

# Improving teaching and learning through discipline-specific support models

Mark Freeman, University of Sydney, and Carol Johnston, University of Melbourne

DOI:10.3794/ijme.71.155

Received: March 2006

Revised: January 2008; June 2008

Accepted: June 2008

## Abstract

In recent years the quality of teaching and the learning experience in higher education has suffered due to a multiplicity of factors including technological change, student diversity, research expectations and funding constraints. Such a dynamic context presents challenges and opportunities. These recent developments prompted two of Australia's largest research-intensive universities, The University of Melbourne and The University of Sydney, to create a business discipline-specific teaching and learning support model for use at their respective institutions. The model was designed to supplement centrally provided student and staff support activities rather than replace them. This paper compares and contrasts the efficacy of the model, as well as the factors that led to its creation and the specific units that comprise the model. The paper also identifies common themes that have contributed to the success of the units. Further, it examines emerging evidence that a contextually relevant approach to teaching and learning offers tangible benefits.

*Keywords:* professional development; decentralisation; teaching and learning support; change

## Introduction

Higher education in Australia and throughout the world faces the challenge of significant and ongoing changes that seriously impact the quality of teaching and learning. The imperative to support improved teaching and learning outcomes has triggered debate as to how this can best be achieved. In the new paradigm where increased accountability and competition prevail, academics are looking for improved modes of professional development in support of their teaching. Likewise, students are demanding new modes of learning support which, to date, have mostly been provided by centralised units.

This paper explores the reasons why the business faculties at The University of Melbourne and The University of Sydney adopted discipline-specific teaching and learning support units that integrate with centralised efforts. The multifaceted model adopted in both the faculties recognised the importance of addressing both student and academic needs concurrently. Similarly, there was early recognition that new technologies offered an effective support pathway.

The research-intensive nature of both faculties indicated that a strong focus on the scholarship of teaching and research must underpin the work of the faculty-based units. Student and staff support services were integrated into daily teaching and learning life through subject or project specific programmes and one-on-one academic staff interaction. These so-called faculty units are integral to the life of the faculty and contribute significantly to its strategic direction in relation to teaching and learning. For students, such programmes might include course specific mentor programmes, peer assisted study schemes and individual tutorials. Staff might engage in tutor training programmes, new staff teaching orientation programmes and individual teaching analysis assistance pertinent to the disciplines of the faculty.

Accordingly, we first review the literature and evidence for the establishment of discipline-specific teaching and learning support units. We then review the specific contextual factors leading to the establishment of units in the respective business faculties and describe a number of the initiatives prioritised by the units. Finally, we discuss emerging outcomes and the implications of these initiatives before concluding and identifying areas for future development and research.

---

*Mark Freeman is Associate Professor and Director of the Office of Learning and Teaching in Economics and Business at the University of Sydney. Mark provides leadership in learning and teaching within the faculty as associate dean and beyond through his role as chair of the Australian Business Deans Council Teaching and Learning Network. His research interests extend beyond finance education and e-learning to academic development, organisational and system-wide change in business higher education.*

*Carol Johnston is Associate Professor and Assistant Dean in the Faculty of Economics and Commerce at the University of Melbourne. She has published in national and international journals on collaborative problem solving, peer learning, assessment in online learning and the scholarship of teaching in the context of economics and commerce disciplines.*

## Relevant literature

One of the most important variables impacting higher education is public sector funding. Across OECD countries, “private sources of funding are becoming increasingly important” (OECD, 2007: 14). Australian governments for example have progressively reduced funding in real terms which has resulted in a greater reliance on income derived from student fees (Marginson, 2008). Universities are obliged to compete in the recruitment of students beyond their domestic, local and mostly government-subsidised environments, which usually involves targeting international students who pay full fees. The quality of research is also under the spotlight in Britain, New Zealand and Australia where national exercises assess research outcomes (ARC, 2008). Unfortunately, increased emphasis on research has the potential to diminish teaching quality if institutions (and individuals) regard these activities as being mutually exclusive. In Australia, the potential negative trade-off between teaching and research is partly offset by regular quality audits of the entire university portfolio as well as those specific to teaching. Additional funding through the Learning and Teaching Performance Fund established in 2005 is also made available for demonstrated teaching achievements, albeit using somewhat lagged indicators.

## Pressures on teachers and students

Regardless of quality audits, and additional bonuses for learning and teaching, the priority given to teaching by academics is being constantly challenged. In particular, academics working in the various schools of business must accommodate increased and more heterogeneous student cohorts that contest previously accepted teaching styles and cultures. The expectation that academic staff need to do ‘more with less’ is a daily reminder that teaching staff in business faculties are under pressure. Time spent on teaching might be seen as an opportunity cost compared to time spent on researching. Bennett (2001) reported increasing class sizes and university management pressure as the main drivers for academics to adopt new teaching technologies and methods. He reported that UK academics perceive themselves as lacking the skills to apply new teaching methods and/or technologies, and also lacking in time and training to implement new approaches. Similarly, he believed that universities were ill equipped to meet the challenge. Global competition, market deregulation, technology and the rapid advance in knowledge continue to impact business practices and the business curriculum in ways that are not always beneficial. It takes time to not only consider the stock of possible responses such as curriculum changes, but also to implement favoured courses of action and subsequently evaluate their impact. In striving for quality benchmark standards and processes, international peer accreditation agencies for business higher education (e.g. The Association to Advance Collegiate Schools of Business, AACSB) are playing an increasingly important role.

