehistory

Simon Carlile, as Assistant PVC (IT), mobilised high-level commitment to the use of ICT for learning and teaching. The key operational decision in 2000 was to initiate a university ICT in T&L project - to invest in WebCT as a central learning management system and to appoint a small team to install and support it (Stephen Sheely plus three other staff). The outcome of this activity was the provision of a useful, stable learning management system and service, with associated staff support and some modest development resources.

In 2000 Simon Carlile also initiated a university project focussed on innovation in education, primarily using ICTs and accompanying project management approaches (ITEV). Outcomes were expected to include both institutional learning and revenue generation.

A change in leadership occurred when Simon Carlile stepped down from his role at the end of 2002.

In 2003 Ann Sefton led the Information and Communication Technology in Teaching and Learning Review at the University of Sydney supported by Rob Ellis as executive officer on secondment from the Institute for Teaching and Learning. This resulted in a detailed report with many recommendations.

History

USyd eLearning as it is known now commenced in 2004 with the establishment of a new central model drawing on the recommendations of the Sefton report. Key elements included:

- appointment of a University Coordinator of ICT in T&L (Rob Ellis)
- substantially increased staffing of the central group (now known as the Flexible Online Learning Team) to include project managers and educational designers, with responsibilities for both central services (helpdesk, staff development workshops and back office administration) and college-prioritized eLearning projects (educational design, development, evaluation, staff development). The full team was on board by September 2004.
- a strategic development model encompassing allocation of FOLT hours to colleges (4,000 each per annum) for their prioritised projects to be conducted within a structured project management framework.
- an expectation that the colleges would appoint a leader in ICT in T&L (an ‘academic director for eLearning’) to work with both the central personnel (FOLT team) and representatives of the faculties in the college to promote and support ICT in T&L developments, in particular selecting and overseeing the strategic projects chosen by each college.

Three rounds of expressions of interest for strategic eLearning projects have occurred (2004 half year, 2005 and 2006). Projects in the 2004 and 2005 rounds are mainly completed while 2006 projects are still underway.

Principal objectives of USyd eLearning

The principal aims are to:

- improve the quality of the student learning experience and to
- safeguard the reputation of the University through sustainably embedding eLearning knowledge and support within the University’s learning and teaching system.

Practical objectives are to enable:

- staff to support their students’ learning activities with appropriate use of ICT (particularly to enhance and complement “face-to-face” learning activities, but also recognising the increasing demands for flexible provision within postgraduate coursework programs, especially when teaching students who do not live in the Sydney area)
- Heads of School and Deans to plan learning and teaching goals strategically, using eLearning as a resource
- the University to understand and address its position, internationally and nationally, in terms of best practice in eLearning – taking into account its distinctive character as a research intensive, student-centred, predominately campus-based institution.

Associated with these objectives are broad goals to:

- develop a basic level of eLearning literacy across the university
- reconceptualise learning and teaching to include ICT-supported strategies as a matter of course
- develop new perspectives on workload and budget including making visible return on investment
- provide a sustainable mechanism for collaboration and coordination across faculties to support strategic planning for eLearning
- establish, manage and review appropriate quality assurance processes.

Does this conception of USyd eLearning meet the University's current needs?

The following needs have been seen as driving USyd eLearning activities:

- The need to catch up with developments in the eLearning area that have affected university teaching world-wide. The main strategy to address this need has been to deploy a University-wide learning management system (WebCT) and to develop capacity in academic staff across all faculties so that staff are enabled to make appropriate use of eLearning technologies and methods in their teaching.
- The need to ensure a base level of quality across all units of study that have significant on-line elements - with the goal of protecting and enhancing the quality of student learning experiences. The strategy chosen here has been to develop and implement a quality assurance process in the form of the *application-to-activate* procedure and life-cycle management.
- The need to promote organisational learning about the role and function of ICT in L&T; to learn from our own experiences as well as the experiences of others. The strategies chosen were strategic projects, comparisons with other universities, and developing structures for collaboration and coordination across faculties.

Conclusions: alignment with University needs

The review team has concluded that these needs are still worth addressing, but that the university must ensure that changes in needs are monitored and taken into account. (See section 5 on sustainability etc.)

We also believe that it is particularly important to develop a broader understanding of the role of eLearning in relation to the organisation's overarching strategic goals. This needs to be understood at high levels within the University. Failure of understanding will result in continuing fragmentation of strategic decision-making, and missed opportunities. Section 3 (leadership) looks at this more closely.

Decision-making in technically complex areas can be so demanding that one loses sight of the overarching objectives. Universities suffer if they do not have simple, clear, compelling statements about valued aspects of the core business – we do not have a shared language through which we can refer to things that we believe are important about student learning, for example. Progress *has* been made in this area, with statements about the principles underpinning a University of Sydney student learning experience, about graduate attributes and about '21st Century Learning' as examples. These need synthesis and refinement, so that the constructs we value come readily to hand in discussions about the resolution of technical problems, how to equip learning and teaching spaces, as well as curriculum issues,

ToR2: What has USyd eLearning achieved?

Evaluating the outcomes of USyd eLearning; considering its status as a project, a fixed-term initiative, or part of the core business of the University

Summary of main achievements

In the time frame September 2004-March 2006, the Review Team acknowledges the following significant accomplishments².

- As of October 2005, 2289 Units of Study (UoS) have a presence in WebCT, 428 in BlackBoard, and 128 in the Medical LMS. The growth rate in numbers of UoS in WebCT was about 30% per annum in the period reviewed.
- A quality assurance process has been established, reviewing each semester all UoS before they become available on-line (the 'application to activate' process)
- A central helpdesk for USyd eLearning has been created, providing a 5 days a week 8am-6pm support service for staff and students.
- University-wide staff development opportunities have been provided, in the form of an eLearning workshop series and faculty-specific workshops.
- College strategic eLearning projects have been conducted, committing about 10,000 hours of educational design and project management support to each of the three colleges over three rounds of strategic projects (2004-2006). Some of these projects have had University-wide implications from their onset, e.g. the Using Still Images Online project.
- Internal and external eLearning benchmarking has been carried out and foundations laid for more formal benchmarking with research-intensive universities in Australia and overseas.

Evaluation of achievements

With 18 full-time staff, USyd eLearning (serving 46 000 students) is not an expensive operation when compared with other Go8 universities. Benchmarking data in the *Management Report* shows that the University of Queensland (39 000 students) has 27 central eLearning support staff. The University of Melbourne (41 000 students) has 23. The University of New South Wales (40 000) has 19.

Professor Tony Bates, a leading international authority on eLearning in higher education, estimates that a ratio of 1 central support person per 25 academic staff is necessary for technology-intensive teaching. Our current provision is probably nearer 1:100.

