

# TEMC

# 2010

Tertiary  
Education  
Management  
Conference

# Refereed Papers

Edited by Ian R Dobson & Maree Conway



Association for Tertiary  
Education Management



**Association for Tertiary Education Management and  
Tertiary Education Facilities Managers Association**

**Tertiary Education and Management Conference 2010**

**Refereed Papers**

Ian R Dobson & Maree Conway (Eds.)

**TEMC - Refereed Papers 2010**

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## **EDITORS' INTRODUCTION**

**Ian R Dobson & Maree Conway**

The Tertiary Education Management (TEM) conference has been a major annual event on the higher education calendar for over thirty years. TEM conferences grew out of conferences held in earlier years by the Association for Tertiary Education and Management (ATEM) and its predecessor, the Association for Tertiary Education Administration (AITEA). The first AITEA conference was held in 1977 on the dual themes of National Policies in Higher Education and Education as a Profession. Conferences were held annually by ATEM since then until 1992, when the then Australasian Association of Higher Education Facilities Directors (AAAPA) became a partner in running the conference, which became known as the ATEM and AAPP Conference. In 2004, the title of the Conference was changed to the Tertiary Education Management Conference to reflect the focus of the conference rather than the two host associations.

The contemporary Tertiary Education Management Conference is organised via a partnership between ATEM and the Tertiary Education Facilities Management Association (TEFMA) (previously the Australasian Association of Higher Education Facilities Officers (AAPP)). It attracts around 600 professional managers and higher education researchers from universities, TAFE institutes, polytechnics, wānanga, government departments, private providers and other organisations. The Conference is the flagship activity each year. It is the opportunity for TEFMA and ATEM to bring its members together for a significant period of professional development, for ATEM/TEFMA to co-host and listen to significant figures in tertiary management and administration as plenary speakers, and to network with like organisations and clients through formal links and sponsorship arrangements.

The conference was re-badged in 2003, to become the Tertiary Education Management Conference, with the aim of building the conference to be the pre-eminent professional development activity for managers in tertiary education. The conference is organised by an organising committee with members from both ATEM and TEFMA. In the interests of professionalism, the conference has used the services of a professional conference organiser, appointed by the TEMC and TEFMA councils either through a tender process or through other arrangements. For the past several years, Leishman Associates has filled this role.

The TEM conference is the only one in the tertiary sector which covers the full range of functions in institutions, and is designed to allow participants to build strong networks across Australia and New Zealand. TEMC has a strong practitioner focus to support the sharing of knowledge and 'know how', and also provides opportunities to focus on big-picture issues as well. It allows participants to reflect on their management practice in a regional, national and global context.

Publishing scholarly work is not new to ATEM. It has been proprietor of a scholarly journal for the past 32 years: the Journal of Higher Education Policy and Management. However, even if ATEM is primarily an association of tertiary education managers, its journal attracts papers from researchers and managers from around the world. ATEM has had a co-proprietor since 2009, the L H Martin Institute for Higher Education Leadership and Management.

One of the changes in content over the Journal's life to date has been a steady decline in the number of practitioner papers published (Dobson, 2009). The main reasons for this have been the relative decline in the number of such papers submitted to the Journal, against the rapid increase in the number of papers submitted by academics. Of course, there is also a section of the tertiary education management 'industry' that has policy, analysis and institutional research and management as its prime interests. Some of the occupants of these newer higher education positions are the university officers that Celia Whitchurch has described in terms of their 'changing identities' (Whitchurch, 2006). The authors of these papers are not drawn exclusively from outside university administrations.

The TEM conference has always been rich with the sort of practitioner research that no longer has many opportunities to be published. To this end, those responsible for organising TEM Conferences agreed a couple of years ago to introduce a 'refereed stream' of papers into the Conference. One of the reasons for this was to try to create a new space in which practitioner research and development can be published. Such material, although based on a background of scholarship and empiricism, will often not be accepted by scholarly journals, often on the grounds that it is based on experience or practice from a single institution. This volume represents an attempt to overcome the hiatus in the publication of material with a practice-driven bent.

But, as the American TV evangelist used to say a number of years ago, 'the kingdom of heaven does not come for free'! Peer-reviewed papers published as part of a refereed stream are counted in the formal annual collection of publications, so there are externally defined standards to be met. The requirements for what can be accepted in a conference 'refereed stream' is laid down by the Department of Innovation, Industry, Science and Research for the Higher Education Research Data Collection (HERDC).

To be eligible for inclusion in HERDC, the conference publication must meet the definition of research as amplified in the key characteristics of research publications and must:

- be peer reviewed on the full paper
- be presented at conferences, workshops or seminars of national or international significance
- be published in full; the papers may appear in a number of different formats, e.g. a volume of proceedings, a special edition of a journal, a normal issue of a journal, a book or a monograph, CD Rom or conference or organisational web site.

Quoting from the 2009 HERDC Guidelines: 'For the purposes of the HERDC, an acceptable peer review process is one that involves an assessment or review of the research publication in its entirety by independent, qualified experts before publication. Independent in this context means independent of the author.'

Peer review is relevant for journal articles and conference publications being counted in the [HERDC] Research Publications Return - Return 2.'

The main reason for this amorphous process is that duly refereed papers accepted for inclusion in a conference refereed stream are eligible to be included in an institution's publications, in the E1 category. Material on the collection and the process can be retrieved from:

<http://www.innovation.gov.au/Section/Research/Pages/highereducationresearchdatacollection.aspx>

For the TEM Conference 2010, 16 papers were submitted and reviewed, and of these, 11 were accepted for inclusion in the refereed stream. Reviewers' comments were reported to authors, and of those papers deemed 'acceptable' several had to be resubmitted having corrected references and adjusted papers to meet the pre-stated style guide.

This is the first time conference organisers have actually 'published' its peer-reviewed conference papers, but it definitely will not be the last. Your feedback you could offer will be gratefully received.

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# **INTERVENTION FOR RETENTION: HOW CAN ACADEMIC AND SOCIAL SUPPORT HELP UNIVERSITIES KEEP THEIR STUDENTS?**

**Alison Owens & Susan Loomes, Central Queensland University, Australia**

## **ABSTRACT**

Tinto's influential model of retention (1975; 2006) depicts academic and social integration as key factors affecting a student's decision to continue their study program. This paper reports on individual interviews with international students who were failing their courses at Central Queensland University Sydney and were subscribed to a monitoring program that assisted them improve their academic performance. Specific social and academic factors affecting their performance prior to and during their 'monitored' study are examined. The outcomes of this research will provide universities with a framework to improve international student retention through the identification and support of students at risk.

Keywords: international students, retention, student support, social integration

This paper was accepted for the TEM Conference 2010 refereed stream.

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## **INTRODUCTION**

Government funding for Australian universities has continually diminished over several decades placing significant financial pressure on universities. In addressing this fiscal challenge, universities have become more reliant on the international student market. However, this market has been critically affected by recent events and concerns particularly in relation to the safety and wellbeing of international students, changes to skilled migration limiting permanent residency options for international students and a strong Australian dollar. The retention of all students is an ongoing concern for universities but in the context of current threats to the continuing success of Australian international higher education, it is timely to consider the factors affecting the retention of international students and invest in strategies to ensure that such students successfully complete their study programmes. In an increasingly competitive national and global market, understanding how to retain international students can preserve the important investment of economic and cultural capital these students deliver to Australian learning and teaching communities. This paper provides a case study of the factors affecting retention of international students at Central Queensland University, Sydney.

## **BACKGROUND**

### **Measuring Retention**

Retention is a complex measure and reporting is somewhat controversial (Norton, 2010) as a consequence of factors such as increasingly common flexible and part-time study options. Retention is defined by the Commonwealth Government's Learning and Teaching Performance Fund as '... the percentage of students in a particular year who neither graduate nor continue studying in an award course at the same institution in the following year' (Crosling & Heagney 2009, p.9). Student attrition is the inverse ratio report of students who leave an institution before completing their programme of study. As the retention of students is one criterion affecting the Australian government's university funding decisions, it is an issue of sector-wide concern. Studies into student retention have focused primarily on the first year experience as it is during the first 'transitional' year of study that students are most likely to withdraw (Kift & Field 2008; Mannan 2007; Crosling & Heagney 2009; Norton 2010).

Retention is conventionally measured annually over two terms. An attrition rate of slightly over 18 per cent in Australia is currently reported (Trounson & Healy 2009) with expected completion rates for first programme at 71-74 per cent (Marks, cited in Norton 2010, p. 57). Recent figures from the UK indicate attrition of between 13-18 per cent (Thomas 2002, p. 424). Attrition at Central Queensland University (CQU) in Sydney is between 7 and 8 per cent per term, counting all students enrolled in a programme that did not graduate and did not continue with their programme. In 'normal reporting' (two terms per year) this would be approximately 15 per cent which is a strong outcome in the sector. As CQU offers three terms in a year, the term by term figure is preferred as the clearest method of tracking retention. This figure includes all non-graduating students regardless of year of study, although it should be acknowledged that international students have limited opportunity to change provider in their first year.

Government regulations associated with international student enrolment in Australian universities prohibit a student from changing provider for the first six months of study (Australian Education International 2010). This is effectively two terms of study or a full academic year at a standard university. Measuring and reporting international student retention and attrition in their first year of study needs to account for this regulation but its effects are not noted in general statistical reports (Trounson & Healy 2009; Gilmore 2009). As reports indicate international student attrition is lower than domestic student rates (Gilmore 2009; Grebennikov 2009), factors which contribute to better retention of international students, including the impact of regulations prohibiting change in provider, warrant investigation. Whilst diploma programmes and some postgraduate programmes are only



comprised of two terms of fulltime study, for most international students, the decision to stay or go to another provider is therefore most likely to be encountered in their third term decision. Few studies have attended to the issue of international student retention yet, clearly, the international student market is both important and somewhat distinct.

### **Understanding Retention of International Students**

The literature on retention recognises that students decide to persist at or leave an institution for a range of reasons including personal, social and organisational factors (Tinto 1975, 2006; Thomas 2002). Whilst students will continue to leave their programme of study for personal and social reasons that cannot necessarily be resolved by the university, all institutions can aim to ensure students do not leave because of institutional failures. As the recruitment investment in international students is a particularly expensive endeavour, institutions need to maximise their returns by retaining those international students they recruit. Whilst the institutional commitment to supporting international students might not be the only factor affecting the successful completion of their programmes with a single provider, this commitment is critically important for the often isolated and vulnerable international student (Marginson, Nyland & Sawir. 2010; Kell & Vogel, 2008). In the past, student attrition was perceived to be the result of individual factors: 'Students failed, not institutions', (Tinto 2006, p.1) but current theorists view the environment, particularly the institution, as complicit in decisions to drop-out or persist with studies.

Studies into retention consistently identify the crucial importance of student engagement or involvement as a driver of retention (Krause & Coates 2008; Tinto 2006; ACER 2008) and emphasise that student engagement is critical in the first year of study where students are most at risk of withdrawing. Institutional activities and approaches that promote student engagement should positively influence the '...time, energy and resources students devote to activities designed to enhance learning at university,' (Krause 2005, p.3). For several years, the CQU approach to learning and teaching has been to adopt Chickering and Gamson's *Seven Principles for Good Practice in Undergraduate Education* (1991) which identifies a range of critical factors supporting student engagement:

- Level of contact between students and staff
- Reciprocity and cooperation among students
- Active learning
- Prompt feedback
- Awareness of the time needed to be spent on the task
- High expectations
- Respecting of diverse talents and ways of learning

In addition to this focus on engaging curriculum and pedagogy, a more holistic focus on building social and academic integration for international students has been a key institutional objective. As student engagement is affected by students' sense of belonging and institutional 'fit' (Bean & Eaton 2002; Thomas 2002; Norton 2010). As international students are more likely to feel isolated and lonely due to their distance from their social network (Khawaja & Dempsey 2008; Marginson et al. 2010), institutions need to work hard to promote integration for international students to ensure their personal as well as academic wellbeing, which are inevitably interrelated. In the context of CQU Sydney where students from over 50 different cultural and language backgrounds are studying, Thomas' recommendation for an institutional 'habitus' that is inclusive and accepting of difference.. [and]... celebrates and prizes diversity' (p.431) as well as 'promoting social networks' (p.436) is particularly useful. CQU strives to create such a 'habitus' through a range of services and initiatives.

### **Social and Academic Integration at CQU**

The approach to student retention at CQU Sydney campus is based on the value expressed by Tinto that '...student retention is everyone's business'. Braxton & McClendon (2002) agree and suggest that

there are numerous people and departments within universities that impact on student retention. In line with this, all campus staff recruitment, training and performance review and development highlight quality customer service provision regardless of staff category or department (see Owens & Loomes 2007). Staff are made aware of the importance of their role in retaining students and how their everyday engagement with students in and out class is an opportunity to enhance student integration into their learning community.

Tinto's influential model of retention (1975) depicts academic and social integration as the key factors affecting a student's decision to continue their study programme with a higher education provider.

Tinto's model has been developed with domestic students in mind and may be expanded (as above) to consider additional and differential *External Factors (International)* that can and do affect international student decisions to continue or discontinue their studies. These factors include social, economic, natural and political events unfolding in home communities as well as internationally. From currency exchange rates to financial crises and natural disasters, the external factors affecting international student ability and motivation to complete their studies are diverse. In addition, international student decisions are affected by education and immigration policies of the Australian government in a manner that domestic student decisions are not. It is the estimate of some commentators (Murray 2010) that international student numbers in Australia may drop by up to 20 per cent in 2010 as a combined outcome of factors including concerns about student safety, less opportunity for skilled employment and residency and a strong Australian dollar. These factors do not affect domestic student retention and Tinto's model may be usefully expanded to incorporate 'international' external factors as contributing to student retention.

Tinto's model emphasises the critical importance of social and academic integration to a successful study experience. CQU has expanded its efforts in providing student opportunity for interaction and integration with staff, other students and the local community over the last few years. Academic integration is achieved through a curriculum and pedagogy that emphasises collaborative and active learning and a proactive and effective Learning Support Unit. Social integration commences as soon as the students arrive on campus (see Appendix 1 for a summary of activities). A fully facilitated enrolment process allows students to integrate with staff members from all areas of the campus from marketing and recruitment to academic staff. Students are timetabled into a thorough orientation programme which includes social activities such as luncheon with students and staff, personalised campus tours and city bus tours. External guest speakers are invited to participate in orientation such as community police officers and health fund representatives.

Other social integration activities are scheduled throughout each term. These include:

- Sporting activities: cricket, soccer, table tennis, basketball, volleyball.
- Social activities: end of term jazz party, parties to celebrate a wide range of cultural festivals such as Chinese New Year and Indian Independence Day, excursions such as trip to the snow fields.
- Community activities: Relay for Life, Seven Bridges Walk, tree planting and charity and fundraising events.
- Communication activities: English conversation corner, interviewing skills workshops, oral communication workshops, academic writing workshops.
- Work-related activities: practitioner presentations, volunteer conference support, job seeking skills workshops, Tax-help project (ATO).

In addition, students are invited to participate in the campus Environmental Committee, the Academic-student Liaison Group and the Occupational Health and Safety Committee. These provide excellent forums for meeting staff and other students, contributing to the campus environment and enhancing a sense of belonging, inclusion and empowerment for participant students. An earlier study explored student participation and satisfaction with these social integration activities (see Owens &

Loomes 2010). This study builds on that research, seeking to identify how such efforts to promote social and academic integration of international students are related to retention.

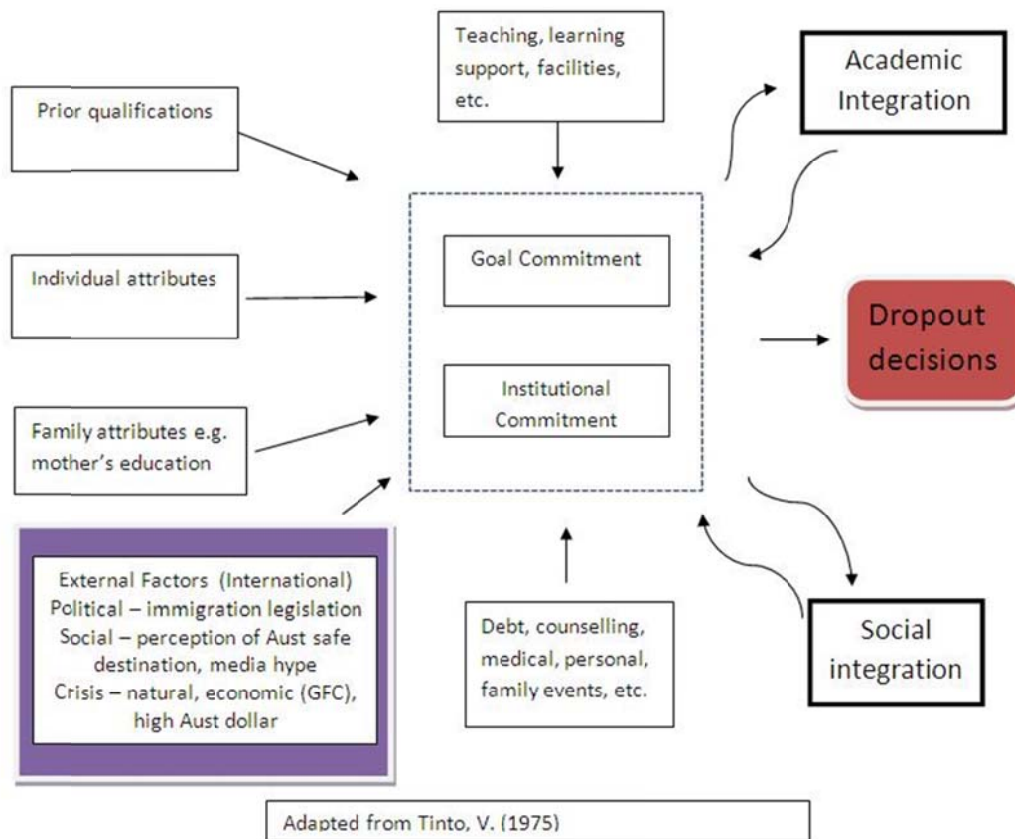


Figure 1: Tinto’s Model of Student Retention (plus ‘External Factors’)

### The Monitoring Academic Progress (MAP) programme

Students who fail to achieve satisfactory progress despite the suite of standard ‘integration’ activities are identified as ‘at risk’ in regular internal reporting systems. They are provided with a personalised support programme (MAP) by the CQU Student Services department. The MAP process has three levels, MAP 1, MAP 2 (must ‘show cause’ why enrolment should not be cancelled) and MAP 3 (the student’s enrolment is cancelled). The process includes monitoring attendance reports and assignment submissions throughout the term to identify low attendance or disengagement. In addition, each term when grades are released a report is run to identify any student who has failed more than 50 per cent of their courses or has multiple fails for a single course. These students are then contacted via telephone, email or SMS and invited in for an interview to discuss their attendance and assignment work and what might be prohibiting their engagement in classes and assessment work. The student forms an ongoing relationship with the Student Services staff member who meets with them regularly over the term to review their progress and monitor their wellbeing. Students are offered additional learning support through the Learning Skills Unit, which has been very effective in improving academic performance. If personal issues are identified, the student is referred to confidential counselling funded initially by the university. Over time, a number of serious issues have been identified during these interviews, such as mental health issues, depression and suicidal thoughts. These are taken very seriously and in some cases students have been taken immediately to a professional counsellor, psychologist or to a hospital if deemed necessary. A student ‘graduates’ from the monitoring programme when they have achieved two successful terms (passed more than 50 per cent of their subjects). Since term 2, 2008, 234 MAP students from CQU have graduated from their degree programmes.

## RESEARCH METHOD

International students score well on conventional measures of retention - spending more time on campus, engaging in online materials and working less than their domestic peers (Krause 2005) - but continue to experience difficulty engaging with their studies. Therefore, qualitative studies of international student retention that seek to explore and explain their perspectives are valuable:

To understand engagement is to understand that for some it is a battle when they encounter university teaching practices which are difficult to understand, and a 'language' which is alien. Some students actively engage in the battle and lose – what do we do for them? (Krause 2005, p.11).

Retention is most frequently reported as statistical data and there is little qualitative, in depth reporting of the experiences of international students in the context of institutional efforts to engage and retain them through and beyond first year. As 'knowing why students leave does not tell us, at least not directly, why students persist,' (Tinto 2006. p.6) this study focuses on understanding the experiences in relation to social and academic integration for a cohort of 'at risk' students who have persisted in their studies despite failing courses. As failing courses is considered a critical drop out event, 'at risk' students who have failed 50 per cent or more of their courses would be expected to leave their institution in higher numbers. Yet the MAP programme at CQU Sydney maintains an internal retention rate equivalent to the general campus-wide retention rate of approximately 15 per cent per year (two terms). This is, in itself, a strong achievement. However, this statistic does not produce a rich understanding of how such a recovery programme works for international students.

In-depth individual interviews were selected as the most appropriate method to allow MAP 'graduate' interviewees to provide a rich description of factors they felt contributed to their study problems and study successes in a confidential and unthreatening environment. Their evaluation of the MAP programme as well as their engagement with the wider range of academic and social integration activities were of central interest to establishing the basis of their decisions to remain at CQU. Interview questions addressed their academic and personal challenges, their views of the monitoring programme, their views and experiences in relation to the social activities provided by the university, their ongoing study intentions and their experiences of good service in and out of the classroom (see Appendix 2).

Seven students were selected from a list of 30 students who had recently graduated from MAP, based on their availability for interview. All students were studying business, accounting or IT programmes (three were postgraduates and four were undergraduates) and had completed a minimum of three terms of study. Students originated from China, India, Saudi Arabia and Vietnam. Two women and five men participated. A research staff member who had no contact with MAP programme or the Student Services staff conducted interviews. They were transcribed for later transcription and analysis. Students were assured of confidentiality in the reporting of their comments. They were encouraged to provide critical as well as positive comments on their study experience at the campus. Transcripts were analysed to identify common experiences, opinions and themes as well as exceptions to common understandings of interviewees.

Although retention literature generally identifies students as 'drop outs', 'throw outs' and 'persisters', a further group of interest is emerging at CQU: the 'returners' – students who left CQU prior to completing their degree, but then returned to resume their studies. As such students can provide valuable insight into international student decisions about persisting and leaving specific to CQU, this research included a telephone survey of a cohort of 'returners' Thirty-seven 'returning' students were identified in regular reporting during term 1, 2010 enrolment. Seven of these students were randomly contacted by telephone and asked a series of questions to establish why they left, where they went and why they returned (see Appendix 3). Feedback from these two research activities is summarised

below and then discussed in relation to retention literature and key issues affecting international study in Australia.

## RESEARCH RESULTS

### Interview Results– Persisters

The most common challenges in passing the courses identified by students in interviews were English proficiency and disparities between prior and current study (in both culturally different contexts and different discipline areas). Many students pointed out the combined effect of a radical change in cultural context, a change in learning and teaching paradigm, and encountering a ‘new’ field of study with specialised language within the wider context of studying in English as a second language, meant comprehension was difficult and existing learning strategies were ineffective. Most students referred to a difficult ‘settling in’ period where they had to adapt to independent study. As all students indicated they had previously worked in examination-only learning contexts, they had many issues in trying to complete written assignments, which two students admitted they did not take seriously, assuming the examination was the key to passing. A significant problem with time management emerged for several of the students who were seeking to balance study and work in an environment where they did not receive the direction from teachers which they had been used to:

*‘... I lost all control, in high school you know, teachers are always checking on you but at uni you have to do everything yourself, it’s a big change you know...,’  
(Chinese male undergraduate).*

*‘In India I studied very well after coming here I lost myself somewhere..totally! I was like crying, crying, crying daily, what happened to me? I was not able to cope’ (Indian female postgraduate).*

Several students identified personal problems and health issues were also affecting their studies and homesickness was mentioned as a common experience. Not surprisingly, all students reported being very stressed at the point at which they were experiencing these challenges. Interestingly, all students nominated their own personal effort, motivation, commitment and focus as the key factor in improving their study performance but they also noted regularly that working with staff in the monitoring programme had powerfully affected their motivation.

All students felt the monitoring programme was a positive experience for them because of the constant contact, friendly interest in their progress and staff responsiveness which helped the students start to self-regulate their learning, manage their stress and inspired them to perform.

*‘The good thing about the programme is .. checking my own things. How am I going with my assignments? I have to report to someone every two weeks and I have to show them what I have done, how I have improved. When I knew that, I was keeping track also,’ (Indian male postgraduate).*

Several students explained that their MAP staff advisor was like their ‘friend’, ‘mate’, ‘buddy’ or ‘family’ and they felt they could discuss all their problems openly with their advisor and receive good advice which was effective in diminishing their stress.

*‘MAP? Oh I think it is really good. I like it because if I have any problems I can tell them and they can tell me the best way to do it,’ (Vietnamese female undergraduate).*

Indeed, many students continued to visit their staff advisor for a chat after they graduated from MAP and referred student-friends to the service regularly whenever they were confused or required advice on a wide range of matters. One student suggested the programme should be strengthened by penalties

so it would be taken more seriously by other students. Another student explained that she was a little distressed at the number of letters she received from the monitoring staff. As she had failed courses for two terms, she viewed any letters from the university with some dread.

All postgraduate students had attended the Learning Skills Unit to access assistance with assignment work and referencing in particular. They were very positive about this resource and appreciated the individual support they received as well as workshops on essay writing, report writing and so on.

*'I took my assignment here and said I don't know anything about this, can you help me out? I had a case study where I had to study the whole summary and search the internet as well, search online. I said please can you select me one of the topics here and help me write it down... and help me? They gave me all the materials and made it very simple,' (Indian female postgraduate).*

The undergraduate students had less contact with the Learning Skills Unit but attended for occasional help mainly with understanding referencing. It was widely acknowledged that the Learning Skills Unit did a 'great job' but there were several complaints that they were not able to get an appointment as the service is popular and you have to book early in the term. One student claimed she was too busy to go to an appointment.

When students were asked what factors besides MAP and the Learning Skills Unit had helped them succeed in their studies, students referred to individual teachers from their discipline or from the the Learning Skills Unit, and their friends at university. Improved time management, improved learning strategies and English comprehension as well as self-discipline and motivation were also discussed.

Two students had experienced significant difficulty balancing work and study.

*'I like to work. I already kept this job a long time and if I not working, I feel guilty with my boss. If I study really bad, I feel guilty with my parents. Sometimes a lot of pressure,' (Vietnamese female undergraduate).*

This student solved her problem by telling her boss she could not work one month before examinations while another student spread his annual study load so that he studied part-time across three terms equivalent to fulltime load across two terms.

Most of the students said they had not considered leaving CQU stating they were 'very comfortable here'.

*'The good feedback for CQU is I have visited all the universities and CQU is the best, so don't leave CQU, but leave **with** CQU (laughter),' (Indian male postgraduate).*

*'No. Never. This university really good university, good reputation, it counts, I don't want to leave, I want my certificate from this uni. No matter if I fail or pass, I will finish my programme here. They have good reputation but also they have good study, they keep on monitoring the students, they don't even leave a single student stranded or in trouble, whatever it is,' (Indian female postgraduate).*

Comments included the convenience CQU offered being located in the CBD near transport and work, a flexible, work-friendly timetable and the organisation of all departments in one building. Several students explained that they did not consider themselves academic 'high achievers' and referred to several leading Australian universities when they explained that they felt they were at the right university for their 'level' of academic skill.

*'It may not be the best uni but it is good for your ability as an international student,' (Vietnamese female undergraduate).*

*'No, I am very comfortable here, even though our govt is paying for me so I can go to any uni I want to. Most of my friends are at Sydney Uni , UNSW, UTS, UWS but I still love the uni here, maybe the place is easier than other unis ,the staff here are good, I find it easy to have everything in one building,' (Saudi Arabian male undergraduate).*

One student said she thought about leaving CQU every time she failed a course but acknowledged that the problem would be the same at any university. All students expressed the intention to complete their studies at CQU.

All students had attended at least one social event during their study – mostly the end of term party. All students felt that social interaction and organised activities were very important, particularly for international students. The challenges of socialising in a second language and the urgent need to do this to improve communication skills as well as establish a network of friends were discussed:

*'New international students; they need to talk...' (Chinese male undergraduate).*

*'I believe that social communication can improve language very well. That is what I believe!' (Chinese male undergraduate).*

Several students complained that the activities being offered were inadequate. Two students felt that students 'flew away' home or to work after classes which made socialising difficult. More events and a wider range of events were proposed. Several students said they were too busy to attend many social events but still saw the value in organised events so that those students who needed to could interact, make connections and share problems. Some students had more 'local' social networks than others as a consequence of prior Australian study, work and club memberships.

In addition to extending social activity options, students suggested that to improve its services CQU might increase the number of books in the library, increase access to computers during peak study periods and provide feedback on annual and term-based student surveys. Students were very positive in their recommendations of CQU to friends.

*'I always tell my friends good things about the uni,' (Indian female postgraduate).*

*'Oh yes, always, even my girlfriend I bought her to study here actually... You can see I do recommend CQU. People say to me I will got here, go there, I say no need to go there... I say I am studying at CQU, having a good experience, teachers are good, staff is really good, everything is available, transport, everything is really close to the campus,' (Indian male postgraduate).*

*'(Laugh) I'm telling them!'* (Saudi Arabian male undergraduate).

*'So far, so good.. I have been here three years,' (Chinese male undergraduate).*

When asked to recount one good experience of customer service students selected staff and services from a wide range of departments including Faculty, student administration, student finance, student services, the Learning Skills Unit. All students were able to name the staff who they perceived as being very helpful. When asked to recount a good teaching experience, students were very positive in their commentary. 'Wonderful', 'awesome', 'amazing', 'one of the best' 'really good' were the adjectives used most frequently to describe teachers they had worked with. It was acknowledged that some teachers were 'better than others' but all students named multiple teachers as inspiring and powerful. Many of these teachers were long-term employees with senior course leadership roles in various disciplines. The main characteristics these students identified as distinguishing the best teachers were providing an active and interactive classroom experience, using real world examples

and materials, spending time consulting individually with students and giving prompt and meaningful feedback.

*'...they always support me like (X) will keep on asking me questions in the class no matter if I sit in the first row or the last no matter,.. he keep on asking me questions and he used to give advice to me. In the first semester he used to keep saying, you have to do your assignment like this.. Immediately when I get the assignment marks he will call me to the office and say to me you are wrong here and you did this very well here so keep on... and (XX) was the same he did the same thing,' (Indian female postgraduate).*

*'The teaching is really good.. (Y) is one of the best, (YY), (YYY), (YYY) all really good! They have broad knowledge. Is students are working on a matter they can take them beyond the limit.. they are really able to deliver the information not just out of the books. They know the workplace,' (Indian male postgraduate).*

*'I have had 22 teachers and think most of them were very helpful,' (Saudi Arabian male undergraduate).*

All students intended looking for a good job after graduation. Most intended to seek employment in Australia but move to their home country or another country to work if that was not possible. All students would consider re-enrolling for a further qualification at CQU. As all students had an inclination to start a career in Australia, they were sensitive to recent changes in skilled migration and experienced some uncertainty about their options. One student expressed a changed intention to apply for permanent residency:

*'After graduation for me, uh... I decide to go back home because Australia you know, before I was try to get PR. I love here, I love living here,..it's a lovely place,... but the politics, the immigration, it is too hard, too harsh, you know so I decide to go back home. I believe the CQU degree will get me a good job in China, (Chinese male undergraduate).*

### **Telephone Interview Results – Returners**

Phone interviews were conducted with seven 'returner' students to ascertain why they left, where they went and why they chose to return. The group included students studying a range of courses with the majority originating from India and China. Their academic transcripts revealed that most of these students were not performing well prior to leaving CQU, however their performance significantly improved on their return.

Half of the students interviewed had participated in social events and the majority of them had attended the Learning Skills Unit while studying at CQU. The interviews revealed varying reasons for leaving CQU, which included financial, personal and family reasons and also pressure from their education agent. None of the students stated that they were dissatisfied with their education experience at the CQU Sydney campus. On leaving CQU several students returned to their home country, others were not studying and two went to another provider.

When the students were asked why they returned to CQU Sydney campus, their responses were very similar. They said 'wanted to stay with CQU', 'really like it', 'didn't want to leave but had to for financial reason'. The students were asked if they would tell their friends positive things about CQU Sydney. All of them said yes except for one student who said they would recommend Sydney University and University NSW first and then CQU.

The students were asked if CQU could do anything better to ensure their studies were successful. Overall, the students' comments suggested that there wasn't much that needed to be done to improve



their experience. A few suggestions were: more books in the library, additional help finding articles for study, exams were too hard and more contact with tutors.

Finally, the group were asked about their plans following graduation. A few were going back to their home country to work, others would seek work in their relevant field in Sydney, and two were going on to complete further studies.

## **DISCUSSION OF RESULTS**

Results from both MAP student interviews and returner interviews provided highly encouraging feedback in relation to CQU efforts to support international students through social and academic integration activities and programmes. It is important to remember that all students in this research were either high-risk attrition as a consequence of failing their courses, or had previously withdrawn from CQU. Their decision to persist in (or return to) their studies and their capacity to improve their academic outcomes is an achievement that is against the odds for such students.

It is evident from MAP 'graduate' comments that they were powerfully affected by the personalised support and attention provided by campus staff from teaching and non-teaching areas. Because of appropriate advice and support, these students were spending more time on their studies and had improved their time management skills, were better able to access resources supporting study and were more motivated in their efforts to learn. Enhanced self regulation was a further outcome to the monitoring programme. These are classic signs of improved engagement and involvement. As more than one-third of university students in Australia recently confessed to finding it '...difficult to motivate themselves to study' (Krause 2005, p.7), such an outcome is significant beyond the international student sector. It has been pointed out that there are a '...wide range of interacting personal and social attributes as well as institutional practices which impact on both retention rates and performance,' (Thomas 2002, p. 426). As such, it can be difficult to identify issues specific to individual students other than by interpersonal counselling and support. A range of studies in the US has established that counselling aids retention (Wilson, Mason & Ewing, 1997; Turner & Berry 2000; Norton 2010). Whilst personal counselling involves significant resource and cost, the alternative in lost tuition fees and dissatisfied students is an unattractive and uneconomic alternative.

A few of the students interviewed experienced a profound sense of loss of control in the first year of their studies. Such an effect is not uncommon for students entering the relative freedom of a university from the context of secondary school where they are formally monitored and controlled by teaching and non-teaching staff and universities are therefore both 'arenas for anxiety as much as for the development of independence,' (Norton 2010, p. 55). Attribution theory identifies an internal 'locus of control' as important for successful study outcomes in that it creates an individual who believes he or she is instrumental in their own success or failures, whereas an external 'locus of control' drives an individual to attribute failures or success to fate or chance (Bean & Eaton 2002, p. 77). It is evident in interview commentary that opportunities to discuss their individual study problems and experiences with a compassionate and skilled advisor assisted these students manage their stress and anxiety, recover their sense of control and to see their own effort as central to success. A 'transition pedagogy' (Kift & Field 2008; Scott, Shah, Grebennikov & Singh 2008) which provides an integrated programme of academic challenge, active learning, student and staff interactions, enriching learning experiences, supportive learning environment and work integrated learning (Kift & Field 2008, p.2/10) is recommended for institutions seeking to mediate the increasing diversity of entering students. Through its academic and social integration programmes CQU is building a successful 'transition pedagogy' suitable for culturally diverse international students. This transition pedagogy is in turn supported by the more intensive and personalised MAP programme which this research indicates is able to both identify and assist those who are not successfully transitioning.

MAP students valued active and interactive class work particularly when it aided them to connect with other students and develop a study network. This supports the sector-wide understanding that

collaborative learning, as well as social interaction, plays an important role in assisting students build peer groups ‘...that play a role in the learning of course content and in the establishment of memberships in the collegiate social communities (Tinto cited in Braxton & McClendon 2002, p.62). In addition, students emphasised the continuing struggle to improve their English and valued formal and informal opportunities to do this by interacting with staff, other students as well as attending language development sessions and accessing English development resources made available by CQU. The capacity for teachers to use accessible language in their classes and provide plentiful explanation and exempling to assist comprehension was noted and well received by students. Essentially, ‘...the more students interact with students and staff, the more likely they are to persist’ (Astin cited in Thomas 2002, p.427). The frequency and accessibility of staff and student interactions appears to support international student engagement and persistence.

A further message evident from interview results is that these international students feel a sense of belonging or a sense of ‘fit’ with CQU. ‘Institutional fit and loyalty lead to the intention to persist which leads to actual persistence,’ (Bean & Eaton 2002, p.77). For many students this sense of ‘fit’ was related to their perceptions of themselves as having ‘limited’ academic skills and talents thereby benefitting from the supportive learning environment and services offered by CQU; a level of support they did not anticipate receiving at other, more highly-ranked institutions. CQU Sydney emphasises quality of teaching above all other academic endeavours.

According high status to teaching can enhance student relationships with staff (Thomas 2002). It is now a ‘widely accepted notion that actions of the faculty, particularly in the classroom, are key to institutional efforts to enhance student retention,’ (Tinto 2006, p.5) but is still more limited than it should be (Tinto 2006). The opportunity to engage personally and in groups with teaching staff was evidently occurring and was highly valued by students. Of particular importance to engaging students in learning is providing quality, timely feedback (Kift & Field 2008; Chickering & Gamson 1991).

Most students in this research indicated that feedback on their assignments was of high quality but some commented this was not consistent for all tutors. In addition to academic feedback, students wanted to know outcomes to student satisfaction surveys they were asked to complete regularly across terms. Feedback, both academic and non-academic, is emphasised in the literature and in this research as critically important to maintaining the engagement of students and thereby engendering persistence and loyalty.

Key outcomes for CQU Sydney from this research involve expanding social integration activities, further resourcing personalised counselling and tutoring, and providing clear and regular feedback on student survey data.

## **CONCLUSION**

This research has contributed to detailing some of the mechanisms that universities can adopt to enhance social and academic integration and positively influence retention for international students at Australian universities. Personalised student support programmes can achieve positive outcomes for international students who are not transitioning to their new study context successfully and are therefore highly likely to withdraw from their study programme. Institutions that invest in such support programmes can expect to achieve improved retention of ‘at risk’ students and better protect their significant recruitment investment in these international students. Pedagogical and bureaucratic approaches that value diversity and difference and promote engagement, collaboration and a ‘student-centred’ work culture and organisational arrangement can generate international student loyalty and a sense of belonging at ‘foreign’ institutions.

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## APPENDIX 1

### Term Integration - Social, Academic and University Commitment

Arrive on Campus	Greeted by friendly marketing staff
Enrolment	Facilitated enrolment, assisted by all staff, in particular, academic staff providing course advice Student timetabled into Learning Skills Workshops
Campus Tour	Students given group tour of campus to meet staff and be familiarised with campus facilities and support
Orientation	Information. Also a comprehensive Orientation Guide is provided on line to be accessed throughout the term. Luncheon with other new students and staff provided
Bus Tour	New students are invited to join bus tour of Sydney to help with familiarisation
Learning Skills Workshops	Held over six weeks to assist students with academic writing, references etc. Student can make a personal appointment as well
Classes Commence	Teaching, learning and assessment designed to facilitate maximum interaction between staff and students
Library Literacy Classes	Library literacy classes held in subject specific classes by key library staff. Students can also visit the library for one on one assistance
Student Attendance Check	Report run to determine students with poor attendance. Student contacted if required. Placed on monitoring programme if deemed necessary
Midterm social activity held	Staff from Student Services hold social integration activity to assist with integration
Exam preparation and revision classes held	Assist students who may not have sat exams in an Australian institution
End of Term Party	Chance to relax and meet new friends
Release of results	If student fails more than 50 per cent or multiple fails then placed on monitoring programme

## APPENDIX 2

### Interview questions for MAP graduates:

1.	What were the main challenges you encountered in trying to pass your courses?
2.	Was there anything else that affected your ability to be successful in your studies?
3.	What features of the Monitoring programme did you like?
4.	What features of Monitoring programme did you dislike?
5.	Did you attend the Learning Skills Unit?
6.	If so, what sort of sessions were most useful? If not, why not?
7.	Would you tell a friend positive things about the MAP programme?
8.	Who or what else has contributed to the improvement in your studies?
9.	Have you ever thought of leaving CQU? Why? Why not?
10.	Do you intend to continue your studies at CQU? Why? Why not?
11.	Do you attend any of the social events held on or off campus such as: end of term party, cultural festivals, sporting activities or community?
12.	How important do you think these social activities are for students?
13.	Is there something CQU doesn't offer that might better support your studies?
14.	Would you tell a friend positive things about CQU?
15.	Can you tell me about one experience of what you think is really good service you have had at the campus?
16.	Can you tell me about one example of what you think is good teaching practice that you have experienced in your studies at the campus?
17.	What do you plan to do after graduation?
18.	Would you consider re-enrolling at CQU if you decided to study for another degree.?

## APPENDIX 3

### Returners telephone interview questions

1.	What was the reason you decided to leave CQU
2.	Can you tell me what provider you went to (if any) when you left CQU and the reasons that you selected this provider?
3.	Where you on a monitoring programme (MAP) prior to leaving CQU?
4.	Did you attend the Learning Skills Unit before you left CQU?
5.	What factor made you decided to return to CQU?
6.	Could CQU do anything better to ensure your studies are successful?
7.	Do you attend social events whilst at CQU such as: end of term party, cultural festivals, sporting events or community events?
8.	Are you currently on the monitoring programme (MAP)?
9.	Would you tell your friends positive things about CQU?

# **THE LONG MARCH: DEVELOPING THE CURTIN LEADERSHIP FRAMEWORK**

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## **ABSTRACT**

The use of leadership frameworks for developing the capability of organisations, including universities, is widespread. An eclectic range of theories describe what leadership 'is' or how leadership is 'done'. However, there is opposition to the application of management models to academic leadership roles. This paper summarises the journey undertaken to develop the Curtin Leadership Framework and provides an insight into Curtin's approach to future directions in career and leadership development. Recommendations include the use of action learning and collegial decision-making along with the need to contextualise leadership for an academic audience when developing a whole of university leadership framework.

Keywords: Academic leadership, management, capability framework, leadership development

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## **INTRODUCTION**

In October 1934, the communist First Red Army reportedly travelled some 10,000 kilometres, first west, then north to escape the stranglehold of the Nationalist army. Of the approximately 100,000 who started out only 10,000 survived the 370-day journey across some of the harshest terrain in China. This march and later successful military campaigns led to the eventual establishment of the Peoples Republic of China under Mao's leadership.

The creation of a leadership and management development framework for Curtin University has likewise been a long march albeit a far less dramatic journey. In late 2007 Curtin established an Organisational Development Unit (ODU) and amongst the University's 'to do' list for the new unit was the design and implementation of a leadership framework suitable for academic and general (or professional) staff in leadership and management roles across the University.

Then in 2009, Curtin adopted a new long-term vision: *To be an international leader shaping the future through our graduates and research, and positioned among the top 20 universities in Asia by 2020* (Curtin 2009a). Implementing the new vision, along with its associated strategies and initiatives, has resulted in each area within the University examining its priorities and capacity for delivering outcomes that assist in positioning Curtin in the top 20 universities in Asia by 2020.

One of the strategies linked to the new vision is to 'Develop a culture of excellence and innovation' (Curtin 2009b). An enabling initiative is to 'Further develop and implement the Curtin Leadership and Management Development Framework' (Curtin 2009b). Curtin's Organisational Development Unit has a key role to play given that the prime responsibility for developing leadership and management capacity is assigned to the Unit. Fundamental to this is the leadership framework.

This paper will provide a summary of the journey, the long march, Curtin's Organisational Development Unit (ODU) has undertaken in developing the Curtin Leadership and Management Development Framework. At the same time, an examination of the Framework and associated learning activities provides an insight into Curtin's approach to future directions in career and leadership development. The paper will briefly summarise the leadership literature, followed by a discussion on leadership frameworks before the Curtin experience is presented. The paper concludes with some reflections and recommendations for others contemplating developing a leadership framework.

## **THE LEADERSHIP LITERATURE**

Numerous theoretic perspectives and disciplines inform the leadership literature – power, motivation, organisational behaviour, management, psychology, and sociology to name a few. There is an eclectic range of theories to explain what leadership 'is' or how leadership is 'done' (Brown 2006).

Is it nature or nurture that determines whether a person becomes a leader? Three theory groups – trait, behavioural and contingency – are commonly reported by researchers while a fourth classification, contemporary theories, has emerged over the past two decades. Trait theory suggests that either a person has leadership traits or they don't (i.e. 'nature') which, in turn, implies that leadership development should only be provided to those with identified leadership traits (though perhaps not yet developed).

Behavioural approaches look at 'what effective leaders do' (Cole, 2001, p. 611) by focussing on the task–person dichotomy and suggest that leaders can be 'made' by learning appropriate leadership behaviours (Lussier & Achua, 2004; Onsmann, 2003). Contingency theories of leadership suggest that 'optimal leader behaviour is contingent upon (i.e. depends upon) the situation' (Arnold, Cooper & Robertson, 1998, p342). Contingency theories extend behavioural approaches but focus on the context



of leader-follower interactions. Arnold et al. note that ‘Contingency theories of leadership propose that different situations demand different leader behaviours’ (1998, p. 342).

Contemporary leadership approaches have been popularised by so called ‘gurus’ – authors such as Covey, Kouzes and Posner, Goleman, Wheatley, and Blanchard. Strategic leadership, transformational leadership, charismatic leadership, team leadership, values-based leadership and servant leadership are examples of popular contemporary theories. Transformational leadership, proposed by Burns (1977, cited in Doyle & Smith 2001) distinguishes between visionary (transformational) leaders who act as change agents by engaging with willing followers and transactional leaders who ‘exchange rewards contingent upon performance and use positional resources in order to encourage desired behaviours’ (Shivers-Blackwell, 2004, p. 43). It is argued that Burns’ theory was ‘the first comprehensive theory of leadership for modern scholars’ (Sorenson 2000).

The plethora of leadership theories can be confusing to both current and aspiring leaders, not to mention those charged with the responsibility of providing appropriate development programmes and processes. Which theory or approach should be used to guide leadership development in a university setting? There is considerable debate (and, in some cases, hostility) as to the applicability of business models to university settings, particularly when applying leadership theories to those in academic leadership roles (Brown 2006; Scott, Coates & Anderson 2008). With this in mind, what does the literature discuss regarding higher education leadership?

### **Higher Education Leadership**

Scott et al. note in their recent study of academic leadership capabilities in Australian Higher Education institutions that ‘Existing research sheds comparatively little systematic light on the distinctions between academic leadership and leadership in other contexts’ (2008, p5). It is important to note that the authors’ comments relate to those in (positional) academic leadership roles and not professional or general staff in leadership roles in Australian universities. Arguably so-called business leadership approaches are seen as broadly applicable to leaders in non-academic leadership roles. For example, Marshall, Adams & Cameron’s (2001) findings, drawing on Ramsden’s (1998) model and the transformational leadership approach, support the task–people constructs implicit in behavioural and contingency theories previously discussed.

The recent Australian ‘Learning Leaders’ study of academic leadership reported five capability clusters: personal, interpersonal, cognitive, role-specific, and generic (Scott et al.2008). The authors note that this capability framework is ‘already validated in studies of successful early career graduates in nine professions [accounting, architecture, primary school education, engineering, information technology, journalism, law, nursing and the sport industry] (Vescio 2005) and in a study of 322 effective [primary and high] school leaders (Scott 2003)’ (Scott et al.2008, p. 18). The authors report that ‘Robinson et al. (2008) in their macro analysis of leadership studies in education have noted that the traditions of instructional leadership and transformational leadership are starting to integrate’ (Scott et al.2008). Hence there is sufficient evidence in the higher education leadership literature to support the broad application of so-called ‘business’ models of leadership and leadership development in higher education and, more specifically, academic leadership, settings.

### **LEADERSHIP FRAMEWORKS**

The use of leadership frameworks for developing the leadership capacity and capability of organisations is widespread in Australia and internationally. A number of organisations have adopted generic or existing frameworks while others have developed their own customised framework.

A framework ‘explains graphically or in narrative form, the main dimensions to be studied – the key factors or variables – and the presumed relationships amongst them’ (Miles and Huberman, 1984 cited

in Scott et al., 2008, p18). Leadership frameworks have multiple uses: they provide focus for leadership development programme designers; they allow staff to understand the organisation's key performance attributes; they can be used as a tool in career planning, succession planning, performance reviews, position descriptions and for selection criteria.