The student community is also feeling the effects of the new realities. In the increasingly deregulated Australian higher education sector, fees continue to rise. Higher fees drive increased student expectations of service; the threat of failing a unit of study has serious cost implications for many students already hard-pressed to meet their financial obligations. In recent years there has been a quantum leap in the cultural diversity of the student body. Improved employment opportunities following the successful completion of business-related courses, and reflected in the expanded demand from international students for places, has led to this increase in diversity. This has been an enriching experience for many, although it challenges accepted norms brought to the learning process. Changes in university policies reflecting community concerns about academic standards require students to abide by new and tighter policies. Some policy changes are to be applauded. For example, the recent introduction of mandatory plagiarism detection software on assessments in some university contexts is expected to assist business students to conform to ethical standards in academic life and, in due course, business life. Other changes highlight the need for time management. Students must balance meeting with peers to work on an increasing number of group assessments (often off-campus) with inflexible part-time work arrangements, which provide a source of income (James *et al.*, 2007). Other time constraints include the need to clarify content, resolve referencing or literacy queries, and obtain timely and contextualised feedback, at a time when their teachers are under similar time pressures.

## Decentralised learning and teaching support

Centralised academic and student support units began to emerge in the 1980s, peaking in the mid-1990s. Hicks (1999: 45) observed that the scope of such units varies considerably:

Some deal only with academic staff; others provide services to all employees of the university. Some have a focus on teaching and learning; others have a broader focus including the development of research and leadership within the university. Some set their boundaries in terms of services to staff; others also provide student learning and study skills support. Some units are formally recognised as academic departments, while others are service units with little or no expectation that they will engage in research into aspects of higher education.

Since the peak the trend appears to have been towards the absorption of central units into multimedia units in response to the emergence of e-learning. Some units have been disbanded altogether (Hicks, 1999) which

may reflect resource constraints. A more convincing explanation might be that some units were largely ineffective at demonstrating improved teaching and learning. This in turn may reflect a dissonance between the 'language' of the academic staff developer and the 'language' of the disciplines in which they were trying to achieve change. Elton (2003) argues that the most effective change in higher education is both top down and bottom up. There is compelling evidence that central initiatives need to be adapted and supplemented to allow for greater localisation and contextualisation.

Business faculties appear to have a distinctive culture of learning and teaching that sets them apart from other faculties and differences between business disciplines are also common. The tools of analysis differ, as do the use of databases and statistical techniques. For example, in the discipline of accounting the early years of the degree are likely to be process-oriented and technical in nature, whereas the discipline of economics requires the synthesis of mathematical skills with application, analysis and evaluation of theories and models. Accounting may be best taught through problem sets and examples while case studies and discussion may prove more effective in economics. Undergraduate business degrees are also subject to external accreditation authorities (e.g. Institute of Chartered Accountants in Australia) which, in one sense, make them professional degrees, unlike arts and science. As business faculties increasingly compete in global markets, international accreditation (e.g. AACSB and EQUIS) is frequently on the agenda. In view of the fact that accreditation processes such as assurance of learning influence the teaching and learning cultures in business faculties, we argue that a distinctive culture can only be supported with the integration of central and local unit provision.

Thus, the argument for faculty-based teaching and learning support models can be articulated in this fashion. First, emerging research indicates that the influence of central units is mixed, both in relation to how academics engage in their own professional development and the extent to which it is successful. In this regard the work of Gibbs and Coffee (2004) on centralised graduate certificate programmes in higher education shows positive results for those who self-select for such courses. In contrast, Martin and Ramsden (1994) demonstrate that central unit influence is dissipated in the local context. Motivated academics returning to local departments with sound, centrally gathered teaching ideas might find the disciplinary context disinterested and unresponsive. In these circumstances the influence of the central unit is soon lost, which is unsurprising given that academics owe their primary allegiance to their discipline (Becher, 1994; Hicks, 1999). There is often an established community of practice (Hutchings, 2000), with a favoured disciplinary epistemology and values (Healey, 2000). Central academic developers assigned to faculties are unlikely to share such historically and contextually developed knowledge and values. Limited time spent in a faculty has actually been found to constrain understanding of the local, personal and the particular affecting the nature of teaching practice (Bryant and Usher, 1997). Lueddeke (2003) concurs, noting the strong impact of discipline on the scholarship of teaching over qualification, gender and years of teaching. According to Huber and Morreale (2002: 2):

Each department has its own intellectual history, agreements and disputes about subject matter and methods that influence what is taught, to whom, when, where, how and why. Each has a set of traditional pedagogies such as lab instruction and problem sets in sciences and its own discourse of reflection and reform. Each has its own community of scholars interested in teaching and learning in that field with one or more journals, associations and face-to-face forums for pedagogical exchange...[they] must address field specific issues if they are going to be heard in their own disciplines, and they must speak in a language that their colleagues understand.

Bennett (2001) reports that whilst academics have a good knowledge about central help they fail to use it, preferring instead to consult departmental colleagues and friends. The latter is not surprising given that teaching is still largely a private and at times secretive behaviour (Elton, 2003). Boud (1999) argues strongly for strategies that support reciprocal peer learning between disciplinary colleagues over coffee, near the photocopier or in the office of a departmental peer. Nevertheless, challenges remain: "the danger arises of unquestioning conformity to suggestions made by highly regarded peers who are seen as expert in a subject, resulting perhaps in the application of inappropriate methods" (Cherrington, 1989, cited in Bennett, 2001: 45).