Keeping these numbers in mind, USyd eLearning has certainly delivered value for money. Direct financial benefits have occurred in the following ways:

- Central hosting of WebCT courses is much cheaper than having each faculty host its own service (avoiding duplicated provision; achieving economies of scale).
- Central support via the help line, instructional design services and project management services and quality assurance services similarly save money in the faculties.
- Increasingly, learning can take place outside of the physical classroom infrastructure, saving costs in terms of investments into the physical infrastructure; at the very least, the existing infrastructure can be used more efficiently.
- New income streams are generated by (postgraduate) programs that are offered via the Internet to an international audience.

² Further detail can be found in the *USyd eLearning management and evaluation report* (October 2005).

Indirect benefits are harder to quantify, but no less important:

- The eLearning literacy of academic staff is increasing; staff increasingly expect to be trained in ICT-supported teaching methods;
- Useful teaching strategies are embodied in resources which can more easily be demonstrated and disseminated across the academic community; good practice, embodied in online artefacts, becomes easier to share;
- Student expectations as to what constitutes a modern campus are at least partially met; this is particularly important as the WWW becomes the first and principal point of contact for potential new students, (national as well as international students);
- The University is seen as being on a similar trajectory to that of other research-intensive universities in the world.

The very significant contribution of the three college academic directors also needs to be acknowledged here: both for their role in the successful implementation of USyd eLearning and because they represent a valuable University resource. The three academic directors have deployed an impressive level of expertise and institutional knowledge, and have built significant networks in their colleges and across the University. Their role, unlike that of FOLT members, was not defined by a clear set of duties, and indeed varied from college to college depending somewhat on the expectations of the relevant PVC (College). They have played a vital part in sharing good practice across the institution.³

Conclusions: mainstreaming

The key point is that USyd eLearning has enabled the University to make up some lost ground. The University now has the basic capability needed in order to stay in the game. ICT in learning and teaching is here to stay.

Moreover, technological developments are accelerating. What is being dealt with currently under the heading of eLearning is the consequence of the introduction of the WWW 12 years ago. Recent developments in personal and mobile technologies offer another example of technological change that has significant implications for students' expectations about the use of ICT in higher education. Managing the interface between personal/mobile technologies and the University's digital and physical infrastructure will be a major challenge in the next few years.

This analysis leads to the conclusion that the University should build on its investment in USyd eLearning. Planning and managing the use of ICT for learning & teaching is a mainstream strategic area – part of the core business. While project-based funding can be an appropriate way of reacting to emerging and uncertain threats and opportunities, it is inappropriate as a way of handling core business. We explore this further, and make recommendations for action, in Section 3, 4 & 5 below.

An important consideration is the faith that University teaching staff feel able to place in the continuing existence of the services offered by FOLT. Staff are very unlikely to invest their own time and effort in making changes to their teaching methods, use of technology etc if they believe the underpinning infrastructure, support services etc are likely to be taken away whenever there is a squeeze on budgets. Continuity is vital.

³ This paragraph was added by Peter Reimann and Peter Goodyear, without the knowledge of Mary Jane Mahony, who was herself one of the academic directors.

ToR 3: Locating leadership for eLearning

Leadership for eLearning involves a tensely adjusted network of people and activity; there needs to be leadership at the centre and in the faculties; eLearning involves pedagogy, digital and physical infrastructure, staff capability and students' expectations and experiences; need for effective integration of academic and infrastructure planning; role of University Library; location of FOLT.

Leadership is necessarily distributed

In a large organization such as this University, and in an area that is so close to the core business of faculties and to academics' pivotal tasks (teaching and research), leadership cannot and should not be provided in one place.

Arguably, the current operation is too disconnected from the innovations that are happening all around the campus – operating in parallel and depending on informal collegial networks for their relationships, mutual awareness, etc.

There is certainly a need for 'joined-up' thinking and management, especially since eLearning developments have implications for the management of physical and digital infrastructure, staff development and HR.

The challenge is to find workable ways of distributing leadership, such that there is suitable scope for local autonomy and enterprise, coupled with efficient communication and knowledge-sharing, avoidance of unintentional duplication and the possibility of tackling major problems and opportunities in a concerted way.

The colleges have been key parts of the architecture of USyd eLearning. Whether there turn out to be seventeen or eight faculties, it will still prove necessary to have some ways of helping schools and faculties co-operate on projects of mutual benefit (eg acquiring a new LMS), or issues of common concern (eg quality assurance).

There are a number of other key players: the Office of the PVC L&T, ITL, the Library, IT Services, ITEV, Campus Property & Services (managing the ICT/AV capabilities of non-faculty teaching spaces), DVC Infrastructure, the faculties, ICT/eLearning support units within faculties; innovation hubs like the School of IT, Web-engineering, CoCo, CIPHER, etc.

On one reading, this positions eLearning among the mainstream considerations of ICT as part of the infrastructure needed to support teaching, learning and research. That is so. But the corollary is that *infrastructure planning needs to be driven by a clear sense of the evolving nature of academic work* – including a sophisticated understanding of future-oriented pedagogies and of the new pressures and demands being placed on university research. eLearning will never be just an infrastructural issue.

Locating 'central' leadership

We recommend locating leadership in this area close to where the strategic expertise for learning and teaching is located: in the Office of the PVC L&T. Academic goals must outweigh technical fads and fascinations. In its core, eLearning is not a technical problem, and the main challenges do not lie in the technical or infrastructure realm. The main challenges have to do with the integration of research and teaching, ownership, workload, academics' buy-in.

Recommendation 1: Strategic leadership for USyd eLearning should continue to be located in the Office of the PVC Learning and Teaching.

eLearning in the university sector is rarely concerned with *technical* innovation—it builds on elements which have been in place in the corporate sector for quite a while. It is a pedagogical as well as an organisational innovation. It is probably fair to say that eLearning has triggered more discussions about how (and increasingly what) to teach in the higher education sector than any other innovation in the last 200 years. One driving factor has been the massification of higher education, which has created pressure to look for new ways of supporting the learning needs of a diverse student body.

We also observe that overarching the leadership and management of learning is a problem arising from the fact that the University does not have a specific place for management and leadership for *academic* computing. It treats administrative and academic computing alike. This creates a number of problems, not only in the use of ICT for teaching, but also in the area of research computing⁴.