Some frameworks are referred to as capability frameworks, others as competency frameworks and still others as leadership frameworks. Are competency and capability 'two sides of the same coin'? Often the terms are used interchangeably. However the Australian Council for Educational Leaders notes that competence is seen to denote static, context free skills whereas capability is seen as dynamic, future-focussed abilities that allow leaders to successfully navigate unfamiliar and changing circumstances (ACEL 2009). Similarly the study by Scott et al. reported that 'competencies were seen [by participants attending the researchers' workshops] as being associated more with managing than leading; that being competent is 'the ability to perform set tasks to a specified standard' whereas capability 'entails the emotional and cognitive capacity to figure out when and when not to draw on specific competencies, along with the capacity to learn from experience' (2008, p. 10,11).

According to Silzer (in Hollenbeck, McCall & Silzer, 2006, p. 403) leadership frameworks 'help organisations by:

- Openly communicating which leader behaviours are important,
- Helping to discriminate the performance of individuals,
- Linking leader behaviours to the strategic directions and goals of the business, and
- Providing an integrative model of leadership that is relevant across many positions and leadership situations'.

## **THE CURTIN LEADERSHIP FRAMEWORK**

Just as the First Red Army struck west to avoid the encircling nationalist forces before heading north to their destination, the team at Curtin's Organisational Development Unit (ODU) spent months in 2008 reviewing the leadership and leadership development literature before striking towards their objective – the creation of a leadership and management development framework suitable for Curtin's academic and professional staff. During this phase the team deliberately looked for, and identified, examples of leadership frameworks, particularly those used in higher education settings. The unearthed frameworks ranged from research/theoretical models to pragmatic approaches to the needs of particular organisations.

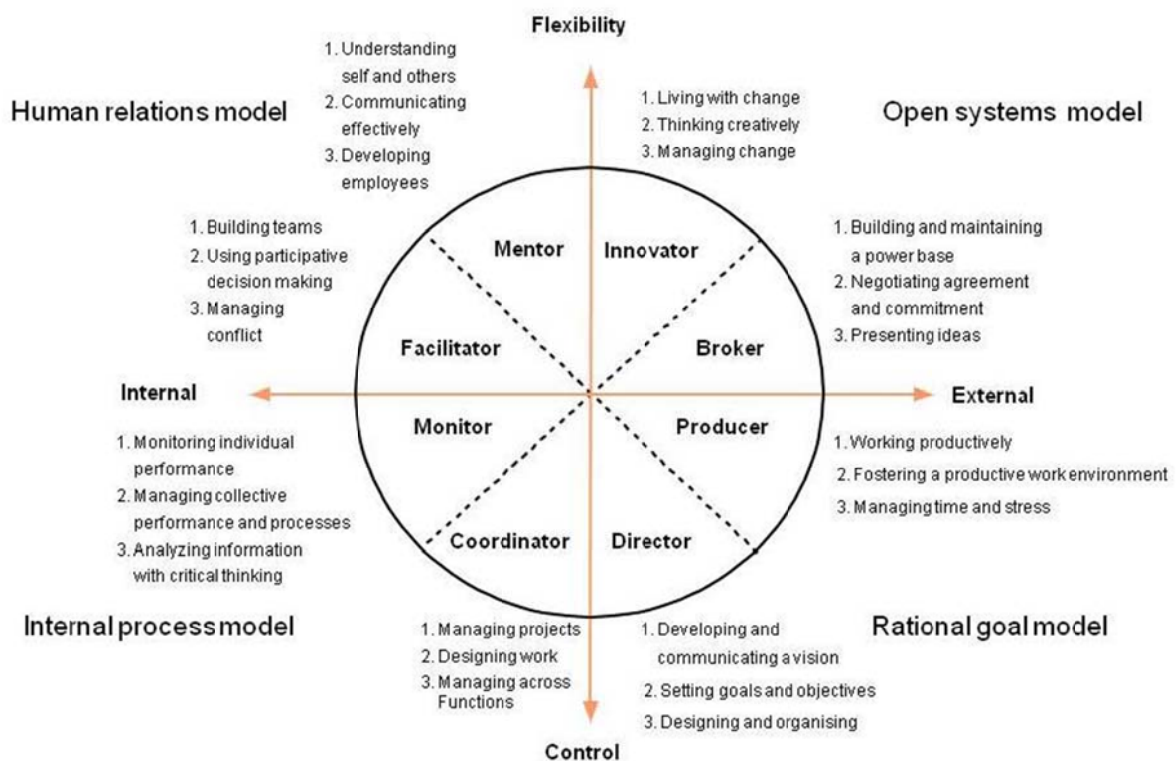
In addition, the team endeavoured to identify the theoretical constructs and frameworks underpinning existing and past leadership development programmes at Curtin for academic staff, senior and mid-level academic and professional staff leaders and postgraduate students. The competing values framework (Quinn, Faerman, Thompson & McGrath 2003) was identified as a potentially suitable framework for the Curtin Leadership and Management Development Framework.

The competing values framework (CVF) is based on four models of management that evolved over the twentieth century: the rational goal model, the internal process model, the human relations model, and the open systems model (Quinn, et al. 2003). By the latter part of the last century Quinn et al. note that 'it had become clear that no one model was sufficient...and that it was in fact necessary to see each of the four models as elements of a ...larger integrated model' (2003, p. 11). As Figure 1 depicts, the competing values framework features eight leadership roles (e.g. mentor, innovator) and 24 competencies. The tensions between the internal and external roles and the need for flexibility **and** control as a leader are another feature of the CVF.

The CVF is a key leadership model taught in the MBA and Master of Business Leadership programmes at Curtin and was the leadership model used in the pilot of a new development programme for Curtin's course coordinators. Two members of the ODU team were also familiar with

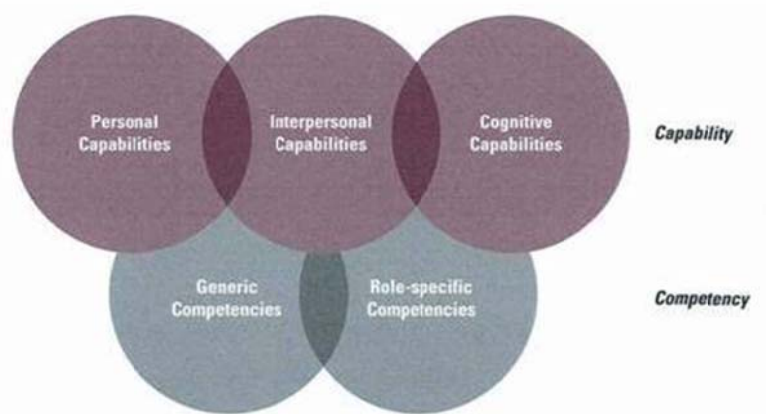
the CVF and saw it as an ideal framework for Curtin. Was the journey over? Subsequent inquiries identified that the initial course coordinator programme participants reacted unfavourably to ‘the business and management language’ of the CVF and it was thus discarded for subsequent cohorts (Jones, Ladyshewsky, Oliver & Flavell, 2008, p. 40). The long march continued.

While the ODU team was conducting its research the Australian Learning and Teaching Council (ALTC) was funding research projects across Australia with the purpose of developing ‘systematic, structured and sustainable models of academic leadership in higher education’ (ALTC 2010). Numerous ALTC projects have focused on institutional leadership development or developing the leadership capacity of academic staff in formal and informal leadership roles. In ensuring the widespread dissemination of project reports the ALTC encourages universities to consider, adapt and adopt suitable programmes, methodologies or approaches to higher education leadership and leadership development.



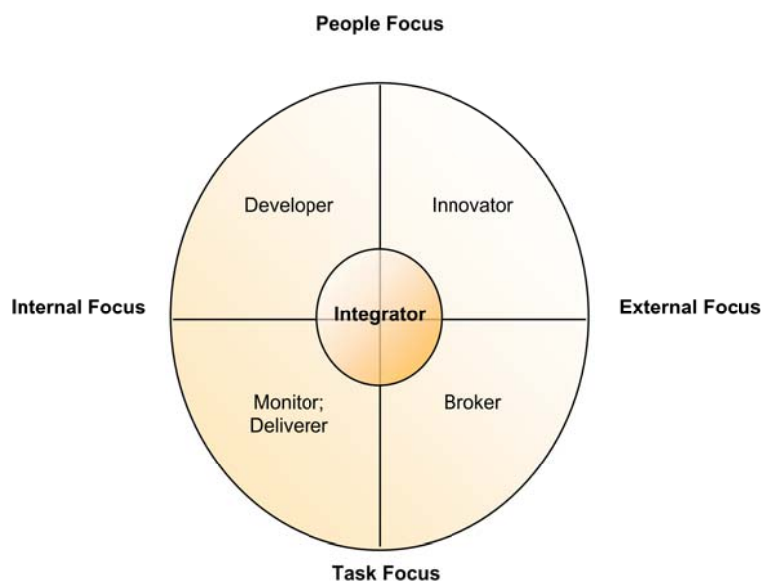
**Figure 1:** Competing values framework (Quinn, et al. 2003)

One ALTC funded project was the above-mentioned academic leadership programme for course coordinators. Another project, *learning leaders in times of change*, was said to be ‘the first study to systematically access the ‘insider's view’ of different university roles... The project canvassed more than 500 Australian higher education leaders from 20 institutions from heads of programme to deputy vice-chancellors, about the contexts and challenges they face and the *key capabilities that underpin their work* [emphasis added]’ (UWS, 2008). The academic leadership capability framework (learning leaders’ project) is shown below at Figure 2. This framework includes over 40 behavioural capabilities and competencies in five clusters. *Learning leaders* highlighted that formal, workshop based programmes are not the most effective approach to developing the leadership capability of individuals.



**Figure 2:** Academic leadership capability framework (Scott, et al. 2008)

Two other ALTC funded projects featured an adaptation of the competing values framework: the integrated competing values framework (ICVF) (Jones et al. 2008; Vilkinas 2009). The project reports suggest that academic leaders, including course coordinators, found the ICVF to be a useful framework that assisted in identifying their leadership development needs. The ICVF (see Figure 3) maintained many of the features of the CVF but with a reduced number of roles and the inclusion of a central ‘integrator’ role. The ICVF’s vertical axis is labelled people focus and task focus in contrast to the CVF labels of flexibility and control.

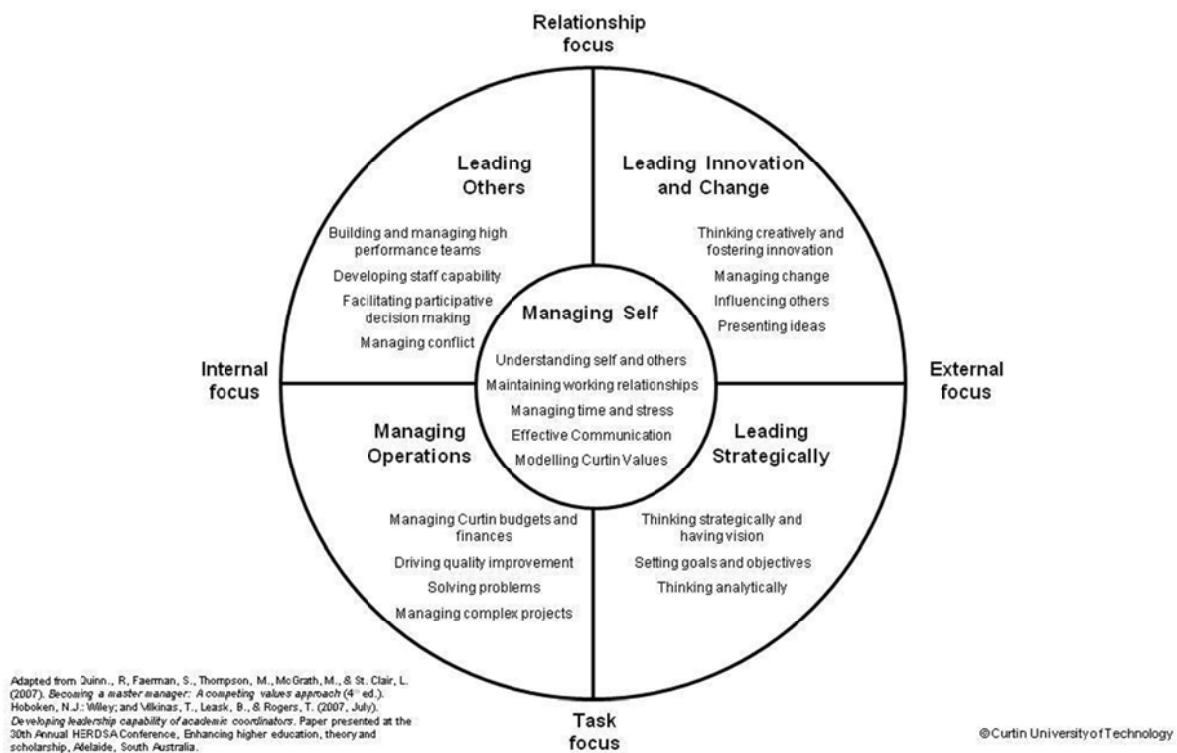


**Figure 3:** Integrated Competing Values Framework (Vilkinas 2009)

By early 2009, the ODU project team had identified numerous frameworks but focussed attention on eight for detailed consideration. While visual presentation differed, many frameworks had common capabilities or competencies. The project team concluded that none was exactly what was needed for Curtin at this time. For example, academic staff were resistant to the business language of the CVF; the learning leaders framework was too oriented to teaching and learning, whilst the ICVF’s roles were considered too ‘soft’ to be applied across the entire University. The team wondered if two frameworks were required – one for academic leaders and one for professional staff leadership roles – something to be avoided to minimise the academic-professional staff divide.

Utilising an action learning approach the project team compared and contrasted the eight frameworks. The analysis yielded a list of twenty capabilities that represented an amalgam of the capabilities across the frameworks. A Leadership and Management Development Reference Group (established to provide advice to the ODU team) subsequently endorsed the twenty capabilities. In June 2009 almost 80 members of Curtin’s senior leadership group were invited to rank the top ten capabilities (of the twenty) that the University should focus on to assist it realising its ‘top 20 in Asia by 2020’ vision. This activity effectively endorsed the list of 20 capabilities and provided the ODU team with the most important capabilities to include in its development programmes.

The next step was to create a model to represent the twenty capabilities visually. Within the list of twenty capabilities the team identified five clusters and each of these clusters nominally matched the four quadrants and central ‘integrator’ role of the integrated competing values framework but without using the CVF/ICVF role nomenclature. In addition, the ICVF’s ‘people focus’ label was changed to ‘relationship focus’. Thus, the draft Curtin framework as depicted at figure 4 draws on the CVF, ICVF, and contingency theory. The reference group, whose membership comprised a majority of academic representatives, agreed that the draft framework would ‘work’ for staff in academic and professional roles, and approved the draft for further development.



**Figure 4:** Draft Curtin leadership framework

In late 2009, an external consultant was engaged to develop a series of behavioural statements to support each capability. The consultant and the project leader agreed that one set of behavioural statements was inappropriate for all levels of management (supervisors through to the vice-chancellor) and decided four broad management levels was appropriate – coordinator/supervisor; manager; director/head of school; and senior executive. A series of approximately 80 behavioural statements (three to five per capability) per management level was created with the assumption that leaders at more senior levels would be able to demonstrate the lower level capabilities.

By April 2010 the draft framework’s management levels and behavioural statements had undergone their first revision by the reference group. Then in May, the project leader commenced a three-month consultation period by presenting the draft framework (including the behavioural statements) at faculty and central area senior management meetings. The presentations provided an opportunity to

inform the Curtin community of the broader application of the framework and the variety of approaches the ODU incorporates within development programmes. The approaches include individually led work-based projects, action learning groups, the establishment of peer-based networks (communities of practice), real-life workplace simulations, coaching and/or mentoring, and self-managed learning. Some suggestions to fine tune the framework have been received but, to date, the anecdotal and documented feedback from staff on the framework and its intended application has been overwhelmingly positive.

A suite of leadership and management development programmes is being developed drawing on the Framework's capabilities. To date programmes have been developed for targeted groups of staff – from aspiring and first time supervisors through to the Vice-Chancellor and her executive team. The project team is planning to take the revised, final version of the Curtin framework to Academic Board and Curtin's Planning and Management Committee in October or November 2010 with an expectation that the framework will be endorsed for use from January 2011. The long march is (almost) over!

## **REFLECTIONS AND RECOMMENDATIONS**

Even though the development of the Curtin leadership framework has been a long march – some two and a half years, the prolonged process has provided numerous benefits including that it:

- allowed the project team time to use an action learning approach resulting in a number of capability iterations to reach the current framework,
- demonstrated that a participative decision making approach – within the project team, the reference group and the broader Curtin community – leads to greater acceptance,
- highlighted that 'business' leadership frameworks must fit the organisational context – the language of business models needs to be adapted to suit higher education institutions to be acceptable to academic leaders in particular,
- afforded the opportunity to learn from current ALTC leadership projects,
- draws on existing, accepted frameworks yet fits the Curtin context and supports the University's 'top 20 in Asia by 2020' vision, and
- provides a framework for leadership development, career management, succession planning, recruitment and selection and performance management.

From the Curtin experience the key recommendations for others considering creating a leadership framework are to:

- use collegial processes to build a coalition of support across the institution,
- keep an open mind and 'it' (the appropriate solution) will come,
- draw on both the general and higher education specific leadership research literature but ensure your framework's language 'speaks' to academic leaders, and above all else
- be prepared for a long march!

## **ACKNOWLEDGEMENTS**

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The opportunity to present the then draft of the Curtin leadership framework to Professor Tricia Vilkinas (University of South Australia) and Associate Professor Rick Ladyshevsky (Curtin

University of Technology) during their ALTC project dissemination workshops in Perth during 2009 provided valuable feedback and encouragement to progress the project.

Finally, the project leader would like to thank the senior managers of Curtin University for their considered feedback during the development and consultation phases of the project and their desire to utilise the final product – the Curtin Leadership Framework.

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# **THE MEANINGFUL ENHANCEMENT OF INDIGENOUS CULTURE THROUGH TECHNOLOGY: A DIGITAL ACKNOWLEDGMENT OF DHARAWAL COUNTRY**

**Jade Kennedy and Theresa Hoynes, University of Wollongong, Australia**

## **ABSTRACT**

The University of Wollongong (UOW) has introduced the protocols of Welcomes to Country and Acknowledgement of Country to open certain events, functions and ceremonies. It has become evident that there is a significant lack of understanding around these customs and that they are becoming merely institutionalised acts of political correctness. The Faculty of Commerce at UOW identified these issues as impeding its journey to becoming an 'indigenous friendly' environment and has drawn on the work of Karl Weick to help guide it in a dedicated sense-making process. The Faculty undertook a series of engagement initiatives with the local Illawarra Aboriginal community to increase its understanding of their traditional customs. In turn, the Faculty has used technology to enhance the sense making for its staff and students in relation to the Acknowledgment and Welcome practices. This collaboration has forged a genuine relationship, inspired much knowledge sharing and resulted in the creation of a digital Acknowledgment of Dharawal Country.

Keywords: Indigenous, protocols, technology, Acknowledgment of Country, sense making, meaning

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## **INTRODUCTION**

The University of Wollongong (UOW) has introduced the protocols of Welcomes to Country and Acknowledgment of Country to open certain events, functions and ceremonies. These practices are becoming increasingly common across higher educational institutions, and within these contexts are intended to reflect the unique position of the Indigenous people of Australia. It is evident, however, that there is a significant lack of understanding around these customs and that many non-indigenous people often feel uncertain as to how to arrange a Welcome or conduct an Acknowledgment of Country. This uncertainty reflects a gap in knowledge related to the interpretation or sense making of these traditional practices. This presents a danger that in becoming institutionalised, these practices will lose their meaning and could be seen as mere acts of political correctness.

Additionally, many Aboriginal communities are disengaged from higher educational organisations, and there is much evidence supporting the poor participation of Aboriginal and Torres Strait Islander people within higher educational institutions (Gunstone, 2008; O'Rourke, 2010; Universities Australia, 2008). It has been observed that this poor participation and engagement within the sector, facilitates the appropriation of traditional Aboriginal customs by people who are not culturally informed or connected to community or country. It is regrettable that people of sincere intent but with little or no understanding of cultural protocols such as Welcomes and Acknowledgments of Country are prone to misinterpreting the true meaning of these practices as they have been communicated to meet the needs of institutions. The challenge lies in creating meaningfulness or sense making around these practices so that their intent and integrity remains intact.

The Faculty of Commerce at UOW noticed that the issues surrounding Welcomes to Country and Acknowledgments of Country directly impeded its journey to becoming an 'indigenous friendly' environment. It did understand that 'commerce' was not a traditional discipline of study for indigenous students and had therefore committed to a strategy to engage Aboriginal and Torres Strait Islander people. It had also identified that by incorporating Welcomes and Acknowledgments into common practice it was attempting to give genuine respect and facilitate engagement. What the Faculty had not anticipated was the impact of its own institutionalisation of these customs and the difficulties that arose in embedding these protocols within the Faculty. The Faculty lacked a depth of understanding of Welcomes and Acknowledgments of Country, and needed to create sense and meaning around these traditional customs. Sense making in this context became fundamental, allowing an understanding of what an event means, the stories that support the event and the subsequent actions that occur as a result of this process (Weick, Sutcliffe & Obstfeld, 2005). It is the actions that result from sense making that bring meaning into existence and provide a basis that allows people to be able to act into the future (Abolafia, 2010).

The Faculty sought to create meaning through the establishment of a genuine two-way relationship with the local Illawarra Aboriginal community. This relationship provided the basis for the Faculty to attempt to learn the true meaning of 'Country', to understand the stories behind Country for Dharawal people and gain a better understanding of traditional Aboriginal customs, protocols and practices. The Faculty identified the most appropriate ways of making sense of these cultural practices that would enable the Faculty of Commerce at UOW to meaningfully embed them in practice and to be perceived by indigenous Australians as a friendly environment.

## **METHODS**

The Faculty of Commerce at UOW undertook a series of engagement initiatives with the local Illawarra Aboriginal community in its attempt to create sense and meaning around Dharawal Country. It was recognised that there are many barriers to engaging Aboriginal people and communities with universities and higher educational organisations (IHEAC, 2006, James & Devlin, 2006), and it was understood that the Illawarra Aboriginal community were uncertain, apprehensive and to a certain extent distrustful when it came to involvement with the University as there has been an inconsistent

history of engagement. It was for these reasons that the Faculty placed emphasis on the building of genuine relationships with the local Aboriginal community organisations, Elders, custodians, cultural knowledge-holders and community members. It was also of great significant for the Faculty that these relationships were on-going and two-way, (ngapartji ngapartji), involving both respect and reciprocity.

The Faculty of Commerce started by establishing an Indigenous Strategy Working Party, to generate, guide and oversee initiatives that worked towards making the Faculty a more indigenous friendly environment. The working party included both academic and general staff members from the Faculty of Commerce, representatives from Woolyungah, the UOW Indigenous Centre, and several Aboriginal community members. All initiatives and decisions regarding the Faculty's engagement with the Aboriginal community went through this group.

Over the course of six months the Faculty began breaking down barriers and building its relationship with the Illawarra Aboriginal community through regular meetings with its Elders and cultural custodians. The Illawarra Aboriginal Corporation's (IAC) Elders group was targeted as an initial point of engagement. These conversations began with Faculty members simply attending the Elder's art and craft sessions, information and presentation sessions or their luncheons, and engaging them in conversations about themselves and their experiences on country. Sense making around the meaning of Country to Dharawal people began to emerge, as sense making is fundamentally a social activity where stories are preserved, retained or shared (Isabella 1990; Maitlis, 2005). However, the learning became a reciprocal process. As Watson (1995) states, the audience for sense making includes the speakers themselves, and it became evident that the Elders were finding ways of articulating oral histories and stories for the Faculty to comprehend and relate to the structures of its institution.

The regularity of these conversations exposed the Faculty to the Aboriginal community, increasing trust and sharing to the point that traditional Custodians and cultural knowledge-holders felt it necessary that 'Country' be communicated 'on Country'. This involved visiting sites of significance and other places of importance to the Dharawal people and hearing the dreamings, stories and Aboriginal histories that pertained to the meanings associated with the area. This was a slow and respectful process, undertaken and initiated on the terms of the traditional custodians that gave the Faculty a privileged insight and appreciation of Dharawal Country and the Dharawal people's connections to their ancestral lands.

In working with the Dharawal Elders it became apparent that the Faculty was being instructed in cultural knowledge in ways that the Elders would use with their own people or children. This generosity, inspired the Faculty to undertake further initiatives that directly engaged with the community and encouraged 'ngapartji ngapartji' and the growth of the two-way relationship it was attempting to establish.

Following the success of engagement and the increased understanding and appreciations of Country, the Faculty commenced the creation of a 'short-film' Acknowledging Dharawal Country that followed the model of digital story-telling. The intent of the film was to convey the meaning of the connection and relationship the Dharawal people have with their Country. Further, it was developed to share the significance of the traditional custom of Acknowledging Country through the use of a digital medium and to challenge the impression that this custom is a 'tokenistic' act performed at the beginning of events.

## **RESULTS**

For the Faculty of Commerce at UOW, the relationships built on time, trust and reciprocity with the local Illawarra Aboriginal Elders and community, were in themselves greater in impact than the outcomes of initiatives undertaken. The on-going nature of these relationships corresponds with the on-going nature of sense making (Weick, 1993) and the fact that it is described by Currie and Brown

(2003) as an evolving product of conversations with ourselves and with others, gives encouragement to the Faculty that gaps in knowledge can be addressed when they appear.

The engagement initiatives have presented the Faculty with opportunities to create sense and meaning through the experiences it has shared on a journey to becoming a more indigenous friendly environment. They have also enlightened the Faculty's comprehension of Dharawal Country and the meaning of traditional customs such as Welcomes and Acknowledgments of Country. Following are the main outcomes achieved thus far.

### **Five Key Concepts**

The generous sharing of knowledge through the process of relationship-building has facilitated the articulation of five key concepts or beliefs of the Dharawal in describing one's relationship with Country. They are country, kinship, culture, journey and connectedness:

- 'Country' refers to one's nature and natural surroundings. It includes lands and waters, trees and plant-life, animals, birds, fish and reptiles.
- 'Kinship' reflects the system by which people are related to each other. It defines one's roles, responsibilities and obligations within a relationship.
- 'Culture' is represented in art, song and dance, language, stories and oral histories. However, culture is said by the Dharawal to be present in your everyday being.
- 'Journey' refers to the lived experiences that occur 'on Country', one's story, one's history.
- 'Connectedness' reflects the core belief that binds Dharawal people to their Country. It speaks of the inter-relationship of everything and that nothing can be considered in isolation, just as none of the concepts or beliefs can be considered without the other.

### **Acknowledgment of Dharawal Country Short Film**

The digital Acknowledgment of Dharawal Country is the meshing of the traditional custom of Acknowledging Country with modern technologies. It is the embodiment of the five key concepts outlined above and depicts these progressively over via imagery viewed didgeridoo music performed by a local Elder. The digital story relates a traditional story from the Wodi Wodi, one of the 13 tribes of the Dharawal people. It is a story of travelling from the ocean to the escarpment; a story of travelling across Country. It is designed to encourage and inspire people not from Country to recognise and value their own connectedness to Dharawal Country and to learn how to show respect through the acknowledgment of this.

### **Acknowledgment of Country protocols**

A set of guidelines and protocols have been created to sit alongside the digital Acknowledgment of Dharawal Country to assist and support users of the short-film or people wishing to organise a Welcomes to Country and Acknowledgment of Country. Unlike most protocols, they are constructed not to direct policy or sit within a governance framework, but instead are designed to be functional; they are in a practical book form and are user based.

### **Koori Kids Fun Day**

The Koori Kids Fun Day was focused on engaging Aboriginal children from the Illawarra area through sporting and cultural activities on the UOW Wollongong campus. ('Koori' is the term is used by the aboriginal people in the states of Victoria, parts of New South Wales and Tasmania to describe themselves). The Day involved University staff and students. The day was supported by the broader community and it was aimed at breaking down the barriers between the University and the local Aboriginal community. Its main objective was to form positive associations and experiences for the children and their families relating to the Faculty and University.

More than 40 local Koori kids and their families attended. The success of this day impressed upon the Faculty, the University and the broader community the need to engage through fun, social activities. The University needs to engage with Aboriginal people and to provide opportunities for the local Aboriginal community to create stories and meaning about the University. The University needs to engage in sense making with the local community, about itself. There has been a strong drive to embed this day into the UOW annual calendar.

### **Mural – Agulia**

This painting was designed by three local Aboriginal artists, and completed through the contributions of the children in attendance at the Koori Kids Fun Day. This triptych is yet another story of Dharawal Country, and is aligned with two of the sacred mountains of the Wollongong region: Mt Kembla and Mt Keira. The placing of the children's handprints on this artwork, from an Aboriginal perspective, provides a significant form of connectedness for the individual kids themselves and their families. This is an age-old Aboriginal practice that in this instance goes beyond the usual perceptions of engagement and therefore the artwork now provides the keystone in the relationship between the particular children, and their families (who gave their handprints) and the Faculty of Commerce. The painting hangs at the entrance to the Faculty of Commerce building.

### **AIME – Australian Indigenous Mentoring Experience**

UOW is the largest host of the AIME programme servicing 140 indigenous children from more than seven Department of Education identified priority funded schools. The programme aligns university students as study mentors to indigenous students. Since initiating this strategy, over 100 Commerce students have registered to participate in AIME from a baseline of zero.

## **DISCUSSION**

In trying to exert a positive influence on the sense making process to create meaning and organisation around these traditional customs, the Faculty, University and community has experienced some truly positive outcomes as well as some unexpected impacts. Room for improvement has also become apparent. Because of the project, the Faculty has offered a scholarship to undertake research into sense making processes for Acknowledgments and Welcomes so that the conclusions that inform actions are based on firm evidence and evaluation. The Faculty expects this research to be of benefit to communities and institutions and outcomes from the research should be available within 12-18 months.

The focus of this discussion then, is based on evidence received through evaluations, feedback and the experiences of those involved. The project was successful in the development of genuine relationships with the local Aboriginal community. Feedback from the children, the parents and the community was overwhelmingly positive. In order to achieve its goal of being indigenous friendly, the Faculty has formed alliances with other faculties to host, on an annual basis, a Koori Kids fun day. The fun day will be improved upon and the agenda for the day will change. It will shift from engaging with the community to create material for the short film, to engaging with the community so that the community can create meaning regarding the University. As we have learnt through our sense making process, in order to create meaning, actions or experiences need to occur that provide opportunities for reframing mental models. Story telling is an effective way of relabeling and communicating experiences. It also fits well with Aboriginal culture. So the day will include parents and carers. It will include activities and visits from inspirational Aboriginal athletes, food and celebrations. A digital story of the day will also be created by the kids and carers for them to take away with them.

The Faculty has been inundated with requests for the film. The requests have come from a range of organisations, groups and institutions. Some of the requests have been genuinely motivated by a desire to create meaning and respect through Welcomes and Acknowledgements and some have not.

Some of the requests for the film surprised the Faculty. It is customary to give respect to an Aboriginal person delivering a Welcome through payment. Some feedback suggested that organisations could now save money by not having to pay an Elder or Dharawal representative to attend a function to give a Welcome because the film superseded that custom. Some organisations have told us that they will just create their own DVD and use it without engaging in community consultation or involvement.

Such feedback was a major stumbling block in the project as it indicated that meaning had not been created and that we had actually created a means to circumvent practices that were about engagement, respect, integrity and intent. We also received feedback associated with this from members of the Aboriginal community who were concerned that we were reducing opportunities for engagement through the short film.

Both of these perspectives demonstrate misunderstanding of the intent of the film. The Faculty continues its practice of engaging and paying community members for the delivery of a Welcome to Country and we clearly communicate this as a priority for the University. The University is committed to ongoing engagement with local Aboriginal communities. The intent with the short film is that it will continue to evolve with new images, sounds and content based on advice from the community. Though it is not possible for the Faculty to guarantee that the film won't be misused, the Faculty will work to prevent misuse of the film as much as possible. The Protocols stipulate clearly the way in which the film is to be used. Distribution of the film occurs through discussion so that the intent of the film is made clear to users.

In response to the issue about creating other DVDs and using them, the Faculty, in collaboration with the Faculty of Education, has decided to be proactive and a stage 2 project is in development. Stage 2 will involve working with the local Aboriginal community, the Elders group, children and teachers from a selection of priority-funded primary schools in the region to create a digital Acknowledgement of Country that is specific to each school. In this way, meaning for Acknowledgements and Welcomes becomes contextualised to each school and draws on their individual stories and traditions. The digital stories would become an educative tool within the school system to cover key learning areas, including indigenous perspectives, culture, information technology and literacy.

In taking definitive action around the issues regarding Welcomes and Acknowledgements, the Faculty and the University has learnt a great deal. It is anticipated that, through ongoing partnerships, research and actions, the meaning behind traditional practices will become embedded in organisational structures in a way that facilitates understanding and respect.

## **CONCLUSION**

The Faculty of Commerce embarked on a journey to make the Faculty an indigenous friendly environment, recognising that indigenous participation in Commerce was extremely low. In order to achieve this objective the Faculty introduced Welcomes to Country and Acknowledgements of Country in its standard practices for events. In doing this, The Faculty came to realise that the 'standardisation' of the practice was reducing people's understanding of and regard for these traditional practices. The Faculty needed to understand and make sense of the meaning of these traditional practices for the Dharawal community and began a process to capture and create stories, images, art and music around the Acknowledgement of Dharawal country. The digital Acknowledgement of Dharawal Country has resulted in partnerships and opportunities that extend beyond the creation of the short film.

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# **FROM AUDIT TO EVALUATION – SO WHERE WILL IT TAKE US?**

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## **ABSTRACT**

For some years, the New Zealand tertiary sector has used an audit model to measure institutional performance. The current and previous governments had concerns about sector performance and questioned the robustness of this quality assurance system. In 2006, the New Zealand Qualifications Authority was commissioned to investigate other models. This paper discusses the development of the new system of self-assessment, external evaluation and review, and describes the journey of a regional polytechnic from the old to the new system including its experience of external evaluation. It also makes some suggestions as to where this might take the sector in the future.

Keywords: quality assurance; audit; self-assessment; evaluation; improvement

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## INTRODUCTION

The tertiary sector in New Zealand comprises eight universities, 20 institutes of technology and polytechnics, three wānanga (publicly-owned tertiary institutions that provide education in a Māori cultural context) and a large number of private training establishments, government training organisations, and industry training organisations. Quality assurance for the university sub-sector is provided through legislation to the New Zealand Vice Chancellors' Committee which established the New Zealand Universities Academic Audit Unit to develop and conduct quality reviews. The remainder of the tertiary sector is covered, under legislation, by the New Zealand Qualifications Authority, which developed a quality assurance monitoring system. The model adopted in the early 1990s was a standards-based audit system. In March 2006, the then Labour Government Cabinet considered a paper titled *Tertiary education reforms: the next steps*, which set out a package of changes to tertiary education (Cabinet Policy Committee, 2006a). Broadly, these reforms were to create a fundamentally different investment system for tertiary education, a system of planning, funding, quality and monitoring that would drive access, quality and relevance within a distinctive contributions framework.

This paper discusses the developments that have occurred following that Cabinet Policy Committee paper including the theoretical underpinning of the new system, which was trialled in a selection of non-university tertiary institutions in 2008, and subsequently after regulatory changes, began to be implemented from the latter part of 2009. The paper then tells the story of a regional polytechnic's experiences of being the first polytechnic to be evaluated using the new model of quality assurance in April 2010, and conclude with some personal perspectives of where this move from audit to evaluation might take the tertiary sector in the future.

## DEVELOPING A NEW QUALITY ASSURANCE MODEL

### The Former Academic Audit Model

Early in the 1990s, the New Zealand Qualifications Authority established a system of academic quality audits that were measured against eight standards. The system required tertiary institutions (except universities) to establish a quality management system supported by policies and processes to meet the standards and then undertake an audit by an external panel every four years. Following negotiation, the New Zealand Qualifications Authority delegated authority to the sub-sector's peak body Institutes of Technology and Polytechnics New Zealand (formerly the Association of Polytechnics New Zealand), to develop its own academic audit system along the same model that the Qualifications Authority had developed. Subsequently the Institutes of Technology and Polytechnics New Zealand established its own quality assurance body; New Zealand Polytechnics Programmes Committee, which was later renamed Institutes of Technology and Polytechnics Quality. This quality assurance body used its own framework of 12 standards with the four yearly audit cycle, which also included a mid-term quality review (Institutes of Technology and Polytechnics Quality, 2005; New Zealand Polytechnics Programmes Committee, 2003). This latter process was primarily a follow-up review to ensure that any recommendations that had been made by the panel during the full audit were being implemented. Upon the satisfactory completion of the four-yearly review the polytechnic would be awarded quality assured status. Institutes of Technology and Polytechnics Quality had also been delegated approval to accredit and approve this subsector to deliver qualifications up to undergraduate degree level. The New Zealand Qualifications Authority undertook accreditation and approval of any post-graduate qualifications for the subsector (Bourke, 2009).

### Rationale for a Shift in the Quality Assurance System

The former Labour Government (1999-2008) and the current National Government, which also held office prior to 1999, had concerns about accountability and variability of practice in the tertiary sector, and a greater concern about the polytechnic sector. While many will argue that this was primarily

because of some questionable behaviour in a small number of polytechnics and wānanga, the whole sector got caught up in the government's focus on review. As mentioned in the introduction, the Labour Government's Cabinet had agreed to a set of changes in the tertiary education system, through the statements in the *Tertiary education reforms: The next steps*. There were three interrelated components to the reforms and the third component is the most relevant to this paper. That component is '...a more rigorous quality, reporting and monitoring regime centred around the performance of the institutions in relation to the expectations established through the profile' (Cabinet Policy Committee, 2006a, p1). The whole thrust of the reforms was to shift the focus from inputs to outcomes, and every component of the new quality assurance system needed to ensure accountability and responsibility by tertiary institutions to the government and the public. Following this initial paper, a raft of proposals was put to the Cabinet Policy Committee; the most relevant here is the *Tertiary education reforms paper 4: Quality assurance and monitoring system* (Cabinet Policy Committee, 2006b).

While the Tertiary Education Commission was given overall responsibility for the development of the tertiary education reforms, in December 2006 the Government agreed that the New Zealand Qualifications Authority, in close association with the Tertiary Education Commission, should lead the work associated with developing quality assurance processes. The New Zealand Qualifications Authority established an Expert Advisory Group. The membership of this group included individuals with experience in evaluation, quality assurance and/or the tertiary education sector. Professor Gary Hawke, well known for his leadership in the major tertiary education reforms in the late 1980s, chaired the Group. The objective of the Group was to advise on the development and implementation of a robust quality assurance system that supports the tertiary education reforms (New Zealand Qualifications Authority, 2007a).

### **Determining the Model**

Over the ensuing months, the Expert Advisory Group met a number of times and presented reports of their thinking to the New Zealand Qualifications Authority. Concurrently with this, the Qualifications Authority had established its own operational team to research quality assurance models in other jurisdictions, receive and consider the advice from the Expert Advisory Group, and publish consultation documents to the sector. Some comment on the research in other jurisdictions, especially OECD countries is made later in the paper. Aspects of the Qualifications Authority research findings have influenced the overall design of the new system for New Zealand.

As mentioned in the previous section one of the key shifts was from measuring inputs to measuring outcomes and accountability to stakeholders including students and government. To facilitate this shift in the quality assurance system a fundamental change had to be made from the audit model against a set of standards, to evaluating outcomes by systematically answering questions about quality, value or importance (Davidson, 2009).

One way to explain the fundamental differences between systems-based audit and an outcomes-focused evaluation is to use the analogy of baking a cake. A systems-based audit would focus mainly on ensuring that the:

- baker was suitably qualified
- appropriate equipment was used
- kitchen was clean
- right ingredients were used and in the right quantities.

In an evaluative approach the baker will, in the first instance, start assessing the quality of the cake from the angle of how well the final product satisfied the customer. So the questions would be:

- Did it taste right?
- Did it have the right texture?
- Did it look appetising?
- Was it safe to eat?

And most importantly:

- Is there anything I want to improve? (New Zealand Qualifications Authority 2009a)

Early in the process, the University sub-sector, via the New Zealand Vice Chancellor's Committee, decided not to participate in the proposed new system but instead opted to retain a watching brief as it was developed and rolled out across the rest of the sector. They held the view that their system of quality assurance was already very evaluative in its approach and also that it was covered under separate legislation from the rest of the sector,

By October 2007, the New Zealand Qualifications Authority put out a discussion paper on the principles of an evaluative approach to quality assurance. This provided a two-component approach. The first - Self-Assessment – was referred to as the processes a tertiary education organisation uses to establish evidence of its own effectiveness (New Zealand Qualifications Authority, 2007b). The second component is External Evaluation and Review. The purpose of External Evaluation and Review is to provide an independent and robust evaluation of the individual organisation's self-assessment. External evaluation would use the results of self-assessment along with other evidence to validate the organisation's self-assessment and make judgements about the quality of the organisation (New Zealand Qualifications Authority, 2007b).

In framing their approach to self-assessment for Tertiary Education Organisations, five areas of focus were proposed:

- (a) the attainment of high educational standards and excellence, relevant to learners' abilities
  - (b) the education and other gains for learners, i.e. the value added
  - (c) the quality of the learning experience, including teaching
  - (d) tertiary education organisation contribution to valued employer, regional and national outcomes
  - (e) tertiary education organisation compliance with regulatory requirements
- (New Zealand Qualifications Authority, 2007b)

Over the next few months, these were clarified into five key evaluation questions which Tertiary Education Organisations would address in developing their own self-assessment practices and would be used in the External Evaluation and Review process for validation and judgements on the quality of the tertiary organisation. In designing the questions, they were put into two groups: those that evaluate outcomes, (that is changes that happen to learning, employing organisations, communities and the economy that are at least partially caused by tertiary institutions' programmes and activities); and those that evaluate process (people and things that are put into or accepted into the institution, programmes systems and services that the institution delivers, and products and trained learners that are produced by or through the institutions' programmes and activities) (Davidson, 2009).

These five questions were:

Outcomes questions:

1. How well do learners achieve?
2. What is the value of the outcomes for key stakeholders, including learners?

Process questions:

3. How well do programmes and activities match the needs of learners and other stakeholders?
4. How effective is the teaching?
5. How well are learners guided and supported?

Along with the key evaluation questions, design work was done to produce a set of outcome and process indicators to guide institutions as how to interpret each key evaluation question and examples of the evidence to support the indicators. The indicators were developed using systems-modelling research and sector advisory feedback and provided detail around background research information, why the indicator was important and how prompts that might aid evaluative conversation might be applied (New Zealand Qualifications Authority, 2008).

While the intention is for tertiary education organisations to develop their own approach to self assessment using the key evaluation questions and indicators as a guide, as mentioned earlier there is a planned process for periodic External Evaluation and Review. More detail of this is provided in a later section as this was largely an evolving process following a trial which is also described later in the paper. However for the purpose of outlining the development of External Evaluation and Review, suffice it to say that a site visit is conducted by a team of two to four trained evaluators, including a lead evaluator. The team, through their in-depth questioning, triangulate any documented evidence with their findings through questioning, and make judgements about the institution's educational performance and its capability in self-assessment. This is built up by using rubrics to determine how well the institution meets the key evaluation questions in a series of mandatory and agreed focus areas. The New Zealand Qualifications Authority has subsequently published guidelines for organisational Self Assessment and External Evaluation and Review (New Zealand Qualifications Authority 2009a; 2009b). Institutes of Technology and Polytechnics Quality has also published its own set of guidelines for External Evaluation and Review (Institutes of Technology and Polytechnics Quality, 2010).

The use of evaluative rubrics is a broad-brush way of defining what good, excellent (etc) performance would look like in practice (Davidson, 2009). The final approved model includes four performance rankings that are applied across a number of focus areas – Excellent, Good, Adequate and Poor, and for the final judgement of the institution's performance the four are – Highly Confident, Confident, Not yet Confident and Not Confident.

The existing gazetted criteria were sufficiently flexible that no legislative change was required to authorise the shift from audit to evaluation and the New Zealand Qualifications Authority and Institute of Technology and Polytechnics Quality Boards have subsequently approved the process, the latter having particular focus on the way External Evaluation and Review will take place in the polytechnic sub-sector. Later in the paper we will discuss one polytechnic's experience of Self Assessment and External Evaluation and Review, including a description of how the new quality assurance model has evolved further as it is being implemented.

### **NZQA Research and Other Models**

The New Zealand Qualifications Authority conducted some in-depth research into approaches to quality assurance in other countries, particularly OECD countries. A high-level report was produced (New Zealand Qualifications Authority, 2007c). One of the first things this report discusses is the concept of quality in higher education in an attempt to gain some consensus of meaning. It is interesting to note that they found that 'quality' as an abstract idea is open to many interpretations. Concepts of quality as - exceptional; perfection or consistency; fitness for purpose; value for money; transformation – are cited from Harvey and Green (1993, cited in New Zealand Qualifications Authority, 2007c). In noticing the concept of 'transformation', they cite Margaret Horsborough (1999, cited in New Zealand Qualifications Authority, 2007c) who argued that if the purpose of higher education is to transform learners, then quality monitoring should relate to the process of transformation and learner outcomes. This concept certainly appears to have emerged in the final Self Assessment External Evaluation and Review model for the non-university tertiary institutions in New Zealand.

Viktoria Kis (2005), in her research into current practices in OECD countries as part of her internship at the Education and Training Policy Division, Directorate for Education, OECD, identifies the range of approaches to quality assurance in higher education. These primarily cover three approaches – accreditation, assessment and audit. She also identified that three basic methods for quality review usually involved some sort of self-review, followed by a peer-review and/or external review. Similarly, she found that amongst the data gathering instruments commonly found were – self-review report; site visits, surveys and performance indicators. A number of these aspects have appeared in the new quality assurance system adopted by the New Zealand Qualifications Authority.

The research also makes significant recognition of work done by Finnie and Usher (2005). This is a large piece of research that looks at current practises in Canada and other OECD countries and identifies that broadly there are four approaches to quality measurement. These are minimum standards – that are mostly qualitative; rankings/indicators – quantitative; learning impacts – quantitative; and continual improvement – qualitative.

One area of interest is the ‘learning impacts’ approach. Finnie and Usher make specific reference to the development of the National Survey of Student Engagement which was piloted in 75 higher education institutions in Canada in 2000 (Finnie & Usher, 2005, p13). Similarly, they refer to another example of measuring learning impacts, that is, the approach pioneered in Australia a few years earlier following the 1998 West Report on universities (West, 1998). West made general recommendations on the skills and attributes graduates should acquire. As a result, the Australian Council for Educational Research developed the Graduate Skills Assessment instrument. It is worth noting that Australia now uses the *Australasian Universities Survey of Student Engagement* as a tool for measuring student engagement and it is being trialled in New Zealand in 2010.

Continuing on the theme of approaches to quality assurance identified by Finnie and Usher is the ‘continual improvement’ approach. They indicate that while the ‘ranking/indicators’ and ‘learning impacts’ approaches were gaining momentum in North America in the 1990s, there was some discontent with the ‘minimum standards’ approach but no real discontent with the basic approach to self-audit followed by some external oversight (Finnie & Usher, 2005, pp15-16). This led to developments that moved beyond minimum standards to more performance benchmarking which required institutions to meet performance targets based on results at other organisations. They also reference the ISO model of continuous improvement concepts and organisational accreditation. This has been noted as a model that could be applied to education where an institution would develop its own method of defining and monitoring quality while the government’s role is to certify that institutions are in fact doing an adequate job of it. Furthermore, Finnie and Usher identify that Australia moved some way toward this model in 1998 when they established the Australian Universities Quality Agency. This agency encourages institutions to develop data in support of their own planning processes and then audits the effectiveness of the universities’ quality management process (Finnie & Usher, 2005, p16). The New Zealand Qualifications Authority also cite the Australian Universities Quality Agency as carrying out whole-of-institution quality audits with a focus on managing continuous quality improvement.

The New Zealand Universities Academic Audit Unit undertakes institutional academic audits on a cyclical basis. The last cycle of audits carried out during 2003-2006 were focused on continuous improvement in relation to teaching quality, programme delivery and the achievement of learning outcomes (New Zealand Qualifications Authority, 2007c). While the term ‘audit’ is used, as mentioned earlier in this paper, the New Zealand Vice Chancellors’ Committee believe that the whole process of preparing a self-review document followed by an external review has many traits of the evaluative approach. This is an explanation of their decision not to participate in the new model for non-university tertiary institutions but keep a watching brief during its implementation.

The next section will tell the story of a regional polytechnic’s implementation of Self Assessment and experience of being the first polytechnic to undergo an External Evaluation and Review.