The second argument in favour of devolving teaching and learning support to the faculty organisational unit, rather than smaller organisational departments (i.e. disciplines), relates to critical mass and the broadly shared norms that exist around established faculty structures. A faculty-based unit with reach into the respective departments has clear cost advantages in that a shared structure is already in place. Also, accounting academics and finance academics would seem to have more in common than with their counterparts in medical or engineering faculties.

A further reason is that identifying and motivating departmental staff to be trained in a centralised unit, and then have them return as the local teaching champion, is likely to be more of a challenge than appointing motivated staff to a faculty-based unit. The impact of the former depends significantly on the individual's

personal skills and their sustained interest in pursuing a ‘teaching’ focus. A teaching focus defies accepted career and rewards norms that typically place significant value on disciplinary research, especially in research-intensive universities facing research assessment exercises. A faculty-based academic developer accepting such a career move is more likely to survive and add value. Departmental champions are less likely than academics from a faculty-based unit, with position or earned respect, to be able to influence change, particularly if departmental heads hold an information-transmission, teacher-centric model of teaching. It is worth noting that Luedekke (2003) found a significantly greater proportion of business academics at one institution held the preferred conception (i.e. conception-change student-centred) over technology-discipline academics.

In short, faculty-based units can be expected to provide a critical mass of expertise that more effectively provide disciplinary-relevant support and utilise generic support available from central support units.

Third, issues of strategic importance in relation to teaching and learning can be addressed more effectively through a faculty-based rather than a centralised unit, which is likely to be focussed on university strategic directions. Faculty-based units understand the university-wide strategic direction, but have the capacity to interpret these within the context of their own faculty.

In Australian universities, faculties are usually composed of several departments which are funded on the basis of student load, which means there is often little financial incentive for them to focus on teaching quality. A faculty-based unit can stimulate this focus through brokering the strategic direction of the university and faculty in relation to teaching quality.

Furthermore, it is more likely that such localised, context specific units provide a better structural fit for supporting cultural change because it already has a common identity and mechanisms in place to foster ‘trading zones’ that result in improved outcomes for the faculty.

This story is, of course, about the strength of disciplinary styles in shaping the scholarship of teaching and learning. But it is also a story about the emergence of a “trading zone” among the disciplines, where scholars are busy simplifying, translating, telling, and persuading “foreigners” to hear their stories and try their wares. In this zone, one finds scholars of teaching and learning seeking advice, collaborations, references, methods, and colleagues to fill in whatever their own disciplinary communities cannot or will not provide. Their goals are to do better by their students, and they are willing (within limits) to enter the trading zone and buy, beg, borrow or steal the tools they need to do the job (Huber and Morreale, 2002: 19).

Related to this is the clear role of faculty leaders. The commitment of leaders is imperative if actual change leading to improvement is to occur (Schofield and Olson, 2000; Zuber-Skerritt, 2001; Kenny, 2004). The moral and financial support of faculty leaders is more likely to be facilitated through a ‘local’ faculty-based unit than a centralised or fully-distributed departmental ‘dispersed’ model. Such units can be monitored under the direct guidance of faculty leaders to ensure that programmes address strategically important faculty issues. International accreditation, for example, is an increasingly important strategic issue driving faculty energies.

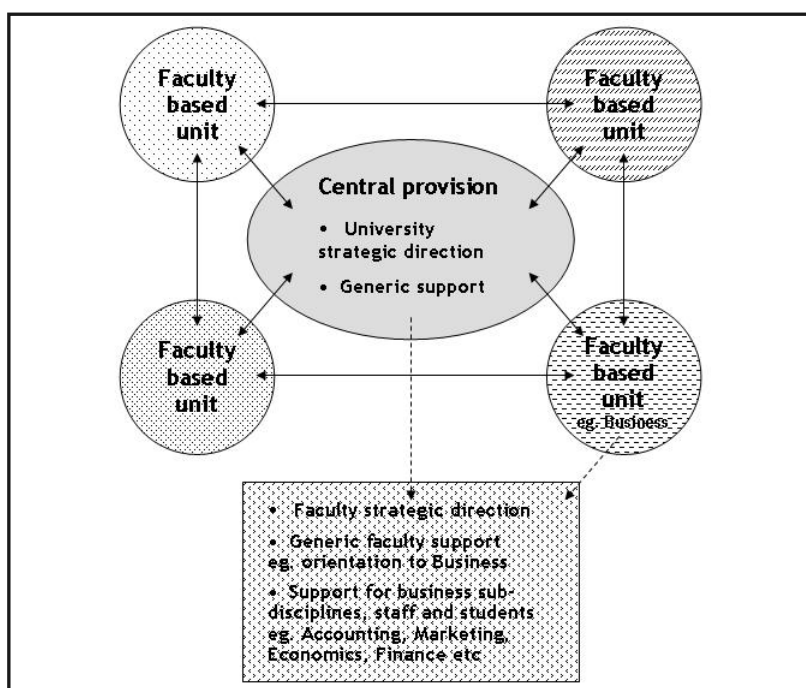


Figure 1: Integrated model of student and staff teaching and learning support

The previous discussion has identified that support can be provided entirely at the central level, in a dispersed manner solely through faculty provision or through a judicious mix of central provision and faculty-based provision. We argue that the integrated approach, as shown in Figure 1, is effective in so far as it allows for ease of implementation of the strategic direction of the university in relation to teaching and learning, while at the same time allowing faculties to realise their own strategic missions in congruence with the university. It allows for support to be more closely targeted to the needs of the faculty, and to be dynamic and quickly responsive to the teaching and learning environment of academic staff and students.