Strategic leadership of ICT for learning and teaching needs to be complemented by strategic leadership of the use of ICT for research. Indeed, we would argue that the University's performance is suffering for lack of integrated leadership of ICT for academic purposes. Separate strategic leadership of (a) learning and teaching (b) research, results in unnecessary fragmentation of academic work and missed opportunities for strengthening the links between research and teaching (with consequent loss of market advantage for a research-intensive institution). The Office of the Provost offers a new opportunity for integrating academic leadership, including in providing academic leadership for ICT.

eLearning and ICT strategy are intimately bound up with the management of our physical plant. For example, if a teacher cannot access WebCT in their lecture room, then they cannot readily explain to students how they are expected to make use of the system; nor can the teacher readily make use of students' online work back in the classroom. There is a disabling 'media break' between the digital and physical worlds. Similar issues arise in relation to the networking – wirelessly or otherwise – of the spaces in which students choose to work together, e.g. on group assignments. We did not see much evidence that the planning of eLearning and planning of ICT provision in University teaching/learning spaces is being handled in an integrated manner, let alone one which is driven by a clear academic vision.

We cannot afford to have four silos for research, learning and teaching, ICT, physical space/plant. A more integrated approach to academic leadership of ICT and the management of the University's physical learning spaces is an urgent necessity.

Recommendation 2: Strategic leadership for the use of ICT in learning and teaching depends upon the existence of strategic leadership for the use of ICT in research, and on integrated strategic academic leadership for ICT. The Office of the Provost is the point at which such academic leadership can be integrated. We recommend that the Provost, PVC Learning and Teaching, DVC Research, CIO and the Chair of the Academic Board work together to establish a capability within the Provost's Office for exercising strategic leadership over academic ICT.

Recommendation 3: Effective implementation of an academically-led strategy for the use of ICT depends upon excellent working relationships between academic planning and infrastructure planning. This applies centrally and at faculty level. We recommend a regular review of the ways in which the University and its faculties manage the integration of these two areas of planning.

Location of FOLT

There are strong arguments for co-locating FOLT with staff of the Library, with potential benefits for the provision of a more integrated service to students and staff, better career development opportunities for FOLT personnel and efficiencies of scale in the provision of administrative and logistical support for FOLT activities.

We also observe that the Library is an important locus for strategic thinking about integrating the needs of teaching and research, and has been very successful in its use of ICT to support both teaching and research activities. We explore these in more detail in Section 4 & 5, below.

Recommendation 4: We recommend that PVC L&T and the University Librarian examine the possibilities for locating FOLT within Fisher Library, seeking a better integration between the user-facing activities of FOLT and of the Library staff, shared administrative and logistical support, and better management of career development opportunities for FOLT members.

⁴ We are not just thinking of the use of ICT in capturing and analysing data, but the whole gamut of ways in which ICT can support research processes, including (crucially) better interactions with the end-users of research.

Conclusions: the need for academic leadership

The introduction of ICT into the core activities of an enterprise involves disruption, a questioning of assumptions about existing and future ways of working and the creation of opportunities for synergy between what were previously seen as separate areas of activity. Effective use of ICT in academic work must involve some strategic thinking and management at high levels. The locus of strategic thinking for eLearning should be in the Office of the PVC L&T. But this needs to be complemented by strategic thinking about research computing (DVC Research) and the two need integration at the level of the Office of the Provost. The cost, if this does not happen, will be further fragmentation of the academic role, an intensification of the competition between teaching and research, missed opportunities for strengthening research-led teaching, and the development of parallel but disconnected infrastructures for research ICT and teaching/learning ICT.

ToR4: Funding a centralised initiative

USyd eLearning has been good value for money; ICT in learning & teaching is here to stay and will need a mix of central and faculty investment; the role and composition of the central team; their working methods.

Summary of options

The options are:

1. Fully centralised (with/without pay for service)
2. Fully decentralised (at the limits, a 'lone ranger' model)
3. Mixed model combining University-wide strategic integration with the business knowledge at the level of faculties and programs (with/without pay for service).

Nature and scale of funding

A fully centralised eLearning operation (Option 1) would entail disbanding the support and innovation functions in many of the faculties (e.g. META in Arts; CALEB in Economics & Business). We see this as undesirable and politically unacceptable.

Given the need for strategic alignment and visioning, a funding model that relies on central funding for the core activities is appropriate. Putting it all at the faculty level (Option 2) will run the risk of further fragmentation and duplication. Reductions in funding at the centre will create higher but less visible costs in the faculties.

We therefore recommend Option 3.

If technology is to be deployed to effectively support academic staff members in teaching and research, then sufficient support staff need to be in place. Based on the available numbers for technology-intensive universities (Bates, 2000), the support staff: academic staff ratio should be 1:25 or better. The University has around 2300 academic staff (fte), giving a FOLT:academic staff ratio no better than 1:110. Even allowing for support staff located in the faculties, this is a lean operation.

Recommendation 5: Central funding for USyd eLearning be continued at at least its present level.

Some faculties make less use than others of FOLT, WebCT etc. Some of the variation is due to the presence of eLearning support staff/centres within faculties. Some of the variation is due to variations between faculties in their 'eLearning readiness'. Top-slicing funding for USyd eLearning means that all faculties are paying, but their usage varies. On the other hand, it would be a mistake to introduce a 'pay for service' model, which might well encourage faculties to run *apparently* cheaper duplicate services.

We do not see a compelling logic for a 'pay for service' model. If faculties wish to set up their own support services, and can afford to do so, then that should be their prerogative. But this freedom should not allow them to make cases against adequate funding of the central service.

The argument is somewhat different when we turn to strategic development projects, which typically involve hours from FOLT and hours from the academic staff of one or more faculties. Here, the idea of cost-sharing is appropriate, with USyd eLearning covering the FOLT costs from its central budget and faculties covering the time costs of their academic staff.

The continuation of funding for USyd eLearning needs to be accompanied by some changes in the structure and working practices of FOLT. These are analysed, and recommendations made, in Annex 1.

We also make some further comments and recommendations about the selection and management of strategic projects in Annex 1.

ToR 5: Sustainability, scalability, integration

Is USyd eLearning ready for emerging challenges and opportunities? What will be the place of eLearning in a research-intensive University and how can it be used to strengthen students' sense of being part of a lively intellectual community?

Introduction

This section deals with some of the most complex problems facing those who manage and direct eLearning and we make no apology for the fact that this section is dense and deals with some fundamental issues. We have organised much of our treatment of these issues in terms of scalability, sustainability and integration. Before addressing these three areas, we need to consider the more fundamental question of vision and purpose. What kind of University do we want to be? How well does the conception of USyd eLearning align with our sense of future needs?

Does the conception of USyd eLearning meet the University's future needs?

Two fundamental points anchor any consideration of eLearning strategy for this University.

1. The University of Sydney is, and will continue to be, a research-intensive institution.
2. The experience of being a University of Sydney student should include a strong sense of connection to a thriving academic community.