### **The Former Internal Academic Audit – Process**

Academic audit at Bay of Plenty Polytechnic had been developed from an approach of collaboration and institutional commitment that was meant to lead to continuous improvement rather than a pure tick box ISO type compliance model of audit. It could be asserted that, in the main, this was also the way in which the New Zealand Polytechnics Programmes Committee (later Institutes of Technology and Polytechnics Quality) model rolled out. So much of the intent can be gleaned from the language used and how it was interpreted.

From an internal perspective the model used leaned toward continuous improvement rather than compliance (Hausman, 1998) and the language used described ‘findings, actions and recommendations’. The latter reflected what people needed to discuss and consider for the best approach for the future; with the former an expectation of considered action as an outcome of the findings. From an Institutes of Technology and Polytechnics Quality audit perspective, these terms were replaced by findings, non-compliances of either high or low risk requiring corrective actions (immediate fix-its); recommendations (Bay of Plenty Polytechnic actions) and suggestions.

We needed to consider the best way to implement audit at Bay of Plenty Polytechnic. The Polytechnic at that stage was structured into five schools with each school having an Academic Adviser with responsibility for school quality assurance and a centralised Senior Academic Adviser responsible for providing advice to assist with cross-polytechnic consistency. To implement academic audit at Bay of Plenty Polytechnic we used a model, shown in Table 1, of awareness heightening, training, use of a consistent approach and model, team briefing and conduct of audit, reporting and closing the loop.

We learned from this that there were some challenges with closing the loop and to ensure that all requirements were acted on. We also experienced challenges in ensuring that we used effective mechanisms for sharing some of the good practice that was identified.

### **The Self-Assessment and External Evaluation and Review Trial 2008**

Bay of Plenty Polytechnic was one of eight tertiary education organisations to participate in the trial of the Self Assessment External Evaluation and Review process. This provided the chance to work with the five key evaluation questions, the draft evaluation indicators, to identify areas of interest for the trial, and to work with a mentor.

Three self-assessment projects were undertaken. The first examined existing processes of internal academic audit, annual programme review and Te Waka Hourua criteria for approval and review of programmes. (Note: Te Waka Hourua is a metaphor that relates to two peoples travelling together towards the same goal - the partnership between the indigenous Māori, and Pakeha, New Zealanders who are not of Māori blood lines). Te Waka Hourua is a subcommittee of Bay of Plenty Polytechnic’s Academic Board that ensures curriculum and delivery reflects the dual heritage of Aotearoa/New Zealand (Bay of Plenty Polytechnic, 2007). The second project examined assessment and the third examined graduate outcomes and their value to both graduates and employers. Findings were reported in terms of the findings for Bay of Plenty Polytechnic, feedback for the New Zealand Qualifications Authority in relation to the trial of the evaluation indicators, and strategies for Bay of Plenty Polytechnic to build the findings into everyday business. Valuable outcomes were achieved that were able to feed into existing business processes and further improve the learning environment for students. With hindsight it is now possible to look at this selection of projects for the trial and consider that while each of these might have had its merits, a thinking ‘outside of the box’ around programme evaluation methodology may have been a better way to go.

The positive component of the experience is that we as an organisation learned from the experience. The negative component is that we may have learned more if we had treated these as broader opportunities for more staff to be involved and learn more from the experience rather than just a few people being involved. We also learned that the external evaluation panel in the trial experienced challenges in dealing with the rubrics and that some of the external evaluators needed to develop skills of evaluative questioning rather than compliance mentality questioning.

### **Implementation of the Full Self Assessment External Evaluation and Review**

After the trial, the New Zealand Qualifications Authority approved the final criteria for Self Assessment External Evaluation and Review and included the sixth question of ‘How effective are governance and management in supporting educational achievement?’ The New Zealand

Qualifications Authority then commenced External Evaluation and Review and by June 2010, 77 External Evaluation and Review reports had been published.

Table 1: Model for the implementation of internal academic audit at Bay of Plenty Polytechnic.

Stage	What was involved
Awareness heightening	The Quality Management System was restructured to reflect the 12 polytechnic standards, relevant policies attached and procedures written that showed those responsible and possible audit evidence
Training of key people	All Academic Advisers participated in Internal Audit training carried out by an external trainer. This was followed up by other interested staff being trained, once again by external trainers but in an onsite environment
Development of a consistent approach and model of audit	A four yearly cycle of audit was approved by Academic Board and developed so that each audit <ol style="list-style-type: none"> <li>1. had it's clearly identified Terms of reference</li> <li>2. identified two specific programme areas in each school</li> <li>3. identified audit evidence that was already available or needed to be available</li> <li>4. showed expectations for triangulation (documentation, staff, students, industry where relevant)</li> <li>5. showed initial questions for each group for further audit group development</li> <li>6. provided a template for the audit report</li> <li>7. showed the timeframe expected</li> </ol> <p>In addition, each audit used a team of two people with the more experienced auditor supporting the newer. Team changes were attempted to prevent group think and to share the knowledge.</p>
Briefing so that all people were on the same page	Prior to the audit a meeting was held to clarify the terms of reference and further refine questions
Conduct of the audit	The audit was carried out and each audit generally took 1.5 days per team member to include preparation, interview and write up. The conduct stage used a triangulation approach of reading documentation such as policy and practice expectation, and evidence of how that was met; talking with a range of people who could support or refute the policy and practice expectation and sighting further documentation that showed that the policy and practice was in effect for this particular programme.
Reporting and closing the loop	Reporting involving sending the written report to the programme team and then face to face follow up for clarification and any correction. The reports were received at School Boards of Studies for discussion and implementation of action plans. <p>At an institutional level, a collated report was provided to Academic Board and contained any polytechnic wide issues that needed to be addressed.</p>

For the polytechnic sector, the quality assurance body chose to appoint two Lead Evaluators (Dr Peter Hodder and Mark Dingle) and a Principal Adviser (Dr John Harré) with the intention being that this composition would aid consistency of approach. Other members of the evaluation team were then drawn from the New Zealand Qualifications Authority's pool of evaluators.

### Self evaluation and Bay of Plenty Polytechnic

We moved into the self-evaluation mode by developing a strategy that was designed to use the best examples of practice identified in the polytechnic sector. That is, be inclusive through the use of an internal advisory committee; develop capability through a series of workshops held for staff; and use



the existing practice of programme and teaching evaluations, student retention and completion reporting and analysis data and annual programme review as mechanisms for developing a more robust examination of the health of programmes. Attempts were made to develop an annual programme review that was a more collaborative process so that all members of the teaching team were involved in discussions about what was working well in the programme and what required a fix. We also introduced a layered approach to the annual programme review, so that the reports were discussed at a School Board of Studies. The Head of School then provided a 'state of the School's health' by reviewing all annual programme reviews, and then a further layer of analysis and reporting to Academic Board about the overall annual programme reviews across the polytechnic to identify any trends and matters that needed to be addressed at an institutional level.

The Otago Polytechnic process of evaluative conversation, involving senior staff and programme staff, was trialled and Business Units carried out a self-evaluation to examine how they contributed both to the Polytechnic's Strategic Directions and also to supporting students and student outcomes. At the stage of writing this paper, evaluative conversations have been trialled in three areas:

- a course based , level 6 programme with large student numbers in both full-time and part-time study with a diverse group of academic staff
- a small level 2 programme with a small teaching team where the programme is designed to feed students into higher level qualifications
- a cluster of three programmes at levels 2, 3 and 5 where each programme feeds to another level, there are graduate outcomes at all three levels, and a shared teaching team across the programmes.

Each level of evaluation has produced useful outcomes and will continue to be rolled out in a trial-learning mode over the next 12 months.

### **External Evaluation and Review**

Bay of Plenty Polytechnic was the first polytechnic to experience External Evaluation and Review in April 2010 and for us it was a positive, collegial and constructive process. A small amount of initial strategic, policy and self-assessment documentation had been provided to the Lead Evaluator and then a scoping meeting was held four weeks prior to the external evaluation and review. This meeting ensured that the areas selected to be focussed on at the external evaluation and review were areas of importance to Bay of Plenty Polytechnic. Further documentation specific to the areas of focus were provided, for example, annual programme reviews and student evaluations of programmes. During the external evaluation and review visit the team met with a range of senior managers, programme managers, academic staff, industry, students and Council members.

Comment from staff about the experience included the following statements

- It was casual, good discussion
- Pushed for time/ ran out of time (several different staff)
- Initial idea of external evaluation and review took me out of my comfort zone – worked through it, the discussion was great - we've all come on from there and have learned so much (Group Leader)
- Some questions seemed abstract (tutor)
- Needed to make sure we clarified language (Head of School)
- It 'felt' cooperative, consultative, collaborative

An oral report back was given at the end of the visit in an open forum that about 45 staff attended. This provided real strengths to build on and share, and evidenced pointers for improvement.

## **Some Important Differences**

A key shift from audit to the external evaluation and review is that judgements about Confidence in both Capability in Self Assessment and Performance with Educational Outcomes are made. The report is provided to the Polytechnic to check for factual accuracy, this aspect being quite important. The final report is the report of the External Evaluation and Review Team. This means that, should the polytechnic disagree with the content of the report, unless it is a 'factual accuracy' then a polytechnic could be in a situation of disagreeing with a report, and the report being published with that particular rider.

With audit, it was only the audit summary that was publicly available unless the conditions of the Official Information Act were used. With External Evaluation and Review, there is a much more detailed report provided to the public. This describes the scope, process used and judgements of Capability in Performance with Educational Outcomes and Self-Assessment for the overall polytechnic. It also uses a rating scale for each of the focus areas using terminology that moves from Excellent, to Good, to Adequate to Poor. Clearly, this language carries important messages to the students and business community of the provider.

The public report carries the confidence levels for the polytechnic and summary statements for each of the polytechnic focus areas. An additional report is provided to the polytechnic that provides greater detail at the focus area level that can be used to share the good practice and to identify improvements to be worked on. This report, if used from the viewpoint of being 'external and objective eyes', is potentially very helpful for ongoing improvement.

Yes – we are happy with our overall judgement at Highly Confident for Institutional Educational Performance and Confident in Capability in Self Assessment and the report was published on the Institutes of Technology and Polytechnics Quality website on 21 June 2010.

## **SO WHERE DO WE THINK THAT THIS WILL TAKE US NEXT?**

An important lesson we learned was that some of the important self-evaluation actions that happen are the everyday, and ongoing, discussions in programme teams about student monitoring of progress, and provision of intervention support that is so second nature that it was not clearly articulated to the External Evaluation and Review Team. This learning has led to the development of a new, more comprehensive, and whole of organisation model for self-evaluation that will guide and support every day practice for teaching and business units – this is currently waiting on final discussion, implementation and adoption.

We realised that there is so much more that we could do to share ideas across the polytechnic and this needs to be a focus for the future. We are starting by discussing the many areas of excellent practice that were identified, with the intention of using these practices for improvement in other programmes and across other Schools at Bay of Plenty Polytechnic. We also realised that the self-evaluation model fits well with other different forms of organisational decision making that are in a current discussion stage for change.

From another viewpoint, we are aware of the public nature of the reports and the potential for them to be used not only benchmarking, but also for league tables to be developed. By comparison, the compulsory school sector in New Zealand has experienced the league tables' impact of Educational Review Office reports over a number of years. A current newspaper series 'What makes your school special?' in the Bay of Plenty Times (Udy, 2010) highlights how the Education Review Office reports can be positively interpreted and the need for the Education Review Office reports to be viewed from perspectives of the principal, students, and teachers as well as the Education Review Office. It will be an interesting idea to be followed for the non-university tertiary institutions in the future.

Our overall view is that the philosophy and model of institutional self assessment will lead to a much wider acceptance of continuous improvement in tertiary institutions in New Zealand.

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# **EDUCATION FACILITIES: LOW ENERGY CONSUMPTION, HIGH THERMAL COMFORT. ARE THEY MUTUALLY EXCLUSIVE?**

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## **ABSTRACT**

As we look to our future, it is a carbon-constrained future. Thus, as we design education facilities today, we are focussing on reducing their energy usage and greenhouse gas generation. However, we cannot forget about the students and staff occupying these buildings and their needs for high levels of thermal comfort that enhance engagement and productivity. The RMIT University Swanston Academic Building (SAB), an education facility in Melbourne targeting a Five-star Green Star Education v1 rating, is presented as a case study. Computational building simulation demonstrated that a high level of thermal comfort can be achieved by widening the internal space air temperature range from 21 – 24°C to 20 – 26°C, providing an improvement in operational building total energy consumption of approximately nine per cent and greenhouse gas emissions of seven per cent.

Keywords: Thermal comfort, low energy building, air conditioning, predicted mean vote

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## INTRODUCTION

In the design of education facilities, there is currently a strong focus on reducing energy consumption and greenhouse gas emissions as part of minimising climate change. With this low energy and carbon approach, the building occupants, students and staff must not be forgotten as the high performing building should also provide a high level of thermal comfort and productivity.

This balance between achieving a high level of thermal comfort and providing a building with low energy consumption can be a difficult challenge for both designers and operators. Research conducted by Hoyt, Lee, Zhang, Arens & Webster (2009) showed in a number of North American climates that where the temperature band for an air conditioning system is widened, a substantial saving in building energy can be achieved. Hoyt et al. (2009) report a reduction in heating ventilation and air conditioning (HVAC) energy consumption of 10 per cent for each degree Celsius increase or decrease in the space set point.

The common approach to improving thermal comfort within a space is to narrow the operational temperature band of the internal air conditioned space. This philosophy is contrary to the approach of Hoyt et al. (2009) to widen the space temperature band to improve overall building operational efficiency.

For a building targeting a Green Building Council of Australia (GBCA) Green Star rating, this balance is a common challenge as design teams strive to achieve the maximum points within both the Energy and Indoor Environment Quality environmental categories during design and construction.

In order to explore the impact of these apparent competing interests, a generic computational thermal simulation of a Building Code of Australian 2010 compliant educational office building's HVAC energy consumption is analysed for varying space temperature ranges that achieve specific thermal comfort criteria.

This generic analysis informed the design of the proposed RMIT University Swanston Academic Building (SAB). The proposed SAB will be a 33,000 m<sup>2</sup>, 11-storey education facility in Melbourne and is targeting a 5 star Green Star Education v1 rating. A key component of achieving this rating is maximising the facility's overall operational energy efficiency, thermal comfort and productivity. Findings are presented from an analysis of energy consumption and thermal comfort for SAB in order to investigate the question of whether or not low energy consumption and high thermal comfort are mutually exclusive.

## THERMAL COMFORT

Occupant thermal comfort is a subjective sensation that varies between people and is defined as a thermal balance with the surrounding environment. This heat balance of a human body is obtained when the internal heat production in the body is equal to the loss of heat to the environment (CIBSE, 2006).

As defined in ASHRAE (2004), there are six primary factors that affect overall thermal sensation separated into two categories – human parameters and environmental – as summarised in Table 1.

Table 1: Key parameters that influence thermal comfort (ASHRAE, 2004)

<b>Environmental parameters</b>	<b>Human parameters</b>
Dry bulb air temperature (°C)	Metabolic rate
Mean radiant temperature (°C)	Clothing insulation
Relative air speed (m/s)	
Humidity (%)	

## Predicted Mean Vote

For moderate thermal environments, an index known as Predicted Mean Vote (PMV) is a measure that calculates a value on a thermal scale by combining the environmental parameters outlined in Table 1 with the human factors of clothing and activity level. The value calculated is a mean value of the votes of a large group of people on a seven point scale from cold to hot, as outlined in Figure 1 (ISO, 2005). It should be noted that the index applies to air conditioned spaces and should be used only for values of PMV no greater than -2 to +2 (ISO, 2005), that is, cool to warm on the thermal scale.

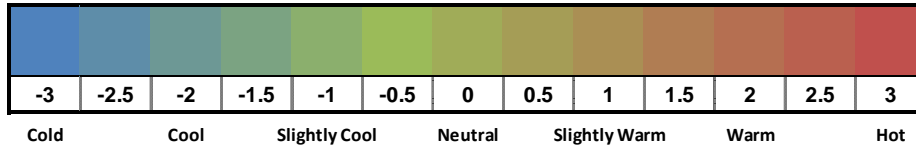


Figure 1: Predicted mean vote thermal scale

People are thermally dissimilar and, therefore, no environment will thermally satisfy everyone at the same time. Within the International Standard ISO 7730, the predicted percentage of people dissatisfied (PPD) is a calculation at each PMV. As PMV increases or decreases from zero, PPD increases as the number of dissatisfied people increases (Dwyer, 2006). Even at a PMV equal to zero, 5 per cent of a large group of people will be dissatisfied as they are either uncomfortably cool or warm.

Within GBCA (2008), a calculated PMV of no greater than +1.0 to -1.0 for 98 per cent of yearly operational hours is considered acceptable. A single point is awarded within the Green Star Education v1 rating tool for satisfying this consistently high level of thermal comfort. A maximum of two points are awarded for achieving a PMV between +0.5 to -0.5.

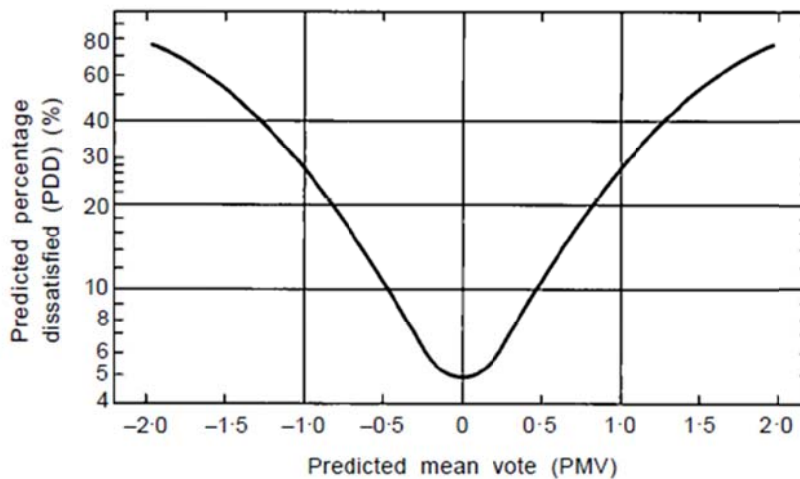


Figure 2: PPD as a function of PMV (CIBSE, 2006)

## Operative Temperature

Operative temperature, also known as dry resultant temperature, is a measure that considers dry bulb temperature and mean radiant temperature at a particular air velocity. Dwyer (2007) outlines that at low velocities of less than or equal to 0.2 m/s, operative temperature is simply the average of the mean radiant and dry bulb temperatures.

The mean radiant temperature is influenced by the thermal condition of building surfaces, including walls, ceilings and floors. Where a particular surface is either cooler or warmer than surrounding

surfaces, a variation in mean radiant temperature will alter the space’s ability to provide a thermally comfortable environment. The element of a building that influences radiant temperature most significantly is the external facade. A facade is typically the weakest component of a building envelope’s interaction with the external environment. Facade surfaces generally have greater fluctuations in surface temperature due to either heat conduction gains or losses. Combined with the transmission of solar radiation through the opaque glazing element, internal surfaces as well as the facade surface are impacted.

Consequently, where the total solar radiation transmitted through the building is minimised, the mean radiant temperature is more closely related to the internal space temperature as variations in surface temperature are reduced.

Dwyer (2006) states that well insulated buildings without large areas of external glazing or extreme air change rates will result in the mean radiant temperature and internal air temperature being similar. So, in practice the operative temperature is comparable to the air temperature, which is readily measured.

### Operational Temperature Range

**Error! Reference source not found.** provides a summary of acceptable thermal comfort bands for internal office/education spaces from a number of industry-recognised sources. The thermal comfort is based on summer and winter air conditioning set points and an overall temperature range. The table highlights the variation in temperature ranges between sources, where within Australia it is considered common practice that actively conditioned spaces are designed and operated with an internal air temperature range of 21 – 24°C, equating to an air conditioning set point of 22.5 ± 1.5°C.

Table 2: Operational space temperature range references

Reference	Space Type	Temperature Set point		Overall temperature range (°C)	Description
		Winter (°C)	Summer (°C)		
CIBSE (2006)	Office open plan	22.0 ± 1.0	23.0 ± 1.0	21.0 – 24.0	Environmental Design CIBSE Guide A
CIBSE (2006)	Education / teaching	20.0 ± 1.0	22.0 ± 1.0	19.0 – 23.0	Environmental Design CIBSE Guide A
ISO (2005)	Office	22.0 ± 1.0	24.5 ± 1.0	21.0 – 25.5	International Standard ISO 7730:2005 Table A.5 Category A criteria
de Dear, Brager, Cooper (1997)	General	22.5 ± 1.2	23.5 ± 1.2	21.3 – 24.7	ASHRAE RP-884 Developing an Adaptive Model of Thermal Comfort and Preference
Australian Government Comcare (1995)	Office	22.0 ± 2.0	23.0 ± 1.0	20.0 – 24.0	Air conditioning and thermal comfort in Australian Public Service offices
WorkSafe Victoria (2008)	Office	N/A	N/A	20.0 – 26.0	General temperature guidance provided in Appendix E – Amenities and facilities planning checklist

Interestingly, CIBSE (2006) presents the overall temperature set points for an office to be 1°C higher in summer and 2°C less in winter when compared to the set points outlined in the same document for



an education teaching space. This variation in temperature is attributed to a higher metabolic rate used in the calculation of the set points for the education teaching space.

All documents referenced in Table 2 provide an internal temperature range as guidance only and do not specify criteria as a mandatory requirement.

## METHODOLOGY

The analysis considered two separate computational building thermal energy simulations. All simulations were completed within Integrated Environmental Solutions (IES) Virtual Environment (VE) software version 6 and developed in accordance with the Green Building Council of Australia Education v1 Energy Calculator Guide (GBCA, 2010).

The analysis utilised CSIRO Melbourne 1971 Test Reference Year (TRY) weather data, as used for all building thermal computational models and in accordance with the ABCB (2006) Protocol for Building Energy Analysis Software.

The first simulation developed was of a generic model of a Building Code of Australia 2010 compliant educational office building. The energy consumption of the HVAC was analysed for three different space temperature ranges to achieve specific thermal comfort criteria. The cases assessed are outlined in **Error! Reference source not found.**

Table 3: Air temperature range

Case	Air conditioning Set point (°C)	Overall temperature range (°C)
Base	22.0 ± 1.5	21.0 – 24.0
1	23.5 ± 2.5	21.0 – 26.0
2	23.5 ± 3.5	20.0 – 27.0

The findings from the initial generic analysis form the foundation of the assessment for the cellular and open plan RMIT SAB academic office space case study. The system proposed for the office space utilises ceiling mounted active chilled beams combined with a central air conditioning system that delivers primary tempered air to the beam within the space.

The thermal comfort target for the project was to achieve a PMV of between -1.0 and +1.0 across all spaces for 98 per cent of the hours of occupancy. This criterion provides a high level of thermal comfort whilst satisfying the GBCA (2008) requirements. Based on the findings of the generic analysis, the standard 21 to 24°C design criterion was extended to 20 to 26°C and was still able to ensure a comparable thermal environment as outlined in Section 4.

The case study of RMIT SAB considers also the student portals – spaces that function as a student meeting, learning and interaction area within the building. These spaces are orientated in multiple directions and elevations across the building, with each portal having its own unique character, views, solar access and microclimate.

Thermal comfort conditions within the portal spaces are maximised with the implementation of a mixed mode HVAC system. The system regulates the space via the operation of a combination of openable windows, ceiling fans and evaporative cooling when conditions outside are favourable. Where the external conditions are not appropriate, or the temperature range within the space cannot be maintained, the HVAC system will revert to a full air conditioned mode of operation.

All assessments discussed for the generic education/office space and RMIT SAB academic offices focus on the interaction of mean radiant temperature with air temperature within the PMV calculation as a means of improving the operational performance of SAB in accordance with Dwyer (2006).

The mechanical system design of the portal spaces was developed and assessed in a manner to capitalise on the benefit of two alternate environmental parameters, relative humidity and air speed, within the PMV calculation to satisfy a criteria of -1.0 and +1.0 across all spaces for 98 per cent of the hours of occupancy, whilst improving overall building energy efficiency.

For the purposes of all analysis and results, the metabolic rate of each occupant was based on 70 W/m<sup>2</sup> sensible heat loss, in accordance with a person undertaking typical office activities that include filing, sitting, slowly walking, and relaxed.

### Thermal Comfort Assumptions For PMV Calculation

There are a range of building design factors that influence thermal comfort and energy consumption, primarily, the HVAC system, facade design and, on a human level, clothing and metabolic rate. For the purposes of this analysis, a number of variables have been assumed constant in accordance with the Green Star Education v1 Technical Manual (GBCA, 2008), as outlined in **Error! Reference source not found.**

Table 4 - Key predicted mean vote assumptions

For assessment of PMV > 0 (positive)			For assessment of PMV < 0 (negative)		
clo	0.60	Clothing unit equivalent to light business attire (trousers with shirt / dress)	clo	0.95	Clothing unit equivalent to medium business attire (trousers with shirt and jumper / winter dress, stockings and jacket)
met	1.20	Metabolic rate equivalent to typical office activities – filing, seated, slow speed walking, relaxed (equivalent to 70 W/m <sup>2</sup> )	met	1.20	Metabolic rate equivalent to typical office activities – filing, seated, slow speed walking, relaxed (equivalent to 70 W/m <sup>2</sup> )
v	0.2 m/s	Air velocity at occupant level based on an overhead linear slot diffuser. Occupant stationary.	v	0.2 m/s	Air velocity at occupant level based on an overhead linear slot diffuser. Occupant stationary.

## RESULTS AND DISCUSSION

Based on the computational thermal modelling of the generic ABCB (2010) BCA deemed to satisfy compliant office/education building, the yearly average internal space mean radiant and dry bulb air temperature, calculated as an area weighted average, were 0.02 per cent different. This negligible difference is in accordance with Dwyer (2006), whereby the operative temperature can be considered equal to the air temperature.

For the purposes of the development of the three cases investigated, operative temperature is considered to be equal to dry bulb air temperature and, by extension, dry bulb temperature to be equal to mean radiant temperature.

It is acknowledged that where the mean radiant temperature significantly differs to the dry bulb temperature further analysis is required of appropriate operational space temperature range to satisfy a specific PMV scale. This could be necessary where the performance of the facade is thermally poor relative to that proposed under BCA 2010 Section J requirements. Typical thermal weaknesses in a building include a large percentage of glazing area to total facade area and/or a low performing glazing performance when considering both thermal conductance and solar radiation transmission into the internal space.

PMV and the corresponding PPD were determined for each of the generic simulation cases. As summarised in Table 5, it can be seen that Case 1 provides similar thermal comfort performance to that calculated for the Base Case.

Case 2 achieves a PMV of between -1.0 and +1.0. Although this equates to a larger number of people dissatisfied than in Case 1, the PMV range is still deemed to be within an acceptable band as the space is considered only slightly warm to slightly cold, with a maximum number of people dissatisfied of 25 per cent.

Table 5: Calculate predicted mean vote and predicted people dissatisfied for specific air temperature ranges

Case	Air conditioning Set point (°C)	Overall temperature range (°C)	Predicted Mean Vote (PMV)	Predicted People Dissatisfied (PPD)
Base	22.0 ± 1.5	21.0 – 24.0	Between -0.5 to +0.5	<10%
1	23.5 ± 2.5	21.0 – 26.0	-0.5 to +0.5	10%
2	23.5 ± 3.5	20.0 – 27.0	-1.0 to +1.0	25%

The results presented in Figure 3, Figure 4 and Table 6 illustrate the reduction in operational energy consumption and greenhouse gas emissions when the temperature range is elevated from the Base Case 21 – 24°C to a range of 21 – 26°C under Case 1. Both cases meet the PPD ≤ 10 per cent criteria with Case 1 achieving a 6.5 per cent reduction in total operational energy and 6.7 per cent reduction in greenhouse gas (GHG) emissions due to the expanded temperature range.

As outlined in Table 6, Case 2 provides an opportunity to further expand the operating temperature range as a means of improving building energy efficiency. However, Case 2 results in a greater percentage of people dissatisfied than that predicted for the Base Case and Case 1.

Table 6: Energy and GHG emissions improvement from Base Case

Case	Overall temperature range (°C)	HVAC operational improvement from Base Case		Total building operational improvement from Base Case	
		Energy	GHG	Energy	GHG
Base	21.0 – 24.0	-	-	-	-
1	21.0 – 26.0	16.8%	18.3%	6.5%	6.7%
2	20.0 – 27.0	30.5%	26.8%	11.8%	10.0%

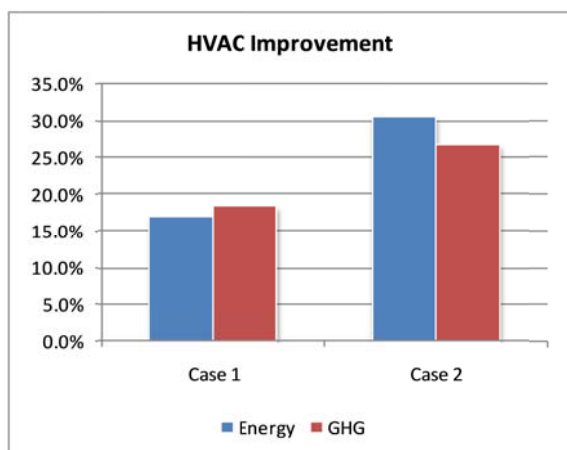


Figure 3: HVAC improvement in energy and greenhouse gas emissions for Case 1 and Case 2 compared to the Base Case

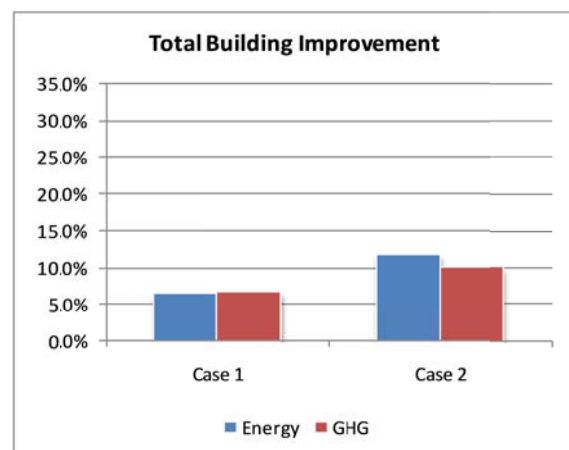


Figure 4: Total building improvement in energy and greenhouse gas emissions for Case 1 and Case 2 compared to the Base Case

## **RMIT SAB Academic Office Spaces**

The aim of the computational thermal modelling of RMIT SAB Academic office spaces was to investigate the operational energy consumption of the facility when the operational temperature range is widened from the typical 21 – 24°C to 20 – 26°C, whilst satisfying the Green Star thermal comfort criteria of achieving a PMV between -1 and +1 for 98 per cent of building operational hours.

Assessment of the thermal comfort in the academic office space from the computer simulation showed that the percentage of time where the target PMV was achieved reduced by only 0.1 per cent, from 99.9 per cent to 99.8 per cent, when the operational temperature range was extended from 21 – 24°C to 20 – 26°C. Both cases achieve the 98 per cent of hours comfort criteria, satisfying the Green Star thermal comfort requirements.

The simulations undertaken showed an improvement in energy and greenhouse gas emissions across the total building operation of 9.0 per cent and 7.0 per cent, respectively, from the 21 – 24°C case compared to the 20 – 26°C case. Where considering just the building's HVAC system operational energy consumption, the reduction for the elevated temperature band was 15 per cent.

Note that the generic model was based on BCA 2010 and the Case 2 temperature range of 20 – 27°C was equivalent to a PMV range of -1 to +1. RMIT SAB targeted the same PMV range as the generic model, however, had a temperature range of 20 – 26°C. This variation in temperature is a function of a less stringent earlier version of the BCA being applied to SAB. The 2010 version of the BCA stipulates high performance facade requirements which, as outlined in Section 2.2, reduce the impact of the mean radiant temperature, a key influence in overall thermal comfort.

## **RMIT SAB Portal Spaces**

As discussed in Section 3.0, the portal spaces utilise non-conventional mechanical system components as part of a mixed mode operation where the space can run in either a natural ventilation or full air conditioned mode.

The key design principle for this style of system is to maximise the number of hours where the space can operate in natural ventilation mode. This form of HVAC operation will be the most energy efficient as all mechanical equipment serving the space will be controlled to shutdown as automated openable windows at high and low level naturally ventilates the space. The hours of natural ventilation operating are maximised when the operational temperature range is widened and internal gains within the space are minimised.

An analysis of the Melbourne TRY weather data indicates that between the hours of 8:00 and 18:00 considering a six day week, 7 per cent of the time the external ambient temperature is between the internal space temperature range of 21 – 24°C, compared to 16 per cent of time for a temperature range of 20 – 26°C. This assessment of the mixed mode system's effectiveness assumes that where the external space temperature is within the internal temperature range there is opportunity to naturally ventilate the internal space. Based on this assumption, the elevated temperature range of 20 – 26°C compared to 21 – 24°C provides an approximate 130 per cent improvement in the number of hours that the mixed mode system can run in passive operation.

Although the elevated temperature band indicates significant opportunity where external conditions are favourable and opportunity exists to operate the portals in natural ventilation, the temperature band can be further extended with the operation of ceiling/wall fans or evaporative cooling. Figure 5 and Figure 6 illustrate the relationship between PMV, air temperature and relative humidity following the same design assumptions on clothing levels, metabolic rate and correlation between air and mean radiant temperature as outlined in Section 2.3.

With the implementation of ceiling/wall fans, the velocity of the air increases in the space, providing opportunity to maintain thermal comfort criteria by elevating the upper temperature limit from 26°C

to 28°C. Figure 5 presents this concept where the air speed increases from the typical 0.2 m/s to greater than 0.8 m/s.

With the upper temperature limit set at 28°C, the potential hours where a natural ventilation mode can run with the fans in operation was calculated at 20 per cent of total hours based on an assessment of the Melbourne TRY weather data to maintain the same level of thermal comfort of -1 to +1 PMV. It should be noted that the operation of the portal spaces in a natural ventilation mode will require continuous monitoring of the outdoor air ventilation rates via carbon dioxide sensors to ensure sufficient outdoor air is delivered to the space. With the operation of the ceiling/wall fans, there is potential that air movement may disrupt air buoyancy driving ventilation – something that will be closely monitored during passive system operation.

Where the space is operating at the lower temperature limit of 20°C, the operation of ceiling fans has a negative impact on the thermal comfort in the space as localised draughts create an uncomfortable environment for occupants. Typically, mechanical systems are designed to ensure air movement, especially in periods of heating, does not exceed 0.2 m/s. CIBSE (2006) notes that air speeds greater than about 0.3 m/s are probably unacceptable except in naturally ventilated buildings in summer when high air speeds may be desirable for their cooling effect.

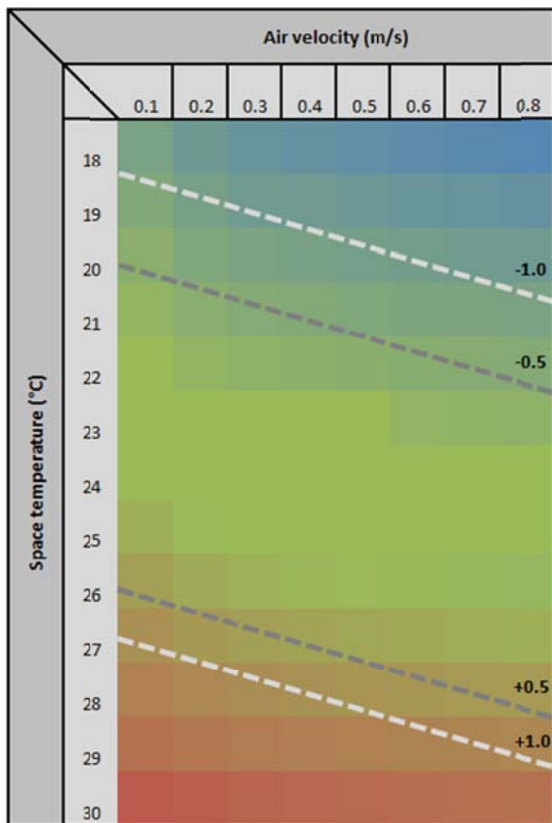


Figure 5 - Predicted mean vote contour plot calculated based on varying air speed and space temperature

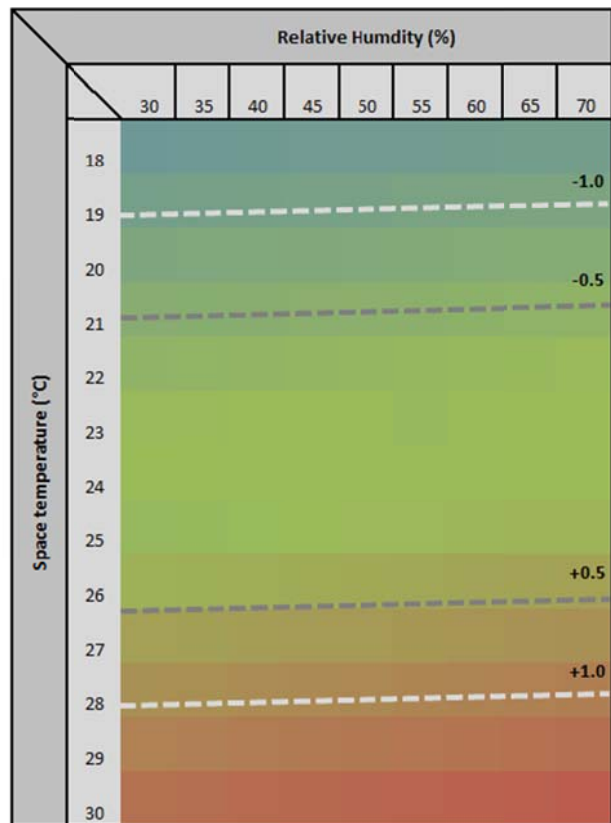
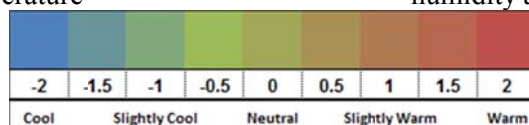


Figure 6 - Predicted mean vote contour plot calculated based on varying relative humidity and space temperature



The PMV scale was developed for air conditioned buildings. When considering truly naturally ventilated spaces and not spaces that have mixed mode operation, the ASHRAE (2004) standard should be adopted where an adaptive thermal comfort scale has been developed that provides a

correlation between internal space operative temperatures and mean monthly outdoor air temperatures.

During summer periods in Melbourne, it is not uncommon to have days where the external relative humidity is less than 35 per cent and the external air temperature is greater than 28°C. An assessment of the TRY weather data indicates that through the summer months of December to February there are approximately 120 hours where the relative humidity is less than 35 per cent and air temperature greater than 28°C during the hours of 8:00 to 18:00, six days a week. These hours provide opportunity to implement evaporative cooling as a mechanism for conditioning the space through a system that consumes minimal energy consumption. The quantifiable energy benefit of an evaporative cooling system was not completed as part of this analysis due to limitations in the modelling process. This concept, although enabling the space to hold an upper temperature range for a greater period of time, does not allow the upper space temperature band to widen as was the case with the ceiling/walls fans described above.

Figure 6 presents a correlation between PMV, relative humidity and space temperature. In accordance with CIBSE (2006), humidity has little effect on feelings of warmth unless the skin is damp with sweat. It is only where the temperature in the space raises to above approximately 28°C that moisture in the air may become apparent and impact thermal comfort. The true benefit of the evaporative cooling is the humidification of air in natural ventilation mode.

## **CONCLUSION**

Thermal comfort is a complex measure that not only considers clothing levels and metabolic rate, but also the temperature, humidity and air speed within the environment a person occupies. In Australia, no mandatory requirements are set for temperature or thermal comfort criteria within education or office spaces. The Green Star thermal comfort requirements provide guidance for designers of new buildings striving to achieve a high indoor environment quality for building occupants.

The computer thermal modelling completed for the generic and RMIT SAB case studies showed that a high level of thermal comfort of PMV -1 to +1, equivalent to 75 per cent of people satisfied within the space can be achieved by widening the internal space air temperature. For RMIT SAB, the modelling compared adjusting the temperature range from 21 – 24°C to 20 – 26°C, and showed an improvement in total operational energy consumption of approximately 9 per cent and greenhouse gas emissions of 7 per cent. This improvement in operational efficiency with the HVAC systems operating at an elevated temperature band showed a negligible reduction in the number of hours that the target thermal comfort PMV range could be satisfied through the year.

The analysis of the RMIT SAB portals' non-standard mechanical systems highlighted improvements of between 15 per cent and 20 per cent in the number of hours of natural ventilation mode operation compared to a fully air conditioned system operating at a temperature range of 20 – 26°C. This improvement was shown through simulation to not compromise the thermal comfort target.

Further research is required to understand the relationship between radiant temperature and air temperature within an internal space in more detail. This research would consider the implementation active radiant systems such as in slab heating or chilled ceilings to maximise thermal comfort and provide improved overall building energy efficiency. This assessment would need to consider a more adaptable relationship than simply the air temperature range being based on the radiant temperature equalling the internal air temperature where benefits of these HVAC systems are radiant heating and cooling capacity.

## **ACKNOWLEDGEMENTS**

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# **FUTURE DIRECTIONS IN COURSE QUALITY ASSURANCE**

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## **ABSTRACT**

The Course Quality Assurance System at Queensland University of Technology (QUT) has as its centrepiece an exemplar of data visualisation known as the Individual Course Report. This report provides every course coordinator with an annual snapshot of their performance data evaluated against QUT and national benchmarks. In this article, the impact of the Individual Course Report is explored through the case study of one undergraduate course identified as underperforming. The case study features an innovative, ethnographic approach to working with course teams and highlights the importance of context, collaboration and appropriate support in creating evidence-based action plans for course improvement.

Keywords: quality assurance, data visualisation, ethnographic evaluation, cultural change.

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## INTRODUCTION

The vision of course quality at Queensland University of Technology (QUT) is simple. First, a course should be viable. Second, students should experience a positive learning environment during their enrolment in a course. Third, a course should have positive outcomes for completing students and finally, these three elements should be monitored annually. This essential definition of quality remains true despite the varying contexts of different discipline areas and course types. Please note that at QUT *course* refers to the degree or award e.g. Bachelor of Law, while a *unit* refers to a subject studied within that award e.g. Legal Foundations A.

Like other universities, in the last decade QUT has experienced an exponential growth in the variety and density of data that can be used to describe course performance in the areas of viability, student experience and course outcomes. With over 350 courses and majors and around 40,000 enrolled students, this quantity of constantly changing information has become difficult to navigate. Increasingly, academic and professional staff time has been spent gathering data from disparate sources, attempting to consolidate and summarise it to meet national reporting agendas, with little capacity left over for interpretation or meaningful action.

Faced with this challenge, QUT's Office of Teaching Quality Curriculum Review and Improvement Team (CRI) and QUT's Corporate Reporting and Analysis team (QCR) joined forces to take a fresh approach to visualising and sharing course performance data. The goal was to engage academic teams in evidence-based action planning for course improvement while at the same time providing a means for reporting performance at faculty and whole-of-university levels. The early results have been encouraging. The story begins with Course Quality System.

## THE COURSE QUALITY SYSTEM AT QUT

At QUT, four main reporting elements make up the annual cycle of Course Quality Assurance.

**1. The Individual Course Report (ICR).** This report is a three-page data snapshot of the performance of each course and major, produced in January each year. At this time, courses that are deemed to be underperforming are identified. Between January and March, all Course Coordinators are required to view and briefly comment on their Individual Course Reports, listing their action plans for the coming year.

**2. The Consolidated Courses Performance Report (CCPR).** After March, the Individual Course Reports for each course and major are consolidated into a faculty and university wide report. Released in May, the Consolidated Courses Performance Report amalgamates data and analysis for consideration by key governance committees. Advances in data management and reporting processes have enabled what was previously a 100-page document to be presented as a concise 12-page report.

**3. The Underperforming Courses Status Update (UCSU).** In July, those responsible for courses that were deemed to be underperforming are asked to fulfil a second reporting requirement – a brief status update on the action plans they identified at the beginning of the year.

**4. The Strategic Faculty Courses Update (SFCU).** In September, faculties are required to provide a brief outline of the anticipated strategic direction of their academic programmes for the coming year, noting any changes to curriculum that are planned and identifying key stakeholders.

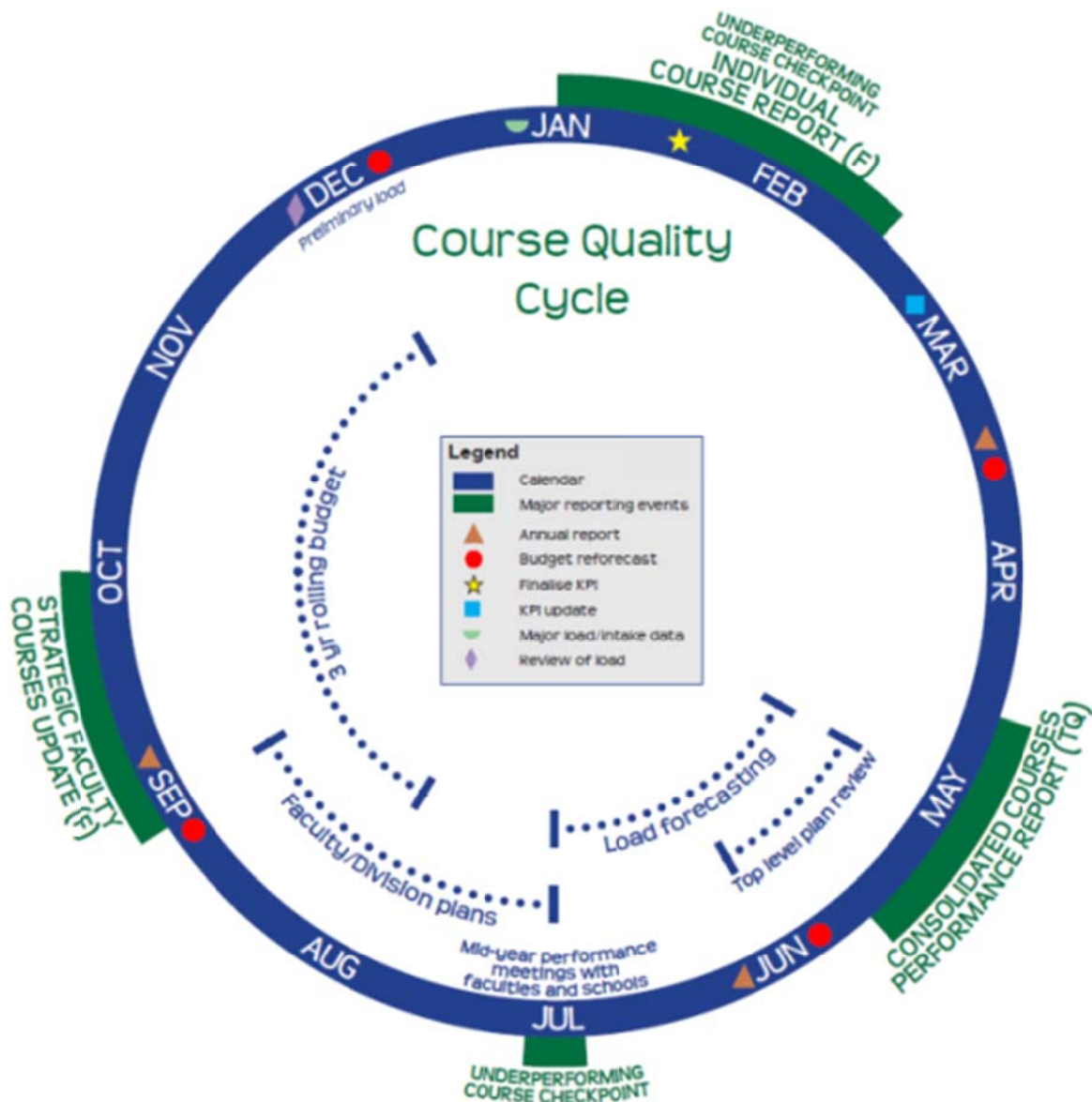


Figure 1: The cyclic map of course quality assurance activities at QUT.

This article particularly focuses on the Individual Course Report and presents a case study of how one course team has been working within the Course Quality Cycle. For further information on other components of the Course Quality System, refer to Towers, Alderman, Nielsen, & McLean (2010).

**The Individual Course Report (ICR) – the key element in the Course Quality Cycle.**

The Individual Course Report is a key element in the Course Quality Assurance Cycle. As outlined in the previous section, this report is an annual snapshot of course performance data provided online to course coordinators in a concise three-page format (see Figure 2). The snapshot pulls together quantitative data from a variety of sources, categorising them into the three core dimensions of course quality:

- Course viability (e.g. course enrolments, Year 12 cut off score for entry to course, first preferences ratios);
- Learning environments (e.g. attrition, unit progression rates, student experience surveys); and

- Learning outcome measures (e.g. Course Experience Questionnaire, Graduate Destination Survey, course completions).