## **Faculty-based teaching and learning support structures for business at the University of Melbourne and the University of Sydney**

The various factors at work in the worldwide and Australian higher education context mentioned previously provided impetus to the establishment of faculty-based teaching and learning support units at The University of Melbourne and The University of Sydney. Both faculties referred to earlier sit within Australia's oldest research-intensive universities with 44,000 and 47,000 students respectively. They offer on-campus business, commerce and economics undergraduate and postgraduate degrees with large doctoral studies programmes. Relatively few students live in residential colleges, which means they do not receive learning support via that particular avenue. The overwhelming majority of students, of which a significant minority are international, commute to the university, and many of them work part-time to fund their studies (Faculty of Economics and Business, 2002).

Both business faculties have experienced faster growth in student numbers than other faculties in their respective universities in the last decade. All the pressures described above (e.g. changes to the funding structure, less homogeneous student cohorts; rising fees and student expectations) are apparent. Each faculty has rapidly expanding enrolments of international students and although such students have to achieve a required score on a language test prior to enrolment, experience shows that extra language and learning support are also needed (Faculty of Economics and Business, 2002). At both universities a separate centralised unit exists to support student learning, another unit for academic development and another unit for e-learning.

A dedicated teaching and learning unit in the Faculty of Economics and Commerce at the University of Melbourne was established in 1998, at a time when the university was moving to enhance teaching quality and learning support. Prior to this, a quality of teaching survey was conducted each semester in every subject taught across the university. Funding was also being increased for multimedia teaching and learning projects, and for university-wide teaching awards. Strategic direction was provided through teaching and learning management plans as well as the appointment of a deputy vice chancellor with special responsibility for teaching and learning. Recruitment, probation, confirmation and promotion criteria were adjusted to reflect an emphasis on teaching as well as research. Various high-level teaching and learning committees, including those with a quality assurance and an e-learning focus, were established to pursue these new initiatives. The Melbourne Faculty of Economics and Commerce Teaching and Learning Unit (TLU) was the first to integrate work with the faculty and the central units, namely the multimedia development group; the Centre for the Study of Higher Education (CSHE) for staff development; and the Language and Learning Skills units for student support. The TLU encompassed four discipline based, interrelated areas: student learning support, academic staff support, research in the teaching of the disciplines of the faculty, and online learning support. In the area of academic staff support and research the cooperation between the CSHE and the TLU proved particularly fruitful through the implementation of several joint projects.

What prompted the decision to establish the TLU? For some time there had been concern with standardised quality of teaching student evaluations. Despite comparing favourably with similar faculties in other Australian institutions on a range of measures, it was felt that the faculty lagged behind others in the home university. It is worth noting that, student perceptions of lower teaching quality in business, vis a vis other fields of study, is not limited to Australian universities (SurrIDGE, 2006). There was a concomitant recognition that the culture in relation to attitudes to teaching needed to be enhanced - both teaching and research had to be excellent if Melbourne was to maintain world-class status.

The decision to establish a TLU was based on a number of factors. Since assessment is a prime motivator of student learning, change in this area was seen as a key strategic driver in improving student learning. Academics required support to achieve such cultural change and a move to embed change within the context of a discipline was seen as most appropriate and effective. Yet, divorced from the faculty, the university's central unit dedicated to the development of online learning was unable to help academics develop resources in a timely manner and be on hand to implement and monitor effectiveness. Also, the faculty's drive to improve teaching and learning quality was beyond the resources that could be equitably supplied from a central unit. A faculty based unit could provide this support in the context of the specific assessments using the 'language' of the learning context. Accordingly, the faculty at Melbourne was determined to rectify shortcomings, prompting it to establish a faculty-based teaching and learning support unit.

The teaching and learning unit in the Faculty of Economics and Business at the University of Sydney was established in 2003, in a context where both the university and faculty had been undertaking systemic change to reposition its standing in teaching as well as research. Led by the arrival of the new Pro Vice Chancellor, academic Paul Ramsden, significant university-level innovations were initiated from 1999 including: extensive systems for evaluating the student learning experience to assist decision making; substantial recognition and financial rewards for performance achieved in teaching, scholarship of teaching and initiatives supporting learning; academic board peer-review of faculty performance; competitive teaching improvement and equipment funds, linked to recommendations from the peer-review process and requiring matched faculty expenditure; repositioning of central academic support to take a strategic leadership role in teaching and scholarship of teaching in lieu of providing workshops and working with individual academics; and the establishment of a series of strategic working groups that operated as a community of practice for faculty representatives to share and collaborate as well as provide feedback on central teaching development ideas.