Teaching in a research-intensive university

Strategies for learning and teaching, including strategies for the effective use of technology in learning and teaching, need to acknowledge that research has a very strong and legitimate call on the time and intellectual energy of the great majority of teaching staff. The research reputation of our staff, and of the University, is valued by many prospective students, especially at the growing postgraduate level. This has two implications for thinking about the role of technology: that it should help realise research-led teaching and that it should help staff protect the quantity and quality of the time they have available for research. Ideally, it should help soften the distinctions between teaching and research, positioning both as aspects of *inquiry*, countering the fragmentation of academics' work and creating more opportunities for students to contribute to the University's research mission.

Technology and time relate in complex ways. Investment in ICT for knowledge workers tends to result in gains through flexibility in working methods and working relationships rather than through raw savings of time or personnel. Without appropriate ICT, working methods are heavily constrained – it is unnecessarily hard to form new working partnerships to take up new opportunities; teaching, learning and research are over-constrained in time and space; only those knowledge resources that come readily to hand in the physically-bounded workspace are usable.

In short, it would be a mistake to see the University's investment in eLearning as a discrete experiment. It needs to be considered in the broader context of teaching and learning developments, research developments, and the enabling role of ICT in relation to academic work seen as a whole. It may well turn out that the greatest payoffs from investment in eLearning are realised through allowing staff greater control over the *timing* of their teaching work (protecting some quality time for research) and supporting the formation of new teaching teams with more complex divisions of labour.

Student experience of a thriving academic community

The University of Sydney does not see itself as a distance teaching university. Its physical environment is an important asset and will continue to be exploited as a distinctive competitive advantage, as part of 'the brand'. In human terms, the experience of working at the University (for students, for staff) is enriched by its physical environment, and by the social and intellectual encounters that the physical environment affords. It is hard to argue against the proposition that all students should have the chance to enjoy these benefits.

We cannot, however, be complacent about this matter. Indeed, we must regularly scrutinise our beliefs about the value of physical presence on campus. Undergraduate students are spending more of their time in paid work and are becoming more strategic about coming to campus: 'need to go' is replacing habitual attendance. For growing numbers of postgraduate students, time on campus is also snatched from a busy working and family life – their impressions of the physical environment may be shaped by the difficulties of parking and badly equipped lecture theatres rather than by the ambience of the Quadrangle. Hence, use of ICT supported learning and teaching must be closely associated with active attention to ensuring the value of the campus experience to students.

Strategies for eLearning – for the effective use of ICT in learning and teaching – need firm roots in the students' experience of the University. We should be using ICT (a) to enhance students' participation in the intellectual and cultural life of the University (b) to help ensure that the precious time they spend on campus is used to good effect. This *can* mean that a good use of ICT is to allow students to have first contact with new ideas *away* from campus – that time on campus is used primarily for those things that can *only* be done face-to-face, or that require access to equipment and other resources unavailable elsewhere. This leads us in a similar direction to that taken by many distance universities – making well-structured introductory course materials available for remote use. Our difference lies elsewhere – in how well we involve students in the intellectual life of the University of Sydney and in particular in our research-oriented culture, using ICT as one way of overcoming constraints of time and space.

Synthesis: authentic participation in knowledge-building communities

Recent research in the learning sciences suggests one way of expressing this vision. Our pedagogical practices should be founded on the idea of collaboration in knowledge construction: apprenticeship in the collective improvement of ideas. Learning is seen not just as the acquisition of knowledge and skills, but as strengthening participation in communities of practice – knowledge-building communities in the case of research universities like ours. In addition to being concerned with *teaching* students we need to aim to *engage* them in our discourse and research practices. (For too many of our students, our research is invisible.) Insofar as we see our role as being to help students to 'think for a living', then organising our academic practices so that students can engage more directly in what we do has benefits for them and for us.

This has implications for curriculum – how decisions about what counts as foundational knowledge should be conditioned by a sense of what is sufficient for an induction into the role of creative and critical knowledge worker. It also has implications for the social organization of teaching, learning and research – for new divisions of labour – and for the reconceptualisation of ICT as an enabler of shifts towards new ways of working. Technology should primarily help students to *participate* in the cognitive, social and cultural practices that are constitutive of academic life in general and of scholarly research in particular. Among other things, technology can make it easier to give students their own voice (quite literally: why should only *lectures* be podcast?). ICT need not be restricted to creating *cognitive capital* (individual knowledge); it can also help create *human capital* (such as networks of students and academics that can reach beyond the university's walls in space and beyond the Bachelor, Masters, or PhD degree in time), as well as *social capital* (students contributing to the solution of problems of wider societal concern, using the university's human, symbolic and physical resources).

A last point on communities of enquiry – as academics, we work at the intersection of disciplinary and institutional communities. The latter are bounded by the 'walls' of the University; the former are global. Progress as a junior member of a research-led intellectual community involves negotiating some transitions between these two. ICT has a role here. With due thought and organization, it can help smooth such transitions. At first, it helps merely by allowing students to see that there *is* an intellectual endeavour living beyond the University but intimately connected to it. Later, it offers opportunities for authentic participation, through discussion lists, academic blogs, virtual conferences, online publishing, and so on.

The central role for ICT is to help break down the walls around learning, teaching, research and 'the campus'.

We note that strategic thinking about the role of ICT is informed by such visions in *some* leading international universities, but not in ours.

Issues of sustainability and scalability

Initiating a new development is easy. Sustaining it over time, without draining energy and resources, is another matter. Developments take on their own momentum when friction in the organisational environment is reduced.

‘Scalability’ means that a solution or development will work for the many, not just the few. It can be easy to find local fixes to local problems, or manage a single project to a successful conclusion. But for such approaches to lead to University-wide benefits they must be scalable. Scalable solutions bring economies or efficiencies of scale. They work ‘at full scale’. Scalability can be a matter of numbers or it can involve doing things in a more integrated fashion.

Sustainability will mainly come from scaling factors and from ICT integration/coordination gains: for instance, when ICT for learning and teaching becomes more integrated with research and administrative ICT.

We also have to be prepared to *sustain change*. There will always be a need for innovation because of the rapidly changing demands universities face, as well as the accelerating pace of technological innovation. We are still a long way from reaping the benefits that some corporate users of ICT have obtained. They, and we, need to continue to invest in a capacity to anticipate and exploit technological innovation.

Individual sustainability

The key to the sustained investment of effort of individual academics into eLearning lies in a positive individual cost-benefit analysis. To mainstream eLearning in the organisation, it must be profitable for the individual academic to engage in related activities. For this to happen, at least the following requirements need to be met:

- Clear workload policies in place, acknowledging the efforts invested for developing materials as well as running the single unit of study, stream of units of study, or the course.
- Sufficient support. This comprises human resources (technical and instructional/web design support), a set of tools, and opportunities for training and knowledge exchange.
- Long-term perspective and strategic alignment with organisational objectives: technology and support must not disappear suddenly (or be perceived that it might), thus rendering previous investments meaningless. Staff will not invest effort into an area with uncertain institutional commitment (see Recommendation 5).