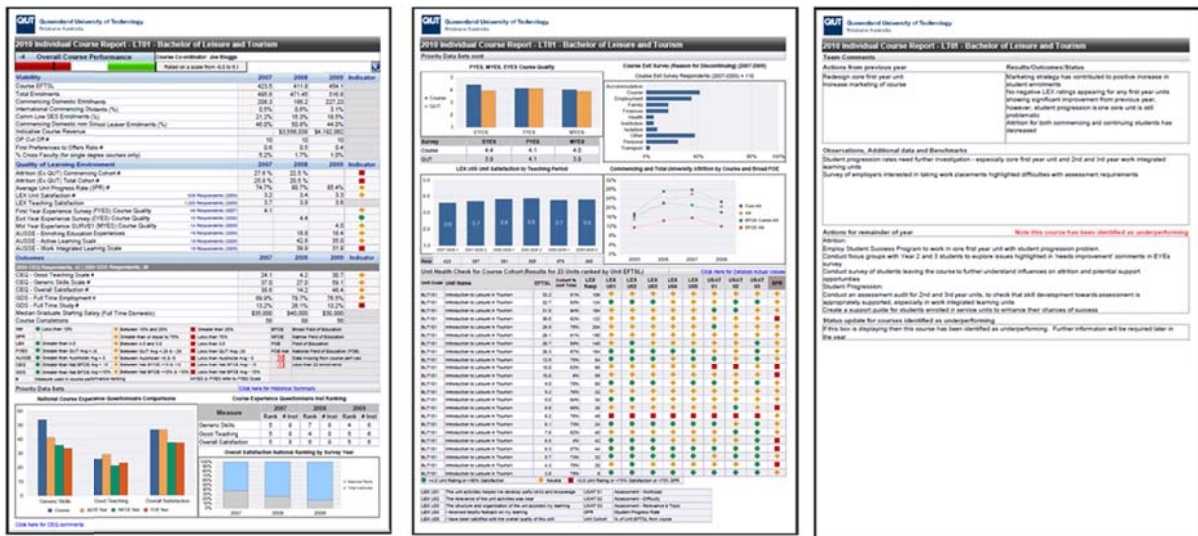


Figure 2: An ICR for a hypothetical course at QUT.

The online snapshot includes text fields for Course Coordinators to make observations about their data, provide contextual details and outline actions for the coming year. Each course is also attributed an Overall Performance Score. The performance metric uses 11 of the 28 data sets available in the Individual Course Report to identify each course on a sliding scale, from underperforming to high-performing. Courses identified as underperforming warrant further scrutiny and are required to provide a status update on their action plans, and qualify for more intense analysis and support from the Curriculum Review and Improvement team. High-performing courses provide exemplary cases of best practice in specific disciplines. The Overall Performance Score and identification of underperforming courses is specifically designed to facilitate risk management at Course, Faculty and University levels.



Figure 3: The sliding scale provided in the header of each ICR, showing the course's Overall Performance Score.

### Obstacles to Academic Staff Engagement in the Course Quality Cycle

Despite an overall positive response from academic and professional staff to the online convenience of the Individual Course Report snapshot, a variety of reasons is used to resist the changes brought about by the Course Quality process. Offence at having performance made visible; outcry at the label 'underperforming'; disagreement with the data – for example, the use of student opinion surveys as a measure of the learning environment; the timing of course reporting deadlines and dismay at being asked to do 'one more' administrative task all factor in negative responses. These manifestations of resistance are not uncommon to organisations in general (Bruckman, 2008) or to the higher education sector in particular (Diamond, 2006). Despite this, the Curriculum Review and Improvement team has earned a positive reputation for engaging the course teams of underperforming courses with their data and supporting them in evidence-based action planning.

## THE COURSE ENVIRONMENT PORTFOLIO – AN OUTLINE OF THE PROCESS

One of the keys to the team’s success has been their willingness to recognise that, although the Individual Course Report is an impressive breakthrough in data communication, it can only ever be a conversation starter. It provides a valuable outline of course performance but will always lack the ‘ethnographic colour’ of the real life of a course. Being willing to listen to the stories and experiences of the course team and document this ‘ethnographic colour’ has shown the significance of the unique academic, industry, and political environments from which a course emerges and has highlighted the influence of this environment on how a course team functions; how they understand change and see innovative solutions.

This holistic and ‘conversational’ approach to looking at the life of a course has been undertaken systematically. A mapping tool called the ‘Course Environment Portfolio’ is used to focus course team discussions and enable the Curriculum Review and Improvement team facilitators to track the collection of a broad range of qualitative and quantitative data. This tool is based on a Quality Achievement Matrix that was first applied in the Australian vocational education sector (Australian Quality Council, 2000) and adapted by the CRI team to better suit the university environment and QUT context.

	1. Leadership	Score	2. Data Analysis	Score	3. Stakeholders	Score	4. Staff	Score	5. Students	Score	6. Marketing and Communication	Score	7. Course	Score
<b>Outcomes</b>	<b>OUTCOME:</b> Leadership in Course Coordination is systemic, recognised and valued		<b>OUTCOME:</b> Evidence based approaches to annual course planning are valued, integrated and rigorous		<b>OUTCOME:</b> Industry, Professional body and QUT stakeholder involvement is valued, monitored and regularly reviewed		<b>OUTCOME:</b> Staff and their industry, academic and administrative expertise are valued, acknowledged and supported		<b>OUTCOME:</b> The student experience is valued, monitored and supported		<b>OUTCOME:</b> Marketing and communications are valued, effective and evaluated		<b>OUTCOME:</b> Curriculum design and delivery is aligned, holistic and has ongoing momentum	
<b>Excellence</b>	1.5 Course leadership contributes to the alignment of Faculty/QUT T&L plans and policy		2.5 Data analysis outcomes align and support strategic planning for the course		3.5 The course team actively seeks benchmarking opportunities with stakeholders		4.5 Staff discipline area and industry expertise is current		5.5 Senior students are celebrated and supported in their transition forwards		6.5 Benchmarking activities are regularly pursued		7.5 Benchmarking activities are regularly pursued to inform course planning and innovation	
	1.4 Leadership creates a positive culture that provides opportunities for development and values and rewards contributions		2.4 Institutional expertise is sought in the validation and improvement of data gathering and analysis		3.4 Annual stakeholder feedback informs strategic direction and course innovation		4.4 Staff succession planning and risk management strategies are effective and ongoing		5.4 Students, including alumni, are represented in a range of course forums		6.4 Institutional expertise is sought to extend and monitor effectiveness of communication approaches		7.4 The curriculum structure supports the course purpose, direction and desired outcomes	
	1.3 Course team members contribute their expertise to decision making		2.3 All forms of stakeholder and student feedback are considered in planning and are used in an ethical manner		3.3 Course team members are represented on professional committees, at conferences and in research projects		4.3 Staff are actively involved in T&L development through training, awards, grant applications, mentoring & project leadership		5.3 Student diversity and learning needs are recognised, supported and evaluated		6.3 Marketing and communication plans are linked to the priority action areas identified for the course		7.3 Assessment is mapped in detail and evaluated at whole of course, year and major levels	
	1.2 The course has a clear philosophy, purpose and direction		2.2 A gap analysis is undertaken to determine where further data about the course is needed		3.2 Regular opportunities for stakeholder interactions are evaluated and new opportunities are actively sought		4.2 Orientation of staff to the course environment is planned, timely and effective		5.2 Student entry pathways are aligned with transition and support strategies		6.2 Media and communication items are mapped, monitored and evaluated		7.2 Graduate capabilities, course objectives, teaching & assessment are mapped, aligned and monitored	
<b>Foundation</b>	1.1 The course has an active course team and effectively structured meetings		2.1 The ICR, Course Quality Cycle and policy informs the course team in planning activities		3.1 Stakeholders have defined roles and responsibilities		4.1 Recruitment of staff is rigorous and systematic		5.1 Students are provided with effective course advice and academic support		6.1 Strengths and weaknesses are identified, communication standards established and regularly reviewed		7.1 Delivery elements (eg mode, timetable, space allocation) support desired course outcomes	

**0 Points** - no evidence of activity  
**1 Point** - some activity  
**2 Points** - activity  
**3 Points** - outstanding activity

Figure 4: The Course Environment Portfolio used to guide curriculum conversations and data collection

The Course Environment Portfolio features seven key continua. Each continuum reflects a priority area of course management such as Leadership, Data Analysis or Marketing and Communications. For each continuum, five levels of achievement are described, from basic performance to excellence. For example, a basic expectation for the Leadership continuum is that ‘*the course has an active course team and effectively structured meetings*’ while excellence in leadership requires that ‘*activities contribute to the alignment of Faculty/QUT Teaching and Learning Plans and policies.*’



Over a series of conversations, data, artefacts and examples are collected and logged against each continuum and level of achievement. Items might include meeting minutes, course advertising materials, staff email announcements, staff development attendance lists, student focus group transcripts, alumni event calendars, records of co-curricula student activities and a variety of other serendipitous finds. At times, the investigation trail is directed by issues that emerge along the way and if possible the Curriculum Review and Improvement team uses their expertise to seek and analyse further data from university systems on behalf of the course team.

At the end of the process, after all available data has been logged, each cell in each of the seven continuums is evaluated and given a score between 0 (for no evidence of activity) to 3 (for outstanding activity). The resulting Portfolio chart is shared with the course team. Gaps in the continua are immediately obvious and strengths and weaknesses identified. Outmoded assumptions, new ideas, possible solutions, areas that need further investigation, and priorities are all discussed until four main actions are decided upon for the coming year. This four-point action plan, based on a wide range of evidence and robust, longitudinal participation from the course team is the final goal of the Course Environment Portfolio and ideally represents a cultural shift in the life of the course that translates into positive performance outcomes.

While literature on the use of ethnographic data in university management, such as that gathered for the Course Environment Portfolio, is uncommon in Australia, it is not a new approach. Fetterman (1990) began using the term 'ethnographic auditing' to describe a number of projects conducted at Stanford University and other higher education institutions during the 1980s that emphasised the importance of the roles of culture, values and the physical environment in education management. By the mid 1990s the term 'empowerment evaluation' replaced the notion of auditing and a stronger focus on collaboration, supporting stakeholders in self-evaluation and promoting the continued use of evaluation principles in daily practice was evident (Fetterman 1998; Fetterman & Wandersman 2007).

The use of the Course Environment Portfolio aligns strongly with Empowerment Evaluation principles and with Fetterman's main goal of fostering improvement. From its inception, the focus of QUT's Course Quality Assurance System has been on identifying risks and areas for improvement. The Individual Course Report has been designed to 'empower' course coordinators and other university stakeholders by easing access to data. The requirement for Course Coordinators to log their action-plans and status updates at key points in the annual quality cycle emphasises the role of stakeholder self-determination and the use of the Course Environment Portfolio highlights a collaborative and capacity-building approach that focuses on self-evaluation, goal setting and the continued use of evaluation principles. Antin (2005) has insightfully described Empowerment evaluation as 'straddling the boundaries between evaluation and training' (p23) and for the Curriculum Review and Improvement Team this exactly explains our remit in regards to those courses identified as underperforming.

## **A CASE IN POINT - THE BACHELOR OF JUSTICE**

As part of QUT's Course Quality cycle, the Bachelor of Justice came onto the radar of the Curriculum Review and Improvement team in 2009. The Individual Course Report (ICR) measured it as underperforming with five negative flags and only one positive flag, resulting in a score of -4, one of the lowest scores in the university. The flags showed a range of problems that had an impact on all three categories of quality assurance indicators - viability, student experience and course outcomes. Both enrolments and first preferences had been dropping over the last three years, showing that the course had lost popularity with prospective students. Fewer first preferences also increased the risk of migration to other courses as students try to manoeuvre into their first choice after enrolment. Both the attrition rates of commencing students and total attrition over the whole duration of the course were over the university's recommended outer limit of 25 per cent. Students that were staying in the course experienced high failure rates in a number of units and for those students that completed the degree, the percentage that continued to full time study was significantly below the national average.

There were also negative indicators around two of the scales from the national Course Experience Questionnaire where the Generic Teaching Scale and the Overall Satisfaction Index both rated more than 15 per cent below the national average for courses from other institutions in the same Broad Field of Education.

### **Course Status Within the Faculty**

The Bachelor of Justice has close to 500 students and provides an important service to the justice professions and the wider community. It is the flagship course of the School of Justice located within the Faculty of Law at QUT. In 1991, after the Fitzgerald inquiry into police misconduct, the School was established to fulfil the recommendation that all police recruits undertake tertiary study before being sworn in. The Bachelor of Justice was initially established for this purpose but since then has expanded to support students entering a wide range of other vocations in the criminal justice system. These include careers in national intelligence and security, crime policy and prevention, national defence and protective services, corrective services, juvenile justice and the public service in areas of policy and legislation advice.

Despite performing this important function, the Bachelor of Justice has often been perceived as the ‘poor cousin’ to traditional law degrees. The Bachelor of Laws at QUT is more exclusive with a Year 12 cut off score for entry to the course of 6, whereas the Bachelor of Justice requires a cut off score of 13. Consequently, poorer academic skills and lower career aspirations are commonly attributed to Justice students. The Law school is approximately three times larger than the School of Justice with 35 more non-sessional staff, giving Justice less representation on committees and less impressive outcomes in research and grant funding. While the faculty’s student body is listed as being the ‘*Law and Justice Students’ Association*’, it is common knowledge that few Justice students attend events with the assumption being they can’t afford to pay the fees. This cultural environment of low self-esteem and poor performance for Justice was made more difficult by the fact that the School of Justice had been without a head of school for an extended period, resulting in uncertain leadership for the degree.

### **Starting the Course Environment Portfolio Conversation**

The opportune time for the Curriculum Review and Improvement team to enter this course environment came when a new head of school for the School of Justice was appointed. By default, the head would also be the Course Coordinator for the Bachelor of Justice. As a senior academic new to the QUT environment, the head of school welcomed our help in unpacking the negative course performance indicators and taking a more holistic approach to understanding the life of the Bachelor of Justice through the use of the Course Environment Portfolio (Alderman, Duncan & Quadrelli 2009). A course team of 8 was nominated from within the school that included representative academic staff from first year core units and majors, key administrative staff and the Head of School and also included the Faculty’s Learning and Teaching Developer who would work more closely with us as an ‘insider’ on some aspects of data gathering.

### **The Meeting Pattern**

Once the course team was confirmed, an initial meeting was conducted to introduce the Portfolio process and establish the basic willingness of members to participate. Over the next three months, a series of more than 20 meetings, data discussions and curriculum conversations ensued. The meetings followed a pattern whereby the Curriculum Review and Improvement team would present data to the course team, engage them in lively conversation and document any assumptions emerging on the day. The CRI team would then work independently to gather further data from university systems to validate or invalidate those assumptions. Meanwhile the Learning and Teaching Developer would assist in gathering artefacts and other qualitative evidence from the course environment before we all returned to the course team with our new findings. While cooperation was sought from the course

team, care was taken not to increase their workload. The bulk of data preparation occurred behind the scenes. This cycle of moving more deeply into the available data and lived experience of the stakeholders and then presenting back to the course team was repeated four times before the Portfolio mapping process was complete.

### **Assumptions and Evidence**

The first meeting with the course team was also the first time the group had come together as a whole. Previously, isolated pockets of activity had been the norm with a focus on individual units rather than a whole-of-course approach. An air of discouragement and frustration was evident as the team viewed their flagging red Individual Course Report and low performance score. They had two reigning assumptions about why their course was performing poorly. Firstly, they assumed course attrition was high because many students used the Bachelor of Justice, with its lower OP, as a pathway to Law. Secondly, they assumed that other students left because they could not handle the academic challenge of university study. In particular, they felt that students who had TAFE entry into the course (approximately 30 per cent of enrolments), were those that most struggled with university systems and practices, having been given credit for introductory units. Since the idea of ‘dumbing down’ the curriculum was not considered an option, alternative plans for course improvement that might address these problems remained limited.

It is not easy for course teams to move past their assumptions without more in-depth analysis of available data. Team members are not employed as business analysts. They are discipline area experts, teachers and academic researchers. Deeper levels of student data are not easy to access from university systems or simple to analyse, even for the experienced. The attrition formula used to calculate whether a student is counted as continuing or exiting is complex. In short, it was imperative that the course team received extra support from the Curriculum Review and Improvement team to examine the data in more detail. Over the next few weeks, the Curriculum Review and Improvement team retrieved, analysed and charted 4 years of data showing students’ movement throughout the course from 2005 to 2008 inclusive. Data were gathered about students’ entry standing, grade point average, point of exit from the course and destination if that was to another course within QUT.

When the Curriculum Review and Improvement team met with the course team again, two main findings were charted and discussed. First, it was important to make clear how the national formula for attrition is calculated. If a student leaves the institution altogether, that is counted as attrition. However, if a student stays at the institution and transfers to a course in a different Broad Field of Education – for example from the Bachelor of Justice (Field = Society and Culture) to the Bachelor of Nursing (Field = Health) –that is also counted as attrition. If a student transfers between courses in the same Broad Field – for example, from the Bachelor of Justice to the Bachelor of Law, it is not counted as attrition. Therefore, the assumption that high attrition was due to students using the course as a pathway to Law was incorrect because Law and Justice are in the same Field. Not only that, the detailed analysis revealed that a much lower proportion of students was transferring to Law than initially thought. Over a four-year period, only 8 per cent of students who enrolled in the Bachelor of Justice transferred to a Law degree at QUT whereas 20 per cent had left QUT altogether and another 2 per cent had transferred to a course in a different Broad Field of Education.

Second, when looking at the academic performance data of the students who had exited the Bachelor of Justice, it was found that 61 per cent of students that left the course had a passing Grade Point Average (GPA). Therefore, the assumption that students left because they were academically challenged was also incorrect. Furthermore, when those students who had a ‘technical and further education’ (TAFE) entry to the course were tracked, it was found that 64 per cent graduated from the course compared to only 21 per cent of standard entry students. Of those TAFE entry students who did not complete, half still had a passing GPA. Therefore, in contrast to the reigning assumption, TAFE entry students were by far the most successful cohort in the Bachelor of Justice. At this point, the course team could only speculate that if their students were not using the course as a pathway to Law at QUT and academic challenge was not their reason for leaving, then students must have been



moving to courses at other universities or the Police Academy. Data on these matters were not held within QUT's systems and therefore the speculation was difficult to validate.

Meanwhile other documents and artefacts pertaining to the life of the course were also being collected. These included marketing materials used at Tertiary Studies Expos, plans for a new online course portal, maps of the degree structure, School of Justice information booklets, staff newsletters, university policy and approval documents, curriculum change documents, and careers booklets. All of these contributed to a clearer picture of course activity. Qualitative data such as student survey comments were thematically analysed by the Curriculum Review and Improvement team at a course level and at a unit level for some problem subjects.

During the three month period of creating the Course Environment Portfolio, new activities also took place as the head of school settled into her role and staff began to rally together. These activities were included in the portfolio. For example, the Head of School appeared in a radio interview on the topical issue of 'girls and cyber-bullying'. Media around Australia later picked up the interview and these reports were added to the Portfolio. Motivated by questions arising from the Curriculum Review and Improvement data analysis, a School of Justice research assistant was tasked with planning a telephone survey of students who had left the course in order to establish their reasons for leaving. It was hoped to confirm if they had moved to the Police Academy or to another university. These survey drafts and pilot results were collected. When a one-day retreat was scheduled for all School of Justice academics, the Curriculum Review and Improvement team was invited to present data collected so far, providing yet another opportunity to gather documents to include in the Portfolio.

### **Evaluating and Summarising the Course Environment Portfolio**

At the end of the three-month period, the time came to evaluate the Portfolio and chart the documents collected against each continuum and level of proficiency. The Curriculum Review and Improvement Team undertook this task with the help of the Faculty of Law's Learning and Teaching Developer. Lively discussions took place as we handled artefacts and data, shared our experiences and insights and finally attributed each item to a specific place on the chart, scoring and colour coding the chart accordingly. The process helped consolidate and summarise a wide range of elements into a single picture and made the strengths and weaknesses of course activities immediately visible. This final picture of the life of the course was then presented to the head of school and the course team.

The Portfolio evaluation revealed that although some excellent exemplars of course activity had been noted, their impact had been patchy and they had not addressed underlying issues. Whole-of-course goals that would unite efforts and place activities in context had been lacking. In particular, in the *Leadership* continuum it was noted that the course did not require industry accreditation and therefore lacked regular feedback and review from a formal panel of industry stakeholders. In the *Marketing and Communication* continuum it could be seen that while some quality student communications had been produced over the years, such as expo flyers and course handbooks, no master list of these items existed. Originals were not easy to locate and development of new items did not build on past achievements. A vision of what a good suite of communication media might look like and a structure for managing these various documents was missing. A third problem area could be seen in the *Students* continuum where the use of student support processes and counselling was neglected and awareness of the real needs of cohorts within the Justice course was low.

By far, the most exciting time is at the end of the Portfolio process. Standing back and viewing the whole course environment for the first time enables priorities and directions to become clear and effective action planning to crystallise. During these final discussions, the course team identified four main areas of action. First, it was decided that an industry advisory panel would be formed to lift the profile of the course, strengthen connection with the 'real world' and inform future curriculum developments. Second, a course mission statement would be developed to unite stakeholders and create a sense of consistency throughout course communications. Third, a communication calendar would be created to encourage stakeholders to be more involved in course events and to contribute

regularly through well-advertised opportunities. Finally, further data and stakeholder feedback would be systematically sought to answer some outstanding questions from the data analysis so far in preparation for curriculum review.

After the results of the Portfolio were presented to the course team, it was time for the Curriculum Review and Improvement team to withdraw their intensive focus and leave the Bachelor of Justice academic and administrative staff to get on with the job of realising their new found vision. From time to time, the Curriculum Review and Improvement team was invited to return to the School of Justice to attend special meetings and functions where we could observe for ourselves some of the progress being made - a testament to the positive relationships we had developed.

### **Observing Cultural Change**

The Curriculum Review and Improvement team looks for three main areas of change after conducting the Course Environment Portfolio process for an underperforming course. First, it wants to see changes in the culture of the course team. Second, it wants to see changes in the student experience and third, it wants to see changes in the course's performance as recorded on the Individual Course Report. As well, the team expects changes to occur largely in that order. In other words, without a change in course team culture, change in the student experience is unlikely and therefore improvement in course performance data is unlikely.

For the Bachelor of Justice course team, positive changes in culture started to show during the Portfolio process and were clearly observable in final meetings and in later meetings and functions to which the Curriculum Review and Improvement team was invited. At the final meetings, it was evident that clear roles and responsibilities had been established. There was high ownership of the action plans by team members and a positive feeling about the future. Actions were seen as practical, achievable and worthwhile and were already underway. People trusted the directions chosen and felt empowered to move forward. Extra activities were beginning to naturally collect around identified priorities adding to the momentum.

After the final Portfolio meetings, the head of school organised an end-of-year party for the school, which was fully attended by the course team and the Executive Dean of the Faculty of Law – a show of the improving status of the School within the Faculty. At the Graduation Ceremony in December that year, a record number of academic staff attended to celebrate the achievements of Bachelor of Justice students, a significant improvement on staff attendance figures from previous years. Regular and well-organised course team meetings had continued into the New Year in the Curriculum Review and Improvement team's absence and action plans were updated as progress was made. Consultations continued with outside experts such as the Office of Teaching Quality's Director of First Year Experience who advised on orientation programs. Course Team members had attended university-wide staff development workshops on course design for 'real world' learning and the University's Curriculum Approval team offered high praise regarding the course's preparation for review and their use of evidence in curriculum design decisions. The Blackboard online portal for the course was launched and had a record 4,000 hits with the head of school being invited to speak at university forums about the success of this online approach to cohort building and communication.

By April of the year following the Team's intervention, when comments were required for the 2010 Individual Course Report, the head of school was able to show the high level of involvement of the course team, listing nine different activities that were underway:

1. Early intervention strategy involving the SUCCESS PROGRAMME.
2. A new first year unit to address lack of policing content in first year.
3. Establishment of Industry Advisory Group of Justice Professionals.
4. Enhanced social Engagement with students through new Justice Students Community Site, creation of Student Engagement working party.
5. Enhanced real world learning opportunities in core units.

6. Promotion of Student support mechanisms and employment of a Support Officer.
7. Establishment of Justice Course Review Team (with OTQ) to explore further enhancements.
8. Enhancing student interaction with academic staff.
9. Enhanced commitment to student service through new student inquiries system within 24-48 hour turnaround time.

The beginnings of change in the experience of students enrolled in the Bachelor of Justice were also observable. The popularity of the Justice Online community site, student participation in faculty activities, records of the involvement of the University's Student Success Programme with first year Justice students and use of the newly established student inquiry service in the School of Justice all indicate immediate and positive changes to their experience of the course environment.

However, to see these changes flow into more systematic course performance indicators such as attrition, student progression and Course Experience Questionnaire ratings, a longer time frame is needed. Since attrition is calculated by the March Census date of the following year, the results of improvements undertaken during 2010 will not be apparent until mid 2011 and will not appear as statistics on the Individual Course Report until 2012. Early changes at the unit level may be seen in the scores and comments resulting from the University's electronic Learning Experience Survey and pass/fail rates but these won't be evident as a whole until the release of the 2011 Individual Course Report. Changes in the Course Experience Questionnaire (CEQ) conducted with graduates will take even longer to appear with the 2012 results being the first opportunity for improvements in the whole-of-course to show.

## **CONCLUSION**

Data, such as those provided in the Individual Course Report, are an important conversation starter. However, course teams can benefit from further help in understanding the data as well as the culture in which they work if course performance figures are to translate into effective action planning within a Course Quality Assurance cycle. The Course Environment Portfolio, which promotes the use of evidence, systematic approaches to discussing data and recognition of the whole environment in which a course exists, is a useful tool for making this happen. It is true that the Portfolio process is intensive in both time and the quality of support, however, it can only be considered worthwhile for this course with over \$4 million in annual revenue and the lives and careers of 500 students at stake.

While the Individual Course Report was the starting point for intervention in this course, improvement in course performance data will not show immediately. It will take a minimum of two years until any related improvements begin to show in Individual Course Report indicators. However, changes in the course team culture were immediate and rewarding. This Course Environment Portfolio showed that leadership can quickly change from a 'putting out fires' approach to a grounded and systematic approach featuring a 'do-able' focused set of strategic priorities. Ad hoc course team meetings can shift to regular structured meetings at which team members have set roles and responsibilities and are fully engaged in collaboration and problem-solving. Academic and administrative staff can move from feeling overwhelmed, isolated and unable to move forward to feel that they are empowered to focus on key directions and able to communicate with others about their progress. Overall, the culture around the course team can change from underperforming and feeling like the 'poor cousin' to outstanding performance in course management with the capacity to circumvent problems as they arise. The dynamic and clear sense of course identity that results can only have a positive flow-on effect on the daily experience of staff and students.

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# **CULTURAL CHANGE THROUGH TECHNOLOGY-AN UNINTENDED CONSEQUENCE**

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## **ABSTRACT**

Intellectual capital is one of the most important assets an organisation has. Knowledge management aims to capture and leverage an organisation's knowledge, create new knowledge, increase collaboration and generate innovation. Information technology is an enabler, supporting knowledge management practices. The Faculty of Commerce at the University of Wollongong introduced SharePoint as its knowledge management tool. In doing so, the Faculty inadvertently experienced a dramatic shift in organisational culture from one where knowledge was tacit, private and protected to a more open culture where knowledge was made explicit, public, accessible and ordered. This shift occurred largely because of the social processes of teamwork and collaboration that were the basis of the implementation of SharePoint. This paper will show that with stakeholder engagement, communication and project management successful deployments of technology can create a culture of information sharing and partnership and generate an open environment.

Keywords: knowledge, technology, collaboration, change, culture.

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## **INTRODUCTION**

Intellectual capital is one of the most important assets an organisation has. The way in which this capital is managed is critical to organisational sustainability and longevity. Several authors state that knowledge management has emerged out of an increasingly and globally competitive climate that requires organisations to compete in real time, leveraging innovation, technological advantage and corporate knowledge to maintain position (Murphy, 2002, p. 18; Lawson & Samson, 2003, p. 2). In this climate, traditional approaches to the management of intellectual capital do not meet the challenges of efficiency, timeliness and knowledge dissemination (Asgarkhani, 2004, p. 32).

Many organisations have initiated knowledge management projects, and failure rates are estimated to be as high as 80 per cent (Payman, Jafari, & Fathian, 2005). Failure is attributable to the usual culprits of project management and change management failure, such as lack of leadership, lack of engagement and inadequate resourcing. In deciding to pursue a knowledge management project within the Faculty of Commerce at the University of Wollongong, management were acutely aware that central to success was the buy-in and support of staff. The methodology used centred on teamwork, collaboration and engagement and it was genuine commitment to these methods that provided the motivation for staff to embrace knowledge management and, quite unexpectedly, to move beyond it to create communities of learning.

This paper will provide the background to the knowledge management project, as well as outlining the process undertaken to implement the project and showing the outcomes.

## **BACKGROUND**

### **Knowledge Management**

Knowledge management aims to capture and leverage an organisation's knowledge, create new knowledge, increase collaboration and generate innovation. Information technology is an enabler, supporting knowledge management practices. The risk to an organisation in not managing knowledge is that intrinsic knowledge is lost with staff turnover and changing practices and new knowledge can be generated only narrowly. In order to minimise this risk, the Faculty of Commerce at the University of Wollongong made a strategic decision to introduce Microsoft SharePoint as the knowledge management tool to capture and share knowledge. The decision was prompted by management when it was observed that the Faculty had duplicate records, minimal electronic records, physical storage constraints, multiple intranets and internet systems, multiple share drives and, that the PC hard drive was where most information and data was kept, making the information largely inaccessible to other staff members.

It was determined that the Faculty needed a Faculty-based central information repository that would reduce duplication, improve accessibility to information, assist in the retention of intellectual capital, streamline workflow processes and capture and share vital information among staff. The Faculty also identified that it would be beneficial to have a tool that aided collaboration, assisted in connecting people and enabled users to receive, create and organise information in order to get the job done.

### **Cultural Change**

What the Faculty did not anticipate was the impact the process of deployment and the system would have on the culture within the Faculty. Current research tells management practitioners that cultural change is complex, shared and socially constructed (Schein, 1992). Cultures are often entrenched and to change them takes a minimum of three to five years; targeted change strategies are rarely successful (Kotter & Heskett, 1992). Most of us are familiar with the cultural iceberg (French & Bell, 1984); not a hopeful picture. It was anticipated that there would be deep resistance to knowledge sharing as many behaviours were entrenched, the organisational structure supported unit and school-

based silos and there was a culture of knowledge hoarding to protect jobs. The underlying belief was that “if the knowledge I have is accessible, then its uniqueness becomes eroded and my value to the organisation also reduces. Therefore, if I hold onto my knowledge, I remain indispensable to the organisation. My value increases, I can resist change and my job is protected.” This thinking is fundamentally flawed, but it was prevalent in the organisation. It was driven largely by previous sweeping, radical changes, which had resulted in a culture of blame, distrust and fear.

## **METHODS: WHAT WE DID**

The project, scope and requirements were defined following standard project management processes. As identified in project management research and literature (PMBOK<sup>®</sup> guide), the key components of successful project completion requires senior management champions, adequate resourcing, teamwork that includes the right people and skills on the team, project management skills and planning, stakeholder engagement, planning, communication and problem solving.

A knowledge audit was conducted in order to understand current processes and issues and to map where knowledge, communications and content were being housed. It was important to acknowledge and understand that information management was more than just technology. As important were the business processes and practices that underpin the creation, use and sharing of information. It was important to look at the information itself, including architecture of information, metadata, content and templates. The people, process, technology and content were addressed, all of which are central to the success of information management projects.

In order to ensure success of the project it was imperative that internal stakeholders were engaged, consulted and supportive of the outcomes. We needed to gain sufficient adoption to ensure that information was captured in SharePoint. It was also important to learn from others who had successfully implemented knowledge management systems. External stakeholders were consulted, so that we could learn from their experiences in SharePoint implementations as well as reviewing best practice.

In researching best practice in knowledge management and SharePoint, a number of people and resources were consulted including but not limited to:

- Knowledge Management Standards Australia
- Internal Knowledge Management Academic specialists
- SharePoint external contacts (corporate and educational) who had deployed the software
- SharePoint industry specialists
- Internal content management specialists.

A working party was formed with representatives from each unit and department. The working party was responsible for putting forward requirements, critiquing components and testing and championing the project in their relevant areas. The most vocal opponents to SharePoint were invited to join the working party. This was a deliberate strategy to address resistance to change, as it was clear that opponents would be highly critical of any change efforts. Understanding their requirements and the basis of their opposition and catering for this, within reasonable limits, ensured that the final functionality of SharePoint met user requirements.

The working party defined the functions needed and priorities for development. They also defined and tested the look, feel, structure, access and controls for SharePoint. Documentation was developed for users, outlining good practice, file-naming conventions and help wikis. Information and training sessions were conducted for staff and continue to run each month for new staff and for staff requiring assistance in certain areas.

The roll out of SharePoint was a phased implementation approach with the first site being a test pilot site. Following success of the pilot site, and implementation of the relevant modifications from that test, each unit was migrated individually. Redundant content was archived during the migration process. The archived information will be able to be migrated straight into the University's new universal records management system, which is currently in development.

Information technology staff were utilised and engaged for the technical components of the project including:

- Security structure and layering

Understand how the external Lightweight Directory Access Protocol (LDAP) University directory would be utilised to import user information into SharePoint in order to have appropriate user accounts that would support a layered security structure.

- Templates

Develop a template for the SharePoint system that would give a consistent look and feel throughout the site. It was important to develop a template that was in line with the University standards and brand and resembled the UOW Intranet. This would be beneficial to the user experience where a number of University systems were being utilised for various needs.

- Server requirement

Server hardware that would support the system and its daily use was required as well as a system that would also support the back end requirements of SharePoint. It was also necessary to have a dual server with one server to support the interface i.e. look and feel, along with content and the second server to support back-end security and software features as well as housing back ups. It was important to have a second server that was taking frequent back-ups in the event that if one server went down, business would be able to continue as normal.

- Remote access

SharePoint operates via a web interface that allows staff to access SharePoint offsite and work on information as if they were in the office. This has been of benefit to professional staff and academics who travel or are frequently out of the office as it allows them to access the information and work from the most current version. It reduces errors, duplication and incorrect versions of documents being updated or accessed.

- Technical support

SharePoint is a system being used by the Faculty of Commerce at the University of Wollongong and being supported by the Faculty's IT Unit. The system has received much interest from the broader University community with presentations being provided to other Faculties and Divisions. SharePoint is currently used within divisional units of the University and is currently being used by the University Information Systems Technology Division (ITS) who manage all systems for the University. They are looking to utilise SharePoint more broadly in the near future.

At the end of migration an evaluation and review was conducted and any further modifications implemented. The evaluation process included meeting with key staff from each unit or division who collated feedback from end users in their area. This process documented the benefits, limitations and additional features that staff would like to see. Outcomes of these meetings were collated and key issues prioritised and addressed.



## RESULTS

### Outcomes

The Faculty achieved its objective of providing a simplified system for the storage of information, reducing duplication, improving access to information and capturing tacit knowledge. Information was accessible and public and it was easier and more efficient for staff to locate the information they required. Inefficiencies were reduced as staff did not waste time searching multiple locations or servers or waiting until the person whose hard drive the information was stored on was available to release it.

The rollout of SharePoint achieved a consistent approach to the storage and communication of information. The project was successful because it drew on three critical components of people, process and technology. Figure 1 illustrates the convergence between these three critical processes.

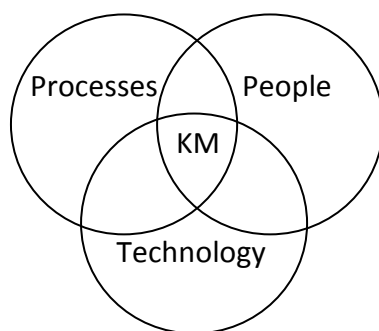


Figure 1: Process convergence

The project clearly identified the benefits to end users, communication was comprehensive and applied consistently to all staff. An inclusive approach was used to engage with staff and to ensure that the system was useful and usable and was appropriately supported. The project delivered both tangible and visible benefits to all staff within the Faculty. It also delivered some welcome though unexpected outcomes.

There was significant cultural change in people, structure and teams. The silo organisational structure was reduced significantly through the establishment of the cross-disciplinary working party and through the formation of self-directed teams in each unit who were responsible for the implementation within their units. The project deliberately sought to influence through self-directed teams. Staff autonomy over the project was considered extremely important. Research conducted by Thomas (2000) found that when staff perceive that their perspectives are a critical part of the process or that they are responsible for decisions that may have an impact on project success, autonomous and responsible employees will feel pride in contributing to the project objectives.

Once staff understood the benefits of SharePoint in terms of its functionality and its ability to make marked improvements in work functions, the majority of staff were keen to embrace SharePoint. It was determined that staff would set the controls around information, i.e. who had access to what, so that the practice of knowledge hoarding was not initially directly confronted. Over time, however, staff behaviour shifted to reduced controls around their information and sharing took place more openly. This occurred as staff received recognition from other staff that they held important and valuable information, and how useful it could be. This outcome is supported by a 2007 Gartner report (Mann, 2007) which found that recognising individual competence is a strong motivating factor towards knowledge sharing.

Staff were made aware of and given access to the SharePoint information available to them outside of their own unit. As the implementation teams were largely self-directed, they began to explore each

other's sites and information. Access to processes and templates resulted in the schools learning from each other and has resulted in streamlined processes and standards across the schools as they discovered easier and better ways of doing things through the sharing of information and the learning that came from that. Tacit knowledge (historical information) was being captured through this learning experience providing valuable information as well as understanding to newer staff. Teaching schedules, timetabling and casual academic teaching staff support processes are now streamlined across units rather than having three different processes for each of the schools in the Faculty. In addition, through the documentation of processes and the revision of processes, the teams have moved towards continuous improvement to update and refresh processes over time.

The impact of moving to standardised processes underpinned by continuous improvement has meant that the blame culture has also changed. Gradually staff have moved from looking for someone to blame when a process fails to identifying the factors that led to a system or process failure or hiccup and identifying ways to ensure that the issue does not recur, and then documenting this improvement in SharePoint.

Research Centres started utilising SharePoint in order to collaborate on work and house documentation that could be accessed easily by a number of members. This made research with people in multiple areas and dispersed locations more efficient and effective. It also allowed these Centres to display the work that was being conducted by the Faculty to the broader community. The Centres have also utilised some of the social media tools of SharePoint, such as discussion forums and blogs, with research partners.

Consistent communication and engagement with users, pre and post rollout of SharePoint, ensured that the transition to the system was smooth. Issues were addressed as roll-out occurred and changes or modifications to workspaces were negotiated to ensure a mutually beneficial outcome. Flexibility in the layout (components) of workspaces ensured that each workspace was unique and met the needs of the individual units, yet maintained a consistent look and feel. Although teams were largely self-directed they were well supported by the Project Manager and IT Team during the process, providing advice, structure and resources.

## **NEXT STAGES**

SharePoint will continue to evolve within the Faculty. As content and usage grows so too does the burden of maintenance and archiving of content. The Faculty will address records management guidelines and implementation of archiving processes and protocols to ensure that the content of SharePoint is live working content, and that formal records are treated and archived within the appropriate system and in compliance with legislation. In addition, the system has capacity to improve administrative efficiency through the utilisation of the workflow and approvals for forms and documents capacity that has yet to be implemented. Although most units are using the calendar functions within SharePoint, more advanced functionality could be achieved in the future. Finally, in the absence of other technologies for wikis and blogs, the Faculty will utilise this functionality in SharePoint to further aid communication, especially for research groups.

## **CONCLUSION**

Projects fundamentally require change management and change management strategies are especially important in an environment where previous silo units are required to work together to achieve project outcomes. Research shows that project success under such conditions is not likely. However, the experience of the implementation of SharePoint, a tool used to generate and share information and knowledge, was that with good communication, stakeholder engagement, support to units, self-directed teams, sound project management and appropriate resourcing, projects can be successful. In

fact, they can create positive unintentional outcomes to create cohesive collegial working relationships, to break down silos and generate a culture of information sharing.

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# **BRUCE – THANK GOD YOU’RE HERE**

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## **ABSTRACT**

An online system for the recording of unit guides was developed at Deakin University in 2008. This system allows unit chairs to enter information for their units, lodge this information with the administrative team for their faculty, and ultimately have the information presented online in a logical and unified manner. This system has benefited both academic and administrative staff members, in that a key feature of the system is the significant reduction in time spent by academic staff in creating and updating unit guides, and the time spent by administrative staff in relation to quality checking and compliance. Published unit guides are available to staff, current students and future students alike.

Keywords: BRUCE, unit guides, online, publish, report

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## INTRODUCTION

Deakin University has over 34,000 higher education students and employs approximately 2,600 full time and fractional full-time staff (Deakin University, 2009). Among other things, the University's strategic plan (Deakin University, 2010), outlines the University's intention to be a catalyst for positive change, for the individuals and the communities it serves. In accordance with the University's mission statement and strategic goals, a new system to increase quality assurance and decrease administrative burden upon academic staff was developed. This system was developed to manage the production and storage of unit guides. A unit guide outlines the unit content, its learning objectives, assessment, and rules governing the teaching and learning in that unit. It also includes generic faculty and University compliance and policy information. Unit guides are important because they ensure that all students studying the unit, regardless of campus, mode or lecturer, have an equivalent understanding of the requirements of the unit. The unit guide forms the learning contract between the student and the Faculty.

BRUCE is an acronym for *Better Repository for University Course Enquiries*, an online system originally developed to assist Deakin University in managing its course and unit publications data for current and prospective students (handbooks and marketing collateral). This system was enhanced to provide a space for academic and administrative staff to develop, check and publish unit guides in an online format. BRUCE is a PHP web application that is linked back into the Curriculum subsystem within Callista Student Management System, and BRUCE is wholly built and supported by Deakin's Information Technology Services Division.

BRUCE was introduced in 2003 with two main functions: a search facility enabling prospective and current students to search the course and unit catalogue; and administration functionality that enables staff to create, accurately maintain and report on curriculum information not able to be stored in the Callista student enrolment system.

In 2006, a Unit Guide Working Party was established, following discussions between management staff in faculties about the multitude of databases and data sources containing unit guide information. It was chaired by the Faculty General Manager from the Faculty of Business and Law, and included members from all four faculties, the student administration, and information technology services. The Working Party examined the range of information stored on Callista and BRUCE that could potentially be pre-populated into unit guides, removing the need to update curriculum outside of Callista and BRUCE. This would also ensure a more consistent process to produce, edit, deliver and store unit guides across faculties. The Working Party hoped to reduce previously experienced concerns pertaining to inaccuracy, unauthorised editing of standardised University content, multiple sources of data in unsecured locations and the high reliance upon individuals to operate and maintain localised systems.

## METHODS

The initial pilot, held in Semester 2, 2007, resulted in a number of unit guides from the faculties of Business and Law and Science and Technology being migrated from Microsoft Word and Excel format into BRUCE. Post-migration, unit chairs were granted access to BRUCE where they were able to edit and save changes to their unit guides. After quality checking by administrative staff, the completed unit guides were then made available to students via a dedicated website and Deakin's online learning tool: Deakin Studies Online (DSO). Feedback was sought from the unit chairs involved in this pilot and subsequent pilots conducted in 2008 with the following responses received:

- academic staff emphasised the importance of being able to copy elements across unit guides where they are multi-coded or cross-listed units resulting in content not having to be entered and edited more than once;
- that the outlay of elements be amended so that staff are made aware of which elements they can and cannot edit via the use of popup text instructions and colour coding; and

- fine tuning in relation to the final format of the unit guide that would be presented to students (spacing, font and file format).

In its Strategic Plan, Deakin outlines one of its key values as continuous improvement: ‘Deakin strives to continually improve (sic) the efficiency and the effectiveness of all its activities, ensuring that it is both responsive to academic needs and strategically focused’ (Deakin University, 2010). In accordance with this value, the Unit Guide Working Party reviewed the advice received from staff during the pilot and created a list of enhancements to be considered in consultation with the University Information Technology Services Division. In 2009, the project team’s outstanding contribution to ‘Academic Support’ was recognised by the Vice-Chancellor, and they were provided with the necessary funding (\$50,000) to introduce the enhancements defined during the pilots.

## **RESULTS**

Following the release of a number of enhancements, the new system is now working effectively in two faculties with all unit guides online as of Trimester 1, 2009, and from 2010 incorporated enhancements made possible by University funding received and utilised in 2009.

The University has received positive feedback from staff and students, and unit chairs are now updating their unit information and submitting their unit guides for quality checking via the online system. Importantly, there is the ability to record standardised information, which is keyed once by administrators and applied to all unit guides, ensuring compliance and ease of update. Academic staff often report frustration in relation to the increasing administrative and compliance-related tasks they are asked to undertake within their roles. A study by McInnis found that the majority of academic staff sampled in his study conducted in 1996 believed that their administrative load had increased substantially in recent years, with administrative work apparently causing the greatest dissatisfaction when it related to accountability and quality assurance (McInnis 1996, p. 14). The use of standardised content ensures that unit chairs are not having to repeatedly update items that are non-unit specific and reduces the amount of time it takes to complete their guide. Furthermore, standardised content substantially reduces the amount of quality checking required by administrators.

### **Unit Outline Report**

One of the enhancements recommended by the Working Party was in relation to the need to prepare similar information to that contained in unit guides for reaccreditation and review purposes. Unit outlines contain a mixture of information from handbook entries and unit guides such as offering information, learning objectives, aims, graduate attributes, teaching methods and references. The manual development of these unit outlines was an intensely onerous task and exceptionally time consuming. As such, members of the Working Party liaised with staff from the Information Technology Services Division to develop a report function which would extract the necessary information from unit guides and also handbook entries stored within BRUCE, and display the information in accordance to the University unit outline template. This enhancement introduced the need for ‘hidden’ elements – data that are not visible on websites or course catalogues, but is required to display in the unit outline report. These hidden elements are entered by administrative staff, and refer to the online status of the unit and assessment panel membership, both of which are required when undertaking major course reviews and accreditation applications.

### **Report Outputs**

Faculties are often required to provide reports on all units in relation to specific compliance matters such as graduate attribute details, student evaluation responses and assessment practices. Therefore, an enhancement that enables data to be extracted from unit guides based on key criteria was introduced. Administrative staff are now able to easily download reports on any element outlined within unit guides with just the click of a few buttons. This reporting functionality will be invaluable

in relation to the future directions of the Federal Government which has recently established the Tertiary Education Quality and Standards Agency, which will come into effect in 2012 (Gillard, 2009).

### **Quality Checking and Procedure**

To enable prompt quality checking, administrative staff receive an automated email, flagging that a unit guide has been submitted by the unit chair and is ready for checking. In addition, a report function demonstrates quickly which unit guides have and have not yet been published. For unit chairs, the system features a customer service element in that they receive confirmation of their successful submission via an automated email, which thanks them and explains that quality checking will take place prior to the publication of their unit guide to the University current student's website and relevant Deakin Studies Online unit site.

### **File Format (PDF)**

To enable students to print certain elements and to view the guide as a stand-alone document, a Portable Document Format (PDF) function was included in the list of enhancements so that PDF versions of guides could be added to Deakin Studies Online sites. The use of PDF guides was recommended by the academic staff involved in the early pilots and also by members of the Working Party. The PDF version of a unit guide allows for a table of contents, automated headers and footers and is accessible for both PC and Mac users. From Trimester 1, 2011 unit guides will be added to Deakin Studies Online unit sites as PDF versions instead of a web link and it is anticipated that students will be in favour of this format as it has been suggested that PDF conversion and compression equips users with the flexibility and compatibility to deliver efficient outputs (Ritz, 2010, p1).

### **Transparency and Knowledge Sharing**

In accordance with directives from the Department of Education, Employment and Workplace Relations (DEEWR) that there be an increased emphasis upon transparency and empowering students to make well informed choices (DEEWR, 2010, p4), the Unit Guides system has been built to enable an element of transparency. For example, students are able to view unit guides via the current student's website for units that they have not yet undertaken to determine their suitability and identify unit requirements prior to enrolling and committing to study. Unit chairs are also able to utilise the work of other staff to enable appropriate knowledge sharing in areas such as assessment design, and aims and objectives setting.