A new dean of the faculty of Economics and Business in Sydney in 1999 embarked upon a series of initiatives to transform the faculty. By 2002 the faculty focus moved beyond organisational and cultural needs, to efforts aimed at valuing teaching and promoting teaching performance. This was concurrent with efforts to pursue accreditation with the peak international business agency, AACSB. The first academic board peer review of the faculty in 2002 highlighted the need to enhance teaching and learning outcomes at a time of significant student growth, increased cultural diversity among staff and students, an increasing proportion of casual teaching staff, and a growing use of information and communication technologies (ICT) to complement and support classroom teaching. Creating a faculty-based unit was one of the recommendations, and in late 2003 a director was appointed and staffing of the small support unit commenced. From the beginning, collaboration with the Melbourne unit was invaluable in establishing the strategic vision. In late 2004 the second academic board peer-review recommended further resourcing of the unit's activities. Two years after establishment, the teaching and learning unit has a clear role and function in assisting the faculty in its mission to build and sustain the leading learning community in business, economics and government in Australia and its region.

Thus, both faculties established discipline specific teaching and learning support units partly in response to university wide initiatives. In the case of The University of Sydney, the decision to appoint a pro-vice chancellor led to new, university-wide initiatives that stimulated changes in the faculty, including the creation of a teaching and learning unit. This coincided with the appointment of a new dean to the faculty who was eager to develop a quality culture and achieve international accreditation. In the case of Melbourne the creation of the TLU was prompted by the central university decision to collect quality of teaching survey data highlighting faculty differences in performance. Progress towards the adoption of online learning technologies was hastened by the provision of central funds for online learning tool development. The overall effect was to stimulate innovation and reflection on teaching practice in the faculty.

The faculty-based support units at both universities have four to five academics and six to eight ICT and administrative staff. The staff provide a range of one-to-one services and programme support that are integrated with aspects of central provision as well as the teaching and learning contexts of the faculty. These are summarised in Table 1.

In summary, the three main stakeholders in a faculty context are provided with a range of human, print and electronic support services. Together these aim to meet the teaching and learning needs of staff, students and management that vary from 'just-in-time' reactive activities to skill development and quality assurance activities that have both proactive and reactive elements. In addition, academics in the units undertake research in the teaching of the disciplines of the faculty, typically in collaboration with disciplinary teaching colleagues, to direct continuous improvement to these support activities.

## Discussion

The five-year lead over the Sydney unit of the faculty-based teaching and learning centre in Melbourne has enabled it to grow substantially. Notwithstanding, both faculties are beginning to see positive effects from their efforts. In quantitative terms, at Melbourne, students' perceptions of good teaching moved from a mean of 3.5 in 1998 to 3.9 in 2007 on a five-point Likert scale ranging from strongly disagree to strongly agree. At Sydney the data was systematically collected and analysed from 2003, so that (using a similar five-point Likert scale for good teaching) it was found that good teaching perceptions increased steadily over the shorter period from 67% agreement in 2003 to 74% agreement in 2008. Sydney's lead indicator of teaching quality, the scholarship of teaching index, which recognises teaching qualifications, teaching awards and scholarship of teaching research, shows positive trends. Scholarship points per full time academic rose dramatically (e.g. from 1.65 in 2002 to 3.14 in 2006). In 2006, 55 Sydney staff were researching their teaching or publishing teaching materials (up from 33 in 2003); the number with teaching qualifications doubled over the same period; and since 2003 the faculty has produced multiple winners of teaching excellence awards from the university and the state.

Qualitative evidence at both institutions indicates an improved academic staff awareness of the importance of teaching and learning to academic work, and heightened awareness by students of the role of research in their learning experience. For example, using a similar five-point Likert scale, student perceptions of their learning being supported, research-based learning experiences steadily increased from 56% agreement in 2005 to 69% agreement in 2008.

Faculty provision	Central provision
<b>Support for Academics</b>	
<ul style="list-style-type: none"> <li>• Individual consultation including feedback on teaching awards and grant applications, observation or video-taped micro teaching sessions, feedback on scholarship of teaching research, evidence and assistance on scholarly approaches to teaching</li> <li>• Orientation and professional development workshops and seminars aimed at both tutors and permanent academics available at faculty, discipline and subject-specific level</li> <li>• Coordination of distributed network of localised discipline-based teaching experts</li> <li>• Support for learning management system and online tool development</li> <li>• Online (text and video) resources for tutors and online resources for permanent academics including support for evidence-based scholarly teaching and teaching-related research</li> <li>• Paper-based and a subscriber-based listserv disseminating teaching tips and resources</li> <li>• Collaboration and support in research in the teaching of the disciplines of the faculty</li> </ul>	<ul style="list-style-type: none"> <li>• Faculty orientation builds on university orientation conducted by centre</li> <li>• Academics in faculty contribute to workshops and seminars conducted by centre on teaching and learning</li> <li>• Online resources developed in faculty made available for other faculties to customise to own needs through the central multimedia unit</li> <li>• Academics in faculty contribute to research by centre and by local units in relation to teaching and learning</li> <li>• Print materials developed by centre are used as basis for development of disciplinary based materials in the faculty units where appropriate</li> </ul>
<b>Support for Faculty Leaders</b>	
<ul style="list-style-type: none"> <li>• Individual consultation and day to day advice to faculty leaders and managers in relation to future directions and interactions with university and centralised support units</li> <li>• Coordination of teaching and learning plans, teaching performance reporting, quality assurance measures and accreditation requirements</li> <li>• Conducting evaluation and research to support ongoing teaching quality decisions</li> <li>• Online resources for supporting teaching quality including development of online tools for compliance (e.g. academic honesty)</li> </ul>	<ul style="list-style-type: none"> <li>• Central teaching and learning strategic and operational plans</li> <li>• Advice in relation to implementation of faculty initiatives in support of central plans</li> </ul>
<b>Support for Students</b>	
<ul style="list-style-type: none"> <li>• Individual consultation including feedback on writing and literacy, learning skills (e.g. referencing), study skills (e.g. time management), maths skills within the discipline context of the faculty</li> <li>• Orientation, transition and study skills workshops (eg. assignment planning, analytical writing, exam anxiety) for undergraduates and postgraduates</li> <li>• Coordination of student peer-mentoring programmes for undergraduates and postgraduates</li> <li>• Peer-assisted study sessions at the subject level</li> <li>• Literacy diagnostic and support at the first-year subject level</li> <li>• Student-at-risk programme for undergraduates and postgraduates</li> <li>• Online pre-arrival self-diagnostic tools and support (eg. for numeracy)</li> <li>• Online (text and video) resources including audio streaming of lectures, self-paced learning (e.g. academic honesty) and learning support (e.g. case analysis)</li> <li>• Paper-based learning tips and resources</li> </ul>	<ul style="list-style-type: none"> <li>• Generic learning skills and literacy support individual consultations</li> <li>• Generic online plagiarism and academic honesty tools and guidelines</li> <li>• Generic paper based learning resources for students</li> </ul>