In addition to these minimal requirements, we think that academics will be more motivated to ‘get their feet wet’ and maintain a high level of effort when they see these additional benefits occurring:

- Teaching accomplished more efficiently; in particular, when time-consuming and repetitive activities such as receiving, marking and giving feedback on assignments can be performed with the use of ICT.
- Significant returns in personal productivity and in quality of the learning experience for upfront investment in ICT supported learning strategies that make use of the unique qualities of the medium.
- More flexible allocation of time for teaching; an academic’s work is not the same each week; research requirements, conferences, presentations, visitors, and administrative demands frequently punctuate the “regular” schedule. Being able arrange time invested in teaching more flexibly is a strong incentive for busy academics.
- Synergies with research and technology-transfer.
- Higher levels of competence developed in students, along with increased student satisfaction.

Recommendation 6: All investments in technology-supported teaching should have two explicit objectives - that the deployment of the technology/method will (a) be beneficial to student learning and experience, and (b) increase the time academics can dedicate to research. The latter may be achieved through allowing academics greater control over how they schedule their teaching (e.g. by some use of asynchronous online teaching methods) or by a decrease in the time committed to teaching, or both. For large investments, appropriate metrics („performance indicators“) should be defined, monitored and analysed to demonstrate how these objectives have been met. Priority should be given to investments into tools and methods that have proven their capability or at least have a high probability to meet both objectives.

Sustainability on the enterprise level

It is still hard to identify examples of unqualified economic success when universities invest in e-Learning. This is somewhat surprising as elearning has the potential for substantial ROI:

- Revenues can be increased by delivering the ‘product teaching’ to a larger student base, such as (large numbers of) international students, or to niche markets such as professionals who need flexible access to specialised knowledge made available on-demand.
- Costs can be significantly reduced by avoiding redundancies in the development and teaching of courses, distributing costs and risks over multiple organizations who then use a shared pool of teaching resources, and by using the existing physical infrastructure more effectively in well-designed ‘blended’ learning offers.

From our reading of the research literature, the reasons why this potential has not been turned into hard dollars (so far) by (most) universities are mainly of an organisational nature. The modal campus-based university does not have the structures and processes in place that are required to produce and deliver higher education economically to very large numbers of students and/or to highly specialised, but profitable professional education markets. Nor has the campus-based university (so far) adopted the culture to see the need for these structures and processes. It is, hence, not surprising that those universities which have derived direct economic benefits from elearning are primarily those that traditionally have dealt with very large numbers (the Open and Distance universities and those universities which have been created to serve professionals’ education needs with the organisational and economic knowledge already in place - such as so-called ‘corporate universities’).

To give just one example: The most straightforward economic reason why an educational organization should employ e-learning methods is that one can easily scale such courses to large numbers of students *without* a proportional increase in costs. The traditional university model – to hire a new lecturer/tutor for a course whenever the number of students increases by 20 to 30 or so – is *not* scalable to thousands of (international) students. In an e-learning course designed for such numbers, if it is designed well and employing the right technology, the number of teaching staff will not grow as a linear function of the number of students. We know only a few examples where conventional universities have been able to successfully employ this model, which is by now standard in many industries. However, it is easy to see that a similar logic applies not only to the case of very large (distance) student numbers; it also applies to courses that are taught repeatedly without needing to change much over time (Analysis 101) and to courses that are taught with similar content at different places (Academic Writing 101).

The University of Sydney’s organisational capacity to capitalize on this direct potential of elearning has significantly increased over the last three years, as a consequence of the availability of expertise such as that represented in FOLT and ITEV and those who manage and co-ordinate their work, but also due to the many “grass root” developments in the faculties and schools. ITEV has played an important role in helping faculties better understand their national and international educational markets as well as the business case for individual courses. We see some pioneering examples (such as in Health Sciences, Medicine, Veterinary Science) where eLearning technologies and methods have been used effectively to develop sustainable courses. It was typical in these success cases that they were developed by a professionally managed team combining domain and pedagogical expertise with technical know-how and a sound business analysis. The business case approach led by ITEV ought to be more widely used across the University, in terms of both processes and outcomes.

We recommend (elaborated below and see Recommendation 11) that the University make increasing and increasingly strategic use of its centrally provided resources (FOLT, ITEV, Library and ITS) to develop courses for “new” markets. This requires a professional approach to project planning and management, but the organization now knows how to do this successfully. To extend gains, however, barriers to integration and coordination need to be removed.

The central issue of integration: vision and implementation

We have already commented on the need for integrated leadership of academic (comprising teaching/learning and research) use of ICT in our University (see section on ToR 3, Recommendation 2 and Recommendation 3). In this section, we need to elaborate on other important forms of integration.

We need to accept that technology is already ubiquitous in our University. If we take the broad definition of eLearning as proposed in the *Management Self Report* seriously--"student learning enabled through the use of information and communication technologies"-- then most of the learning on campus is eLearning. We might as well drop the "e". The activities around WebCT and Blackboard are only a small part of a much larger picture, with students bringing their own ICT to campus (we note a dramatic increase in laptops), and staff realising teaching on a continuum from the use of classroom aids, through mixed-mode teaching, to fully eLearning courses offered via distance. Significant trends are the uptake of synchronous distance technologies such as (web-based) audio- and videoconferencing, the increasing use of rich media such as audio- and videocasting as well as the employment of technologies related to mobile phones, such as SMS services for purposes of (organising) teaching.

A University of the size and aspirations of Sydney will need to put in place more than a merely technological adaptation process to deal with the potential of technology-enriched learning. What is required is a significant effort in organisational and pedagogical adaptation and appropriation, informed by research and best practice. Importantly, this change process needs to be seen as a continuous one; there is no end in sight for the use of technological innovations in education. A university may have the freedom to ignore some technical gadgets and fashions, but it will not stem the tide of organisational efficiencies and rising student expectations.