## **CONCLUSIONS AND FUTURE DIRECTIONS**

Two other faculties are currently considering the introduction of the BRUCE Unit Guide system through a pilot for a select number of units in Trimester 3, 2010-2011. The system enables some autonomy at the faculty level in relation to the template and outlay of elements. Other minor enhancements will be introduced to the system in late 2010, which will include a performance update to the HTML editor where unit chairs edit their information, and improvements to the user interface.

Making Deakin websites and publications accessible to users with disabilities has been a topic of key priority and much discussion during 2010, and it is planned that a major accessibility investigation for unit guides will take place in 2011. Preliminary work was conducted in 2010 through an accessibility audit conducted by an accessibility expert from Deakin's Knowledge Media Division and a visually impaired student who advised on potential issues specific to unit guides.

With the higher education environment becoming more complex, there is a need to develop systems that provide a greater level of academic support and that ensure better quality assurance. Additionally,



sharing common systems across faculties increases consistency as students often undertake elective units from outside their 'home faculty' and may find the intricacies of each faculty difficult and frustrating to grasp.

Reducing the time spent on the update and quality assurance of ongoing administrative tasks such as unit guides has enabled increased focus to be placed upon core university business such as teaching and research. This is reinforced in Deakin's 2010 strategic plan which outlines a need for 'Improving the efficiency and effectiveness of academic support services to ensure that the University has the best possible range and quality of services' (Deakin University, 2010, p28).

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# **CURRENT INITIATIVES TO IMPROVE TERTIARY EDUCATION PERFORMANCE IN NEW ZEALAND**

**Grant Klinkum, Tertiary Education Commission, New Zealand**

## **ABSTRACT**

A refreshed tertiary education strategy has underpinned a strong focus on tertiary education sector performance outcomes in New Zealand over the past eighteen months. The National Party-led Government is seeking to simplify the funding system, reduce central bureaucracy, improve tertiary education provider accountability and significantly lift learner outcomes. New Zealand has entered a new period of constrained funding in tertiary education with a clear focus on linking funding to performance, making performance information publically available, improving quality assurance systems and establishing priorities for provision. Early results of the Government's change agenda include a significant reduction in the size of the Tertiary Education Commission (TEC), changes to the role of the TEC, new legislation designed to secure a sustainable polytechnic sector and a reduction in the number of qualifications. This paper largely draws on published data and the author's personal perspective of issues as an employee of the Tertiary Education Commission. Recent developments in New Zealand tertiary education policy are placed within a longer term reform context. It concludes that although the strategic direction of the past decade has been retained, a significant new phase of using refined policy levers and funding incentives to drive improvements in learner achievement levels and institutional performance is underway.

Keywords: tertiary education, performance, New Zealand.

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## **INTRODUCTION**

With a number of high profile initiatives completed or underway, it is clear that the National Government, elected in late 2008, has given high priority to improving the performance of the tertiary education system. Recent activity consolidates and extends the reforms started by the previous Government in 1999. The pace and scale of activity over the past 18 months have been significant.

While considerable debate exists across the political spectrum about the most effective means to drive further improvements in tertiary education system performance, there is widespread agreement about the role tertiary education has in developing the skills needed to support a strong and innovative economy. There is largely agreement too about strengths and weaknesses in the current system. Provider diversity is valued. The increasing emphasis on using benchmarks and sharing best practice across the system is widely supported. Increased levels of participation in tertiary education are widely acknowledged as a success of the past 15 years. Measuring and rewarding the quality of research is also largely uncontested. So too is investing in effective teaching and learning through government funding of Ako Aotearoa, the National Centre for Tertiary Teaching Excellence. Greater sector ownership of quality assurance arrangements is broadly supported.

There is also a shared understanding by government, providers and the funding agency about areas where further improvement is required. This includes improving transitions from school to tertiary, building better learning progressions and pathways for students, improving links and technology transfer between tertiary research activity and industry and rationalising the qualifications system. It is also widely acknowledged that critical to system success is building literacy, language and numeracy skills in the general population and improving overall course and qualification completion rates, particularly for Māori and Pacific students.

Indicating the government's position on some of these areas, the Minister for Tertiary Education, Steven Joyce, noted in mid-2010 that the system 'is not broken but is not without its issues' (Joyce, 2010a). Challenges the Minister identified were too many qualifications on the register, low completion rates, a lack of increase in the number of degree students graduating despite significant increases in participation, value for money concerns and heavy controls on the sector through price and volume.

What characterises the current phase of tertiary education administration is the proposed means to further drive improvement and a greatly reduced tolerance for slow progress by the Government. To place current initiatives in context and to understand what significance should be accorded to the Government's policy direction, it is necessary to briefly survey the tertiary education reforms from the early 2000s onward.

## **REFORM HISTORY**

Behind the political support for tertiary education reform in the late 1990s was a view that there was insufficient strategic direction across the system, unnecessary competition, a lack of engagement with stakeholders such as industry and professional associations, and uneven standards across providers. The Tertiary Education Advisory Commission (TEAC, 2000, 2001a, 2001b, 2001c) recommended the introduction of a more collaborative tertiary education system, the development of a national strategic statement to guide the system, the use of Charters and Profiles to steer the system, the creation of the Tertiary Education Commission to act as an independent funding and monitoring agency, the separation of funding for teaching and research and the continuation of tertiary education organisations being able to set tuition fees (TEAC, 2000 and 2001).

The Fifth Labour Government, elected in 1999, had sought to moderate, but not essentially change, the impact of market forces on tertiary education while moving toward a system that would have more central steering through the creation of the TEC, new regulatory and funding arrangements and the

publication of the first Tertiary Education Strategy 2002-2007 (McLaughlin, 2003, p. 6). Throughout the reform period of the early 2000s, the concepts of excellence, relevance, access and capability were touchstones used to position the work of the TEC and indicate expectations of the tertiary education sector.

A further iteration of the reforms in 2006 sought to improve ‘relevance and responsiveness, access and learner outcomes, quality, public and government confidence and fiscal certainty’ (Cabinet Policy Committee, 2006a). Central to the second phase of the reforms was the introduction of Investment Plans (instead of Charters and Profiles), with multi-year funding that would support a ‘whole of institution’ approach to considering inputs, capability, outcomes and quality. The creation of Tertiary Education Organisation Capability funding and a new approach to quality assurance were also key parts of the 2006 reforms. Increased fiscal certainty for government was to be obtained by moving toward a more ‘student need’ funding system, rather than driven off student demand and tertiary education organisation generated demand.

Looking back across the last decade some aspects of the reforms have been successful. Most notably, student participation increased significantly in the first half of the decade. The introduction of research funding through the Performance-Based Research Fund and the use of Centres of Research Excellence must also be seen as a significant area of success. Improvements in the quality of investment through the removal of low value provision should also be added as a highlight. More broadly, there have been uneven results across the system with significant remaining challenges.

## **NEW ZEALAND’S TERTIARY EDUCATION PERFORMANCE**

New Zealand has moved from an elite tertiary education system to a mass participatory system in a remarkably short period of time. There were 120,000 students in 1985 and 283,000 in 2001 (McLaughlin, 2003, p. 34). In 2009, the figure had increased to 424,000 domestic students enrolled in formal tertiary education study (MOE, 2010c). If students in non-formal courses and international students are added, the figure exceeded 700,000 learners in 2009 (TEC, 2010a, p. 6). The number of learners in the system needs to be seen in terms of liberal policy settings for student admission, the availability of student loans and allowances, a national commitment to life long learning, and relatively generous state funding levels, rather than as merely a demographic issue.

Of 31 OECD countries in 2007, New Zealand had the fourth-highest level of tertiary education attainment for 25 to 34 year olds at approximately 45 per cent and around 10 percentage points higher than the OECD average (OECD, 2009, p. 13). Some 44 per cent of New Zealanders aged over 15 years held a tertiary education qualification in 1998. A decade later, this had increased to 50 per cent (TEC, 2010a). Another measure of the dramatic increase in tertiary education participation and achievement is that the proportion of the population with a bachelors degree or higher increased from 10 per cent in 1998 to 18 per cent in 2008 (TEC, 2010a, p. 14).

Partially reflecting both policy shifts and the TEC’s engagement with tertiary education organisations, there has been a shift to higher levels of study on the qualifications framework. The proportion of total domestic student enrolments at levels 1 to 3 has shifted from 27 per cent in 2005 to 23 per cent in 2009 and, conversely, enrolments at bachelor’s level as a proportion of all formal enrolments have increased from 30 per cent in 2005 to 33 per cent in 2009. Further illustrating this change has been that between 2008 and 2009 there were an additional 15,500 enrolments in level 5 to 10 programmes and an 11,000 decrease in enrolments for level 1 to 4 certificates (MOE, 2010c).

Despite this progress, there persist some entrenched and concerning patterns of student and system performance. The large increase in participation has not been matched by increases in qualification completions. Completions at level 4 and above between 2004 and 2008 have increased by 8 per cent for domestic students but in the same period, bachelors degree completions have fallen by 2 per cent (MOE, 2010c).

Completion rates are variable across different sub-sectors. In 2008, universities had an 82 per cent course completion rate compared with 68 per cent for institutes of technology and polytechnics, while the course completion rates for Māori students were 75 per cent at universities and 59 per cent at institutes of technology and polytechnics (TEC, 2009c, p. 15). Five-year completion rates for students who initially enrolled in 2004 across all students and all qualifications were 41.4 per cent (TEC, 2009c, p. 19). Even while acknowledging the flexible nature of the New Zealand system, with a large number of mature and part-time students, qualification completion rates at this level inevitably lead to questions about value for money for taxpayers and concerns about students leaving institutions with large loans and incomplete qualifications.

In relation to one of the target learner groups highlighted in the TES, Māori participation constituted 20 per cent of all enrolments in 2009 compared with 15 per cent in 1999 (MOE, 2010c). This level of participation is higher than the proportion of Māori in the population at 17 per cent (Statistics New Zealand, 2010). However, Māori students are overrepresented at lower levels of study; participation rates for Māori aged 18 to 19 in degree level study are less than half the rate for all students (MOE, 2009a, p. 12). The ethnic differential is particularly pronounced in some sub-sectors. In the period 2006-2008, Pacific students at university had a 64 per cent course completion rate across all levels of the framework compared with 85 per cent for students who were not Māori or Pacific (TEC, 2009a, p. 2). Over the same time period, Māori students at institutes of technology and polytechnics across all programmes had a course completion rate of 57 per cent compared with 70 per cent for students who were not Māori or Pacific (TEC, 2009a, p. 4). Qualification completion data varies even more markedly when gender and ethnicity are considered beside each other. Thus, in 2008, 32 per cent of female non-Māori aged 25 had completed a bachelor's degree or higher qualification, but slightly less than 7 per cent of male Māori had achieved at this level (TEC, NZQA, MOE, 2010).

There are significant national development needs at the foundation level of education as well. The 2006 Adult Literacy and Life Skills Survey found that approximately 43 per cent per cent of New Zealand adults have lower literacy skills and 51 per cent lower numeracy skills than those required for full participation in a knowledge society (TEC 2008, p. 6).

Against a backdrop of uneven student educational performance, poor financial performance by some institutes of technology and polytechnics, an increase in low value courses in the mid-2000s and economic recession, the National Party in opposition developed strong views about the need for improved performance within current fiscal baselines.

## **NATIONAL PARTY PRIORITIES IN 2008**

In its 2008 election manifesto, the National Party signalled a clear intention to focus on improving the performance of the tertiary education sector as a whole and on the sector's funding agency, the Tertiary Education Commission. National outlined five commitments in the manifesto: to simplify the tertiary education funding system, reduce central bureaucracy, strengthen quality and accountability, support and encourage students and improve the interface between schools and tertiary education institutions (National Party, 2008). A further manifesto commitment was to ensure that a future National government would move to treat institutions similarly, irrespective of ownership structure. Also in the pre-election period was a commitment to retaining controls on student fees.

None of these commitments sought to overturn the underlying strategic direction or fundamental architecture used to steer tertiary education over the previous decade. Perhaps it is for this reason that considerable progress has been made in each of these commitment areas since National formed a coalition Government.

## **NATIONAL GOVERNMENT PRIORITIES SINCE 2008**

As might be anticipated, the National Government has both refined and extended the initial priorities set out in the manifesto. In particular, a stronger focus on value for money across all aspects of the tertiary education system has been pursued. System wide strategic priorities related to improved student achievement and a focus on priority learner groups have been retained, but the means to reach these ends has evolved considerably over the past eighteen months.

### **A New Tertiary Education Strategy**

Continuity in strategic direction combined with a vigorous position on delivering higher quality services without substantial new funding can be clearly seen in the Government's Tertiary Education Strategy 2010-15 (MOE, 2009a). Despite having a five to ten year strategic timeframe, the new TES reflects the economic stringencies of 2009 with early references in the document to fiscal restraint and the need for both providers and students to use government's investment in tertiary education efficiently and effectively.

Compared with the previous two Tertiary Education Strategy documents, the current strategy has sharper expectations. The focus on priority learner outcomes, improved system performance and research that more directly supports innovation and economic growth is unambiguous. With limited resources, the Government has signalled a clear prioritisation toward students aged under-25, Māori students, Pacific students, students moving from secondary education to tertiary education and foundation-level students. Noting that the substantial increase in participation during the 2000s has been at the sub-degree level, the Tertiary Education Strategy elevates the importance of increasing the number of learners achieving higher-level qualifications. The higher individual and societal returns for young people achieving higher level qualifications is provided as the rationale for giving greater attention to successful transitions from school to tertiary.

Finally, improving literacy, language and numeracy skill outcomes from level one to three study is also given prominence in the document. Improving literacy programmes for young Māori enrolled in levels 1 to 3 programmes with a view to progressing these learners to level 4 and above will support a number of Tertiary Education Strategy objectives simultaneously.

The dimensions of system performance that require attention are enhanced quality assurance arrangements whereby providers are to take more responsibility for continuous improvement and a rationalisation of the number of sub-degree qualifications. Improved pathways for students, shared services between providers, improved availability of performance information, and performance linked funding, along with more fully linking student support to student performance and further expanding international linkages across the tertiary education sector are all highlighted for further work.

The need for institutions to improve course and qualification completion rates as a way to improve public value for money in tertiary education spend is made explicit. While dropping the language of 'distinctive contributions', the current Tertiary Education Strategy sets out the core roles for universities, polytechnics, Wānanga (Government funded Māori tertiary education organisations), private training establishments, industry training organisations and adult and community education providers. Students are extolled to take responsibility for their own performance, while institutions are required to improve the success of target priority learner groups, respond to skill demands, and make better connections with industry and iwi (Māori tribes).

Symbolising the Government's view that there should be minimal but effective central oversight of the system, the expectations in the third Tertiary Education Strategy are pared down. Most of these priorities and challenges were also highlighted in the second Tertiary Education Strategy 2007-2012, a document that included the Statement of Tertiary Education Priorities, 2008-2010. To this extent, strategic continuity across the two documents may be observed. A different policy emphasis can be

seen however in decisions about funding levels for the TEC, and performance expectations of providers and students.

### **Reform of the TEC**

Following the election, one of the first manifesto commitments to be addressed related to the Tertiary Education Commission. The manifesto expressed concern about ‘heavy handed centrally driven control by the TEC’ and described the agency as one that ‘has grown into a large and demanding agency that places excessive compliance burden on education providers and stifles innovation’ (National Party, 2008). Budget 2009 reduced the TEC’s operating budget reduced by almost \$10 million for financial year 2009/2010. Streamlining the TEC was designed to save \$31m over four years. The positions of fifty-five staff were made redundant and all area offices were closed in the middle of 2009. Staffing levels, at approximately 260 full time equivalents (with a full establishment of 298 FTEs), fell to the same level as when the TEC was first established in 2003. Structural changes within the TEC were not merely about living within a new budget baseline of approximately \$59m in the 2009/2010 government financial year. Changes made reflected a particular view by Government about the appropriate roles and responsibilities of the TEC.

Most significantly, the TEC sought a refreshed model for engaging with smaller tertiary education providers that relied on the use of a TEC service centre for e-mail and telephone based advice and a new TEC website was launched to significantly improve access to information for tertiary education organisations. Area advisor positions were disestablished. In-person relationship management was to be focused on the sectors of highest investment: industry training, Wānanga, institutes of technology and polytechnics, and universities.

Two further changes are noteworthy. The size and scope of the Tertiary Advisory Monitoring Unit’s work was changed to streamline its functions, with a focus on preparing six-monthly reports on Tertiary Education Institution’s financial and educational viability for the Minister and for the Cabinet Expenditure Control Committee. The new arrangements ensure that the dual perspectives of an independent ownership interest in the financial and organisational viability of (government ‘owned’) tertiary education institutions and TEC’s view as a funder of tertiary education provision can be used in an integrated way.

Finally, the TEC’s stakeholder engagement function - through which employers, industry and community groups were consulted on their view of tertiary education needs and priorities - was disestablished. The new Government believed that this activity was the rightful work of tertiary education organisations themselves. The enterprise of understanding tertiary education need across all industries, business types, professional associations, community sectors and regions was highly ambitious. Also, the evolving nature of the Investing in a Plan system meant that findings from stakeholders were difficult to embed in the first round of Investment Plan engagements and approvals.

Overall, these changes reflect the desire to streamline the TEC’s own functions, reduce the total number of funds administered by the TEC, engage with tertiary education organisations in proportion to risk and scale of activity, reduce compliance on tertiary education organisations and empower tertiary education organisations to take responsibility for their own self improvement and stakeholder relationships.

### **Fund Rationalisation and Funding Reductions**

Another area of National Government interest signalled in the manifesto – and also a priority for the previous Government – has been reducing compliance and transaction costs both for the sector and within the TEC. In Budget 2009, a significant number of small funds were slated for disestablished in 2010 and 2011 including bilingual tutor grants, academic migrant grants, refugee study grants, English for speakers of other languages assessment services and building research capacity in the social sciences. In some cases there were concerns about fund performance, but an underlying goal



was to reduce the total number of funds as part of a programme to reduce complexity and compliance costs. Another area identified for reduced funding was short courses that focused on regulatory compliance training. The most controversial decision proved to be the reduction of community education funding in high schools by 80 per cent, with a broader goal of reducing adult and community education funding across the whole system by 50 per cent. Community groups and high schools fought a very public and ultimately unsuccessful campaign to overturn this decision.

Capability funding – including competitive project based funding used as an incentive for change in line with government priorities - has largely been discontinued. This included the Encouraging and Supporting Innovation fund involving almost \$9m, institutes of technology and polytechnic Business Links funding of \$6m and Supporting Change funding of \$35m. The move away from funding institutional capability development has been one of the most significant policy changes introduced by the Government. This reflects a philosophical view that paying the full price of provision directly through Student Achievement Component funding allows institutions more choice about how they spend their funding. Budget 2010 disestablished the Tertiary Education Organisation Component fund, with the money being amalgamated again into enrolment driven funding. The Tertiary Education Organisation Component fund had included a core component to fund costs associated with a provider's distinctive role and a strategic fund to support innovation in teaching and learning.

Alongside this rationalisation of funding pools and reduction of funding in some areas has been new investment as well. Reflecting priorities of the Government, redirected funding has been committed to the Youth Guarantee programme, which provided 2000 free course fees in 2010 for 16 and 17 year old students at risk of not being in work, school or training. New initiatives were also announced in both 2009 and 2010 to increase the number of funded medical places, in 2009 to support a significant summer research scholarship scheme, and also in 2009 to fund a 50 per cent increase in the workplace literacy fund (while reducing out year commitments in total for language literacy and numeracy). In Budget 2010, redirected funding was applied to Equivalent Full Time Student system volume with 455 more places for institutes of technology and polytechnics and 765 more for universities in 2011 compared with 2010 and to a 2.2 per cent increase in Student Achievement Component funding rates (MOE, 2010a).

### **Student Support Policy Changes**

A range of changes to student loans and allowances and student fees policy settings have been made over the past eighteen months (MOE, 2010a & MOE 2010b). A simplified approach to increasing student fees has been introduced, involving an Annual Maximum Fee Movement policy which allows for a 4 per cent increase in fees and compulsory course costs for all government funded courses, with the possibility of applying for an exemption to be able to increase fees by up to 8 per cent.

A number of changes were made to student loans policy as part of Budget 2010, reducing eligibility to student loans for permanent residents and Australians (a saving of almost \$80m across four years), placing a life time limit on access to student loans of seven years, and raising student loan administration fees. Most importantly, in terms of policy direction, a performance element has been added which requires students to pass at least half of their course load over two years to retain eligibility for a student loan. In a sign of the Government's resolve in this area, student results from 2009 and 2010 will be used to assess 2011 eligibility. The Government has estimated savings of around \$140m over a four-year period from this policy change.

The manifesto commitment to retain interest free student loans has been honoured, despite the high level of total tertiary education funding directed to students. Throughout OECD countries, an average of 19 per cent of public spending on tertiary education is used to support students, households and other private entities. In New Zealand this figure was approximately 42 per cent in 2006 (OECD, 2009, p. 61). Currently, the government writes off almost half the value of each dollar loaned to students. The Vice-Chancellor of Victoria University of Wellington recently noted: 'I fully accept the need for a fair and low-cost student loan system to ease the very real burdens on students. I do

question the strategic wisdom for New Zealand of denying university places to aspiring students so that enrolled students can borrow money at no cost to themselves' (Walsh, 2010).

A further dimension of supporting students relates to access to tertiary education. The highest profile tertiary education issue in 2010 has been restrictions on tertiary education places, especially in universities, with a number of institutions restricting enrolments or closing off enrolment in the second half of 2010 after meeting or exceeding their government funded enrolment numbers. For a system that has had very open access for two decades, this has come as a shock to the public. Institutions are beginning to prioritise in accordance with the Tertiary Education Strategy however. Waikato University, for example, have said that enrolment priority in 2011 will be given to school leavers, Māori students and those in post graduate study (Boyes, 2010). A significant demographic blip will place more pressure on the system through until 2013 and the Government will need to consider further how to reprioritise funding to support priority groups engaging in both foundation level and higher-level programmes.

### **Sub-sector Specific Initiatives**

One sub-sector under particular scrutiny by the Government has been institutes of technology and polytechnics. Drawing on 2009 data, the TEC's 2010 report on Tertiary Education Institutions (the 31 government 'owned' institutions) performance to the Minister for Tertiary Education and the Cabinet Expenditure Control Committee noted that nine Tertiary Education Institutions were categorised as having some degree of unsatisfactory educational or financial performance. Of these five were institutes of technology and polytechnics. The Education (Polytechnics) Amendment Act 2009 provided for the restructuring of polytechnic councils and the introduction of additional intervention measures to ensure that the TEC can support an educationally and financially viable institute of technology and polytechnics sector.

New councils were appointed in May 2010, each comprising four ministerial appointments and four local appointments. With smaller councils and ministerial appointments of the chair and deputy chair positions, the Government is looking for strong governance focused on educational performance and financial viability. The new legislation also allowed for a more graduated interventions framework in cases of poor performance, including the requirement for an institution to obtain specialist help or produce a performance improvement plan. More severe interventions include the appointment of a crown manager and the disestablishment of a council.

The initiatives detailed in the pages above are significantly progressed. Two further policies, which the National Government sees as important in incentivising the right student and institutional behaviour, are linking student performance results to institutional funding levels and making information about student results publically available.

### **PERFORMANCE-LINKED FUNDING**

Performance-based funding could be said to have existed for a number of years in the context of the existing quality assurance system. Ongoing funding from the Tertiary Education Commission has always required institutions to maintain the confidence of the relevant quality assurance body. In an era of capped funding, performance in relation to achieving planned student participation levels has had an impact on the volume of future Student Achievement Component funding. Where new money has been available for additional student places in the polytechnic and institutes of technology and private training establishment sectors, it has been allocated on the basis of past performance. Building on a new performance framework for Student Achievement Component funding introduced for private training establishments in 2009, funding was withheld from a number of providers pending revised Plans and in two cases it was removed altogether from the lowest performing private training establishments.

In other ways too, funding has been linked to aspects of tertiary education organisation performance. In funds such as Training Opportunities and Youth Training, funding each year is dependent upon evidence of institutions reaching targets specified in the contract. For these funding streams, targets relate to the average proportion of training places filled and the percentage of people leaving the programmes who find work or further training within a specific time span. Similarly, funding streams such as the Intensive Literacy and Numeracy fund have been designed so that future funding is dependent on learners achieving measurable gains in literacy and numeracy and on reaching targets related to the number of learning hours.

What is meant by performance linked funding in the current policy context is linking a proportion of Student Achievement Component funding to student performance results in order to reward teaching and learning performance. Based on 2011 student performance results, institutions will be subject to performance linked funding in 2012, with up to 5 per cent of enrolment driven funding at risk. Performance linked funding will apply to formal funded courses and programmes from level 1 to level 8 on the New Zealand Qualifications Framework. Research degrees at level 9 and 10 are excluded from the system as elements of the Performance-Based Research Fund already reward student performance in this area. All tertiary education sectors will be part of the system, although it will operate in a slightly different way for the Industry Training sector where, for example, progression to higher-level programmes is perhaps a less important measure.

The measures and specific weightings place the greatest emphasis on course and qualification completions. The rationale for focusing on course completions is that completed courses demonstrate measurable learning and are a partial proxy of progress toward a qualification, while students and employers value qualification completions as labour market currency. It is proposed to give progression a modest weighting for level 1 and 2 programmes and no weighting for higher level programmes, reflecting the importance placed on moving students from foundation programmes into higher levels of study that are likely to result in greater personal earnings and economic contribution. At this point, mid-level retention is considered important only from level 5 through to level 8 programmes where there are multiyear programmes and retention acts as a barometer of student progress and institutional performance. Final decisions on how the mechanism will work are yet to be made.

While some shift from part-time to full time study is considered beneficial for the system, raw performance results are likely to be adjusted to acknowledge that part-time students take longer to complete qualifications. Thresholds will be set at a level which incentivises improvement, while allowing for good performance to be recognised with 100 per cent of enrolment driven performance being paid. The thresholds will be published in the year before performance is measured so that institutions know what they are aiming for. A number of different approaches could be taken to setting the exact upper threshold, including using average performance in recent years.

It is not proposed that exceptional performance levels will result in more than 100 per cent of enrolment driven funding being paid. The system is geared toward targeting outliers in the first phase. The intention is to remedy poor performance without destabilising the system. Early modelling of possible impacts suggests that, in keeping with the Government's intentions, the viability of key parts of the system will not be affected. Funding not allocated as a result of tertiary education organisations failing to reach the threshold is likely to be reinvested in the tertiary education system. For example, this money could be invested in unmet student demand or other priority areas.

It is expected that the new policy will result in institutions working harder to ensure that students enrol in programmes that are appropriate for their interests and skill levels and that student progress is monitored more assiduously. There may be unintended consequences. The TEC will need to ensure that performance linked funding does not result in institutions raising entry standards at the expense of improvements in target learner group performance. There may be concern that assessment standards will drop in order to improve outcomes and government funding levels. It is instructive to see that Columbia University's Community College Research Centre has found that although performance

linked funding systems may result in increasing restrictions for entry into specific programmes, there is no evidence of academic standards being lowered as a strategy to improve performance results (Dougherty, 2010b).

New Zealand's decision to adopt performance linked funding is not without precedent. A range of performance-linked systems has been used for example at the State level over the past thirty years in the United States of America, involving at risk funding of between 0.4 per cent through to 5.45 per cent. In some cases, a portion of enrolment driven funding is withheld subject to student performance results and in other cases, additional sums of money have been used to reward performance over and above enrolment-based payments. A number of States have discontinued performance based funding due to pressure on State budgets, a lack of provider support and changing policy settings within State legislatures. Stable systems are characterised by the involvement of tertiary education providers in the development of the system, the introduction of performance based funding through legislation rather than the use of budget provision and maintaining consistency in the use of performance measures (Dougherty & Hong, 2005, Dougherty & Natow 2009, 2010a; Dougherty, 2010b).

Research findings from the US suggest the link between the use of performance linked funding and improvements in performance outcomes is modest (Dougherty, 2010b). This suggests that performance based funding must be seen as one of a number of levers to be used to improve the performance of individual tertiary education organisations and the system as a whole. It may be supposed that institutions with poor educational outcomes that are financially weak will feel its impact most keenly. For these institutions, losing even 1 per cent or 2 per cent of Student Achievement Component funding may be the difference between reporting a surplus or deficit position.

A potentially more challenging dimension of performance linked funding is the possible future inclusion of employment outcomes as a criterion for funding. The Minister for Tertiary Education foreshadowed this in a speech at Victoria University of Wellington in July 2010 when he said 'ultimately I want to see funding linked to employment outcomes, not just internal benchmarks. This will send a strong signal to students about which qualifications and which institutions offer the best career prospects – and that's what tertiary education has got to be about'. The statement elicited a strong response from universities and commentators about the value of a liberal education.

The chief executive of one tertiary education organisation who has come out in favour of the idea has noted that 'Developing some sort of national measure of graduate employment will be a heroic task ...' (Ede, 2010). It may be that collecting data on employment outcomes for making that information publically available would produce the right incentives for institutions and potentially useful information for learners. Ideally, such data collection would be driven by institutions themselves or sub-sectors as part of the close relationships tertiary education organisations should have with industry and employers, rather than being centralised. However, here again there is overseas practice to draw on. In the State of Tennessee, job placement results count for 10 per cent of performance linked funding for community colleges (Tennessee Performance Advisory Funding Committee, 2010).

In the case of New Zealand, performance linked funding will be used in concert with the Investment Plan system which provides opportunities for institutions to demonstrate that their planning reflects Government priorities and meets the needs of their communities of interest, including students. Plan approval (or not) by the Board of Commissioners of the TEC remains the ultimate sanction for poor quality performance. Very poor performing courses and programmes are targeted for attention during Plan engagement between the TEC and tertiary education organisations. Institutes of technology and polytechnics in 2010 have been required to provide, as part of the 2011-13 Investment Plan engagement process, information on how courses with less than 30 per cent achievement will either be restructured or discontinued. Plan commitments are monitored throughout the duration of the Plan, with interventions taken as needed. Sitting alongside these levers are ownership monitoring and interventions (in the case of Tertiary Education Institutions), a well developed self review and

external evaluation review system, the use of benchmarking to increase efficiency and a performance consequences framework.

A comprehensive performance consequences framework from 2011 will see reduced funding, conditions on funding or funding declined where an institution fails to deliver against their performance indicators. Points of influence for the TEC include funding approvals, Plan conditions, frequency of TEC engagement with providers, Plan amendments, suspending or revoking funding, recovering funding or activating a statutory intervention. Outside of the Plan system, budget decisions can and have been used to remove 'low value' provision in areas such as first aid training and regulatory compliance training.

In this way, it may be argued that the lever of performance linked funding adds an important tool to the planning, approval and monitoring levers already available. The impact of performance linked funding is likely to be only as effective as the complementary instruments that sit around it. Capped funding during a period of increased demand has increased attention on prioritising some learner groups and types of provision. Arguably, it has also led to students placing greater value on securing and retaining a university place. This may yet prove to be as effective as performance linked funding in driving overall improvements in system performance.

## **PUBLIC AVAILABILITY OF PERFORMANCE INFORMATION**

Closely related to linking funding to student performance, is making publically available information on tertiary education organisation performance in relation to student outcomes. Although student performance information has been available through the annual reports of some tertiary education organisations, a centralised approach to publishing such information allows for the use of common measures and comparable information.

Performance data on student course and qualification completion, student progression and student retention for institutions receiving Student Achievement Component funding is to be published in 2010 for the first time. The Minister for Tertiary Education sees this information as an input for student study choices (Joyce, 2010a). Publication of district health board outcomes across various surgical and other services in 2009 was used as a model for the development of the reporting format. Information for the university, Wānanga, polytechnic and institute of technology and private training sectors will be published by sub-sector allowing for students and the public to understand one dimension of institutional performance in a comparative format. A page per tertiary education organisation provides results for each of the four measures by level of study broken down into levels 1-2, 3-4, 5-6, 7-8 and 9-10, along with information about the number of equivalent full time students, student ethnicity, level of study, student age and subject area.

Tertiary education organisations have raised a variety of concerns throughout the development of the project including data integrity, the possible distortionary impacts of high numbers of part-time students and the difficulty of comparing very different types of institutions in the private training establishment sector. There were also concerns that an institution could be performing well for a particular demographic, such as Pacific students, but be rated poorly by comparison with institutions enrolling a different student demographic. The reputational impact associated with the publication of performance information is likely to be considerable. It remains to be seen how much interest the media will show in the comparative data, but it can be anticipated that comparatively high performing institutions will seek to use the results in their branding and advertising, as has occurred with performance-based research funding results.

Performance linked funding and the public availability of performance-linked information have been subject to considerable political and sector attention. Doubtless, both policies have an immediate signalling impact and over time will help incentivise improved enrolment processes, pastoral care, and teaching and learning. It is suggested that the careful alignment of these policies with a fuller

application of the tools available within the Investing in a Plan system has the potential to significantly improve overall system and tertiary education organisation performance.

## **FUTURE POLICY DIRECTIONS SIGNALLED BY THE GOVERNMENT**

Beyond the measures discussed above, the Government has foreshadowed a number of areas of focus in the short to medium term. The need to consider relative contributions of public - private cost sharing remains a key issue. Modest increases in private contributions to the cost of tertiary education are unlikely to undermine the high levels of participation in tertiary education. Indeed the historic evidence in New Zealand is that rates of participation significantly increased after fees were introduced and student loans were made available. Shifting a higher proportion of costs to private contributions however increases the Government's financial exposure through greater demand for student loans. Also, raising the level of private contributions is likely to differentially impact on different learner groups and may undermine the goal of improving the performance of target learner groups.

Rather than confirming a three year funding path for institutions in the forthcoming Plan approval round, the Minister for Tertiary Education has decided upon a two year period in order to allow for work to be done on the price government pays for tuition subsidies. The possibility of rationalising the number of funding categories and reviewing subsidy rates against the cost of provision, the mode of delivery and level of provision was signalled in mid-2010. Many dimensions of price are likely to be considered over time – how much should employers, students and the government financially contribute to different levels of study and how should different types of qualifications and different learning modes be funded? Should funding be able to be moved between sub-sectors more easily and what price should be paid for provision in regions where full provision is not economically viable? If significant improvement is not made in the performance of target groups such as Māori and Pacific, should there be further consideration of the subsidy rate for these learner groups?

A further area for system wide attention signalled by the Government is the importance of increasing the internationalisation of New Zealand tertiary education, especially the recruitment of foreign students. Government's aspirations in this area are likely to be wider than catching up to Australia's position as the country with the highest proportion of international students. Opportunities gained from having a portion of a degree completed overseas and offshore delivery opportunities for New Zealand institutions are also considerations. The Government is currently setting international education goals for the next 15 years that will place raised expectation on institutions and the system as a whole. After a welcome increase in international student numbers in 2009 compared with 2008 (MOE, 2010c), tertiary education organisations have responded positively to the Government's encouragement, with some institutions seeking or expanding offshore international education opportunities.

More broadly, ensuring that skills and training meet the needs of employers is likely to be an enduring area of attention for the government and the TEC over the coming years. This goes to the issue of the supply of skills, relevance of qualifications, the structure and pathways of qualifications and relationships with the end users of tertiary education. In relation to qualification approval, Minister Joyce has also signalled that delegations for qualification approval and quality assurance arrangements will be reviewed as a consequence of the perception that the number of qualifications has rapidly expanded due to sub-sector regulation of qualifications (Joyce, 2010b). Reflecting the Minister's often quoted concern about there being 6,000 qualifications on the framework, the number has already been reduced by 15 per cent by retiring or removing out of date qualifications and further change may be expected.

Finally, it is likely that the Government will work to develop a broader view of school to tertiary transitions. One context for this is the need to ensure that there are clear routes to vocational study and

that senior secondary school is linked to next steps in education, not merely through a small number of specific funds, but because of clearly defined study and career pathways.

## CONCLUSION

The Government has sought to move tertiary education away from central steering during a period of increased student demand and financial constraint. In doing this, the Government has focused on introducing new mechanisms to improve student outcomes and institutional performance. This has resulted in changes to the TEC's operational funding level and its roles, a more explicit Tertiary Education Strategy, removal of capability funding and a decrease in the number of funds, new legislation aimed at a more effective and viable polytechnic sector, significant student support changes and reduced tolerance for poor tertiary education organisation performance. New levers linking funding to student performance and highlighting student performance information in the public arena will augment the Investing in a Plan system.

Behind this considerable activity and impetus since late 2008, there remains an enduring focus on improving the performance of target learner groups, lifting system performance and improving the quality of research. Continuity of strategic direction may be seen in the emphasis on creating responsive institutions meeting the needs of students and industry, efficient and financially viable tertiary education organisations and high quality teaching and learning that leads to improved student course and qualification completion rates. The refreshed means being utilised to realise these goals have created considerable momentum in the sector.

Future work on the price government pays for tertiary education provision, re-conceptualising the relationship between the secondary and tertiary sectors, opportunities to further internationalise the tertiary education sector, and streamlining qualifications to better meet employer needs will further progress what are widely agreed strategic priorities for New Zealand's tertiary education system.

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# CLIMATE CHANGE IN ACADEMIA

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## ABSTRACT

In these times of economic uncertainty within the Australian economy, it has been necessary for the tertiary education sector to implement changes to the very essence of its structure in order to respond to demands from multiple bodies, including the federal government, industry, and internally from the higher education sector. Academic development units are not immune to this uncertainty and the pressures resulting from this need for change. The Griffith Institute for Higher Education (GIHE) has recently experienced a greater reliance on the experience and knowledge of para-academics to assist in the provision of teaching and learning services. Whilst this provides an opportunity for para-academics to enrich, build, and enhance their qualifications and expertise, does this translate into progressive acceptance of these staff as academic equivalents? A review of the nature of these changes and an anticipation regarding reactions from the University community about the impact these changes might have on the perceived value of the unit will be raised in this paper.

Keywords: Higher education, para-academic, future directions.

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## INTRODUCTION

The future direction of Australia's higher education sector faces multiple challenges, not just economically, but also from those identified through the Review of Australian Higher Education report, as fundamental to support Australia's ongoing commitment to educational reform (Department of Education, Employment and Workplace Relations [DEEWR], 2008, p.5). Without an expansion of the higher education system, Australia faces a substantially staggered economic and social future, suffering under the lack of knowledge (Coaldrake, 2000, p.8). As observed by the then Minister for Education, 'Events are forcing us to make new calls on our higher education system. We must have new and greater expectations' (Gillard, 2009).

Some of the challenges to Australia's higher education system that need to be addressed include:

- Increasing '...the proportion of young Australians with undergraduate qualifications...' (Gillard, 2009);
- Improving Australia's Organisation for Economic Co-operation and Development (OECD) position, to match those countries whose institutions inject significant finances into research (DEEWR, 2008, pp.xi-xii);
- Creating cohesion between the tertiary education sector and in-need schools (DEEWR, 2009, p.5);
- Improving research capabilities within each institution (DEEWR, 2009, p.5); and,
- Determining how best to maintain and improve '...high quality teaching and learning...' (DEEWR, 2009, p.5).

The Australian Government has recognised that these challenges require significant funding in order to succeed (DEEWR, 2009, p.5). The 10-year Australian Federal Government reform plan will see additional funding of approximately \$5.4 billion injected into the higher education and research sectors to help meet these challenges (DEEWR, 2009, pp.5-9).

The Griffith Institute for Higher Education (GIHE), is Griffith University's internationally recognised academic development unit charged with the responsibility of improving '...the quality of learning and teaching at Griffith University' (Griffith University, 2010, p.3). The unit aims to achieve this by producing and delivering academically relevant workshops; working with academic staff and executives on University strategic initiatives; supporting academics through the provision of information and leadership to assist colleagues achieve their targeted goals; and, undertaking research that strengthens the '...quality of student teaching, the student learning experience and outcomes' (Griffith University, 2010, p.3).

Griffith University places substantial emphasis on the important role a highly skilled workforce plays in the achievement of its nationally and internationally significant strategic priorities (Griffith University, 2008, p.2). The GIHE is central to Griffith University's capacity to assist in the achievement of these strategic priorities (Griffith University, 2008, p.16). 'The University will continue, through the GIHE, to provide high-quality professional development programs and resources that align with the University's learning and teaching philosophy and strategic objectives' (Griffith University, 2008, p.16).

The implicit challenge of determining how best to maintain and improve '...high quality teaching and learning...' (DEEWR, 2009, p.5) is matched perfectly with GIHE's charter to improve the quality of learning and teaching at Griffith University (Griffith University, 2010, p.3). Strategically-aligned and highly-considered academic and professional support staff at the GIHE complements the unit as a whole and helps to sustain a very successful academic development operation (Griffith University, 2010, p.19-20). These positions include a combined Director and Dean (Student Outcomes) position, an Associate Director, senior academic staff, and various administrative and research staff.

Macfarlane (2010) identifies para-academic positions as those whose concentration is predominantly on a single aspect of academia. Positions such as educational developers, e-learning coordinators and business development managers are examples of para-academic positions (see Figure 1, Macfarlane, 2010).

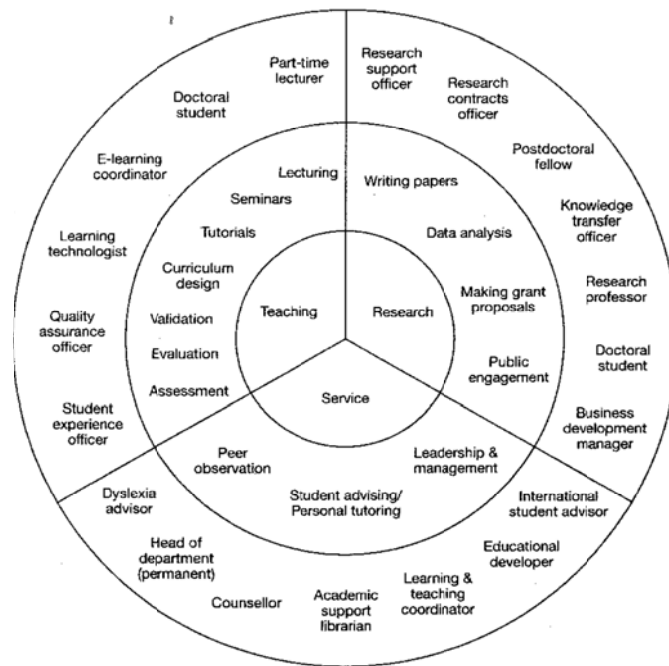


Figure 1. Types of para-academics in higher education.

Para-academic positions have evolved not simply because of the knowledge-expansion of professional support staff (Macfarlane, 2010). A distinct need has been created for professional support experts to carry out tasks that could be considered too time consuming and of an insufficient academic focus for traditional academics to carry out on a regular basis (Coaldrake, 2000). Macfarlane (2010) offers a clear visual representation of the evolution of these changes to the support, para-academic and traditional academic positions (see Figure 2, Macfarlane, 2010).

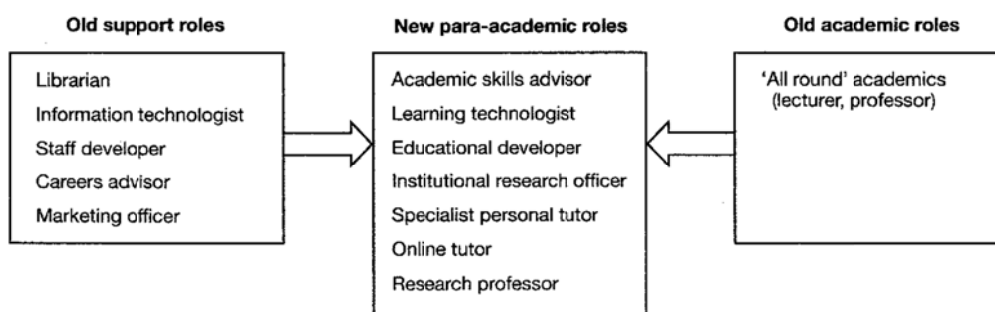


Figure 2. Source/origin of para-academics.

A 1997 inquiry into the United Kingdom higher education sector commented that ‘Clearly the role and profile of administrative and support functions in higher education has altered quite considerably over recent years. Many staff have found themselves taking on higher levels of responsibility and playing an increasingly central role in the delivery of higher education’ (Dearing, 1997).

Acting on several long-term and planned University initiatives, the GIHE introduced three para-academic positions to assist in the achievement of key strategic initiatives (Griffith University, 2008,

p.6). The creation of the blended learning consultant, curriculum support officer, and manager, teaching quality enhancement positions provide an exploratory introduction to this topic. Each of these positions is intrinsically involved in the support of the University's strategic initiatives (Griffith University, 2008, p.16).

## **METHODS**

The qualitative method used in the collection of data for this paper involved the initial identification of appropriate GIHE staff, and one brief round of interviews to establish an understanding of the individual and of the positions. Three GIHE para-academics were interviewed for this paper as a starting point for what may be a basis for data collection and the development of future papers.

## **DISCUSSION**

### **Exploring the position: Blended Learning Consultant**

A 'blended learning' style of teaching encourages academic staff to utilise various educational styles such as those involving information and communication technologies (ICTs), mixed with media and educational resources, multiple methods of teaching, a range of learning types, and face-to-face communication (Griffith University, 2009a). Griffith University has acknowledged the value a blended learning style of teaching and learning can add to the climate of academia (Griffith University, 2009b).

The GIHE blended learning consultant position commenced in November 2009 and was created in direct response to a strategic initiative from the University's Deputy Vice Chancellor (Academic). The consultant operates in collaboration with four Group-based blended learning advisors who seek to generate a higher usage of ICTs in both the teaching and learning environments throughout the University. The position is responsible for providing professional development information and instruction to groups of staff. A vignette of how the appointee to the blended learning consultant position views this role follows.

I do not consider this to be a traditionally-held academic position in terms of undergraduate/postgraduate teaching. Whilst I do not convene or moderate a course or professional development program, there is responsibility to contribute to the developmental design and delivery of components of these programs.

I recognise there may be concern throughout the University's academic community that similar positions are being created at the expense of traditional academic roles. However, this position should free the GIHE academics from tasks that whilst important in themselves, are time consuming and are not considered of a sufficiently high standard to be called quality academic work. Whilst recognising this position allows GIHE academics the opportunity to continue to pursue valuable research, teaching or service-related activities, I suggest it may take some time to be positively accepted throughout the University's academic community.

You have to be honest and upfront about who you are, and what you are doing here. Establishing credibility and respect with academic colleagues within GIHE is a matter that needs careful acknowledgement.

### **Exploring the position: Curriculum Support Officer**

As Whitchurch (2009) explains, a future direction for a university, and one which may become more prevalent, is that of an altered organisational format where more staff work on specific projects and portfolios, outside of the accepted academic or professional structure.

The curriculum support officer position was established as a twelve-month seconded position, commencing in February 2010. Primary objectives of the position are to assist GIHE (deliver to the University) ‘...in the areas of teaching and curriculum development and quality enhancement, professional development of teaching staff engaged in curriculum development, other key activities including GIHE representation in Group or School Communities’ (Griffith University, 2009c). A vignette of how the appointee to the curriculum support officer position views this role follows.

I see the essence of this position as one of offering support to GIHE senior academics, allowing them time to undertake more traditional academic activities, such as conducting teaching and research at a higher level. This ultimately saves the senior academics’ time, and provides them with the opportunity to operate in accordance with their qualifications.

Finding new ways of supporting and engaging academics whilst meeting targeted objectives is central to the way I see this position. Providing the opportunity for such objectives to be met, also allows me to further extend my personal knowledge base and expertise.

This extremely supportive assessment of the curriculum support officer position is reinforced by The National Committee of Inquiry into Higher Education (1997); ‘They took tutorials, seminars and even gave lectures in order to free academics for other things.’ Similarly, Gordon and Whitchurch (2007, p.17), Conway (1998, p.1) and Dobson (2000, p.209) recognise the institutional value of a position like this, where professional staff work in conjunction with academic staff. The mixing of academic and administrative roles and responsibilities can also help to provide a flexible workforce who provide an institutional context for ‘...complex knowledge environments’ (Gordon & Whitchurch, 2007, p.16).

### **Exploring the position: Manager, Teaching Quality Enhancement**

Communication and ICTs are central to the continual blossoming of the education industry (Cunningham, Ryan, Stedman, Flew, Tapsall, Bagdon & Coaldrake, 2000). A primary responsibility of the manager, teaching quality enhancement is to manage GIHE’s communication tools and activities designed to improve the quality of learning and teaching at the University. The position is a full-time continuing role that commenced in November 2007. Additional positional responsibilities include supporting the University’s strategic initiatives such as responding to key recommendations from the 2006 GIHE Review, and supporting academic staff with the development of Australian Learning and Teaching Council (ALTC) and institution-based applications for awards and grants. A vignette of how the appointee to the manager, teaching quality enhancement position views this role follows.