**Table 1:** Overview of activities provided by faculty-based units and integration with central provision

In qualitative terms, the faculty-based teaching and learning support units in both institutions have some common features worthy of discussion. Both have strong ongoing commitment from faculty leaders, without which such units are unlikely to succeed. Deans and heads of schools and departments are committed to the

principle of improvement in teaching and learning and speak with one voice on this general issue. The leaders of the learning and teaching support unit have come to understand that disciplinary cultures influence perceptions of good teaching practice and therefore a 'one size fits all' approach is unlikely to succeed. In short, a discipline-based support system is more beneficial to stakeholders than a more distant, centrally placed unit.

An approach that allows discussion and is not heavy handed is important in building respect and trust between academics in the support units and the departmental academics, although, understandably, this is a slow process. Embedding improvements and innovations into the teaching and learning culture in a faculty also requires considerable patience. For example, at Melbourne in 1998 most students were assessed primarily via exams and timed tests. Using the committee structure in the faculty to agree on assessment guidelines, this has gradually changed over time. A wider range of assessment instruments are now employed and group as well as individual assessment is now regularly used.

Similarly, teaching grants have been used to support academic staff wishing to introduce an innovative practice or develop a specific teaching tool. Such grants have achieved positive outcomes in so far as they contribute to an ad hoc dialogue about teaching and learning that takes place in the myriad of daily interactions between academics over lunch and in the coffee room. They also improve student engagement since students become involved in new approaches to teaching and learning. For example, students in peer learning programs are significantly less likely to have lower grades and students participating in the postgraduate peer mentoring program have a significantly higher retention rate (Faculty of Economics and Business, 2008). Finally, teaching grants contribute to research in the teaching of the various disciplines of the faculty. Teaching grants appear more effective than teaching awards in stimulating a change in teaching culture as awards reward excellence but do not directly stimulate innovation and engagement (Faculty of Economics and Business, 2008).

Based on the evidence, it appears that a faculty-based approach can, and should, take an integrated and strategic approach to providing support services for academic staff, students and administrators. This allows a single and common vision to thread through all activities. Student support services are now being developed in ways that are congruent with academic support services for both casual tutors and permanent academics. Indeed, they are consistent with faculty and university strategic objectives. A good example of this is the Peer Assisted Study Scheme (PASS) which has been implemented at both Sydney and Melbourne which trains (and pays) later year students to conduct study groups with junior students in particular subjects. The success of this initiative measured for example by lower failure rates, sits well with the goals of supporting students in independent study, the development of communication and collaboration skills, as well as the building of a cohort of students who can later be encouraged to take on fully fledged tutoring roles and postgraduate study.

Both units work collaboratively and collegially in various ways. For example, collaboration with centralised units ensures that services provided within the faculty supplement and reinforce rather than substitute, or worse contradict, central provision. Joint resources have been developed with centralised units that have then been shared with other faculties. Collaborative initiatives have also occurred with other faculties (e.g. numeracy diagnostics with mathematics and academic mentoring programme with the education faculty). Academics from the faculty-based support units have contributed to staff development seminars provided by the central academic development units and collaborate with them in research. There are a number of joint research projects in place involving collaboration between central unit academic staff, local unit academic staff and academics in the faculty. These have been particularly valuable in raising awareness of the education literature and building a scholarly approach to teaching and learning in the faculty.

The creation of faculty-based units also facilitated the greater uptake of an evidence-based and scholarly approach to teaching and innovation. The units assist in gathering relevant evidence that time constraints would have otherwise prohibited collecting or analysing. All projects conducted by the units are subjected to rigorous evaluation and where possible joint research publications are pursued. The ongoing evaluation of projects and programmes results in refinement and improvement, and assists in aligning the work of the units with the needs of academics and the strategic direction of the faculty. Output of refereed scholarship of teaching publications more than tripled at Sydney over the period from 2003.