We see the following areas as particularly promising to gain benefits from a further integration of ICT for learning and teaching:

- Integration of research and teaching: We have identified this dimension above as pivotal for a research intensive university like ours that caters at the same time to very large numbers of students, (see above and Recommendation 6). We note in passing that most of the world's top universities have fewer, and indeed often significantly fewer, students than the University of Sydney. We need to be very smart in the technology use area, among others, to successfully deal with this challenge.
- Integration with the University's internationalisation strategy and activities. Most of the "global" players in the Higher Education sector make eLearning an integrated part of their interface to the world, starting with a university's web site(s) as the predominant first point of contact for potential students and research collaborators.
- Integration with the University's alumni strategy and activities. For former students, the University of Sydney should be the first consideration when they think of continuing their academic education, their first partner of choice for life-long learning. Many of these students will not be willing or able to take courses on campus (excepting, perhaps, short, intensive periods for which are embedded in longer engagement by other means). We need to better understand (and monitor) their learning needs and habits, and to design educational offers that suit their needs.
- Integration with faculties' risk management. In light of some faculties' significant dependence on international student enrolment and given the risks involved in international travel and health as well as the fact that travelling will most probably not become much cheaper for the foreseeable future, elearning is an important measure to mitigate the risks related to a decrease in or sudden interruptions in international travel. (The SARS 'crisis' seems already to be forgotten.)
- Technical integration: Sustainability and scalability are currently limited by a number of technical factors: severe limitations of the current version of WebCT, which is outdated; no systematic content and digital assets management; no database services; no net-based video and audio conferencing services; no streaming media services; no standardized and adequate set of tools for content production; no support for "smart" services such as quiz item pools, essay grading; no enterprise document management and messaging infrastructure. These infrastructural weaknesses make it hard to realize more effective divisions of labour among staff involved in course design, development and management. Furthermore, problems with linking to student management and administrative IT abound. All these issues, among others not listed here, need urgent attention to prevent the costs resulting from fragmentation and duplication growing to unsustainable levels.

Recommendation 7: In order to gain enterprise-level benefits from its investments into technology the University should consider integrating teaching and research related ICT across a larger number of components of the central portfolio : Research, Internationalisation, and Alumni. ICT-enhanced learning and teaching should become an integral part of strategic plans and planning on all levels. In addition, a large number of technical integration issues need to be addressed in the short to midterm, to prevent the costs resulting from fragmentation and duplication growing to unsustainable levels.

ToR 6: Other relevant policy issues

Workloads

The most significant remaining policy issue is that of workloads – in particular, the ways in which involvement in eLearning features – or does not feature - in the calculation of academic staff workloads.

The move to greater use of eLearning typically involves an upstream shift of staffing effort. There is increased time investment in design and planning and in setting in place the task specifications, resources and tools that students will need. When eLearning is used well, this upstream investment pays off by reducing teaching effort *during* a course. It may allow academic staff to delegate more of their teaching work to postgraduate tutors. It should allow them more control over their use of time.

When eLearning is done badly, it can result in unsustainable increases in teaching time. Part of the function of USyd eLearning and FOLT is to help staff avoid such pitfalls.

But there is a broader issue of workload planning and accounting. Where faculty workload systems fail to align with the need to shift teaching time investments upstream then staff will be discouraged from engaging in eLearning.

Some faculties (e.g. Education & Social Work) are currently working with USyd eLearning to identify ways in which workloads models can be revised to acknowledge the characteristic pattern of time investment in eLearning and to gain a better alignment between faculty learning and teaching strategy and workloads policy. The outcomes from this investigative work will be made available to other faculties later in the year.

Recommendation 8: Faculty workloads policies need to recognise the special characteristics of time investment in eLearning. The PVC L&T and eLearning co-ordinator should facilitate this process, in particular by facilitating further exploration of workloads issues and disseminating guidelines when ready.

Annex 1: The work of FOLT

Background

The analysis and recommendations in this section build on observations about the practices of eLearning support as they have taken shape during the period under review. Growth has been quick and new working practices have been developed quite rapidly. Our suggestions about reorganisation and change are intended to build and improve upon some impressive achievements. In making these suggestions, we imply no criticism of the eLearning co-ordinator or eLearning administrator. Both have played a major part in managing and steering some complex developments. Nor are we criticising members of FOLT, whose professionalism and commitment has also impressed us greatly.

In reviewing the workings of FOLT in this section, we cover: management, the work-mix of the educational designers, strategic projects, the nature of staff development workshops, the QA process, helpdesk and the location of responsibility for IT support.

The recommendations below should be considered as soon as possible, and steps should be taken to address the main concerns in the near future.

As indicated in the brief history of USyd eLearning, formation of the team at its current size was initiated in late 2003 and involved a significant increase in personnel from the initial WebCT project team of four. There has been a substantial growth in the range of expertise available in FOLT, as well as a growth in numbers.

The team now comprises (FOLT website 30/4/2006)

- eLearning Coordinator (1)
- eLearning Administrator (1)
- Project Managers (3)
- Educational Designers (13)
- Administrative Assistant (1)

Expertise has expanded, to include specific project management skills to support the new model of eLearning strategic projects, and to extend the range of qualifications and experience in educational design and web development. (It has, however, also been necessary for some of these staff to learn new skills to meet emerging technical demands, e.g. use of FLASH, XML).

This has provided a wider and deeper pool of expertise, which is then matched by the eLearning Administrator and the Project Managers to the needs of specific eLearning strategic projects.

The demands on FOLT staff have grown rapidly with the increase in eLearning activities around the campus. We do not see a reduction of demand anywhere in the near future. To the contrary: while the quantitative growth rate may slow down somewhat, because most units of study will have a web presence, the demand for a higher quality of course web presence will increase. To sustain a level of support from FOLT that is adequate to demand, FOLT activities are in need for streamlining. Its core business needs to be more clearly defined and then maintained.

It is time for the organisational model within FOLT to be refined as the University has moved from an introductory phase of development to a more mature and significantly more widespread use of eLearning.

Concerns about the existing model include: overall management and staffing, the work of the educational designers, and provision for staff development. We review each of these in turn, before providing some recommendations.

Management

The eLearning Administrator is overloaded. The management span and prioritisation of this role's responsibilities need reconsideration. Changes since the role's establishment include expanded staff management responsibilities, increased breadth and depth of FOLT activities, and increased participation in relevant university groups to address emergent university infrastructure issues. Consideration should be given to relocating some WebCT technical responsibilities (see Recommendations below), and to more delegation (e.g. of conducting beginners WebCT workshops, administration of aspects of FOLT recurrent activities).

There is potential risk in most management responsibility appearing to rest with the eLearning Administrator. When he is on leave, no one appears to be in his role in an acting position. If his responsibilities go up to the eLearning Coordinator at such times, is this appropriate?

Administrative support for the eLearning administrator and team. The administrative assistant for FOLT appears to provide assistance to activities outside of FOLT responsibilities.

Recommendation 9: Internal structuring of FOLT be revised, to allow greater delegation of responsibility to project managers and educational designers and to enable the eLearning Administrator to spend more time on higher-level management and leadership issues. Arrangements to include someone to deputise for the eLearning Administrator as necessary.