I see the fundamentals of the position as that of a University relationship broker; the bridge and network builder between GIHE and the rest of the University – a type of two-way conduit for GIHE and the wider University community. It follows that through this position, support for the developmental aspects of the unit, as well as the delivery of grass-roots feedback to inform staff of the requirements of Griffith University academics is offered. As a communications support role, I understand the capacity this position has to free up academic staff to provide them with the opportunity to concentrate on the higher-level teaching and research aspects of their work.

In the past, academics in higher-level positions would be responsible for investigating the applications of award and grant writers to ascertain names to put forward for recommendation. The position of Manager, TQE develops and delivers the professional assistance required to apply for awards and grants, and to then make recommendations for senior academics to make final decisions regarding submitted grants based on this professional support.

The position presents its own set of complexities and challenges as I attempt to integrate the support of process and protocol-oriented administrative staff and academics who are traditionally less involved or interested in systems knowledge. Although the position has led to issues of credibility, there is a sense that regular, respectful communication, along with collaboration and negotiation with academic and professional staff will ensure all staff are recognised for their traditional values, strengths and contributions to the University as a whole.

The University-wide exposure this position allows, creates privileged opportunities to view the great work the University academics have been able to deliver because of the support given by this position.

## **CONCLUDING REMARKS**

As outlined earlier, this paper has commenced an exploration of the acceptance of para-academic or professional support staff within the academic development unit of Griffith University. It could be concluded from the data collected that these staff value the positions they play within the University, and also that they see these positions as being strategically implemented, purpose-driven, and fundamentally important to the value of the work carried out by the University.

A further conclusion is the acknowledgement from the three para-academics that these positions cannot be categorised as traditional academic roles, but that they are positions which are accepted throughout the University. In addition, each para-academic remains highly committed, enthusiastic and supportive of the position and its place within the complex University environment - providing a unique opportunity to be 'in-tune' with both professional and academic elements of the University.

It could also be concluded that traditional academic acceptance of these para-academic positions is strong, both at Griffith University and at the GIHE, given the support offered by the University to GIHE's ongoing and future direction. Further analysis regarding the depth of the GIHE academics' support of the para-academic could assist in the development of this concept. Coaldrake (2000, p.28) suggests that elements of University life, including academic and para-academic positions, has altered over many years and will continue to do so, offering an increased capacity for these positions to apply profound institutional knowledge and an ability to develop further into the future.

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# **ARE WE MISSING SOMETHING? BENCHMARKING A SUITE OF UNIVERSITY POLICIES**

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## **ABSTRACT**

This paper outlines the process and outcomes of a review of the University of Western Sydney's policies to ensure proper levels of coverage, compliance and approval pathways within its policy suite. Benchmarking of publicly available information was used to ascertain whether the University of Western Sydney's policies provide sufficient protection for the university given the range of issues related to its operation. In addition, the project examined policy approval processes and compliance mechanisms in another higher education organisation and compared these against similar processes at the home institution. Outcomes identified inconsistencies in policy coverage in relationship standards between the university and students, and potential business risk exposure; and the approval authority instruments.

Keywords: policy, benchmarking, review and evaluation, risk management.

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## INTRODUCTION

University policy documents generally concern themselves with internal matters relating to the principles on which the institution stands, management of exposure to risk, and to interpret and apply legislative requirements. The process for setting university policy is usually enshrined in the legislation that enacts the university. A governing body such as a council or board is given the overall responsibility of setting the organisation's policies. Other sub-committees or positions, such as an academic board or a Vice-Chancellor, may be delegated certain policy responsibilities within the university's act or by-laws.

The policy development and approval regime can determine the shape of an institution's policy suite, however, a number of other factors influence an organisation's policy profile (Althaus, Bridgman, & Davis, 2007, p46). Within the tertiary education industry, the strategic direction of the university effects its policy decisions and needs. External influences such as sector reform or government policy and new legislation can also impact on internal university policy. Expectations of staff, students and society in general change over time; policy can guide this change or be reactive to these external pressures. Universities also need to be responsive to critical incidents, and to be risk resilient. Policy development processes such as policy life cycles like those outlined by Althaus et al. (2007, p37) and Hatwell & Jensen (2008), assist organisations to respond to internal and external issues. Review processes assist in ensuring that policy documents meet the contemporary requirement of the organisation and its stakeholders (Althaus et al. 2007, p190).

In 2010, the Policy and Governance Unit at the University of Western Sydney (UWS) undertook a project to review comprehensively its policy suite in order to determine the currency of its policy profile. The objectives of the project were to ensure appropriate levels of coverage, compliance and approval pathways, and to identify and action outstanding policies. The key element of the project was to compare the UWS set of policies and approval processes with those of a comparable university. The underlying theme of the project was framed around risk management; that is the UWS's potential exposure to risk through disparity in policy coverage and potential risk of inadequate approval processes. At the beginning of July 2010, the UWS had 182 policy and related documents such as procedures, guidelines and plans, on its policy website. These policy documents cover the myriad issues faced by a modern university, ranging across academic rules and procedures, setting behavioural standards, meeting legislative requirements, governance processes, health and safety, matters relating to working at the University, and privacy, security and risk management. These documents represent the evolution of the University's policy suite since the amalgamation of its three former federated members, and their various policies, in 2000. The historic versions of current policies listed on the UWS policy website tracks the changes in policies since that time.

The policy review process at UWS is managed through its policy document management and development system, the Policy DDS. Every policy has a set review date, usually three years after publication but this can vary depending on the type of policy. The Policy DDS system auto-generates a review notification to the responsible manager four months before the date of review. The relevant manager reviews the policy for currency and institutes any required action such as minor amendments or a full review. A senior executive must approve the outcome of the review. Individual units have responsibility for policy development within in their portfolio, with the Policy and Governance Unit managing the policy process centrally. The Policy and Governance Unit also provides policy development support and resources to managers. In terms of policy development support, the Policy and Governance Unit (2009) encourages policy reviewers to consider the policy in terms of the full policy suite and the sector generally. Good policy review practices also include looking at similar policies and at best practice in the industry (Hatwell & Jensen, 2008). Whilst under the review process individual policies at the UWS are considered in terms of what is happening in the sector, the overall policy requires review in terms of industry practice from time-to-time.

## **METHOD**

A benchmarking process was determined to be the most suitable method in which to undertake the review. Benchmarking is a mechanism used by organisations to improve performance by identifying and adapting best practice (Stapenhurst, 2009, p6). It usually relates to business performance -faster production, reduced costs, higher quality, increased competitiveness and so on - by collecting and analysing a range of operational data. In terms of the policy suite review project, benchmarking may not have seemed the obvious method in which to undertake the comparison. However, as a standardisation analysis, the processes underpinning benchmarking can be adapted to identify a partner organisation, to collect and analyse information, and to assist in identifying gaps.

### **Selecting a Benchmarking Partner**

In selecting a benchmarking partner, it is common to develop selection criteria (Andersen & Pettersen, 1996, p41). Cook (1995, p13) notes that as benchmarking is usually a measure of one organisation's performance against the best practice of another organisation, generally a leader in the field is sought as the benchmarking partner. As this review was devised as a desk-based project, only information in the public domain could be used so whilst best practice was important, other criteria were developed, as follows (in no particular order):

- 1) Location - A NSW-based university to account for the same state legislative requirements,
- 2) Accessibility - A large range of policy and related documents were readily available on the university's public website,
- 3) Policy Development Process - The university's policy development process was available online, and was consistent with a mature policy development framework, and that the majority of policies listed were developed under that policy development process,
- 4) Best Practice - some recognition of best practice in the sector.

In addition, a multi-campus profile was determined to be important but not essential.

A desk-based audit of other NSW university policy websites was undertaken to determine suitability in terms of the criteria. Whilst all NSW universities list policies on their websites, many did not meet criterion three. The University of Technology Sydney (UTS) and the University of Wollongong (UOW) websites were the two most suitable based on the criteria. The UOW was selected as the benchmarking partner because Freeman (2010) rated the UOW's policy framework as best practice, with its policy website rating highly among the 13 institutions reviewed as part of that study. Finally, the UOW's strategic plan was reviewed to ensure that the potential benchmarking partner's strategic directions were not significantly different to that of the home institution. Whilst each organisation has particular foci, the strategic plans were not as different as to believe that their policy directions would be divergent. A summary of the two strategic directions are listed in Table1.

### **Collecting the Data**

In order to make a comparative analysis, the policy documents listed on each university central policy site were transferred to a number of spreadsheets. These documents included all those listed on the central site including policies, procedures, guidelines, standards, codes and legislation. Only the information available on the central policy site was used to undertake the analysis – no further information or clarification was sought. Even though the author was aware that potentially similar documents were available elsewhere on the UWS website this information was not used in the comparison process.

Information on each policy document was captured - a summary of the document, the approval authority and the category in which the home institution had allocated the document. The lists of policy documents of the two universities were compared to each other to determine whether there were certain issues covered by UOW that were not covered by the UWS policy suite. The titles of the documents, the document summaries and categories were used to establish whether there were deficiencies in policy coverage at the UWS.

Table 1 – Overview of Strategic Directions of Benchmarked Institutions

University of Wollongong*	University of Western Sydney#
<b>Mission, Vision and Principles</b>	<b>Mission, Vision, Beliefs and Values</b>
<p>To be an international University recognised for originality and enterprise in exploring, communicating and applying knowledge to enrich individuals, their communities and the environment</p> <p>MISSION Our mission is to excel through:</p> <ul style="list-style-type: none"> <li>• Research and teaching of world-class standard and impact</li> <li>• A learning environment that supports, informs and inspires our diverse student community</li> <li>• Staff initiative, enthusiasm and commitment to the University's goals</li> <li>• Collaboration and enterprise that provide innovative and timely ideas and solutions for the University and its community partners</li> </ul> <p>PRINCIPLES We share a commitment to promoting and celebrating:</p> <ul style="list-style-type: none"> <li>• Excellence through initiative, enterprise and achievements that take society forward</li> <li>• Intellectual openness and freedom of opinion</li> <li>• Integrity</li> <li>• Mutual respect and collegiality</li> <li>• Diversity of cultures, ideas and peoples</li> <li>• Indigenous perspectives and reconciliation</li> <li>• Foresight, quality and accountability as an institution</li> <li>• Community partnerships and mutual development</li> <li>• Equity and social justice</li> <li>• Responsible stewardship of the natural environment</li> </ul>	<p>Our Mission To be a university of international standing and outlook, achieving excellence through scholarship, teaching, learning, research and service to its regional, national and international communities, beginning with the people of Greater Western Sydney.</p> <p>Our Vision Bringing knowledge to life in Greater Western Sydney through community and business engagement with our learning and research.</p> <p>What we Believe in</p> <ul style="list-style-type: none"> <li>* The primacy of the student experience</li> <li>* Environmental and social responsibility</li> <li>* A vibrant and inclusive intellectual community</li> <li>* Opportunity and excellence</li> <li>* Being connected locally and internationally</li> <li>* Valuing and rewarding our staff</li> </ul> <p>Our Values UWS has a shared and explicit set of values which underpin all that it does:</p> <ul style="list-style-type: none"> <li>* excellence and quality in all endeavours</li> <li>* scholarly rigour and integrity</li> <li>* equity of access and inclusiveness</li> <li>* collegiality and participatory decision-making</li> <li>* academic responsibility and freedom</li> <li>* relevance and responsibility to our communities</li> <li>* ethics and accountability</li> </ul>
<b>Strategic Goals 2008–2010</b>	<b>Strategic Goals 2010-2015</b>
<p>Core Goals &amp; Objectives</p> <ol style="list-style-type: none"> <li>1. Excellence and innovation in learning and teaching</li> <li>2. Excellence and innovation in research</li> <li>3. Dynamic engagement with our communities</li> </ol> <p>Enabling Goals &amp; Objectives</p> <ol style="list-style-type: none"> <li>4. Students engaged with learning and University life</li> <li>5. A university of international outlook and achievement</li> <li>6. Versatile, skilled and committed staff</li> <li>7. Business capacity to advance the achievement of our vision</li> </ol>	<p>Key areas of focus 2010-15</p> <ol style="list-style-type: none"> <li>1. Create a superior and engaged learning experience</li> <li>2. Develop focused, relevant and world-class research</li> <li>3. Build organisational and financial strength</li> </ol> <p>Key Performance Indicators &amp; Current Priorities</p> <ul style="list-style-type: none"> <li>* Widening participation</li> <li>* Student retention</li> <li>* International enrolments</li> <li>* Research outcomes</li> <li>* Postgraduate load</li> </ul>

\* University of Wollongong. (2010)

# University of Western Sydney. (2010a)

Part of the original brief was to ascertain the pathways for approval of the policy documents. Accordingly, the policy documents of each institution, as listed on the central policy website, were assessed by approval authority. That is, which university governing body or position approved the document. As the relevant university Act determines the bodies within the organisation that have authority to make policy or to delegate that responsibility, both University Acts were reviewed to determine legislative variances in approval authorities. Additionally, the documents detailing the policy approval processes in each institution were compared.

The *University of Western Sydney Act 1997* (the UWS Act), the *University of Western Sydney By-Laws (2005)*, the *UWS Rules* and the *Delegations (Administrative) Policy* set the authorities for approval of policies at the University. The Board of Trustees has, under the UWS Act, the

responsibility for broad policy development but also has the authority to delegate those powers to an officer of the University or committee; and the Academic Senate has responsibility for policies relating to academic matters. The Vice-Chancellor, under the *UWS Rules* has responsibility to develop policies on administrative and financial matters, and under the *Delegations (Administrative) Policy* has delegation to approve policies. UWS also has the *Policy, Procedure and Guidelines Policy*, which advises that the policy approval authorities are the Board of Trustees, the Academic Senate and the Vice-Chancellor.

The *University of Wollongong Act* (the UOW Act), the *University of Wollongong By-Laws (1991)* and its policy on *Delegations of Authority Policy* provide the authorities for policy approval. Under the UOW Act the University Council can delegate its responsibility. The Administrative Committee is a formal committee of the University Council delegated with particular responsibility for monitoring policies and performance including making recommendations on administrative policies. The Administrative Committee is also able to approve administrative policies. The UOW's *Standard on UOW Policy* advises that the University Council and/or the Administrative Committee is required to approve new policies, except where that responsibility is delegated by the resolution of the University Council.

The definitions of the two institutions' policy document titles were compared to each other to ensure that the analysis was actually comparing "like to like". Table 2 shows that the definitions as outlined in the relevant university's "policy document" policy. The UWS limits its policy documents to policies, procedures and guidelines but the UOW also has codes, standards and rules. Although guidelines are not defined in the UOW's *Standard on UOW Policy*, many guidelines were listed on the central policy website. The UWS's site included plans, which were undefined.

Table 2 – Definitions of the Policy Titles of the Benchmarked Institutions

University of Wollongong*	University of Western Sydney#
<p><u>Code of Practice or Conduct</u> - a statement of rules and expectations which have been approved in some formal way but without the legal force of legislation or regulations. They focus on duties and responsibilities for particular circumstances, often outlining the required standard of behaviour.</p> <p><u>Policy</u> - a statement that outlines non-discretionary governing principles and intentions in order to guide University practice. Policies apply to the University as a whole. They comply with all relevant legislation and rules and shall be approved by the highest delegated authority being the University Council and/or Administrative Committee.</p> <p><u>Procedure</u> - a documented instruction that gives directions to carry out specified actions. For the purposes of procedures that support policy, they are mandated directions.</p> <p><u>Rule</u> - an authoritative, prescribed direction for conduct. Rules are made in accordance with the UOW Act and are approved by the University Council. They have the same force and effect as By-Laws.</p> <p><u>Standards</u> - dictate an action in particular circumstance or the state of affairs on a particular issue. They establish a precept from a recognised authority with no deviation. Standards may be established internally, but also externally and be adopted by the University. Standards which have University wide effect have the same status and requirements as Policy.</p>	<p><u>Guideline</u> - a statement that is advisory or explanatory in nature and provides guidance on how University policies and procedures might best be implemented or applied.</p> <p><u>Policy</u> - a statement that sets out the University's official position in relation to a particular issue and any mandatory requirements.</p> <p><u>Procedure</u> - a statement that sets out the University's standard and required practice for implementation of a University policy.</p>

\* University of Wollongong. (2007)

# University of Western Sydney. (2006a)

## RESULTS

### Analysing the Data

UWS has many more policies than UOW (158 versus 88), however, the documents relating to procedures are much reduced (7 versus 28). Similarly, UWS has fewer guidelines listed – 11

compared to 37. The *UWS Policy Template Structure* explains that the policy template has five sections: purpose and context; definitions; policy statement; procedures and guidelines (University of Western Sydney, 2006a). Accordingly, a UWS policy may also include either or both procedures and guidelines in the relevant sections of the policy. The UWS has no documents defined as a standard, code or rule because there is no scope for these document types within the *UWS Policy, Procedure and Guideline Policy*; only policies, procedures and guidelines are mentioned (University of Western Sydney, 2006b). Although Clause 44 of the *UWS By-Law 2005* does refer to making of rules, a rule is not a defined document type (NSW Legislation, 2005). There are some documents listed on the UWS central policy website that by their title might suggest a standard, code or rule, such as the *UWS Code of Conduct* and the *UWS Doctor of Philosophy Rule* but these are classified as policies (University of Western Sydney, 2010b). For the purpose of this analysis, policies of UWS are treated as equivalent to the codes, policies, rules and standards of UOW.

At each institution the documents were classified as per the type of document listed in Table 2; the number of documents in each type are listed in Table 3 for both universities.

Table 3 - Type of Policy Documents at the Benchmarked Institutions

	University of Wollongong	University of Western Sydney
Guidelines	37	11
Legislation	2	3
Plans	0	3
Policies	88	158
Procedures	28	7
Rules	5	0
Standards	4	0
Codes	9	0
Total	173	182

Each university classified the documents listed on their central policy website by a category, generally relating to a broad component of the University's business, as a "quick link" or search option. UWS has one additional category (Community Relations) containing five documents and there were 16 documents on the UOW website that were not categorised. However, the nine other categories are reasonably similar in both name and number of documents. The exception is the UOW category "Facilities and Services" and UWS category "University Premises". The UWS category "Behaviour and Standards" does cover equity-based policies and therefore is considered similar to the UOW category "Equity and Diversity". The documents are classified by each University into a category and these are listed in Table 4.

Table 4 - Categories of Policy Documents at the Benchmarked Institutions

University of Wollongong		University of Western Sydney	
Equity and Diversity	10	Behaviour and Standards	15
Facilities and Services	2	University Premises	13
Finance and Internal Audit	16	Financial Management	16
Governance	12	Governance and Management	14
Information Technology	17	Information Technology	10
Learning and Teaching	46	Learning at UWS	37
Occupational Health and Safety	5	Health and Safety	10
Research	16	Research	22
Staff	33	Working at UWS	40
Not Categorised	16	Community Relations	5



Of the 173 documents on UOW central policy website, UWS had at least one document covering the same or similar issues of 136 of those policy records. This meant that there were 37 UOW documents not covered by a similar UWS policy document. The categories of those documents are listed in Table 5. UOW has four codes that are not covered by any UWS document. These were the *Code of Practice – Casual Academic Teaching*, *Code of Practice – Students*, *Library Code of Conduct* and the *Code of practice – Student Professional Experience*. These might reasonably be considered to be the sort of document covered by the UWS category “Behaviours and Standards”. UWS had 59 documents that did not cover issues at UOW. These were predominantly in the categories of “Working at UWS” and “Learning at UWS”. An analysis of these documents has not been included as this was not part of the brief for this project but could be the basis for further investigation.

Table 5 – UOW Policy Documents Not Covered by a UWS Policy Document

Category		Type of Documents	Code and Policy Document Titles
Finance and Internal Audit	2	2 Policies	Business Continuity Policy Project Management Policy
Governance	2	2 Policies	Production of Marketing Material and Use of UOW Brand Policy Quality Assurance Policy – UOW Administration
Information Technology	5	2 Policies, 2 Procedures, 1 Guideline	IT Server Security Policy IT User Account Management Policy
Learning and Teaching	9	3 Codes, 3 Policies, 3 Guidelines	Code of Practice – Casual Academic Teaching Code of Practice – Students Library Code of Conduct Ethical Objection by Students to the Use of Animals and Animal Products in Coursework Subjects Fees Policy Information Literacy Integration Policy
Occupational Health and Safety	1	1 policy	Smoke Free Policy
Staff	7	1 policy, 3 procedures, 3 guidelines	Development Program Assistance Policy
Not categorised	9	1 code, 6 procedures, 1 guideline	Code of Practice – Student Professional Experience

In analysing the policy approval pathways for both institutions, only the “policies” were considered. For UWS, the approval process for policies was reviewed; for UOW, the approval process of codes, standards, rules and policies was examined. Procedures and guidelines were not included in the assessment of the approval pathways. The UWS Board of Trustees approved 12 of the 158 policies at UWS; the policies were in the categories Behaviours and Standards, Financial Management, Governance and Management, and Working at UWS. The Academic Senate approved 40 policies in two main categories – Teaching and Learning, and Research –, both of which are in their portfolio. The Vice-Chancellor approved the remaining policies, 106 over all categories. If the Academic Senate approvals are included in the Board of Trustee’s tally, the Board has approved approximately 40 per cent of University policies.

Eighteen policies on the UOW central policy website were not available for viewing without a password and therefore some of the details of the documents could not be discerned. This included the approving authority, and therefore these were excluded from the investigation. This left a balance of 106 documents. The UOW University Council approved all nine codes, all five rules and two of the four standards and 36 of the policies. These documents were in all categories. The Academic Senate approved three policies and one standard in the Learning and Teaching category. The Administrative Committee approved one standard and 18 policies in a range of categories but not in Learning and Teaching. The Vice-Chancellor approved 11 policies, almost all in Information Technology and the Pro Vice-Chancellor (Information Technology) approved one policy, also in the category of Information Technology. Including the Administrative Committee as a standing committee of the University Council, the University Council approved 67 per cent of all codes, policies, rules and standards at UOW.

## **DISCUSSION**

The project scope was to ensure appropriate levels of coverage, compliance and approval pathways, and to identify and action outstanding policies. The results highlighted two important points in relation to the list of policy and related documents located in the UOW's policy directory. The first was that the UOW had established a number of codes of practice that were based on enhancing the student experience and maximising students' potential. In addition, the UOW has codes of conduct for students which the UWS does not as yet have. Such codes are important in establishing the University's expectation of both students staff. The second was that UOW has a number of policies related to risk management such as the *Business Continuity Policy* (business risk), the *Production of Marketing Material and Use of UOW Brand Policy* (brand risk) and the *IT Server Security Policy* (information risk) that UWS does not. Additionally, the UWS *Risk Management Policy* has not been reviewed since 2007 (University of Western Sydney, 2010b). These areas represent gaps in the UWS policy suite that should be further explored.

In terms of the policy approval pathways, the highest approving body at the UOW, the University Council approved about two thirds of all codes, policies, rules and standards, whilst at UWS approximately the same amount of policies are approved by the Vice-Chancellor. The UWS Board of Trustees only approved two fifths of all policies. Whilst the Vice-Chancellor does have responsibility for developing policies in administrative and financial areas, the policies approved by the Vice-Chancellor have extended to all categories of policies. Given the difference between UOW and UWS, the policy approval pathways at UWS require further investigation to determine whether the policies currently approved with authority by the Vice-Chancellor should be submitted to the Board of Trustees for approval. This may include exploring whether policy approval responsibilities could be delegated to standing committees of the Board of Trustees, or a particular standing committee established and charged with policy development and approval responsibility, similar to the Administrative Committee at the UOW. Those policies, in particular, where the Vice-Chancellor has a specific role identified within the policy, should be considered in this process to ensure segregation of duties.

## **CONCLUSIONS**

A benchmarking project comparing the policy documents listed on the central policy websites of UWS and UOW identified disparities between the UOW and the UWS policy suites. Primarily, UOW has a number of codes of conduct or practice relating to expectations of students and their experience, whereas UWS does not. Also, UOW had three policies addressing areas in which the university might be exposed to risk that were not covered in the UWS suite of policy documents. Furthermore, the defined approval trail at the UOW resulted in the majority of policy type documents being approved by the University Council or one of its standing committees. However, at UWS the majority of policies are approved by the Vice-Chancellor. Based on these outcomes, the specific differences in policy coverage should be more closely examined with a view to actioning any outstanding policies. The differentiation in policy approval also requires a closer investigation of the policy content to determine whether an alternative approval authority, such as the Board of Trustees, or a standing committee, is warranted. There is the opportunity to undertake further examination of appropriate policy coverage by expanding the review to consider policies within each category, and to benchmark with a wider number of institutions, including overseas.

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**Association for Tertiary Education Management and  
Tertiary Education Facilities Managers Association**

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## **EDITORS' INTRODUCTION**

**Ian R Dobson & Maree Conway**

The Tertiary Education Management (TEM) conference has been a major annual event on the higher education calendar for over thirty years. TEM conferences grew out of conferences held in earlier years by the Association for Tertiary Education and Management (ATEM) and its predecessor, the Association for Tertiary Education Administration (AITEA). The first AITEA conference was held in 1977 on the dual themes of National Policies in Higher Education and Education as a Profession. Conferences were held annually by ATEM since then until 1992, when the then Australasian Association of Higher Education Facilities Directors (AAAPA) became a partner in running the conference, which became known as the ATEM and AAPPAs Conference. In 2003, the title of the Conference was changed to the Tertiary Education Management Conference to reflect the focus of the conference rather than the two host associations.

The contemporary Tertiary Education Management Conference is organised via a partnership between ATEM and the Tertiary Education Facilities Management Association (TEFMA) (previously the Australasian Association of Higher Education Facilities Officers (AAPPAs)). It attracts around 600 professional managers and higher education researchers from universities, TAFE institutes, polytechnics, wānanga, government departments, private providers and other organisations. The Conference is the flagship activity each year. It is the opportunity for TEFMA and ATEM to bring its members together for a significant period of professional development, for ATEM/TEFMA to co-host and listen to significant figures in tertiary management and administration as plenary speakers, and to network with like organisations and clients through formal links and sponsorship arrangements.

The conference was re-badged in 2003, to become the Tertiary Education Management Conference, with the aim of building the conference to be the pre-eminent professional development activity for managers in tertiary education. The conference is organised by an organising committee with members from both ATEM and TEFMA. In the interests of professionalism, the conference has used the services of a professional conference organiser, appointed by the TEMC and TEFMA councils either through a tender process or through other arrangements. For the past several years, Leishman Associates has filled this role.

The TEM conference is the only one in the tertiary sector which covers the full range of functions in institutions, and is designed to allow participants to build strong networks across Australia and New Zealand. TEMC has a strong practitioner focus to support the sharing of knowledge and 'know how', and also provides opportunities to focus on big-picture issues as well. It allows participants to reflect on their management practice in a regional, national and global context.

Publishing scholarly work is not new to ATEM. It has been proprietor of a scholarly journal for the past 32 years: the Journal of Higher Education Policy and Management. However, even if ATEM is primarily an association of tertiary education managers, its journal attracts papers from researchers and managers from around the world. ATEM has had a co-proprietor since 2009, the L H Martin Institute for Higher Education Leadership and Management.

One of the changes in content over the Journal's life to date has been a steady decline in the number of practitioner papers published (Dobson, 2009). The main reasons for this have been the relative decline in the number of such papers submitted to the Journal, against the rapid increase in the number of papers submitted by academics. Of course, there is also a section of the tertiary education management 'industry' that has policy, analysis and institutional research and management as its prime interests. Some of the occupants of these newer higher education positions are the university officers that Celia Whitchurch has described in terms of their 'changing identities' (Whitchurch, 2006). The authors of these papers are not drawn exclusively from outside university administrations.

The TEM conference has always been rich with the sort of practitioner research that no longer has many opportunities to be published. To this end, those responsible for organising TEM Conferences agreed a couple of years ago to introduce a 'refereed stream' of papers into the Conference. One of the reasons for this was to try to create a new space in which practitioner research and development can be published. Such material, although based on a background of scholarship and empiricism, will often not be accepted by scholarly journals, often on the grounds that it is based on experience or practice from a single institution. This volume represents an attempt to overcome the hiatus in the publication of material with a practice-driven bent.

But, as the American TV evangelist used to say a number of years ago, 'the kingdom of heaven does not come for free'! Peer-reviewed papers published as part of a refereed stream are counted in the formal annual collection of publications, so there are externally defined standards to be met. The requirements for what can be accepted in a conference 'refereed stream' is laid down by the Department of Innovation, Industry, Science and Research for the Higher Education Research Data Collection (HERDC).

To be eligible for inclusion in HERDC, the conference publication must meet the definition of research as amplified in the key characteristics of research publications and must:

- be peer reviewed on the full paper
- be presented at conferences, workshops or seminars of national or international significance
- be published in full; the papers may appear in a number of different formats, e.g. a volume of proceedings, a special edition of a journal, a normal issue of a journal, a book or a monograph, CD Rom or conference or organisational web site.

Quoting from the 2009 HERDC Guidelines: 'For the purposes of the HERDC, an acceptable peer review process is one that involves an assessment or review of the research publication in its entirety by independent, qualified experts before publication. Independent in this context means independent of the author.'

Peer review is relevant for journal articles and conference publications being counted in the [HERDC] Research Publications Return - Return 2.'

The main reason for this amorphous process is that duly refereed papers accepted for inclusion in a conference refereed stream are eligible to be included in an institution's publications, in the E1 category. Material on the collection and the process can be retrieved from:

<http://www.innovation.gov.au/Section/Research/Pages/highereducationresearchdatacollection.aspx>

For the TEM Conference 2010, 16 papers were submitted and reviewed, and of these, 11 were accepted for inclusion in the refereed stream. Reviewers' comments were reported to authors, and of those papers deemed 'acceptable' several had to be resubmitted having corrected references and adjusted papers to meet the pre-stated style guide.

This is the first time conference organisers have actually 'published' its peer-reviewed conference papers, but it definitely will not be the last. Your feedback you could offer will be gratefully received.

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# **INTERVENTION FOR RETENTION: HOW CAN ACADEMIC AND SOCIAL SUPPORT HELP UNIVERSITIES KEEP THEIR STUDENTS?**

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## **ABSTRACT**

Tinto's influential model of retention (1975; 2006) depicts academic and social integration as key factors affecting a student's decision to continue their study program. This paper reports on individual interviews with international students who were failing their courses at Central Queensland University Sydney and were subscribed to a monitoring program that assisted them improve their academic performance. Specific social and academic factors affecting their performance prior to and during their 'monitored' study are examined. The outcomes of this research will provide universities with a framework to improve international student retention through the identification and support of students at risk.

Keywords: international students, retention, student support, social integration

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## **INTRODUCTION**

Government funding for Australian universities has continually diminished over several decades placing significant financial pressure on universities. In addressing this fiscal challenge, universities have become more reliant on the international student market. However, this market has been critically affected by recent events and concerns particularly in relation to the safety and wellbeing of international students, changes to skilled migration limiting permanent residency options for international students and a strong Australian dollar. The retention of all students is an ongoing concern for universities but in the context of current threats to the continuing success of Australian international higher education, it is timely to consider the factors affecting the retention of international students and invest in strategies to ensure that such students successfully complete their study programmes. In an increasingly competitive national and global market, understanding how to retain international students can preserve the important investment of economic and cultural capital these students deliver to Australian learning and teaching communities. This paper provides a case study of the factors affecting retention of international students at Central Queensland University, Sydney.

## **BACKGROUND**

### **Measuring Retention**

Retention is a complex measure and reporting is somewhat controversial (Norton, 2010) as a consequence of factors such as increasingly common flexible and part-time study options. Retention is defined by the Commonwealth Government's Learning and Teaching Performance Fund as '... the percentage of students in a particular year who neither graduate nor continue studying in an award course at the same institution in the following year' (Crosling & Heagney 2009, p.9). Student attrition is the inverse ratio report of students who leave an institution before completing their programme of study. As the retention of students is one criterion affecting the Australian government's university funding decisions, it is an issue of sector-wide concern. Studies into student retention have focused primarily on the first year experience as it is during the first 'transitional' year of study that students are most likely to withdraw (Kift & Field 2008; Mannan 2007; Crosling & Heagney 2009; Norton 2010).

Retention is conventionally measured annually over two terms. An attrition rate of slightly over 18 per cent in Australia is currently reported (Trounson & Healy 2009) with expected completion rates for first programme at 71-74 per cent (Marks, cited in Norton 2010, p. 57). Recent figures from the UK indicate attrition of between 13-18 per cent (Thomas 2002, p. 424). Attrition at Central Queensland University (CQU) in Sydney is between 7 and 8 per cent per term, counting all students enrolled in a programme that did not graduate and did not continue with their programme. In 'normal reporting' (two terms per year) this would be approximately 15 per cent which is a strong outcome in the sector. As CQU offers three terms in a year, the term by term figure is preferred as the clearest method of tracking retention. This figure includes all non-graduating students regardless of year of study, although it should be acknowledged that international students have limited opportunity to change provider in their first year.

Government regulations associated with international student enrolment in Australian universities prohibit a student from changing provider for the first six months of study (Australian Education International 2010). This is effectively two terms of study or a full academic year at a standard university. Measuring and reporting international student retention and attrition in their first year of study needs to account for this regulation but its effects are not noted in general statistical reports (Trounson & Healy 2009; Gilmore 2009). As reports indicate international student attrition is lower than domestic student rates (Gilmore 2009; Grebennikov 2009), factors which contribute to better retention of international students, including the impact of regulations prohibiting change in provider, warrant investigation. Whilst diploma programmes and some postgraduate programmes are only

comprised of two terms of fulltime study, for most international students, the decision to stay or go to another provider is therefore most likely to be encountered in their third term decision. Few studies have attended to the issue of international student retention yet, clearly, the international student market is both important and somewhat distinct.

### **Understanding Retention of International Students**

The literature on retention recognises that students decide to persist at or leave an institution for a range of reasons including personal, social and organisational factors (Tinto 1975, 2006; Thomas 2002). Whilst students will continue to leave their programme of study for personal and social reasons that cannot necessarily be resolved by the university, all institutions can aim to ensure students do not leave because of institutional failures. As the recruitment investment in international students is a particularly expensive endeavour, institutions need to maximise their returns by retaining those international students they recruit. Whilst the institutional commitment to supporting international students might not be the only factor affecting the successful completion of their programmes with a single provider, this commitment is critically important for the often isolated and vulnerable international student (Marginson, Nyland & Sawir. 2010; Kell & Vogel, 2008). In the past, student attrition was perceived to be the result of individual factors: 'Students failed, not institutions', (Tinto 2006, p.1) but current theorists view the environment, particularly the institution, as complicit in decisions to drop-out or persist with studies.

Studies into retention consistently identify the crucial importance of student engagement or involvement as a driver of retention (Krause & Coates 2008; Tinto 2006; ACER 2008) and emphasise that student engagement is critical in the first year of study where students are most at risk of withdrawing. Institutional activities and approaches that promote student engagement should positively influence the '...time, energy and resources students devote to activities designed to enhance learning at university,' (Krause 2005, p.3). For several years, the CQU approach to learning and teaching has been to adopt Chickering and Gamson's *Seven Principles for Good Practice in Undergraduate Education* (1991) which identifies a range of critical factors supporting student engagement:

- Level of contact between students and staff
- Reciprocity and cooperation among students
- Active learning
- Prompt feedback
- Awareness of the time needed to be spent on the task
- High expectations
- Respecting of diverse talents and ways of learning

In addition to this focus on engaging curriculum and pedagogy, a more holistic focus on building social and academic integration for international students has been a key institutional objective. As student engagement is affected by students' sense of belonging and institutional 'fit' (Bean & Eaton 2002; Thomas 2002; Norton 2010). As international students are more likely to feel isolated and lonely due to their distance from their social network (Khawaja & Dempsey 2008; Marginson et al. 2010), institutions need to work hard to promote integration for international students to ensure their personal as well as academic wellbeing, which are inevitably interrelated. In the context of CQU Sydney where students from over 50 different cultural and language backgrounds are studying, Thomas' recommendation for an institutional 'habitus' that is inclusive and accepting of difference.. [and]... celebrates and prizes diversity' (p.431) as well as 'promoting social networks' (p.436) is particularly useful. CQU strives to create such a 'habitus' through a range of services and initiatives.

### **Social and Academic Integration at CQU**

The approach to student retention at CQU Sydney campus is based on the value expressed by Tinto that '...student retention is everyone's business'. Braxton & McClendon (2002) agree and suggest that

there are numerous people and departments within universities that impact on student retention. In line with this, all campus staff recruitment, training and performance review and development highlight quality customer service provision regardless of staff category or department (see Owens & Loomes 2007). Staff are made aware of the importance of their role in retaining students and how their everyday engagement with students in and out class is an opportunity to enhance student integration into their learning community.

Tinto's influential model of retention (1975) depicts academic and social integration as the key factors affecting a student's decision to continue their study programme with a higher education provider.

Tinto's model has been developed with domestic students in mind and may be expanded (as above) to consider additional and differential *External Factors (International)* that can and do affect international student decisions to continue or discontinue their studies. These factors include social, economic, natural and political events unfolding in home communities as well as internationally. From currency exchange rates to financial crises and natural disasters, the external factors affecting international student ability and motivation to complete their studies are diverse. In addition, international student decisions are affected by education and immigration policies of the Australian government in a manner that domestic student decisions are not. It is the estimate of some commentators (Murray 2010) that international student numbers in Australia may drop by up to 20 per cent in 2010 as a combined outcome of factors including concerns about student safety, less opportunity for skilled employment and residency and a strong Australian dollar. These factors do not affect domestic student retention and Tinto's model may be usefully expanded to incorporate 'international' external factors as contributing to student retention.

Tinto's model emphasises the critical importance of social and academic integration to a successful study experience. CQU has expanded its efforts in providing student opportunity for interaction and integration with staff, other students and the local community over the last few years. Academic integration is achieved through a curriculum and pedagogy that emphasises collaborative and active learning and a proactive and effective Learning Support Unit. Social integration commences as soon as the students arrive on campus (see Appendix 1 for a summary of activities). A fully facilitated enrolment process allows students to integrate with staff members from all areas of the campus from marketing and recruitment to academic staff. Students are timetabled into a thorough orientation programme which includes social activities such as luncheon with students and staff, personalised campus tours and city bus tours. External guest speakers are invited to participate in orientation such as community police officers and health fund representatives.

Other social integration activities are scheduled throughout each term. These include:

- Sporting activities: cricket, soccer, table tennis, basketball, volleyball.
- Social activities: end of term jazz party, parties to celebrate a wide range of cultural festivals such as Chinese New Year and Indian Independence Day, excursions such as trip to the snow fields.
- Community activities: Relay for Life, Seven Bridges Walk, tree planting and charity and fundraising events.
- Communication activities: English conversation corner, interviewing skills workshops, oral communication workshops, academic writing workshops.
- Work-related activities: practitioner presentations, volunteer conference support, job seeking skills workshops, Tax-help project (ATO).

In addition, students are invited to participate in the campus Environmental Committee, the Academic-student Liaison Group and the Occupational Health and Safety Committee. These provide excellent forums for meeting staff and other students, contributing to the campus environment and enhancing a sense of belonging, inclusion and empowerment for participant students. An earlier study explored student participation and satisfaction with these social integration activities (see Owens &

Loomes 2010). This study builds on that research, seeking to identify how such efforts to promote social and academic integration of international students are related to retention.

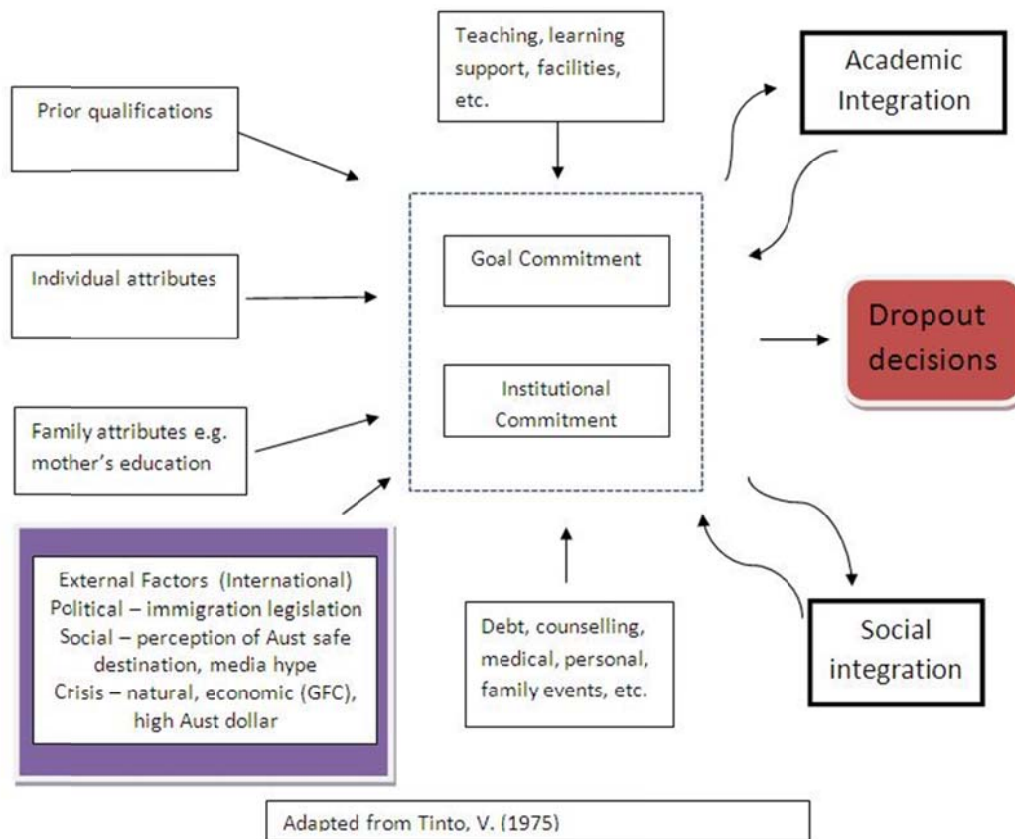


Figure 1: Tinto’s Model of Student Retention (plus ‘External Factors’)

### The Monitoring Academic Progress (MAP) programme

Students who fail to achieve satisfactory progress despite the suite of standard ‘integration’ activities are identified as ‘at risk’ in regular internal reporting systems. They are provided with a personalised support programme (MAP) by the CQU Student Services department. The MAP process has three levels, MAP 1, MAP 2 (must ‘show cause’ why enrolment should not be cancelled) and MAP 3 (the student’s enrolment is cancelled). The process includes monitoring attendance reports and assignment submissions throughout the term to identify low attendance or disengagement. In addition, each term when grades are released a report is run to identify any student who has failed more than 50 per cent of their courses or has multiple fails for a single course. These students are then contacted via telephone, email or SMS and invited in for an interview to discuss their attendance and assignment work and what might be prohibiting their engagement in classes and assessment work. The student forms an ongoing relationship with the Student Services staff member who meets with them regularly over the term to review their progress and monitor their wellbeing. Students are offered additional learning support through the Learning Skills Unit, which has been very effective in improving academic performance. If personal issues are identified, the student is referred to confidential counselling funded initially by the university. Over time, a number of serious issues have been identified during these interviews, such as mental health issues, depression and suicidal thoughts. These are taken very seriously and in some cases students have been taken immediately to a professional counsellor, psychologist or to a hospital if deemed necessary. A student ‘graduates’ from the monitoring programme when they have achieved two successful terms (passed more than 50 per cent of their subjects). Since term 2, 2008, 234 MAP students from CQU have graduated from their degree programmes.

## RESEARCH METHOD

International students score well on conventional measures of retention - spending more time on campus, engaging in online materials and working less than their domestic peers (Krause 2005) - but continue to experience difficulty engaging with their studies. Therefore, qualitative studies of international student retention that seek to explore and explain their perspectives are valuable:

To understand engagement is to understand that for some it is a battle when they encounter university teaching practices which are difficult to understand, and a 'language' which is alien. Some students actively engage in the battle and lose - what do we do for them? (Krause 2005, p.11).

Retention is most frequently reported as statistical data and there is little qualitative, in depth reporting of the experiences of international students in the context of institutional efforts to engage and retain them through and beyond first year. As 'knowing why students leave does not tell us, at least not directly, why students persist,' (Tinto 2006. p.6) this study focuses on understanding the experiences in relation to social and academic integration for a cohort of 'at risk' students who have persisted in their studies despite failing courses. As failing courses is considered a critical drop out event, 'at risk' students who have failed 50 per cent or more of their courses would be expected to leave their institution in higher numbers. Yet the MAP programme at CQU Sydney maintains an internal retention rate equivalent to the general campus-wide retention rate of approximately 15 per cent per year (two terms). This is, in itself, a strong achievement. However, this statistic does not produce a rich understanding of how such a recovery programme works for international students.

In-depth individual interviews were selected as the most appropriate method to allow MAP 'graduate' interviewees to provide a rich description of factors they felt contributed to their study problems and study successes in a confidential and unthreatening environment. Their evaluation of the MAP programme as well as their engagement with the wider range of academic and social integration activities were of central interest to establishing the basis of their decisions to remain at CQU. Interview questions addressed their academic and personal challenges, their views of the monitoring programme, their views and experiences in relation to the social activities provided by the university, their ongoing study intentions and their experiences of good service in and out of the classroom (see Appendix 2).

Seven students were selected from a list of 30 students who had recently graduated from MAP, based on their availability for interview. All students were studying business, accounting or IT programmes (three were postgraduates and four were undergraduates) and had completed a minimum of three terms of study. Students originated from China, India, Saudi Arabia and Vietnam. Two women and five men participated. A research staff member who had no contact with MAP programme or the Student Services staff conducted interviews. They were transcribed for later transcription and analysis. Students were assured of confidentiality in the reporting of their comments. They were encouraged to provide critical as well as positive comments on their study experience at the campus. Transcripts were analysed to identify common experiences, opinions and themes as well as exceptions to common understandings of interviewees.

Although retention literature generally identifies students as 'drop outs', 'throw outs' and 'persisters', a further group of interest is emerging at CQU: the 'returners' - students who left CQU prior to completing their degree, but then returned to resume their studies. As such students can provide valuable insight into international student decisions about persisting and leaving specific to CQU, this research included a telephone survey of a cohort of 'returners' Thirty-seven 'returning' students were identified in regular reporting during term 1, 2010 enrolment. Seven of these students were randomly contacted by telephone and asked a series of questions to establish why they left, where they went and why they returned (see Appendix 3). Feedback from these two research activities is summarised



below and then discussed in relation to retention literature and key issues affecting international study in Australia.

## RESEARCH RESULTS

### Interview Results– Persisters

The most common challenges in passing the courses identified by students in interviews were English proficiency and disparities between prior and current study (in both culturally different contexts and different discipline areas). Many students pointed out the combined effect of a radical change in cultural context, a change in learning and teaching paradigm, and encountering a ‘new’ field of study with specialised language within the wider context of studying in English as a second language, meant comprehension was difficult and existing learning strategies were ineffective. Most students referred to a difficult ‘settling in’ period where they had to adapt to independent study. As all students indicated they had previously worked in examination-only learning contexts, they had many issues in trying to complete written assignments, which two students admitted they did not take seriously, assuming the examination was the key to passing. A significant problem with time management emerged for several of the students who were seeking to balance study and work in an environment where they did not receive the direction from teachers which they had been used to:

*‘... I lost all control, in high school you know, teachers are always checking on you but at uni you have to do everything yourself, it’s a big change you know...,’*  
(Chinese male undergraduate).

*‘In India I studied very well after coming here I lost myself somewhere..totally! I was like crying, crying, crying daily, what happened to me? I was not able to cope’* (Indian female postgraduate).

Several students identified personal problems and health issues were also affecting their studies and homesickness was mentioned as a common experience. Not surprisingly, all students reported being very stressed at the point at which they were experiencing these challenges. Interestingly, all students nominated their own personal effort, motivation, commitment and focus as the key factor in improving their study performance but they also noted regularly that working with staff in the monitoring programme had powerfully affected their motivation.

All students felt the monitoring programme was a positive experience for them because of the constant contact, friendly interest in their progress and staff responsiveness which helped the students start to self-regulate their learning, manage their stress and inspired them to perform.

*‘The good thing about the programme is .. checking my own things. How am I going with my assignments? I have to report to someone every two weeks and I have to show them what I have done, how I have improved. When I knew that, I was keeping track also,’* (Indian male postgraduate).

Several students explained that their MAP staff advisor was like their ‘friend’, ‘mate’, ‘buddy’ or ‘family’ and they felt they could discuss all their problems openly with their advisor and receive good advice which was effective in diminishing their stress.