Furthermore, a scholarly approach to design and rigorous evaluation of projects sets the stage for other benefits. For example, professional development implicitly takes place as disciplinary colleagues are exposed either directly or indirectly to educational research literature - an effective alternative to attending a centralised professional development workshop. A research outcome in a disciplinary teaching journal is an engaging incentive for disciplinary colleagues particularly in such research-focussed universities. And the potential flow-on benefit exists - in that academic economists are more likely to engage if a peer economist has researched and published evidence in for example, the *Journal of Economics Education*. For example, in the period 1998 to 2004, discipline academics in collaboration with the academics in the faculty TLU at

Melbourne completed an average of two fully refereed journal articles each year related to teaching innovations in the faculty. This is an excellent way to engage academics in disciplinary departments and allows them to achieve joint publications in the higher education literature which is useful in promotion applications.

A further significant aspect of collaboration relates to the two faculty-based units at Melbourne and Sydney. Joint resources have been developed (e.g. self-paced development resources for tutors that include streamed videos) and other informal benchmarking activities between comparative programmes (e.g. tutor training, peer mentoring and peer assisted learning). This has been a valuable knowledge-sharing and informal benchmarking experience. Henderson-Smart *et al.* (2006) provide some insights into a method for benchmarking teaching and learning that is similar to the approach taken between the two faculty units. It has allowed the units to cross-fertilise ideas and has contributed to the building of networks of academics interested in learning support in a disciplinary context.

An example of a localised and more distributed collegial approach is the learning and teaching associates programme at Sydney. In this programme, recognised and enthusiastic teachers with leadership abilities, as part of a community of professional practitioners, are funded to provide discipline-based leadership and localised expertise. They extend the provision of teaching and learning support in contextually relevant ways, strengthen the capacities of their respective departments and embed the influence of the faculty unit. They also provide a disciplinary perspective on possible changes, and input into strategic planning for teaching and learning.

While both faculty-based units provide reactive, one-to-one support to academic staff and students, they have been able to focus on strategic initiatives. The latter programmes are much less resource-intensive and focus on helping individuals to help themselves. For example, the student peer-mentoring programme seeks to connect new students in order to avoid student isolation, which is a problem for many international students. The peer mentoring programmes have the potential to improve retention rates while the peer learning programmes have been demonstrated to have a positive impact on student pass rates and student satisfaction. The number of students taking advantage of the individual consultations at Melbourne has risen steadily as a proportion of the cohort each year. A reduction in the differential pass rate for international and domestic students is another indirect measure that improvement is at hand. While no direct link between these programmes and student performance and/or satisfaction can be established, it is the case that quality of teaching satisfaction measures indicates a concomitant improvement.

## Conclusion

This paper has described how two business faculties in large, research-intensive Australian universities employed a discipline-specific teaching and learning support model that was able to integrate with centralised support to achieve improvements in teaching and learning. Drawing on the experience of the two units, the emerging evidence suggests this is a cost-effective, timely and relevant strategy that business faculties can employ to support improvements in the current complex and rapidly changing higher education context. Nonetheless, since these results are based on two institutions that occupy a particular niche of the Australian higher education system, there are obvious limitations, and to extrapolate these results to the entire academic community would be a mistake.

Essential to the process of cultural change in teaching and learning is the support of faculty leaders and the integration of the support model across relevant stakeholders, namely staff, students, faculty leaders and centralised support units. Collaboration in all its forms - top-down, bottom-up, internal-external - is crucial, although at times problematic. The usefulness of collaboration and informal benchmarking to jumpstart improvements in higher education, particularly as experienced between these two faculty-based teaching and learning units, would be a worthy avenue for future research.

The importance of quantitative evidence of changes in the quality of teaching and learning, while open to a range of criticisms, nevertheless provides an effective albeit blunt tool to demonstrate the need to improve (or congratulate). Researchers respond to research evidence and having access to this evidence is instrumental in gaining the attention of heads of departments and academic staff, and engaging them in the improvement process. Within the units, evaluation of programmes offered provides the respective faculties with evidence of the effectiveness or ineffectiveness of strategies and programmes offered. This contributes to effective resource allocation. Faculties do not support such units unless they perceive them to be effective in improving the learning and teaching experience of students and staff.

The collaboration between academic staff in the faculty, academics in the faculty teaching and learning units, and academics in the central support units, provides an avenue for building the scholarship of teaching in higher education. As a result of this collaboration, some academics have been engaged, often for the first time, in the higher education literature and have moved to a reflective, scholarly approach in their teaching.

Several have published in this literature following receipt of a faculty grant and have been promoted and confirmed in their positions, in part, as a result. Staff in the faculty units have published jointly with central unit academics and with members of their own faculty.

The strategic overview in relation to teaching and learning that such units are able to provide has been effective in informing the strategic direction of their respective faculties. The benchmarking collaboration undertaken between the units has been instrumental in providing opportunities for staff of the respective units to engage in an interchange of ideas and strategies that have been beneficial to both faculties.

While we have argued that faculty-based teaching and learning support units are an effective approach to influencing change in teaching and learning practice there is no doubt that such provision is more likely in large faculties with stable or expanding student enrolments. As a possible future direction for small, under-resourced faculties there is also an argument for individual academic appointments who could work with guidance and support provided by central units. A single model for providing academic and student support to teaching academics is unlikely to be appropriate in all contexts. It is our view, however, that innovation, change and improvement in the culture of teaching and learning will be harder to achieve than might otherwise be the case until academic and student support is embedded within the disciplinary context of the faculty.