The work-mix of the educational designers

Educational designers are not readily available for the strategic development projects during peak development times for academic staff. Educational designers work on strategic projects, helpdesk and the Application to Activate (AtoA) process. In the peak periods – roughly speaking four weeks either side of the start of teaching in each semester – all educational designers are assigned to AtoA⁵ and helpdesk. But the run-up to the start of semester can also be a peak time for completion of strategic development projects, and is often a time at which academic staff are most free and willing to contribute time to preparations for teaching. We make recommendations (below) about the AtoA process, and the management of strategic projects, which should reduce the conflicting calls on educational designers time, and help smooth the demand.

Consideration of more explicit specialisation in the educational designers may be desirable. Although there is some variation in skills and expertise, the educational designers are expected to be generalists. There do not appear to be assigned responsibilities or opportunity (except as reactive to defined project needs) for a systematic approach to providing advanced web development skills (using specialist packages beyond the expectations of the ordinary WebCT users)

Career development pathways for FOLT members are limited. This then poses a significant risk to the investment the University has made in FOLT and to the principle on which it was based, to develop and retain a pool of expertise and skills within the University. Our recommendation that FOLT be located in the University Library is partly motivated by a recognition of the difficulty of organising personal and career developments opportunities under the present arrangements.

Research and scholarship is not part of the expectations of the educational designer and project management roles, yet they are particularly well placed both to contribute relevant knowledge and to foster the construction of new knowledge through fostering research in eLearning environments.

Recommendation 10: Recognition should be given to the potential contribution to research and scholarship of the educational designers and project managers. They can play an important role in helping document and share good practice, as well as in enhancing the University's reputation for innovation and the scholarship of teaching.

Strategic projects

Strategic development projects, identified at college and faculty level, have played a major role in USyd eLearning. Although colleges will no longer provide a suitable locus for assessing and deciding between projects, we believe that mechanisms *should* be found for identifying and managing such projects.

The reviewers observed that a source of concern for members of FOLT, in particular the project managers, as well as for FOLT clients has been the interface between FOLT and the individual academic. This is particularly the case for the strategic projects where large-scale development work needed to be co-ordinated between academics and the team, facilitated and monitored by a project manager.

It has sometimes proved difficult for the educational designers working on a project to get the input of academic staff time and expertise that was promised at project start-up. This is a common problem, not

⁵ All WebCT sites to be live on the first day of Semester 1, 2006 (6 March), were required to be submitted for Application-to-Activate checking by 10 February. Checking of sites commenced well prior to this date.

restricted to our University. To help smooth demands on the time of FOLT, to increase the RoI of each development project, and to make it easier to secure academic buy-in, we make the following recommendation.

Recommendation 11: Strategic development projects should focus on change at the program level (not individual UoSs). The decision to move ahead with a strategic development project should involve commitment of a teaching team, not just a single academic. It is also appropriate for strategic development projects to tackle opportunities that have even wider potential benefits – eg in providing tools, resources or platforms that are of use to the whole University. The Dean of any faculty involved in a strategic development project should be required to authorise the allocation of academic staff time, and the University eLearning coordinator should expect to have access to the Dean where any difficulties about staff commitment arise. Project planning should take proper account of the rhythm of the academic year, and acknowledge there are periods when academic staff contributions are unlikely to be made.

Nature of the FOLT staff development workshops

The staff development workshops run by FOLT rarely go beyond the beginner's level, yet more advanced workshops are crucial to staff development and dissemination of innovation. Development and delivery of workshops at an intermediate level – ie beyond the original beginners workshop - seems to occur ad hoc, although there is now a considerable pool of WebCT-experienced staff.

Workshops seem to be planned and scheduled without adequate notice to academic staff.

Recommendation 12: A semester-long programme of FOLT workshops should be published prior to the start of semester. This should include a mix of beginners and more advanced workshops, with a clear articulation of the rationale for each, and of progression from one to another. Planning of the workshop program should be done in collaboration with ITL.

Quality Assurance

It has to be acknowledged that AtoA is an incomplete quality assurance process.

Pedagogical quality assurance is ambiguous. It appears to be based on one Yes/No question, answered by the member of academic staff responsible for the UoS, as to whether the site has been reviewed/discussed with a peer. FOLT checking in this area seems limited to the individual views of the FOLT member checking a site as to whether the site is ready for release.

AtoA is only a moment in time. Once a website goes live staff may make any changes they wish without further review and sites may undergo substantial changes during a semester with no checking for either technical or pedagogical implications.

AtoA may promote miscategorisation of units of study. AtoA requires Head of School signoff for units of study categorised as fully online⁶. Evidence suggests that the meaning of 'fully online' is not clear and that in some cases such a unit of study may be categorised otherwise to avoid the extra 'bureaucratic' work.

Recommendation 13: The application to activate (AtoA) process needs to be revised. Routine technical checking (eg broken links) should be delegated to staff who are not so highly qualified and in demand as the educational designers. Casual help and automatic link checking tools may play a part here. More serious attention should be given to the pedagogical qualities of WebCT sites. This ought to be done on a sampling basis, by experienced staff (eg the educational designers), looking at mature sites (ie in the form they typically take towards the end of semester, rather than near the start of semester). The eLearning co-ordinator should design a protocol for this QA process, which should also be expected to provide a way of identifying and sharing good practice across the University.

⁶ Categories include Mode A – Web Supplemented (student on-line participation is optional); Mode B – Web Dependent (student on-line participation for some percentage of the curriculum is mandatory); Mode C – Fully On-line.

Helpdesk

A separate helpdesk for the eLearning area not only ties-up substantial FOLT resources, but also creates yet another source of confusion for students and teaching staff. We are in particular concerned that FOLT members have to respond to technical and logistical questions from students regarding course access and the use of WebCT – questions that can be answered without the specialist knowledge of the educational designers.

We are persuaded by arguments that the University should be moving towards the provision of a unified help service for students, where the front-end of the service is provided by people with experience in diagnosing students' needs. The 'front-end' staff would then pass student requests/queries to more specialised staff in IT, Library, eLearning, etc.

Recommendation 14: The eLearning coordinator work with senior staff from ITS and the Library (and other student-facing units as appropriate) to identify ways in which a unified student help system can be created.

Technology Management

Identification and testing of software solutions for WebCT use is reactive, not systematic.

There appears to be no systematic process to identify, test, evaluate and provide recommendations for use of additional eLearning tools, even for 'plug-ins' developed by third parties specifically for use in WebCT. There is an apparent view that only WebCT's basic toolset should be used. It appears that in most cases use of software solutions outside WebCT's basic tools occurs because a faculty member wants to use a specific software package or a strategic project forces a solution. Selected third party solutions could offer desirable extension of WebCT functionality and/or increased efficiency in use of WebCT tools.