*‘MAP? Oh I think it is really good. I like it because if I have any problems I can tell them and they can tell me the best way to do it,’* (Vietnamese female undergraduate).

Indeed, many students continued to visit their staff advisor for a chat after they graduated from MAP and referred student-friends to the service regularly whenever they were confused or required advice on a wide range of matters. One student suggested the programme should be strengthened by penalties

so it would be taken more seriously by other students. Another student explained that she was a little distressed at the number of letters she received from the monitoring staff. As she had failed courses for two terms, she viewed any letters from the university with some dread.

All postgraduate students had attended the Learning Skills Unit to access assistance with assignment work and referencing in particular. They were very positive about this resource and appreciated the individual support they received as well as workshops on essay writing, report writing and so on.

*'I took my assignment here and said I don't know anything about this, can you help me out? I had a case study where I had to study the whole summary and search the internet as well, search online. I said please can you select me one of the topics here and help me write it down... and help me? They gave me all the materials and made it very simple,' (Indian female postgraduate).*

The undergraduate students had less contact with the Learning Skills Unit but attended for occasional help mainly with understanding referencing. It was widely acknowledged that the Learning Skills Unit did a 'great job' but there were several complaints that they were not able to get an appointment as the service is popular and you have to book early in the term. One student claimed she was too busy to go to an appointment.

When students were asked what factors besides MAP and the Learning Skills Unit had helped them succeed in their studies, students referred to individual teachers from their discipline or from the the Learning Skills Unit, and their friends at university. Improved time management, improved learning strategies and English comprehension as well as self-discipline and motivation were also discussed.

Two students had experienced significant difficulty balancing work and study.

*'I like to work. I already kept this job a long time and if I not working, I feel guilty with my boss. If I study really bad, I feel guilty with my parents. Sometimes a lot of pressure,' (Vietnamese female undergraduate).*

This student solved her problem by telling her boss she could not work one month before examinations while another student spread his annual study load so that he studied part-time across three terms equivalent to fulltime load across two terms.

Most of the students said they had not considered leaving CQU stating they were 'very comfortable here'.

*'The good feedback for CQU is I have visited all the universities and CQU is the best, so don't leave CQU, but leave **with** CQU (laughter),' (Indian male postgraduate).*

*'No. Never. This university really good university, good reputation, it counts, I don't want to leave, I want my certificate from this uni. No matter if I fail or pass, I will finish my programme here. They have good reputation but also they have good study, they keep on monitoring the students, they don't even leave a single student stranded or in trouble, whatever it is,' (Indian female postgraduate).*

Comments included the convenience CQU offered being located in the CBD near transport and work, a flexible, work-friendly timetable and the organisation of all departments in one building. Several students explained that they did not consider themselves academic 'high achievers' and referred to several leading Australian universities when they explained that they felt they were at the right university for their 'level' of academic skill.

*'It may not be the best uni but it is good for your ability as an international student,' (Vietnamese female undergraduate).*

*'No, I am very comfortable here, even though our govt is paying for me so I can go to any uni I want to. Most of my friends are at Sydney Uni , UNSW, UTS, UWS but I still love the uni here, maybe the place is easier than other unis ,the staff here are good, I find it easy to have everything in one building,' (Saudi Arabian male undergraduate).*

One student said she thought about leaving CQU every time she failed a course but acknowledged that the problem would be the same at any university. All students expressed the intention to complete their studies at CQU.

All students had attended at least one social event during their study – mostly the end of term party. All students felt that social interaction and organised activities were very important, particularly for international students. The challenges of socialising in a second language and the urgent need to do this to improve communication skills as well as establish a network of friends were discussed:

*'New international students; they need to talk...' (Chinese male undergraduate).*

*'I believe that social communication can improve language very well. That is what I believe!' (Chinese male undergraduate).*

Several students complained that the activities being offered were inadequate. Two students felt that students 'flew away' home or to work after classes which made socialising difficult. More events and a wider range of events were proposed. Several students said they were too busy to attend many social events but still saw the value in organised events so that those students who needed to could interact, make connections and share problems. Some students had more 'local' social networks than others as a consequence of prior Australian study, work and club memberships.

In addition to extending social activity options, students suggested that to improve its services CQU might increase the number of books in the library, increase access to computers during peak study periods and provide feedback on annual and term-based student surveys. Students were very positive in their recommendations of CQU to friends.

*'I always tell my friends good things about the uni,' (Indian female postgraduate).*

*'Oh yes, always, even my girlfriend I bought her to study here actually... You can see I do recommend CQU. People say to me I will got here, go there, I say no need to go there... I say I am studying at CQU, having a good experience, teachers are good, staff is really good, everything is available, transport, everything is really close to the campus,' (Indian male postgraduate).*

*'(Laugh) I'm telling them!'* (Saudi Arabian male undergraduate).

*'So far, so good.. I have been here three years,' (Chinese male undergraduate).*

When asked to recount one good experience of customer service students selected staff and services from a wide range of departments including Faculty, student administration, student finance, student services, the Learning Skills Unit. All students were able to name the staff who they perceived as being very helpful. When asked to recount a good teaching experience, students were very positive in their commentary. 'Wonderful', 'awesome', 'amazing', 'one of the best' 'really good' were the adjectives used most frequently to describe teachers they had worked with. It was acknowledged that some teachers were 'better than others' but all students named multiple teachers as inspiring and powerful. Many of these teachers were long-term employees with senior course leadership roles in various disciplines. The main characteristics these students identified as distinguishing the best teachers were providing an active and interactive classroom experience, using real world examples

and materials, spending time consulting individually with students and giving prompt and meaningful feedback.

*'...they always support me like (X) will keep on asking me questions in the class no matter if I sit in the first row or the last no matter,.. he keep on asking me questions and he used to give advice to me. In the first semester he used to keep saying, you have to do your assignment like this.. Immediately when I get the assignment marks he will call me to the office and say to me you are wrong here and you did this very well here so keep on... and (XX) was the same he did the same thing,' (Indian female postgraduate).*

*'The teaching is really good.. (Y) is one of the best, (YY), (YYY), (YYY) all really good! They have broad knowledge. Is students are working on a matter they can take them beyond the limit.. they are really able to deliver the information not just out of the books. They know the workplace,' (Indian male postgraduate).*

*'I have had 22 teachers and think most of them were very helpful,' (Saudi Arabian male undergraduate).*

All students intended looking for a good job after graduation. Most intended to seek employment in Australia but move to their home country or another country to work if that was not possible. All students would consider re-enrolling for a further qualification at CQU. As all students had an inclination to start a career in Australia, they were sensitive to recent changes in skilled migration and experienced some uncertainty about their options. One student expressed a changed intention to apply for permanent residency:

*'After graduation for me, uh... I decide to go back home because Australia you know, before I was try to get PR. I love here, I love living here,..it's a lovely place,... but the politics, the immigration, it is too hard, too harsh, you know so I decide to go back home. I believe the CQU degree will get me a good job in China, (Chinese male undergraduate).*

### **Telephone Interview Results – Returners**

Phone interviews were conducted with seven 'returner' students to ascertain why they left, where they went and why they chose to return. The group included students studying a range of courses with the majority originating from India and China. Their academic transcripts revealed that most of these students were not performing well prior to leaving CQU, however their performance significantly improved on their return.

Half of the students interviewed had participated in social events and the majority of them had attended the Learning Skills Unit while studying at CQU. The interviews revealed varying reasons for leaving CQU, which included financial, personal and family reasons and also pressure from their education agent. None of the students stated that they were dissatisfied with their education experience at the CQU Sydney campus. On leaving CQU several students returned to their home country, others were not studying and two went to another provider.

When the students were asked why they returned to CQU Sydney campus, their responses were very similar. They said 'wanted to stay with CQU', 'really like it', 'didn't want to leave but had to for financial reason'. The students were asked if they would tell their friends positive things about CQU Sydney. All of them said yes except for one student who said they would recommend Sydney University and University NSW first and then CQU.

The students were asked if CQU could do anything better to ensure their studies were successful. Overall, the students' comments suggested that there wasn't much that needed to be done to improve

their experience. A few suggestions were: more books in the library, additional help finding articles for study, exams were too hard and more contact with tutors.

Finally, the group were asked about their plans following graduation. A few were going back to their home country to work, others would seek work in their relevant field in Sydney, and two were going on to complete further studies.

## **DISCUSSION OF RESULTS**

Results from both MAP student interviews and returner interviews provided highly encouraging feedback in relation to CQU efforts to support international students through social and academic integration activities and programmes. It is important to remember that all students in this research were either high-risk attrition as a consequence of failing their courses, or had previously withdrawn from CQU. Their decision to persist in (or return to) their studies and their capacity to improve their academic outcomes is an achievement that is against the odds for such students.

It is evident from MAP 'graduate' comments that they were powerfully affected by the personalised support and attention provided by campus staff from teaching and non-teaching areas. Because of appropriate advice and support, these students were spending more time on their studies and had improved their time management skills, were better able to access resources supporting study and were more motivated in their efforts to learn. Enhanced self regulation was a further outcome to the monitoring programme. These are classic signs of improved engagement and involvement. As more than one-third of university students in Australia recently confessed to finding it '...difficult to motivate themselves to study' (Krause 2005, p.7), such an outcome is significant beyond the international student sector. It has been pointed out that there are a '...wide range of interacting personal and social attributes as well as institutional practices which impact on both retention rates and performance,' (Thomas 2002, p. 426). As such, it can be difficult to identify issues specific to individual students other than by interpersonal counselling and support. A range of studies in the US has established that counselling aids retention (Wilson, Mason & Ewing, 1997; Turner & Berry 2000; Norton 2010). Whilst personal counselling involves significant resource and cost, the alternative in lost tuition fees and dissatisfied students is an unattractive and uneconomic alternative.

A few of the students interviewed experienced a profound sense of loss of control in the first year of their studies. Such an effect is not uncommon for students entering the relative freedom of a university from the context of secondary school where they are formally monitored and controlled by teaching and non-teaching staff and universities are therefore both 'arenas for anxiety as much as for the development of independence,' (Norton 2010, p. 55). Attribution theory identifies an internal 'locus of control' as important for successful study outcomes in that it creates an individual who believes he or she is instrumental in their own success or failures, whereas an external 'locus of control' drives an individual to attribute failures or success to fate or chance (Bean & Eaton 2002, p. 77). It is evident in interview commentary that opportunities to discuss their individual study problems and experiences with a compassionate and skilled advisor assisted these students manage their stress and anxiety, recover their sense of control and to see their own effort as central to success. A 'transition pedagogy' (Kift & Field 2008; Scott, Shah, Grebennikov & Singh 2008) which provides an integrated programme of academic challenge, active learning, student and staff interactions, enriching learning experiences, supportive learning environment and work integrated learning (Kift & Field 2008, p.2/10) is recommended for institutions seeking to mediate the increasing diversity of entering students. Through its academic and social integration programmes CQU is building a successful 'transition pedagogy' suitable for culturally diverse international students. This transition pedagogy is in turn supported by the more intensive and personalised MAP programme which this research indicates is able to both identify and assist those who are not successfully transitioning.

MAP students valued active and interactive class work particularly when it aided them to connect with other students and develop a study network. This supports the sector-wide understanding that

collaborative learning, as well as social interaction, plays an important role in assisting students build peer groups ‘...that play a role in the learning of course content and in the establishment of memberships in the collegiate social communities (Tinto cited in Braxton & McClendon 2002, p.62). In addition, students emphasised the continuing struggle to improve their English and valued formal and informal opportunities to do this by interacting with staff, other students as well as attending language development sessions and accessing English development resources made available by CQU. The capacity for teachers to use accessible language in their classes and provide plentiful explanation and exempling to assist comprehension was noted and well received by students. Essentially, ‘...the more students interact with students and staff, the more likely they are to persist’ (Astin cited in Thomas 2002, p.427). The frequency and accessibility of staff and student interactions appears to support international student engagement and persistence.

A further message evident from interview results is that these international students feel a sense of belonging or a sense of ‘fit’ with CQU. ‘Institutional fit and loyalty lead to the intention to persist which leads to actual persistence,’ (Bean & Eaton 2002, p.77). For many students this sense of ‘fit’ was related to their perceptions of themselves as having ‘limited’ academic skills and talents thereby benefitting from the supportive learning environment and services offered by CQU; a level of support they did not anticipate receiving at other, more highly-ranked institutions. CQU Sydney emphasises quality of teaching above all other academic endeavours.

According high status to teaching can enhance student relationships with staff (Thomas 2002). It is now a ‘widely accepted notion that actions of the faculty, particularly in the classroom, are key to institutional efforts to enhance student retention,’ (Tinto 2006, p.5) but is still more limited than it should be (Tinto 2006). The opportunity to engage personally and in groups with teaching staff was evidently occurring and was highly valued by students. Of particular importance to engaging students in learning is providing quality, timely feedback (Kift & Field 2008; Chickering & Gamson 1991).

Most students in this research indicated that feedback on their assignments was of high quality but some commented this was not consistent for all tutors. In addition to academic feedback, students wanted to know outcomes to student satisfaction surveys they were asked to complete regularly across terms. Feedback, both academic and non-academic, is emphasised in the literature and in this research as critically important to maintaining the engagement of students and thereby engendering persistence and loyalty.

Key outcomes for CQU Sydney from this research involve expanding social integration activities, further resourcing personalised counselling and tutoring, and providing clear and regular feedback on student survey data.

## **CONCLUSION**

This research has contributed to detailing some of the mechanisms that universities can adopt to enhance social and academic integration and positively influence retention for international students at Australian universities. Personalised student support programmes can achieve positive outcomes for international students who are not transitioning to their new study context successfully and are therefore highly likely to withdraw from their study programme. Institutions that invest in such support programmes can expect to achieve improved retention of ‘at risk’ students and better protect their significant recruitment investment in these international students. Pedagogical and bureaucratic approaches that value diversity and difference and promote engagement, collaboration and a ‘student-centred’ work culture and organisational arrangement can generate international student loyalty and a sense of belonging at ‘foreign’ institutions.

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## APPENDIX 1

### Term Integration - Social, Academic and University Commitment

Arrive on Campus	Greeted by friendly marketing staff
Enrolment	Facilitated enrolment, assisted by all staff, in particular, academic staff providing course advice Student timetabled into Learning Skills Workshops
Campus Tour	Students given group tour of campus to meet staff and be familiarised with campus facilities and support
Orientation	Information. Also a comprehensive Orientation Guide is provided on line to be accessed throughout the term. Luncheon with other new students and staff provided
Bus Tour	New students are invited to join bus tour of Sydney to help with familiarisation
Learning Skills Workshops	Held over six weeks to assist students with academic writing, references etc. Student can make a personal appointment as well
Classes Commence	Teaching, learning and assessment designed to facilitate maximum interaction between staff and students
Library Literacy Classes	Library literacy classes held in subject specific classes by key library staff. Students can also visit the library for one on one assistance
Student Attendance Check	Report run to determine students with poor attendance. Student contacted if required. Placed on monitoring programme if deemed necessary
Midterm social activity held	Staff from Student Services hold social integration activity to assist with integration
Exam preparation and revision classes held	Assist students who may not have sat exams in an Australian institution
End of Term Party	Chance to relax and meet new friends
Release of results	If student fails more than 50 per cent or multiple fails then placed on monitoring programme

## APPENDIX 2

### Interview questions for MAP graduates:

1.	What were the main challenges you encountered in trying to pass your courses?
2.	Was there anything else that affected your ability to be successful in your studies?
3.	What features of the Monitoring programme did you like?
4.	What features of Monitoring programme did you dislike?
5.	Did you attend the Learning Skills Unit?
6.	If so, what sort of sessions were most useful? If not, why not?
7.	Would you tell a friend positive things about the MAP programme?
8.	Who or what else has contributed to the improvement in your studies?
9.	Have you ever thought of leaving CQU? Why? Why not?
10.	Do you intend to continue your studies at CQU? Why? Why not?
11.	Do you attend any of the social events held on or off campus such as: end of term party, cultural festivals, sporting activities or community?
12.	How important do you think these social activities are for students?
13.	Is there something CQU doesn't offer that might better support your studies?
14.	Would you tell a friend positive things about CQU?
15.	Can you tell me about one experience of what you think is really good service you have had at the campus?
16.	Can you tell me about one example of what you think is good teaching practice that you have experienced in your studies at the campus?
17.	What do you plan to do after graduation?
18.	Would you consider re-enrolling at CQU if you decided to study for another degree.?

## APPENDIX 3

### Returners telephone interview questions

1.	What was the reason you decided to leave CQU
2.	Can you tell me what provider you went to (if any) when you left CQU and the reasons that you selected this provider?
3.	Where you on a monitoring programme (MAP) prior to leaving CQU?
4.	Did you attend the Learning Skills Unit before you left CQU?
5.	What factor made you decided to return to CQU?
6.	Could CQU do anything better to ensure your studies are successful?
7.	Do you attend social events whilst at CQU such as: end of term party, cultural festivals, sporting events or community events?
8.	Are you currently on the monitoring programme (MAP)?
9.	Would you tell your friends positive things about CQU?

# **THE LONG MARCH: DEVELOPING THE CURTIN LEADERSHIP FRAMEWORK**

**Tony Brown, Curtin University of Technology, Australia**

## **ABSTRACT**

The use of leadership frameworks for developing the capability of organisations, including universities, is widespread. An eclectic range of theories describe what leadership 'is' or how leadership is 'done'. However, there is opposition to the application of management models to academic leadership roles. This paper summarises the journey undertaken to develop the Curtin Leadership Framework and provides an insight into Curtin's approach to future directions in career and leadership development. Recommendations include the use of action learning and collegial decision-making along with the need to contextualise leadership for an academic audience when developing a whole of university leadership framework.

Keywords: Academic leadership, management, capability framework, leadership development

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## **INTRODUCTION**

In October 1934, the communist First Red Army reportedly travelled some 10,000 kilometres, first west, then north to escape the stranglehold of the Nationalist army. Of the approximately 100,000 who started out only 10,000 survived the 370-day journey across some of the harshest terrain in China. This march and later successful military campaigns led to the eventual establishment of the Peoples Republic of China under Mao's leadership.

The creation of a leadership and management development framework for Curtin University has likewise been a long march albeit a far less dramatic journey. In late 2007 Curtin established an Organisational Development Unit (ODU) and amongst the University's 'to do' list for the new unit was the design and implementation of a leadership framework suitable for academic and general (or professional) staff in leadership and management roles across the University.

Then in 2009, Curtin adopted a new long-term vision: *To be an international leader shaping the future through our graduates and research, and positioned among the top 20 universities in Asia by 2020* (Curtin 2009a). Implementing the new vision, along with its associated strategies and initiatives, has resulted in each area within the University examining its priorities and capacity for delivering outcomes that assist in positioning Curtin in the top 20 universities in Asia by 2020.

One of the strategies linked to the new vision is to 'Develop a culture of excellence and innovation' (Curtin 2009b). An enabling initiative is to 'Further develop and implement the Curtin Leadership and Management Development Framework' (Curtin 2009b). Curtin's Organisational Development Unit has a key role to play given that the prime responsibility for developing leadership and management capacity is assigned to the Unit. Fundamental to this is the leadership framework.

This paper will provide a summary of the journey, the long march, Curtin's Organisational Development Unit (ODU) has undertaken in developing the Curtin Leadership and Management Development Framework. At the same time, an examination of the Framework and associated learning activities provides an insight into Curtin's approach to future directions in career and leadership development. The paper will briefly summarise the leadership literature, followed by a discussion on leadership frameworks before the Curtin experience is presented. The paper concludes with some reflections and recommendations for others contemplating developing a leadership framework.

## **THE LEADERSHIP LITERATURE**

Numerous theoretic perspectives and disciplines inform the leadership literature – power, motivation, organisational behaviour, management, psychology, and sociology to name a few. There is an eclectic range of theories to explain what leadership 'is' or how leadership is 'done' (Brown 2006).

Is it nature or nurture that determines whether a person becomes a leader? Three theory groups – trait, behavioural and contingency – are commonly reported by researchers while a fourth classification, contemporary theories, has emerged over the past two decades. Trait theory suggests that either a person has leadership traits or they don't (i.e. 'nature') which, in turn, implies that leadership development should only be provided to those with identified leadership traits (though perhaps not yet developed).

Behavioural approaches look at 'what effective leaders do' (Cole, 2001, p. 611) by focussing on the task–person dichotomy and suggest that leaders can be 'made' by learning appropriate leadership behaviours (Lussier & Achua, 2004; Onsmann, 2003). Contingency theories of leadership suggest that 'optimal leader behaviour is contingent upon (i.e. depends upon) the situation' (Arnold, Cooper & Robertson, 1998, p342). Contingency theories extend behavioural approaches but focus on the context

of leader-follower interactions. Arnold et al. note that ‘Contingency theories of leadership propose that different situations demand different leader behaviours’ (1998, p. 342).

Contemporary leadership approaches have been popularised by so called ‘gurus’ – authors such as Covey, Kouzes and Posner, Goleman, Wheatley, and Blanchard. Strategic leadership, transformational leadership, charismatic leadership, team leadership, values-based leadership and servant leadership are examples of popular contemporary theories. Transformational leadership, proposed by Burns (1977, cited in Doyle & Smith 2001) distinguishes between visionary (transformational) leaders who act as change agents by engaging with willing followers and transactional leaders who ‘exchange rewards contingent upon performance and use positional resources in order to encourage desired behaviours’ (Shivers-Blackwell, 2004, p. 43). It is argued that Burns’ theory was ‘the first comprehensive theory of leadership for modern scholars’ (Sorenson 2000).

The plethora of leadership theories can be confusing to both current and aspiring leaders, not to mention those charged with the responsibility of providing appropriate development programmes and processes. Which theory or approach should be used to guide leadership development in a university setting? There is considerable debate (and, in some cases, hostility) as to the applicability of business models to university settings, particularly when applying leadership theories to those in academic leadership roles (Brown 2006; Scott, Coates & Anderson 2008). With this in mind, what does the literature discuss regarding higher education leadership?

### **Higher Education Leadership**

Scott et al. note in their recent study of academic leadership capabilities in Australian Higher Education institutions that ‘Existing research sheds comparatively little systematic light on the distinctions between academic leadership and leadership in other contexts’ (2008, p5). It is important to note that the authors’ comments relate to those in (positional) academic leadership roles and not professional or general staff in leadership roles in Australian universities. Arguably so-called business leadership approaches are seen as broadly applicable to leaders in non-academic leadership roles. For example, Marshall, Adams & Cameron’s (2001) findings, drawing on Ramsden’s (1998) model and the transformational leadership approach, support the task–people constructs implicit in behavioural and contingency theories previously discussed.

The recent Australian ‘Learning Leaders’ study of academic leadership reported five capability clusters: personal, interpersonal, cognitive, role-specific, and generic (Scott et al.2008). The authors note that this capability framework is ‘already validated in studies of successful early career graduates in nine professions [accounting, architecture, primary school education, engineering, information technology, journalism, law, nursing and the sport industry] (Vescio 2005) and in a study of 322 effective [primary and high] school leaders (Scott 2003)’ (Scott et al.2008, p. 18). The authors report that ‘Robinson et al. (2008) in their macro analysis of leadership studies in education have noted that the traditions of instructional leadership and transformational leadership are starting to integrate’ (Scott et al.2008). Hence there is sufficient evidence in the higher education leadership literature to support the broad application of so-called ‘business’ models of leadership and leadership development in higher education and, more specifically, academic leadership, settings.

### **LEADERSHIP FRAMEWORKS**

The use of leadership frameworks for developing the leadership capacity and capability of organisations is widespread in Australia and internationally. A number of organisations have adopted generic or existing frameworks while others have developed their own customised framework.

A framework ‘explains graphically or in narrative form, the main dimensions to be studied – the key factors or variables – and the presumed relationships amongst them’ (Miles and Huberman, 1984 cited

in Scott et al., 2008, p18). Leadership frameworks have multiple uses: they provide focus for leadership development programme designers; they allow staff to understand the organisation's key performance attributes; they can be used as a tool in career planning, succession planning, performance reviews, position descriptions and for selection criteria.

Some frameworks are referred to as capability frameworks, others as competency frameworks and still others as leadership frameworks. Are competency and capability 'two sides of the same coin'? Often the terms are used interchangeably. However the Australian Council for Educational Leaders notes that competence is seen to denote static, context free skills whereas capability is seen as dynamic, future-focussed abilities that allow leaders to successfully navigate unfamiliar and changing circumstances (ACEL 2009). Similarly the study by Scott et al. reported that 'competencies were seen [by participants attending the researchers' workshops] as being associated more with managing than leading; that being competent is 'the ability to perform set tasks to a specified standard' whereas capability 'entails the emotional and cognitive capacity to figure out when and when not to draw on specific competencies, along with the capacity to learn from experience' (2008, p. 10,11).

According to Silzer (in Hollenbeck, McCall & Silzer, 2006, p. 403) leadership frameworks 'help organisations by:

- Openly communicating which leader behaviours are important,
- Helping to discriminate the performance of individuals,
- Linking leader behaviours to the strategic directions and goals of the business, and
- Providing an integrative model of leadership that is relevant across many positions and leadership situations'.

## **THE CURTIN LEADERSHIP FRAMEWORK**

Just as the First Red Army struck west to avoid the encircling nationalist forces before heading north to their destination, the team at Curtin's Organisational Development Unit (ODU) spent months in 2008 reviewing the leadership and leadership development literature before striking towards their objective – the creation of a leadership and management development framework suitable for Curtin's academic and professional staff. During this phase the team deliberately looked for, and identified, examples of leadership frameworks, particularly those used in higher education settings. The unearthed frameworks ranged from research/theoretical models to pragmatic approaches to the needs of particular organisations.

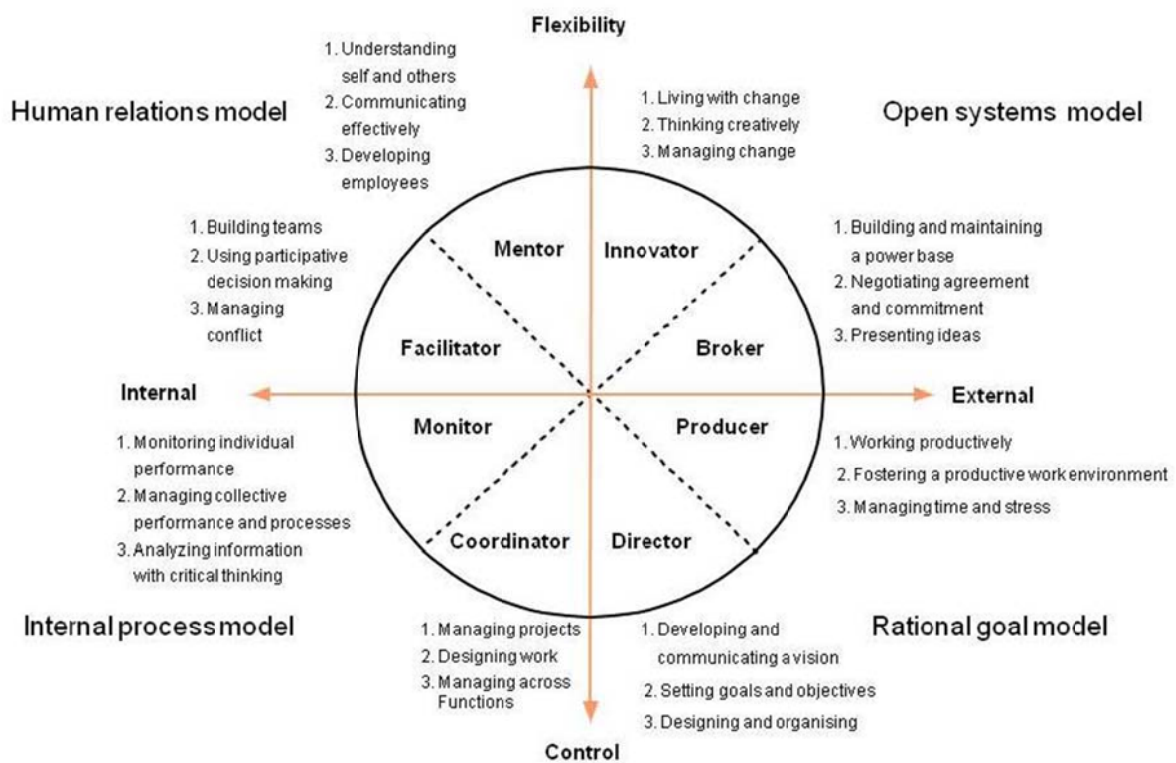
In addition, the team endeavoured to identify the theoretical constructs and frameworks underpinning existing and past leadership development programmes at Curtin for academic staff, senior and mid-level academic and professional staff leaders and postgraduate students. The competing values framework (Quinn, Faerman, Thompson & McGrath 2003) was identified as a potentially suitable framework for the Curtin Leadership and Management Development Framework.

The competing values framework (CVF) is based on four models of management that evolved over the twentieth century: the rational goal model, the internal process model, the human relations model, and the open systems model (Quinn, et al. 2003). By the latter part of the last century Quinn et al. note that 'it had become clear that no one model was sufficient...and that it was in fact necessary to see each of the four models as elements of a ...larger integrated model' (2003, p. 11). As Figure 1 depicts, the competing values framework features eight leadership roles (e.g. mentor, innovator) and 24 competencies. The tensions between the internal and external roles and the need for flexibility **and** control as a leader are another feature of the CVF.

The CVF is a key leadership model taught in the MBA and Master of Business Leadership programmes at Curtin and was the leadership model used in the pilot of a new development programme for Curtin's course coordinators. Two members of the ODU team were also familiar with

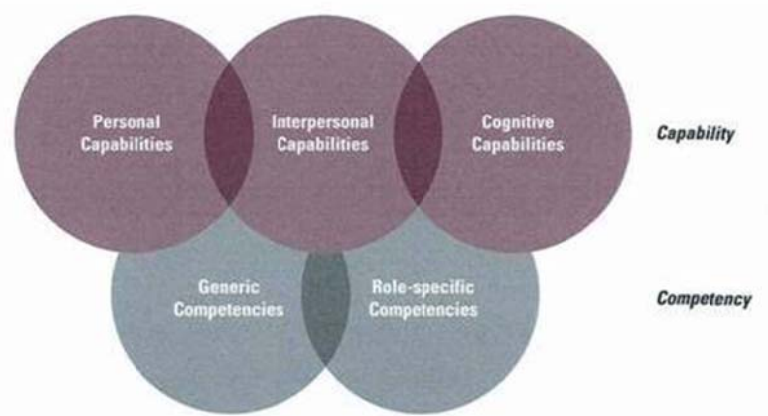
the CVF and saw it as an ideal framework for Curtin. Was the journey over? Subsequent inquiries identified that the initial course coordinator programme participants reacted unfavourably to ‘the business and management language’ of the CVF and it was thus discarded for subsequent cohorts (Jones, Ladyshewsky, Oliver & Flavell, 2008, p. 40). The long march continued.

While the ODU team was conducting its research the Australian Learning and Teaching Council (ALTC) was funding research projects across Australia with the purpose of developing ‘systematic, structured and sustainable models of academic leadership in higher education’ (ALTC 2010). Numerous ALTC projects have focused on institutional leadership development or developing the leadership capacity of academic staff in formal and informal leadership roles. In ensuring the widespread dissemination of project reports the ALTC encourages universities to consider, adapt and adopt suitable programmes, methodologies or approaches to higher education leadership and leadership development.



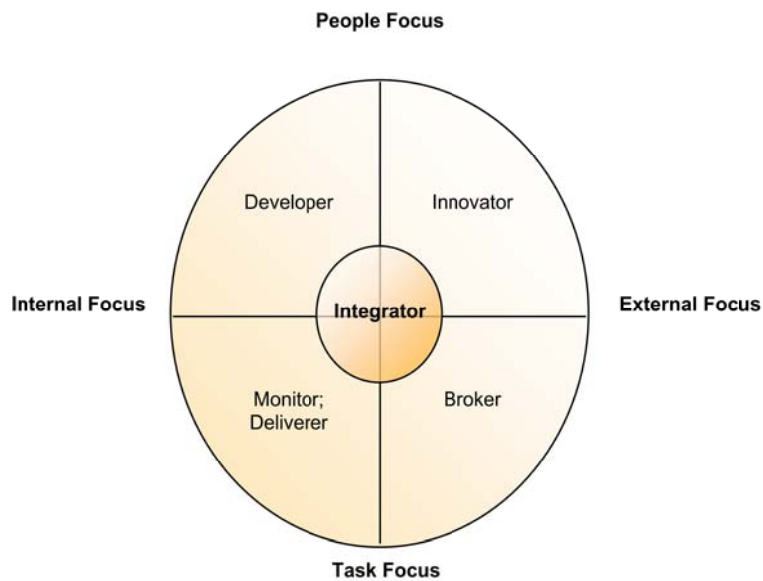
**Figure 1:** Competing values framework (Quinn, et al. 2003)

One ALTC funded project was the above-mentioned academic leadership programme for course coordinators. Another project, *learning leaders in times of change*, was said to be ‘the first study to systematically access the ‘insider's view’ of different university roles... The project canvassed more than 500 Australian higher education leaders from 20 institutions from heads of programme to deputy vice-chancellors, about the contexts and challenges they face and the *key capabilities that underpin their work* [emphasis added]’ (UWS, 2008). The academic leadership capability framework (learning leaders’ project) is shown below at Figure 2. This framework includes over 40 behavioural capabilities and competencies in five clusters. *Learning leaders* highlighted that formal, workshop based programmes are not the most effective approach to developing the leadership capability of individuals.



**Figure 2:** Academic leadership capability framework (Scott, et al. 2008)

Two other ALTC funded projects featured an adaptation of the competing values framework: the integrated competing values framework (ICVF) (Jones et al. 2008; Vilkinas 2009). The project reports suggest that academic leaders, including course coordinators, found the ICVF to be a useful framework that assisted in identifying their leadership development needs. The ICVF (see Figure 3) maintained many of the features of the CVF but with a reduced number of roles and the inclusion of a central ‘integrator’ role. The ICVF’s vertical axis is labelled people focus and task focus in contrast to the CVF labels of flexibility and control.



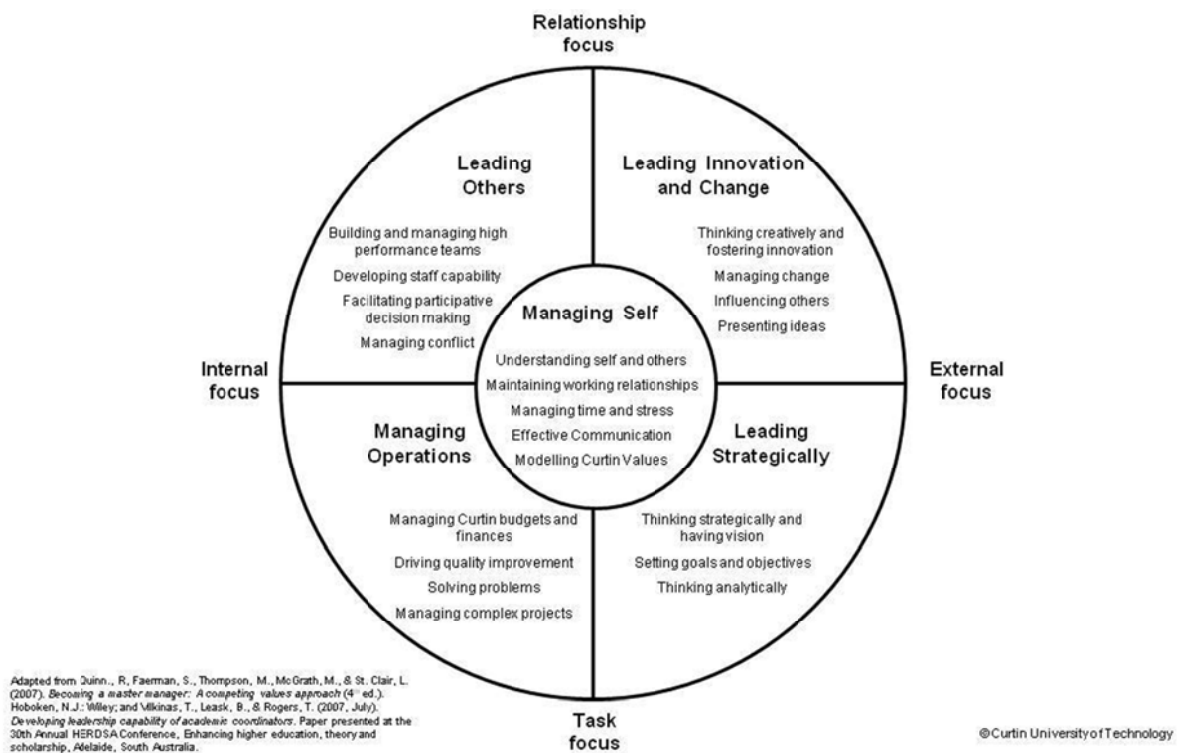
**Figure 3:** Integrated Competing Values Framework (Vilkinas 2009)

By early 2009, the ODU project team had identified numerous frameworks but focussed attention on eight for detailed consideration. While visual presentation differed, many frameworks had common capabilities or competencies. The project team concluded that none was exactly what was needed for Curtin at this time. For example, academic staff were resistant to the business language of the CVF; the learning leaders framework was too oriented to teaching and learning, whilst the ICVF’s roles were considered too ‘soft’ to be applied across the entire University. The team wondered if two frameworks were required – one for academic leaders and one for professional staff leadership roles – something to be avoided to minimise the academic-professional staff divide.



Utilising an action learning approach the project team compared and contrasted the eight frameworks. The analysis yielded a list of twenty capabilities that represented an amalgam of the capabilities across the frameworks. A Leadership and Management Development Reference Group (established to provide advice to the ODU team) subsequently endorsed the twenty capabilities. In June 2009 almost 80 members of Curtin’s senior leadership group were invited to rank the top ten capabilities (of the twenty) that the University should focus on to assist it realising its ‘top 20 in Asia by 2020’ vision. This activity effectively endorsed the list of 20 capabilities and provided the ODU team with the most important capabilities to include in its development programmes.

The next step was to create a model to represent the twenty capabilities visually. Within the list of twenty capabilities the team identified five clusters and each of these clusters nominally matched the four quadrants and central ‘integrator’ role of the integrated competing values framework but without using the CVF/ICVF role nomenclature. In addition, the ICVF’s ‘people focus’ label was changed to ‘relationship focus’. Thus, the draft Curtin framework as depicted at figure 4 draws on the CVF, ICVF, and contingency theory. The reference group, whose membership comprised a majority of academic representatives, agreed that the draft framework would ‘work’ for staff in academic and professional roles, and approved the draft for further development.



**Figure 4:** Draft Curtin leadership framework

In late 2009, an external consultant was engaged to develop a series of behavioural statements to support each capability. The consultant and the project leader agreed that one set of behavioural statements was inappropriate for all levels of management (supervisors through to the vice-chancellor) and decided four broad management levels was appropriate – coordinator/supervisor; manager; director/head of school; and senior executive. A series of approximately 80 behavioural statements (three to five per capability) per management level was created with the assumption that leaders at more senior levels would be able to demonstrate the lower level capabilities.

By April 2010 the draft framework’s management levels and behavioural statements had undergone their first revision by the reference group. Then in May, the project leader commenced a three-month consultation period by presenting the draft framework (including the behavioural statements) at faculty and central area senior management meetings. The presentations provided an opportunity to

inform the Curtin community of the broader application of the framework and the variety of approaches the ODU incorporates within development programmes. The approaches include individually led work-based projects, action learning groups, the establishment of peer-based networks (communities of practice), real-life workplace simulations, coaching and/or mentoring, and self-managed learning. Some suggestions to fine tune the framework have been received but, to date, the anecdotal and documented feedback from staff on the framework and its intended application has been overwhelmingly positive.

A suite of leadership and management development programmes is being developed drawing on the Framework's capabilities. To date programmes have been developed for targeted groups of staff – from aspiring and first time supervisors through to the Vice-Chancellor and her executive team. The project team is planning to take the revised, final version of the Curtin framework to Academic Board and Curtin's Planning and Management Committee in October or November 2010 with an expectation that the framework will be endorsed for use from January 2011. The long march is (almost) over!

## **REFLECTIONS AND RECOMMENDATIONS**

Even though the development of the Curtin leadership framework has been a long march – some two and a half years, the prolonged process has provided numerous benefits including that it:

- allowed the project team time to use an action learning approach resulting in a number of capability iterations to reach the current framework,
- demonstrated that a participative decision making approach – within the project team, the reference group and the broader Curtin community – leads to greater acceptance,
- highlighted that 'business' leadership frameworks must fit the organisational context – the language of business models needs to be adapted to suit higher education institutions to be acceptable to academic leaders in particular,
- afforded the opportunity to learn from current ALTC leadership projects,
- draws on existing, accepted frameworks yet fits the Curtin context and supports the University's 'top 20 in Asia by 2020' vision, and
- provides a framework for leadership development, career management, succession planning, recruitment and selection and performance management.

From the Curtin experience the key recommendations for others considering creating a leadership framework are to:

- use collegial processes to build a coalition of support across the institution,
- keep an open mind and 'it' (the appropriate solution) will come,
- draw on both the general and higher education specific leadership research literature but ensure your framework's language 'speaks' to academic leaders, and above all else
- be prepared for a long march!

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# **THE MEANINGFUL ENHANCEMENT OF INDIGENOUS CULTURE THROUGH TECHNOLOGY: A DIGITAL ACKNOWLEDGMENT OF DHARAWAL COUNTRY**

**Jade Kennedy and Theresa Hoynes, University of Wollongong, Australia**

## **ABSTRACT**

The University of Wollongong (UOW) has introduced the protocols of Welcomes to Country and Acknowledgement of Country to open certain events, functions and ceremonies. It has become evident that there is a significant lack of understanding around these customs and that they are becoming merely institutionalised acts of political correctness. The Faculty of Commerce at UOW identified these issues as impeding its journey to becoming an 'indigenous friendly' environment and has drawn on the work of Karl Weick to help guide it in a dedicated sense-making process. The Faculty undertook a series of engagement initiatives with the local Illawarra Aboriginal community to increase its understanding of their traditional customs. In turn, the Faculty has used technology to enhance the sense making for its staff and students in relation to the Acknowledgment and Welcome practices. This collaboration has forged a genuine relationship, inspired much knowledge sharing and resulted in the creation of a digital Acknowledgment of Dharawal Country.

Keywords: Indigenous, protocols, technology, Acknowledgment of Country, sense making, meaning

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## **INTRODUCTION**

The University of Wollongong (UOW) has introduced the protocols of Welcomes to Country and Acknowledgment of Country to open certain events, functions and ceremonies. These practices are becoming increasingly common across higher educational institutions, and within these contexts are intended to reflect the unique position of the Indigenous people of Australia. It is evident, however, that there is a significant lack of understanding around these customs and that many non-indigenous people often feel uncertain as to how to arrange a Welcome or conduct an Acknowledgment of Country. This uncertainty reflects a gap in knowledge related to the interpretation or sense making of these traditional practices. This presents a danger that in becoming institutionalised, these practices will lose their meaning and could be seen as mere acts of political correctness.

Additionally, many Aboriginal communities are disengaged from higher educational organisations, and there is much evidence supporting the poor participation of Aboriginal and Torres Strait Islander people within higher educational institutions (Gunstone, 2008; O'Rourke, 2010; Universities Australia, 2008). It has been observed that this poor participation and engagement within the sector, facilitates the appropriation of traditional Aboriginal customs by people who are not culturally informed or connected to community or country. It is regrettable that people of sincere intent but with little or no understanding of cultural protocols such as Welcomes and Acknowledgments of Country are prone to misinterpreting the true meaning of these practices as they have been communicated to meet the needs of institutions. The challenge lies in creating meaningfulness or sense making around these practices so that their intent and integrity remains intact.

The Faculty of Commerce at UOW noticed that the issues surrounding Welcomes to Country and Acknowledgments of Country directly impeded its journey to becoming an 'indigenous friendly' environment. It did understand that 'commerce' was not a traditional discipline of study for indigenous students and had therefore committed to a strategy to engage Aboriginal and Torres Strait Islander people. It had also identified that by incorporating Welcomes and Acknowledgments into common practice it was attempting to give genuine respect and facilitate engagement. What the Faculty had not anticipated was the impact of its own institutionalisation of these customs and the difficulties that arose in embedding these protocols within the Faculty. The Faculty lacked a depth of understanding of Welcomes and Acknowledgments of Country, and needed to create sense and meaning around these traditional customs. Sense making in this context became fundamental, allowing an understanding of what an event means, the stories that support the event and the subsequent actions that occur as a result of this process (Weick, Sutcliffe & Obstfeld, 2005). It is the actions that result from sense making that bring meaning into existence and provide a basis that allows people to be able to act into the future (Abolafia, 2010).

The Faculty sought to create meaning through the establishment of a genuine two-way relationship with the local Illawarra Aboriginal community. This relationship provided the basis for the Faculty to attempt to learn the true meaning of 'Country', to understand the stories behind Country for Dharawal people and gain a better understanding of traditional Aboriginal customs, protocols and practices. The Faculty identified the most appropriate ways of making sense of these cultural practices that would enable the Faculty of Commerce at UOW to meaningfully embed them in practice and to be perceived by indigenous Australians as a friendly environment.

## **METHODS**

The Faculty of Commerce at UOW undertook a series of engagement initiatives with the local Illawarra Aboriginal community in its attempt to create sense and meaning around Dharawal Country. It was recognised that there are many barriers to engaging Aboriginal people and communities with universities and higher educational organisations (IHEAC, 2006, James & Devlin, 2006), and it was understood that the Illawarra Aboriginal community were uncertain, apprehensive and to a certain extent distrustful when it came to involvement with the University as there has been an inconsistent

history of engagement. It was for these reasons that the Faculty placed emphasis on the building of genuine relationships with the local Aboriginal community organisations, Elders, custodians, cultural knowledge-holders and community members. It was also of great significant for the Faculty that these relationships were on-going and two-way, (ngapartji ngapartji), involving both respect and reciprocity.

The Faculty of Commerce started by establishing an Indigenous Strategy Working Party, to generate, guide and oversee initiatives that worked towards making the Faculty a more indigenous friendly environment. The working party included both academic and general staff members from the Faculty of Commerce, representatives from Woolyungah, the UOW Indigenous Centre, and several Aboriginal community members. All initiatives and decisions regarding the Faculty's engagement with the Aboriginal community went through this group.

Over the course of six months the Faculty began breaking down barriers and building its relationship with the Illawarra Aboriginal community through regular meetings with its Elders and cultural custodians. The Illawarra Aboriginal Corporation's (IAC) Elders group was targeted as an initial point of engagement. These conversations began with Faculty members simply attending the Elder's art and craft sessions, information and presentation sessions or their luncheons, and engaging them in conversations about themselves and their experiences on country. Sense making around the meaning of Country to Dharawal people began to emerge, as sense making is fundamentally a social activity where stories are preserved, retained or shared (Isabella 1990; Maitlis, 2005). However, the learning became a reciprocal process. As Watson (1995) states, the audience for sense making includes the speakers themselves, and it became evident that the Elders were finding ways of articulating oral histories and stories for the Faculty to comprehend and relate to the structures of its institution.

The regularity of these conversations exposed the Faculty to the Aboriginal community, increasing trust and sharing to the point that traditional Custodians and cultural knowledge-holders felt it necessary that 'Country' be communicated 'on Country'. This involved visiting sites of significance and other places of importance to the Dharawal people and hearing the dreamings, stories and Aboriginal histories that pertained to the meanings associated with the area. This was a slow and respectful process, undertaken and initiated on the terms of the traditional custodians that gave the Faculty a privileged insight and appreciation of Dharawal Country and the Dharawal people's connections to their ancestral lands.

In working with the Dharawal Elders it became apparent that the Faculty was being instructed in cultural knowledge in ways that the Elders would use with their own people or children. This generosity, inspired the Faculty to undertake further initiatives that directly engaged with the community and encouraged 'ngapartji ngapartji' and the growth of the two-way relationship it was attempting to establish.

Following the success of engagement and the increased understanding and appreciations of Country, the Faculty commenced the creation of a 'short-film' Acknowledging Dharawal Country that followed the model of digital story-telling. The intent of the film was to convey the meaning of the connection and relationship the Dharawal people have with their Country. Further, it was developed to share the significance of the traditional custom of Acknowledging Country through the use of a digital medium and to challenge the impression that this custom is a 'tokenistic' act performed at the beginning of events.