## References

- Australian Research Council (ARC) (2008) *Excellence in Research for Australia Initiative Consultative Paper*. Available from: [http://www.arc.gov.au/pdf/ERA\\_ConsultationPaper.pdf](http://www.arc.gov.au/pdf/ERA_ConsultationPaper.pdf) [Accessed 25 August 2008].
- Australian Universities Quality Agency (AUQA) (2004) *A report of a quality audit on the University of Sydney*. Available from: [http://www.auqa.edu.au/qualityaudit/sai\\_reports/index.shtml](http://www.auqa.edu.au/qualityaudit/sai_reports/index.shtml) [Accessed 11 August 2005].
- Barrie, S.C., Ginns P., and Prosser, M. (2005) Early impact and outcomes of an institutionally aligned, student focused learning perspective on teaching quality assurance. *Assessment and Evaluation in Higher Education*, 30(5), 641-656.
- Becher, T. (1994) The Significance of Disciplinary Differences. *Studies in Higher Education*, 19(2), 151-161.
- Bennett, R. (2001) Lecturers' attitudes to new teaching methods. *International Journal of Management Education*, 2(1), 42-58.
- Boud, D. (1999) Situating academic development in professional work: Using peer learning. *The Journal for Academic Development*, 4(1), 3-10.
- Bryant, I. and Usher, R. (1997) The personal and the particular: adult educators, postmodernity and the problem of localised knowledge. *Proceedings of the Standing Conference on University Teaching and Research in the Education of Adults*, 27th Annual Conference. London: University of London, Birkbeck College.
- Elton, L. (2003) Disseminations of Innovations in Higher Education: A Change Theory approach. *Tertiary Education and Management*, 9, 199-214.
- Faculty of Economics and Business (2002) *Academic Board Review Phase One Report, University of Sydney*. Available from: [http://www.usyd.edu.au/quality/Reviews/abr\\_phase1.shtml](http://www.usyd.edu.au/quality/Reviews/abr_phase1.shtml) [Accessed 25 August 2008]
- Faculty of Economics and Business (2008) *Academic Board Review Phase Three Report, University of Sydney*. Available from: [http://www.usyd.edu.au/quality/Reviews/abr\\_phase3.shtml](http://www.usyd.edu.au/quality/Reviews/abr_phase3.shtml) [Accessed 25 August 2008]
- Gibbs, G. and Coffee, M. (2004) The impact of training of university teachers on their approach to teaching and the approach to learning of their students. *Active Learning in Higher Education*, 5(1), 87-100
- Healey, M. (2000) Developing the scholarship of teaching in higher education: a discipline-based approach. *Higher Education Research and Development*, 19, 169-189.
- Henderson-Smart, C., Winning, T., Gerzina, T., King, S. and Hyde, S. (2006) Benchmarking Learning and Teaching: developing a method. *Quality Assurance in Education*, 14(2), 143-155.
- Hicks, O. (1999) Integration of central and departmental development - reflections from Australian Universities. *The Journal for Academic Development*, 4(1), 43-51.
- Huber, M and Morreales, S. (eds.) (2002) *Disciplinary Styles in the Scholarship of teaching and Learning: Exploring Common Ground*. Washington, DC: The American Association for Higher Education and the Carnegie Foundation for the Advancement of Teaching.
- Hutchings, P (2000) *Opening Lines: Approaches to the Scholarship of Teaching and Learning*. Menlo Park, CA: The Carnegie Foundation for the Advancement of Teaching.
- James, R., Bexley, E., Devlin, M. and Marginson, S. (2007) *Australian University Students Finances 2006: A Summary of Findings from a National Survey of Students in Public Universities*. Australian Vice Chancellors Committee, Feb.
- Kenny, J. (2004) A study of educational technology project management in Australian universities. *Australasian Journal of Educational Technology*, 20(3), 388-404. Available from: <http://www.ascilite.org.au/ajet/ajet20/kenny.html>
- Lave, J. and Wenger, E. (1994) *Situated Learning: Legitimate Peripheral Participation*. New York: Cambridge University Press.
- Lueddeke, G. (2003) Professionalising teaching practice in higher education: a study of disciplinary variation and teaching scholarship. *Studies in Higher Education*, 28(2), 213-227.
- Marginson, S. (2008) *Submission to Australian Government Review of Australian Higher Education Submission*. Melbourne: Centre for the Study of Higher Education, University of Melbourne.
- Martin, E. and Ramsden, P. (1994) Effectiveness and Efficiency of Course in Teaching Methods for Recently Appointed Academic Staff. In: *DEET Evaluation and Investigations Programme*. Canberra: AGPS.
- OECD (2007) *Education at a Glance 2007*. Paris: Organisation for Economic Co-Operation and Development. Available from: <http://www.oecd.org/dataoecd/60/47/39311361.pdf> [Accessed 25 August 2008].
- Schofield, A. and Olson, A. (2000) *An Evaluation of the Committee for University Teaching and Staff Development (CUTSD) Initiative*. Australian Universities Teaching Committee.
- Surridge, P. (2006) *National Student Survey 2005: Summary Report to Higher Education Funding Council of England*. Available from: [http://www.hefce.ac.uk/pubs/rdreports/2006/rd22\\_06/](http://www.hefce.ac.uk/pubs/rdreports/2006/rd22_06/) [Accessed 25 August 2008]

Zuber-Skerritt, O. (2001) Action learning and action research: paradigm, praxis and programmes. *In*: S. Sankarans, B. Dick, R. Passfield and P. Swepson (eds.) *Effective Change Management Using Action Learning and Action Research: Concepts, Frameworks, Process and Applications*. Lismore: Southern Cross University Press. pp1-20.