Recommendation 15: In light of the increasingly complex and demanding technical infrastructure required for a technology-intensive campus, we recommend moving the server-related hard- and software as well as related purchasing and maintenance activities to ITS. ITS should also manage the purchasing/licensing process for the LMS as well as other software and hardware that might be required for ICT-supported learning

Recommendation 16: It is further recommended that ITS identifies a person to liaise with the Office of the PVC L&T and the USyd eLearning team, in particular the eLearning administrator. This will in particular be required to allow for a smooth migration to database-oriented LMSs, for the integration of net-based audio/visual technologies, and for supporting clients with more advanced technical needs. Positioning of the responsibilities related to data exchange between major institutional resources (e.g. moving student data from FlexSIS to WebCT and staff data from PeopleSoft to WebCT in a timely, appropriate and reliable manner) will also need consideration.

Concluding comment

To ensure sustainability and efficiency in the use of eLearning methods by academics, the mission of the USyd eLearning team needs to be extended. The USyd eLearning team should increasingly focus on the integration challenges: finding methods and tools to reduce the amount of teaching staff time spent on routine tasks, in particular grading/assessment, and helping develop methods and tools to integrate teaching with research and administrative tasks.

FOLT management also needs to develop mechanisms which increase the probability of ongoing relationships between FOLT members and academic staff leading to improved mutual understanding and decreased inefficiencies in coordination and communication.

Annex 2: List of recommendations

Strategic recommendations

Recommendation 1: Strategic leadership for USyd eLearning should continue to be located in the Office of the PVC Learning and Teaching.

Recommendation 2: Strategic leadership for the use of ICT in learning and teaching depends upon the existence of strategic leadership for the use of ICT in research, and on integrated strategic academic leadership for ICT. The Office of the Provost is the point at which such academic leadership can be integrated. We recommend that the Provost, PVC Learning and Teaching, DVC Research, CIO and the Chair of the Academic Board work together to establish a capability within the Provost's Office for exercising strategic leadership over academic ICT.

Recommendation 3: Effective implementation of an academically-led strategy for the use of ICT depends upon excellent working relationships between academic planning and infrastructure planning. This applies centrally and at faculty level. We recommend a regular review of the ways in which the University and its faculties manage the integration of these two areas of planning.

Recommendation 4: We recommend that PVC L&T and the University Librarian examine the possibilities for locating FOLT within Fisher Library, seeking a better integration between the user-facing activities of FOLT and of the Library staff, shared administrative and logistical support, and better management of career development opportunities for FOLT members.

Recommendation 5: Central funding for USyd eLearning be continued at at least its present level.

Recommendation 6: All investments in technology-supported teaching should have two explicit objectives - that the deployment of the technology/method will (a) be beneficial to student learning and experience, and (b) increase the time academics can dedicate to research. The latter may be achieved through allowing academics greater control over how they schedule their teaching (e.g. by some use of asynchronous online teaching methods) or by a decrease in the time committed to teaching, or both. For large investments, appropriate metrics („performance indicators”) should be defined, monitored and analysed to demonstrate how these objectives have been met. Priority should be given to investments into tools and methods that have proven their capability or at least have a high probability to meet both objectives.

Recommendation 7: In order to gain enterprise-level benefits from its investments into technology the University should consider integrating teaching and research related ICT across a larger number of components of the central portfolio : Research, Internationalisation, and Alumni. ICT-enhanced learning and teaching should become an integral part of strategic plans and planning on all levels. In addition, a large number of technical integration issues need to be addressed in the short to midterm, to prevent the costs resulting from fragmentation and duplication growing to unsustainable levels.

Recommendation 8: Faculty workloads policies need to recognise the special characteristics of time investment in eLearning. The PVC L&T and eLearning co-ordinator should facilitate this process, in particular by facilitating further exploration of workloads issues and disseminating guidelines when ready.

Recommendations concerning the operation of FOLT

Recommendation 9: Internal structuring of FOLT be revised, to allow greater delegation of responsibility to project managers and educational designers and to enable the eLearning Administrator to spend more time on higher-level management and leadership issues. Arrangements to include someone to deputise for the eLearning Administrator as necessary.

Recommendation 10: Recognition should be given to the potential contribution to research and scholarship of the educational designers and project managers. They can play an important role in helping document and share good practice, as well as in enhancing the University's reputation for innovation and the scholarship of teaching.

Recommendation 11: Strategic development projects should focus on change at the program level (not individual UoSs). The decision to move ahead with a strategic development project should involve commitment of a teaching team, not just a single academic. It is also appropriate for strategic development projects to tackle opportunities that have even wider potential benefits – eg in providing

tools, resources or platforms that are of use to the whole University. The Dean of any faculty involved in a strategic development project should be required to authorise the allocation of academic staff time, and the University eLearning coordinator should expect to have access to the Dean where any difficulties about staff commitment arise. Project planning should take proper account of the rhythm of the academic year, and acknowledge there are periods when academic staff contributions are unlikely to be made.

Recommendation 12: A semester-long programme of FOLT workshops should be published prior to the start of semester. This should include a mix of beginners and more advanced workshops, with a clear articulation of the rationale for each, and of progression from one to another. Planning of the workshop program should be done in collaboration with ITL.

Recommendation 13: The application to activate (AtoA) process needs to be revised. Routine technical checking (eg broken links) should be delegated to staff who are not so highly qualified and in demand as the educational designers. Casual help and automatic link checking tools may play a part here. More serious attention should be given to the pedagogical qualities of WebCT sites. This ought to be done on a sampling basis, by experienced staff (eg the educational designers), looking at mature sites (ie in the form they typically take towards the end of semester, rather than near the start of semester). The eLearning co-ordinator should design a protocol for this QA process, which should also be expected to provide a way of identifying and sharing good practice across the University.

Recommendation 14: The eLearning coordinator work with senior staff from ITS and the Library (and other student-facing units as appropriate) to identify ways in which a unified student help system can be created.

Recommendation 15: In light of the increasingly complex and demanding technical infrastructure required for a technology-intensive campus, we recommend moving the server-related hard- and software as well as related purchasing and maintenance activities to ITS. ITS should also manage the purchasing/licensing process for the LMS as well as other software and hardware that might be required for ICT-supported learning

Recommendation 16: It is further recommended that ITS identifies a person to liaise with the Office of the PVC L&T and the USyd eLearning team, in particular the eLearning administrator. This will in particular be required to allow for a smooth migration to database-oriented LMSs, for the integration of net-based audio/visual technologies, and for supporting clients with more advanced technical needs. Positioning of the responsibilities related to data exchange between major institutional resources (e.g. moving student data from FlexSIS to WebCT and staff data from PeopleSoft to WebCT in a timely, appropriate and reliable manner) will also need consideration.