## **RESULTS**

For the Faculty of Commerce at UOW, the relationships built on time, trust and reciprocity with the local Illawarra Aboriginal Elders and community, were in themselves greater in impact than the outcomes of initiatives undertaken. The on-going nature of these relationships corresponds with the on-going nature of sense making (Weick, 1993) and the fact that it is described by Currie and Brown

(2003) as an evolving product of conversations with ourselves and with others, gives encouragement to the Faculty that gaps in knowledge can be addressed when they appear.

The engagement initiatives have presented the Faculty with opportunities to create sense and meaning through the experiences it has shared on a journey to becoming a more indigenous friendly environment. They have also enlightened the Faculty's comprehension of Dharawal Country and the meaning of traditional customs such as Welcomes and Acknowledgments of Country. Following are the main outcomes achieved thus far.

### **Five Key Concepts**

The generous sharing of knowledge through the process of relationship-building has facilitated the articulation of five key concepts or beliefs of the Dharawal in describing one's relationship with Country. They are country, kinship, culture, journey and connectedness:

- 'Country' refers to one's nature and natural surroundings. It includes lands and waters, trees and plant-life, animals, birds, fish and reptiles.
- 'Kinship' reflects the system by which people are related to each other. It defines one's roles, responsibilities and obligations within a relationship.
- 'Culture' is represented in art, song and dance, language, stories and oral histories. However, culture is said by the Dharawal to be present in your everyday being.
- 'Journey' refers to the lived experiences that occur 'on Country', one's story, one's history.
- 'Connectedness' reflects the core belief that binds Dharawal people to their Country. It speaks of the inter-relationship of everything and that nothing can be considered in isolation, just as none of the concepts or beliefs can be considered without the other.

### **Acknowledgment of Dharawal Country Short Film**

The digital Acknowledgment of Dharawal Country is the meshing of the traditional custom of Acknowledging Country with modern technologies. It is the embodiment of the five key concepts outlined above and depicts these progressively over via imagery viewed didgeridoo music performed by a local Elder. The digital story relates a traditional story from the Wodi Wodi, one of the 13 tribes of the Dharawal people. It is a story of travelling from the ocean to the escarpment; a story of travelling across Country. It is designed to encourage and inspire people not from Country to recognise and value their own connectedness to Dharawal Country and to learn how to show respect through the acknowledgment of this.

### **Acknowledgment of Country protocols**

A set of guidelines and protocols have been created to sit alongside the digital Acknowledgment of Dharawal Country to assist and support users of the short-film or people wishing to organise a Welcomes to Country and Acknowledgment of Country. Unlike most protocols, they are constructed not to direct policy or sit within a governance framework, but instead are designed to be functional; they are in a practical book form and are user based.

### **Koori Kids Fun Day**

The Koori Kids Fun Day was focused on engaging Aboriginal children from the Illawarra area through sporting and cultural activities on the UOW Wollongong campus. ('Koori' is the term is used by the aboriginal people in the states of Victoria, parts of New South Wales and Tasmania to describe themselves). The Day involved University staff and students. The day was supported by the broader community and it was aimed at breaking down the barriers between the University and the local Aboriginal community. Its main objective was to form positive associations and experiences for the children and their families relating to the Faculty and University.



More than 40 local Koori kids and their families attended. The success of this day impressed upon the Faculty, the University and the broader community the need to engage through fun, social activities. The University needs to engage with Aboriginal people and to provide opportunities for the local Aboriginal community to create stories and meaning about the University. The University needs to engage in sense making with the local community, about itself. There has been a strong drive to embed this day into the UOW annual calendar.

### **Mural – Agulia**

This painting was designed by three local Aboriginal artists, and completed through the contributions of the children in attendance at the Koori Kids Fun Day. This triptych is yet another story of Dharawal Country, and is aligned with two of the sacred mountains of the Wollongong region: Mt Kembla and Mt Keira. The placing of the children's handprints on this artwork, from an Aboriginal perspective, provides a significant form of connectedness for the individual kids themselves and their families. This is an age-old Aboriginal practice that in this instance goes beyond the usual perceptions of engagement and therefore the artwork now provides the keystone in the relationship between the particular children, and their families (who gave their handprints) and the Faculty of Commerce. The painting hangs at the entrance to the Faculty of Commerce building.

### **AIME – Australian Indigenous Mentoring Experience**

UOW is the largest host of the AIME programme servicing 140 indigenous children from more than seven Department of Education identified priority funded schools. The programme aligns university students as study mentors to indigenous students. Since initiating this strategy, over 100 Commerce students have registered to participate in AIME from a baseline of zero.

## **DISCUSSION**

In trying to exert a positive influence on the sense making process to create meaning and organisation around these traditional customs, the Faculty, University and community has experienced some truly positive outcomes as well as some unexpected impacts. Room for improvement has also become apparent. Because of the project, the Faculty has offered a scholarship to undertake research into sense making processes for Acknowledgments and Welcomes so that the conclusions that inform actions are based on firm evidence and evaluation. The Faculty expects this research to be of benefit to communities and institutions and outcomes from the research should be available within 12-18 months.

The focus of this discussion then, is based on evidence received through evaluations, feedback and the experiences of those involved. The project was successful in the development of genuine relationships with the local Aboriginal community. Feedback from the children, the parents and the community was overwhelmingly positive. In order to achieve its goal of being indigenous friendly, the Faculty has formed alliances with other faculties to host, on an annual basis, a Koori Kids fun day. The fun day will be improved upon and the agenda for the day will change. It will shift from engaging with the community to create material for the short film, to engaging with the community so that the community can create meaning regarding the University. As we have learnt through our sense making process, in order to create meaning, actions or experiences need to occur that provide opportunities for reframing mental models. Story telling is an effective way of relabeling and communicating experiences. It also fits well with Aboriginal culture. So the day will include parents and carers. It will include activities and visits from inspirational Aboriginal athletes, food and celebrations. A digital story of the day will also be created by the kids and carers for them to take away with them.

The Faculty has been inundated with requests for the film. The requests have come from a range of organisations, groups and institutions. Some of the requests have been genuinely motivated by a desire to create meaning and respect through Welcomes and Acknowledgements and some have not.

Some of the requests for the film surprised the Faculty. It is customary to give respect to an Aboriginal person delivering a Welcome through payment. Some feedback suggested that organisations could now save money by not having to pay an Elder or Dharawal representative to attend a function to give a Welcome because the film superseded that custom. Some organisations have told us that they will just create their own DVD and use it without engaging in community consultation or involvement.

Such feedback was a major stumbling block in the project as it indicated that meaning had not been created and that we had actually created a means to circumvent practices that were about engagement, respect, integrity and intent. We also received feedback associated with this from members of the Aboriginal community who were concerned that we were reducing opportunities for engagement through the short film.

Both of these perspectives demonstrate misunderstanding of the intent of the film. The Faculty continues its practice of engaging and paying community members for the delivery of a Welcome to Country and we clearly communicate this as a priority for the University. The University is committed to ongoing engagement with local Aboriginal communities. The intent with the short film is that it will continue to evolve with new images, sounds and content based on advice from the community. Though it is not possible for the Faculty to guarantee that the film won't be misused, the Faculty will work to prevent misuse of the film as much as possible. The Protocols stipulate clearly the way in which the film is to be used. Distribution of the film occurs through discussion so that the intent of the film is made clear to users.

In response to the issue about creating other DVDs and using them, the Faculty, in collaboration with the Faculty of Education, has decided to be proactive and a stage 2 project is in development. Stage 2 will involve working with the local Aboriginal community, the Elders group, children and teachers from a selection of priority-funded primary schools in the region to create a digital Acknowledgement of Country that is specific to each school. In this way, meaning for Acknowledgements and Welcomes becomes contextualised to each school and draws on their individual stories and traditions. The digital stories would become an educative tool within the school system to cover key learning areas, including indigenous perspectives, culture, information technology and literacy.

In taking definitive action around the issues regarding Welcomes and Acknowledgements, the Faculty and the University has learnt a great deal. It is anticipated that, through ongoing partnerships, research and actions, the meaning behind traditional practices will become embedded in organisational structures in a way that facilitates understanding and respect.

## **CONCLUSION**

The Faculty of Commerce embarked on a journey to make the Faculty an indigenous friendly environment, recognising that indigenous participation in Commerce was extremely low. In order to achieve this objective the Faculty introduced Welcomes to Country and Acknowledgements of Country in its standard practices for events. In doing this, The Faculty came to realise that the 'standardisation' of the practice was reducing people's understanding of and regard for these traditional practices. The Faculty needed to understand and make sense of the meaning of these traditional practices for the Dharawal community and began a process to capture and create stories, images, art and music around the Acknowledgement of Dharawal country. The digital Acknowledgement of Dharawal Country has resulted in partnerships and opportunities that extend beyond the creation of the short film.

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# **FROM AUDIT TO EVALUATION – SO WHERE WILL IT TAKE US?**

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## **ABSTRACT**

For some years, the New Zealand tertiary sector has used an audit model to measure institutional performance. The current and previous governments had concerns about sector performance and questioned the robustness of this quality assurance system. In 2006, the New Zealand Qualifications Authority was commissioned to investigate other models. This paper discusses the development of the new system of self-assessment, external evaluation and review, and describes the journey of a regional polytechnic from the old to the new system including its experience of external evaluation. It also makes some suggestions as to where this might take the sector in the future.

Keywords: quality assurance; audit; self-assessment; evaluation; improvement

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## INTRODUCTION

The tertiary sector in New Zealand comprises eight universities, 20 institutes of technology and polytechnics, three wānanga (publicly-owned tertiary institutions that provide education in a Māori cultural context) and a large number of private training establishments, government training organisations, and industry training organisations. Quality assurance for the university sub-sector is provided through legislation to the New Zealand Vice Chancellors' Committee which established the New Zealand Universities Academic Audit Unit to develop and conduct quality reviews. The remainder of the tertiary sector is covered, under legislation, by the New Zealand Qualifications Authority, which developed a quality assurance monitoring system. The model adopted in the early 1990s was a standards-based audit system. In March 2006, the then Labour Government Cabinet considered a paper titled *Tertiary education reforms: the next steps*, which set out a package of changes to tertiary education (Cabinet Policy Committee, 2006a). Broadly, these reforms were to create a fundamentally different investment system for tertiary education, a system of planning, funding, quality and monitoring that would drive access, quality and relevance within a distinctive contributions framework.

This paper discusses the developments that have occurred following that Cabinet Policy Committee paper including the theoretical underpinning of the new system, which was trialled in a selection of non-university tertiary institutions in 2008, and subsequently after regulatory changes, began to be implemented from the latter part of 2009. The paper then tells the story of a regional polytechnic's experiences of being the first polytechnic to be evaluated using the new model of quality assurance in April 2010, and conclude with some personal perspectives of where this move from audit to evaluation might take the tertiary sector in the future.

## DEVELOPING A NEW QUALITY ASSURANCE MODEL

### The Former Academic Audit Model

Early in the 1990s, the New Zealand Qualifications Authority established a system of academic quality audits that were measured against eight standards. The system required tertiary institutions (except universities) to establish a quality management system supported by policies and processes to meet the standards and then undertake an audit by an external panel every four years. Following negotiation, the New Zealand Qualifications Authority delegated authority to the sub-sector's peak body Institutes of Technology and Polytechnics New Zealand (formerly the Association of Polytechnics New Zealand), to develop its own academic audit system along the same model that the Qualifications Authority had developed. Subsequently the Institutes of Technology and Polytechnics New Zealand established its own quality assurance body; New Zealand Polytechnics Programmes Committee, which was later renamed Institutes of Technology and Polytechnics Quality. This quality assurance body used its own framework of 12 standards with the four yearly audit cycle, which also included a mid-term quality review (Institutes of Technology and Polytechnics Quality, 2005; New Zealand Polytechnics Programmes Committee, 2003). This latter process was primarily a follow-up review to ensure that any recommendations that had been made by the panel during the full audit were being implemented. Upon the satisfactory completion of the four-yearly review the polytechnic would be awarded quality assured status. Institutes of Technology and Polytechnics Quality had also been delegated approval to accredit and approve this subsector to deliver qualifications up to undergraduate degree level. The New Zealand Qualifications Authority undertook accreditation and approval of any post-graduate qualifications for the subsector (Bourke, 2009).

### Rationale for a Shift in the Quality Assurance System

The former Labour Government (1999-2008) and the current National Government, which also held office prior to 1999, had concerns about accountability and variability of practice in the tertiary sector, and a greater concern about the polytechnic sector. While many will argue that this was primarily

because of some questionable behaviour in a small number of polytechnics and wānanga, the whole sector got caught up in the government's focus on review. As mentioned in the introduction, the Labour Government's Cabinet had agreed to a set of changes in the tertiary education system, through the statements in the *Tertiary education reforms: The next steps*. There were three interrelated components to the reforms and the third component is the most relevant to this paper. That component is '...a more rigorous quality, reporting and monitoring regime centred around the performance of the institutions in relation to the expectations established through the profile' (Cabinet Policy Committee, 2006a, p1). The whole thrust of the reforms was to shift the focus from inputs to outcomes, and every component of the new quality assurance system needed to ensure accountability and responsibility by tertiary institutions to the government and the public. Following this initial paper, a raft of proposals was put to the Cabinet Policy Committee; the most relevant here is the *Tertiary education reforms paper 4: Quality assurance and monitoring system* (Cabinet Policy Committee, 2006b).

While the Tertiary Education Commission was given overall responsibility for the development of the tertiary education reforms, in December 2006 the Government agreed that the New Zealand Qualifications Authority, in close association with the Tertiary Education Commission, should lead the work associated with developing quality assurance processes. The New Zealand Qualifications Authority established an Expert Advisory Group. The membership of this group included individuals with experience in evaluation, quality assurance and/or the tertiary education sector. Professor Gary Hawke, well known for his leadership in the major tertiary education reforms in the late 1980s, chaired the Group. The objective of the Group was to advise on the development and implementation of a robust quality assurance system that supports the tertiary education reforms (New Zealand Qualifications Authority, 2007a).

### **Determining the Model**

Over the ensuing months, the Expert Advisory Group met a number of times and presented reports of their thinking to the New Zealand Qualifications Authority. Concurrently with this, the Qualifications Authority had established its own operational team to research quality assurance models in other jurisdictions, receive and consider the advice from the Expert Advisory Group, and publish consultation documents to the sector. Some comment on the research in other jurisdictions, especially OECD countries is made later in the paper. Aspects of the Qualifications Authority research findings have influenced the overall design of the new system for New Zealand.

As mentioned in the previous section one of the key shifts was from measuring inputs to measuring outcomes and accountability to stakeholders including students and government. To facilitate this shift in the quality assurance system a fundamental change had to be made from the audit model against a set of standards, to evaluating outcomes by systematically answering questions about quality, value or importance (Davidson, 2009).

One way to explain the fundamental differences between systems-based audit and an outcomes-focused evaluation is to use the analogy of baking a cake. A systems-based audit would focus mainly on ensuring that the:

- baker was suitably qualified
- appropriate equipment was used
- kitchen was clean
- right ingredients were used and in the right quantities.

In an evaluative approach the baker will, in the first instance, start assessing the quality of the cake from the angle of how well the final product satisfied the customer. So the questions would be:

- Did it taste right?
- Did it have the right texture?
- Did it look appetising?
- Was it safe to eat?

And most importantly:

- Is there anything I want to improve? (New Zealand Qualifications Authority 2009a)

Early in the process, the University sub-sector, via the New Zealand Vice Chancellor's Committee, decided not to participate in the proposed new system but instead opted to retain a watching brief as it was developed and rolled out across the rest of the sector. They held the view that their system of quality assurance was already very evaluative in its approach and also that it was covered under separate legislation from the rest of the sector,

By October 2007, the New Zealand Qualifications Authority put out a discussion paper on the principles of an evaluative approach to quality assurance. This provided a two-component approach. The first - Self-Assessment – was referred to as the processes a tertiary education organisation uses to establish evidence of its own effectiveness (New Zealand Qualifications Authority, 2007b). The second component is External Evaluation and Review. The purpose of External Evaluation and Review is to provide an independent and robust evaluation of the individual organisation's self-assessment. External evaluation would use the results of self-assessment along with other evidence to validate the organisation's self-assessment and make judgements about the quality of the organisation (New Zealand Qualifications Authority, 2007b).

In framing their approach to self-assessment for Tertiary Education Organisations, five areas of focus were proposed:

- (a) the attainment of high educational standards and excellence, relevant to learners' abilities
  - (b) the education and other gains for learners, i.e. the value added
  - (c) the quality of the learning experience, including teaching
  - (d) tertiary education organisation contribution to valued employer, regional and national outcomes
  - (e) tertiary education organisation compliance with regulatory requirements
- (New Zealand Qualifications Authority, 2007b)

Over the next few months, these were clarified into five key evaluation questions which Tertiary Education Organisations would address in developing their own self-assessment practices and would be used in the External Evaluation and Review process for validation and judgements on the quality of the tertiary organisation. In designing the questions, they were put into two groups: those that evaluate outcomes, (that is changes that happen to learning, employing organisations, communities and the economy that are at least partially caused by tertiary institutions' programmes and activities); and those that evaluate process (people and things that are put into or accepted into the institution, programmes systems and services that the institution delivers, and products and trained learners that are produced by or through the institutions' programmes and activities) (Davidson, 2009).

These five questions were:

Outcomes questions:

1. How well do learners achieve?
2. What is the value of the outcomes for key stakeholders, including learners?

Process questions:

3. How well do programmes and activities match the needs of learners and other stakeholders?
4. How effective is the teaching?
5. How well are learners guided and supported?

Along with the key evaluation questions, design work was done to produce a set of outcome and process indicators to guide institutions as how to interpret each key evaluation question and examples of the evidence to support the indicators. The indicators were developed using systems-modelling research and sector advisory feedback and provided detail around background research information, why the indicator was important and how prompts that might aid evaluative conversation might be applied (New Zealand Qualifications Authority, 2008).



While the intention is for tertiary education organisations to develop their own approach to self assessment using the key evaluation questions and indicators as a guide, as mentioned earlier there is a planned process for periodic External Evaluation and Review. More detail of this is provided in a later section as this was largely an evolving process following a trial which is also described later in the paper. However for the purpose of outlining the development of External Evaluation and Review, suffice it to say that a site visit is conducted by a team of two to four trained evaluators, including a lead evaluator. The team, through their in-depth questioning, triangulate any documented evidence with their findings through questioning, and make judgements about the institution's educational performance and its capability in self-assessment. This is built up by using rubrics to determine how well the institution meets the key evaluation questions in a series of mandatory and agreed focus areas. The New Zealand Qualifications Authority has subsequently published guidelines for organisational Self Assessment and External Evaluation and Review (New Zealand Qualifications Authority 2009a; 2009b). Institutes of Technology and Polytechnics Quality has also published its own set of guidelines for External Evaluation and Review (Institutes of Technology and Polytechnics Quality, 2010).

The use of evaluative rubrics is a broad-brush way of defining what good, excellent (etc) performance would look like in practice (Davidson, 2009). The final approved model includes four performance rankings that are applied across a number of focus areas – Excellent, Good, Adequate and Poor, and for the final judgement of the institution's performance the four are – Highly Confident, Confident, Not yet Confident and Not Confident.

The existing gazetted criteria were sufficiently flexible that no legislative change was required to authorise the shift from audit to evaluation and the New Zealand Qualifications Authority and Institute of Technology and Polytechnics Quality Boards have subsequently approved the process, the latter having particular focus on the way External Evaluation and Review will take place in the polytechnic sub-sector. Later in the paper we will discuss one polytechnic's experience of Self Assessment and External Evaluation and Review, including a description of how the new quality assurance model has evolved further as it is being implemented.

### **NZQA Research and Other Models**

The New Zealand Qualifications Authority conducted some in-depth research into approaches to quality assurance in other countries, particularly OECD countries. A high-level report was produced (New Zealand Qualifications Authority, 2007c). One of the first things this report discusses is the concept of quality in higher education in an attempt to gain some consensus of meaning. It is interesting to note that they found that 'quality' as an abstract idea is open to many interpretations. Concepts of quality as - exceptional; perfection or consistency; fitness for purpose; value for money; transformation – are cited from Harvey and Green (1993, cited in New Zealand Qualifications Authority, 2007c). In noticing the concept of 'transformation', they cite Margaret Horsborough (1999, cited in New Zealand Qualifications Authority, 2007c) who argued that if the purpose of higher education is to transform learners, then quality monitoring should relate to the process of transformation and learner outcomes. This concept certainly appears to have emerged in the final Self Assessment External Evaluation and Review model for the non-university tertiary institutions in New Zealand.

Viktoria Kis (2005), in her research into current practices in OECD countries as part of her internship at the Education and Training Policy Division, Directorate for Education, OECD, identifies the range of approaches to quality assurance in higher education. These primarily cover three approaches – accreditation, assessment and audit. She also identified that three basic methods for quality review usually involved some sort of self-review, followed by a peer-review and/or external review. Similarly, she found that amongst the data gathering instruments commonly found were – self-review report; site visits, surveys and performance indicators. A number of these aspects have appeared in the new quality assurance system adopted by the New Zealand Qualifications Authority.

The research also makes significant recognition of work done by Finnie and Usher (2005). This is a large piece of research that looks at current practises in Canada and other OECD countries and identifies that broadly there are four approaches to quality measurement. These are minimum standards – that are mostly qualitative; rankings/indicators – quantitative; learning impacts – quantitative; and continual improvement – qualitative.

One area of interest is the ‘learning impacts’ approach. Finnie and Usher make specific reference to the development of the National Survey of Student Engagement which was piloted in 75 higher education institutions in Canada in 2000 (Finnie & Usher, 2005, p13). Similarly, they refer to another example of measuring learning impacts, that is, the approach pioneered in Australia a few years earlier following the 1998 West Report on universities (West, 1998). West made general recommendations on the skills and attributes graduates should acquire. As a result, the Australian Council for Educational Research developed the Graduate Skills Assessment instrument. It is worth noting that Australia now uses the *Australasian Universities Survey of Student Engagement* as a tool for measuring student engagement and it is being trialled in New Zealand in 2010.

Continuing on the theme of approaches to quality assurance identified by Finnie and Usher is the ‘continual improvement’ approach. They indicate that while the ‘ranking/indicators’ and ‘learning impacts’ approaches were gaining momentum in North America in the 1990s, there was some discontent with the ‘minimum standards’ approach but no real discontent with the basic approach to self-audit followed by some external oversight (Finnie & Usher, 2005, pp15-16). This led to developments that moved beyond minimum standards to more performance benchmarking which required institutions to meet performance targets based on results at other organisations. They also reference the ISO model of continuous improvement concepts and organisational accreditation. This has been noted as a model that could be applied to education where an institution would develop its own method of defining and monitoring quality while the government’s role is to certify that institutions are in fact doing an adequate job of it. Furthermore, Finnie and Usher identify that Australia moved some way toward this model in 1998 when they established the Australian Universities Quality Agency. This agency encourages institutions to develop data in support of their own planning processes and then audits the effectiveness of the universities’ quality management process (Finnie & Usher, 2005, p16). The New Zealand Qualifications Authority also cite the Australian Universities Quality Agency as carrying out whole-of-institution quality audits with a focus on managing continuous quality improvement.

The New Zealand Universities Academic Audit Unit undertakes institutional academic audits on a cyclical basis. The last cycle of audits carried out during 2003-2006 were focused on continuous improvement in relation to teaching quality, programme delivery and the achievement of learning outcomes (New Zealand Qualifications Authority, 2007c). While the term ‘audit’ is used, as mentioned earlier in this paper, the New Zealand Vice Chancellors’ Committee believe that the whole process of preparing a self-review document followed by an external review has many traits of the evaluative approach. This is an explanation of their decision not to participate in the new model for non-university tertiary institutions but keep a watching brief during its implementation.

The next section will tell the story of a regional polytechnic’s implementation of Self Assessment and experience of being the first polytechnic to undergo an External Evaluation and Review.

### **The Former Internal Academic Audit – Process**

Academic audit at Bay of Plenty Polytechnic had been developed from an approach of collaboration and institutional commitment that was meant to lead to continuous improvement rather than a pure tick box ISO type compliance model of audit. It could be asserted that, in the main, this was also the way in which the New Zealand Polytechnics Programmes Committee (later Institutes of Technology and Polytechnics Quality) model rolled out. So much of the intent can be gleaned from the language used and how it was interpreted.

From an internal perspective the model used leaned toward continuous improvement rather than compliance (Hausman, 1998) and the language used described ‘findings, actions and recommendations’. The latter reflected what people needed to discuss and consider for the best approach for the future; with the former an expectation of considered action as an outcome of the findings. From an Institutes of Technology and Polytechnics Quality audit perspective, these terms were replaced by findings, non-compliances of either high or low risk requiring corrective actions (immediate fix-its); recommendations (Bay of Plenty Polytechnic actions) and suggestions.

We needed to consider the best way to implement audit at Bay of Plenty Polytechnic. The Polytechnic at that stage was structured into five schools with each school having an Academic Adviser with responsibility for school quality assurance and a centralised Senior Academic Adviser responsible for providing advice to assist with cross-polytechnic consistency. To implement academic audit at Bay of Plenty Polytechnic we used a model, shown in Table 1, of awareness heightening, training, use of a consistent approach and model, team briefing and conduct of audit, reporting and closing the loop.

We learned from this that there were some challenges with closing the loop and to ensure that all requirements were acted on. We also experienced challenges in ensuring that we used effective mechanisms for sharing some of the good practice that was identified.

### **The Self-Assessment and External Evaluation and Review Trial 2008**

Bay of Plenty Polytechnic was one of eight tertiary education organisations to participate in the trial of the Self Assessment External Evaluation and Review process. This provided the chance to work with the five key evaluation questions, the draft evaluation indicators, to identify areas of interest for the trial, and to work with a mentor.

Three self-assessment projects were undertaken. The first examined existing processes of internal academic audit, annual programme review and Te Waka Hourua criteria for approval and review of programmes. (Note: Te Waka Hourua is a metaphor that relates to two peoples travelling together towards the same goal - the partnership between the indigenous Māori, and Pakeha, New Zealanders who are not of Māori blood lines). Te Waka Hourua is a subcommittee of Bay of Plenty Polytechnic’s Academic Board that ensures curriculum and delivery reflects the dual heritage of Aotearoa/New Zealand (Bay of Plenty Polytechnic, 2007). The second project examined assessment and the third examined graduate outcomes and their value to both graduates and employers. Findings were reported in terms of the findings for Bay of Plenty Polytechnic, feedback for the New Zealand Qualifications Authority in relation to the trial of the evaluation indicators, and strategies for Bay of Plenty Polytechnic to build the findings into everyday business. Valuable outcomes were achieved that were able to feed into existing business processes and further improve the learning environment for students. With hindsight it is now possible to look at this selection of projects for the trial and consider that while each of these might have had its merits, a thinking ‘outside of the box’ around programme evaluation methodology may have been a better way to go.

The positive component of the experience is that we as an organisation learned from the experience. The negative component is that we may have learned more if we had treated these as broader opportunities for more staff to be involved and learn more from the experience rather than just a few people being involved. We also learned that the external evaluation panel in the trial experienced challenges in dealing with the rubrics and that some of the external evaluators needed to develop skills of evaluative questioning rather than compliance mentality questioning.

### **Implementation of the Full Self Assessment External Evaluation and Review**

After the trial, the New Zealand Qualifications Authority approved the final criteria for Self Assessment External Evaluation and Review and included the sixth question of ‘How effective are governance and management in supporting educational achievement?’ The New Zealand

Qualifications Authority then commenced External Evaluation and Review and by June 2010, 77 External Evaluation and Review reports had been published.

Table 1: Model for the implementation of internal academic audit at Bay of Plenty Polytechnic.

Stage	What was involved
Awareness heightening	The Quality Management System was restructured to reflect the 12 polytechnic standards, relevant policies attached and procedures written that showed those responsible and possible audit evidence
Training of key people	All Academic Advisers participated in Internal Audit training carried out by an external trainer. This was followed up by other interested staff being trained, once again by external trainers but in an onsite environment
Development of a consistent approach and model of audit	A four yearly cycle of audit was approved by Academic Board and developed so that each audit <ol style="list-style-type: none"> <li>1. had it's clearly identified Terms of reference</li> <li>2. identified two specific programme areas in each school</li> <li>3. identified audit evidence that was already available or needed to be available</li> <li>4. showed expectations for triangulation (documentation, staff, students, industry where relevant)</li> <li>5. showed initial questions for each group for further audit group development</li> <li>6. provided a template for the audit report</li> <li>7. showed the timeframe expected</li> </ol> In addition, each audit used a team of two people with the more experienced auditor supporting the newer. Team changes were attempted to prevent group think and to share the knowledge.
Briefing so that all people were on the same page	Prior to the audit a meeting was held to clarify the terms of reference and further refine questions
Conduct of the audit	The audit was carried out and each audit generally took 1.5 days per team member to include preparation, interview and write up. The conduct stage used a triangulation approach of reading documentation such as policy and practice expectation, and evidence of how that was met; talking with a range of people who could support or refute the policy and practice expectation and sighting further documentation that showed that the policy and practice was in effect for this particular programme.
Reporting and closing the loop	Reporting involving sending the written report to the programme team and then face to face follow up for clarification and any correction. The reports were received at School Boards of Studies for discussion and implementation of action plans.  At an institutional level, a collated report was provided to Academic Board and contained any polytechnic wide issues that needed to be addressed.

For the polytechnic sector, the quality assurance body chose to appoint two Lead Evaluators (Dr Peter Hodder and Mark Dingle) and a Principal Adviser (Dr John Harré) with the intention being that this composition would aid consistency of approach. Other members of the evaluation team were then drawn from the New Zealand Qualifications Authority's pool of evaluators.

### **Self evaluation and Bay of Plenty Polytechnic**

We moved into the self-evaluation mode by developing a strategy that was designed to use the best examples of practice identified in the polytechnic sector. That is, be inclusive through the use of an internal advisory committee; develop capability through a series of workshops held for staff; and use

the existing practice of programme and teaching evaluations, student retention and completion reporting and analysis data and annual programme review as mechanisms for developing a more robust examination of the health of programmes. Attempts were made to develop an annual programme review that was a more collaborative process so that all members of the teaching team were involved in discussions about what was working well in the programme and what required a fix. We also introduced a layered approach to the annual programme review, so that the reports were discussed at a School Board of Studies. The Head of School then provided a 'state of the School's health' by reviewing all annual programme reviews, and then a further layer of analysis and reporting to Academic Board about the overall annual programme reviews across the polytechnic to identify any trends and matters that needed to be addressed at an institutional level.

The Otago Polytechnic process of evaluative conversation, involving senior staff and programme staff, was trialled and Business Units carried out a self-evaluation to examine how they contributed both to the Polytechnic's Strategic Directions and also to supporting students and student outcomes. At the stage of writing this paper, evaluative conversations have been trialled in three areas:

- a course based , level 6 programme with large student numbers in both full-time and part-time study with a diverse group of academic staff
- a small level 2 programme with a small teaching team where the programme is designed to feed students into higher level qualifications
- a cluster of three programmes at levels 2, 3 and 5 where each programme feeds to another level, there are graduate outcomes at all three levels, and a shared teaching team across the programmes.

Each level of evaluation has produced useful outcomes and will continue to be rolled out in a trial-learning mode over the next 12 months.

### **External Evaluation and Review**

Bay of Plenty Polytechnic was the first polytechnic to experience External Evaluation and Review in April 2010 and for us it was a positive, collegial and constructive process. A small amount of initial strategic, policy and self-assessment documentation had been provided to the Lead Evaluator and then a scoping meeting was held four weeks prior to the external evaluation and review. This meeting ensured that the areas selected to be focussed on at the external evaluation and review were areas of importance to Bay of Plenty Polytechnic. Further documentation specific to the areas of focus were provided, for example, annual programme reviews and student evaluations of programmes. During the external evaluation and review visit the team met with a range of senior managers, programme managers, academic staff, industry, students and Council members.

Comment from staff about the experience included the following statements

- It was casual, good discussion
- Pushed for time/ ran out of time (several different staff)
- Initial idea of external evaluation and review took me out of my comfort zone – worked through it, the discussion was great - we've all come on from there and have learned so much (Group Leader)
- Some questions seemed abstract (tutor)
- Needed to make sure we clarified language (Head of School)
- It 'felt' cooperative, consultative, collaborative

An oral report back was given at the end of the visit in an open forum that about 45 staff attended. This provided real strengths to build on and share, and evidenced pointers for improvement.

## **Some Important Differences**

A key shift from audit to the external evaluation and review is that judgements about Confidence in both Capability in Self Assessment and Performance with Educational Outcomes are made. The report is provided to the Polytechnic to check for factual accuracy, this aspect being quite important. The final report is the report of the External Evaluation and Review Team. This means that, should the polytechnic disagree with the content of the report, unless it is a 'factual accuracy' then a polytechnic could be in a situation of disagreeing with a report, and the report being published with that particular rider.

With audit, it was only the audit summary that was publicly available unless the conditions of the Official Information Act were used. With External Evaluation and Review, there is a much more detailed report provided to the public. This describes the scope, process used and judgements of Capability in Performance with Educational Outcomes and Self-Assessment for the overall polytechnic. It also uses a rating scale for each of the focus areas using terminology that moves from Excellent, to Good, to Adequate to Poor. Clearly, this language carries important messages to the students and business community of the provider.

The public report carries the confidence levels for the polytechnic and summary statements for each of the polytechnic focus areas. An additional report is provided to the polytechnic that provides greater detail at the focus area level that can be used to share the good practice and to identify improvements to be worked on. This report, if used from the viewpoint of being 'external and objective eyes', is potentially very helpful for ongoing improvement.

Yes – we are happy with our overall judgement at Highly Confident for Institutional Educational Performance and Confident in Capability in Self Assessment and the report was published on the Institutes of Technology and Polytechnics Quality website on 21 June 2010.

## **SO WHERE DO WE THINK THAT THIS WILL TAKE US NEXT?**

An important lesson we learned was that some of the important self-evaluation actions that happen are the everyday, and ongoing, discussions in programme teams about student monitoring of progress, and provision of intervention support that is so second nature that it was not clearly articulated to the External Evaluation and Review Team. This learning has led to the development of a new, more comprehensive, and whole of organisation model for self-evaluation that will guide and support every day practice for teaching and business units – this is currently waiting on final discussion, implementation and adoption.

We realised that there is so much more that we could do to share ideas across the polytechnic and this needs to be a focus for the future. We are starting by discussing the many areas of excellent practice that were identified, with the intention of using these practices for improvement in other programmes and across other Schools at Bay of Plenty Polytechnic. We also realised that the self-evaluation model fits well with other different forms of organisational decision making that are in a current discussion stage for change.

From another viewpoint, we are aware of the public nature of the reports and the potential for them to be used not only benchmarking, but also for league tables to be developed. By comparison, the compulsory school sector in New Zealand has experienced the league tables' impact of Educational Review Office reports over a number of years. A current newspaper series 'What makes your school special?' in the Bay of Plenty Times (Udy, 2010) highlights how the Education Review Office reports can be positively interpreted and the need for the Education Review Office reports to be viewed from perspectives of the principal, students, and teachers as well as the Education Review Office. It will be an interesting idea to be followed for the non-university tertiary institutions in the future.

Our overall view is that the philosophy and model of institutional self assessment will lead to a much wider acceptance of continuous improvement in tertiary institutions in New Zealand.

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# **EDUCATION FACILITIES: LOW ENERGY CONSUMPTION, HIGH THERMAL COMFORT. ARE THEY MUTUALLY EXCLUSIVE?**

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## **ABSTRACT**

As we look to our future, it is a carbon-constrained future. Thus, as we design education facilities today, we are focussing on reducing their energy usage and greenhouse gas generation. However, we cannot forget about the students and staff occupying these buildings and their needs for high levels of thermal comfort that enhance engagement and productivity. The RMIT University Swanston Academic Building (SAB), an education facility in Melbourne targeting a Five-star Green Star Education v1 rating, is presented as a case study. Computational building simulation demonstrated that a high level of thermal comfort can be achieved by widening the internal space air temperature range from 21 – 24°C to 20 – 26°C, providing an improvement in operational building total energy consumption of approximately nine per cent and greenhouse gas emissions of seven per cent.

Keywords: Thermal comfort, low energy building, air conditioning, predicted mean vote

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## INTRODUCTION

In the design of education facilities, there is currently a strong focus on reducing energy consumption and greenhouse gas emissions as part of minimising climate change. With this low energy and carbon approach, the building occupants, students and staff must not be forgotten as the high performing building should also provide a high level of thermal comfort and productivity.

This balance between achieving a high level of thermal comfort and providing a building with low energy consumption can be a difficult challenge for both designers and operators. Research conducted by Hoyt, Lee, Zhang, Arens & Webster (2009) showed in a number of North American climates that where the temperature band for an air conditioning system is widened, a substantial saving in building energy can be achieved. Hoyt et al. (2009) report a reduction in heating ventilation and air conditioning (HVAC) energy consumption of 10 per cent for each degree Celsius increase or decrease in the space set point.

The common approach to improving thermal comfort within a space is to narrow the operational temperature band of the internal air conditioned space. This philosophy is contrary to the approach of Hoyt et al. (2009) to widen the space temperature band to improve overall building operational efficiency.

For a building targeting a Green Building Council of Australia (GBCA) Green Star rating, this balance is a common challenge as design teams strive to achieve the maximum points within both the Energy and Indoor Environment Quality environmental categories during design and construction.

In order to explore the impact of these apparent competing interests, a generic computational thermal simulation of a Building Code of Australian 2010 compliant educational office building's HVAC energy consumption is analysed for varying space temperature ranges that achieve specific thermal comfort criteria.

This generic analysis informed the design of the proposed RMIT University Swanston Academic Building (SAB). The proposed SAB will be a 33,000 m<sup>2</sup>, 11-storey education facility in Melbourne and is targeting a 5 star Green Star Education v1 rating. A key component of achieving this rating is maximising the facility's overall operational energy efficiency, thermal comfort and productivity. Findings are presented from an analysis of energy consumption and thermal comfort for SAB in order to investigate the question of whether or not low energy consumption and high thermal comfort are mutually exclusive.

## THERMAL COMFORT

Occupant thermal comfort is a subjective sensation that varies between people and is defined as a thermal balance with the surrounding environment. This heat balance of a human body is obtained when the internal heat production in the body is equal to the loss of heat to the environment (CIBSE, 2006).

As defined in ASHRAE (2004), there are six primary factors that affect overall thermal sensation separated into two categories – human parameters and environmental – as summarised in Table 1.

Table 1: Key parameters that influence thermal comfort (ASHRAE, 2004)

<b>Environmental parameters</b>	<b>Human parameters</b>
Dry bulb air temperature (°C)	Metabolic rate
Mean radiant temperature (°C)	Clothing insulation
Relative air speed (m/s)	
Humidity (%)	

## Predicted Mean Vote

For moderate thermal environments, an index known as Predicted Mean Vote (PMV) is a measure that calculates a value on a thermal scale by combining the environmental parameters outlined in Table 1 with the human factors of clothing and activity level. The value calculated is a mean value of the votes of a large group of people on a seven point scale from cold to hot, as outlined in Figure 1 (ISO, 2005). It should be noted that the index applies to air conditioned spaces and should be used only for values of PMV no greater than -2 to +2 (ISO, 2005), that is, cool to warm on the thermal scale.

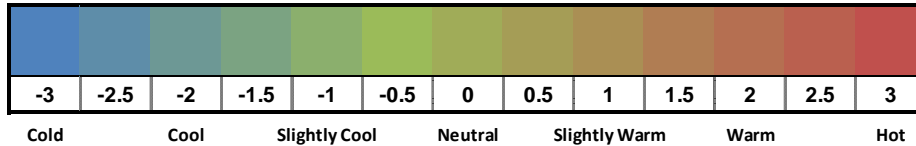


Figure 1: Predicted mean vote thermal scale

People are thermally dissimilar and, therefore, no environment will thermally satisfy everyone at the same time. Within the International Standard ISO 7730, the predicted percentage of people dissatisfied (PPD) is a calculation at each PMV. As PMV increases or decreases from zero, PPD increases as the number of dissatisfied people increases (Dwyer, 2006). Even at a PMV equal to zero, 5 per cent of a large group of people will be dissatisfied as they are either uncomfortably cool or warm.

Within GBCA (2008), a calculated PMV of no greater than +1.0 to -1.0 for 98 per cent of yearly operational hours is considered acceptable. A single point is awarded within the Green Star Education v1 rating tool for satisfying this consistently high level of thermal comfort. A maximum of two points are awarded for achieving a PMV between +0.5 to -0.5.

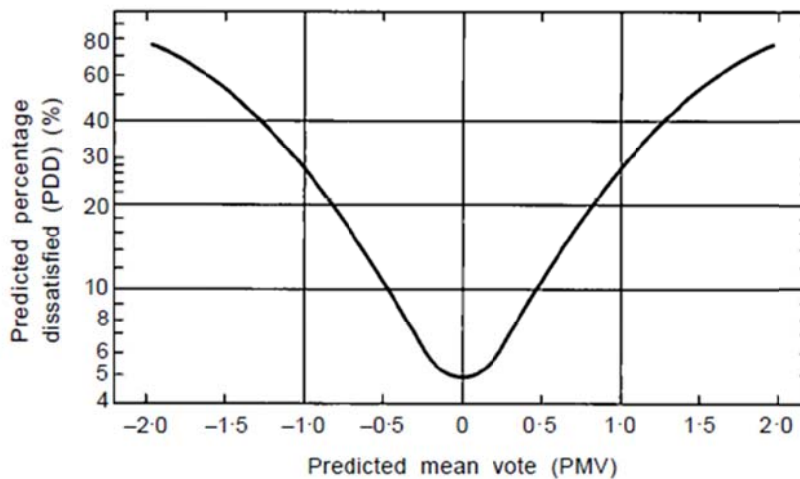


Figure 2: PPD as a function of PMV (CIBSE, 2006)

## Operative Temperature

Operative temperature, also known as dry resultant temperature, is a measure that considers dry bulb temperature and mean radiant temperature at a particular air velocity. Dwyer (2007) outlines that at low velocities of less than or equal to 0.2 m/s, operative temperature is simply the average of the mean radiant and dry bulb temperatures.

The mean radiant temperature is influenced by the thermal condition of building surfaces, including walls, ceilings and floors. Where a particular surface is either cooler or warmer than surrounding

surfaces, a variation in mean radiant temperature will alter the space’s ability to provide a thermally comfortable environment. The element of a building that influences radiant temperature most significantly is the external facade. A facade is typically the weakest component of a building envelope’s interaction with the external environment. Facade surfaces generally have greater fluctuations in surface temperature due to either heat conduction gains or losses. Combined with the transmission of solar radiation through the opaque glazing element, internal surfaces as well as the facade surface are impacted.

Consequently, where the total solar radiation transmitted through the building is minimised, the mean radiant temperature is more closely related to the internal space temperature as variations in surface temperature are reduced.

Dwyer (2006) states that well insulated buildings without large areas of external glazing or extreme air change rates will result in the mean radiant temperature and internal air temperature being similar. So, in practice the operative temperature is comparable to the air temperature, which is readily measured.

### Operational Temperature Range

**Error! Reference source not found.** provides a summary of acceptable thermal comfort bands for internal office/education spaces from a number of industry-recognised sources. The thermal comfort is based on summer and winter air conditioning set points and an overall temperature range. The table highlights the variation in temperature ranges between sources, where within Australia it is considered common practice that actively conditioned spaces are designed and operated with an internal air temperature range of 21 – 24°C, equating to an air conditioning set point of 22.5 ± 1.5°C.

Table 2: Operational space temperature range references

Reference	Space Type	Temperature Set point		Overall temperature range (°C)	Description
		Winter (°C)	Summer (°C)		
CIBSE (2006)	Office open plan	22.0 ± 1.0	23.0 ± 1.0	21.0 – 24.0	Environmental Design CIBSE Guide A
CIBSE (2006)	Education / teaching	20.0 ± 1.0	22.0 ± 1.0	19.0 – 23.0	Environmental Design CIBSE Guide A
ISO (2005)	Office	22.0 ± 1.0	24.5 ± 1.0	21.0 – 25.5	International Standard ISO 7730:2005 Table A.5 Category A criteria
de Dear, Brager, Cooper (1997)	General	22.5 ± 1.2	23.5 ± 1.2	21.3 – 24.7	ASHRAE RP-884 Developing an Adaptive Model of Thermal Comfort and Preference
Australian Government Comcare (1995)	Office	22.0 ± 2.0	23.0 ± 1.0	20.0 – 24.0	Air conditioning and thermal comfort in Australian Public Service offices
WorkSafe Victoria (2008)	Office	N/A	N/A	20.0 – 26.0	General temperature guidance provided in Appendix E – Amenities and facilities planning checklist

Interestingly, CIBSE (2006) presents the overall temperature set points for an office to be 1°C higher in summer and 2°C less in winter when compared to the set points outlined in the same document for

an education teaching space. This variation in temperature is attributed to a higher metabolic rate used in the calculation of the set points for the education teaching space.

All documents referenced in Table 2 provide an internal temperature range as guidance only and do not specify criteria as a mandatory requirement.

## METHODOLOGY

The analysis considered two separate computational building thermal energy simulations. All simulations were completed within Integrated Environmental Solutions (IES) Virtual Environment (VE) software version 6 and developed in accordance with the Green Building Council of Australia Education v1 Energy Calculator Guide (GBCA, 2010).

The analysis utilised CSIRO Melbourne 1971 Test Reference Year (TRY) weather data, as used for all building thermal computational models and in accordance with the ABCB (2006) Protocol for Building Energy Analysis Software.

The first simulation developed was of a generic model of a Building Code of Australia 2010 compliant educational office building. The energy consumption of the HVAC was analysed for three different space temperature ranges to achieve specific thermal comfort criteria. The cases assessed are outlined in **Error! Reference source not found.**

Table 3: Air temperature range

Case	Air conditioning Set point (°C)	Overall temperature range (°C)
Base	22.0 ± 1.5	21.0 – 24.0
1	23.5 ± 2.5	21.0 – 26.0
2	23.5 ± 3.5	20.0 – 27.0

The findings from the initial generic analysis form the foundation of the assessment for the cellular and open plan RMIT SAB academic office space case study. The system proposed for the office space utilises ceiling mounted active chilled beams combined with a central air conditioning system that delivers primary tempered air to the beam within the space.

The thermal comfort target for the project was to achieve a PMV of between -1.0 and +1.0 across all spaces for 98 per cent of the hours of occupancy. This criterion provides a high level of thermal comfort whilst satisfying the GBCA (2008) requirements. Based on the findings of the generic analysis, the standard 21 to 24°C design criterion was extended to 20 to 26°C and was still able to ensure a comparable thermal environment as outlined in Section 4.

The case study of RMIT SAB considers also the student portals – spaces that function as a student meeting, learning and interaction area within the building. These spaces are orientated in multiple directions and elevations across the building, with each portal having its own unique character, views, solar access and microclimate.

Thermal comfort conditions within the portal spaces are maximised with the implementation of a mixed mode HVAC system. The system regulates the space via the operation of a combination of openable windows, ceiling fans and evaporative cooling when conditions outside are favourable. Where the external conditions are not appropriate, or the temperature range within the space cannot be maintained, the HVAC system will revert to a full air conditioned mode of operation.

All assessments discussed for the generic education/office space and RMIT SAB academic offices focus on the interaction of mean radiant temperature with air temperature within the PMV calculation as a means of improving the operational performance of SAB in accordance with Dwyer (2006).

The mechanical system design of the portal spaces was developed and assessed in a manner to capitalise on the benefit of two alternate environmental parameters, relative humidity and air speed, within the PMV calculation to satisfy a criteria of -1.0 and +1.0 across all spaces for 98 per cent of the hours of occupancy, whilst improving overall building energy efficiency.

For the purposes of all analysis and results, the metabolic rate of each occupant was based on 70 W/m<sup>2</sup> sensible heat loss, in accordance with a person undertaking typical office activities that include filing, sitting, slowly walking, and relaxed.

### Thermal Comfort Assumptions For PMV Calculation

There are a range of building design factors that influence thermal comfort and energy consumption, primarily, the HVAC system, facade design and, on a human level, clothing and metabolic rate. For the purposes of this analysis, a number of variables have been assumed constant in accordance with the Green Star Education v1 Technical Manual (GBCA, 2008), as outlined in **Error! Reference source not found.**

Table 4 - Key predicted mean vote assumptions

For assessment of PMV > 0 (positive)			For assessment of PMV < 0 (negative)		
clo	0.60	Clothing unit equivalent to light business attire (trousers with shirt / dress)	clo	0.95	Clothing unit equivalent to medium business attire (trousers with shirt and jumper / winter dress, stockings and jacket)
met	1.20	Metabolic rate equivalent to typical office activities – filing, seated, slow speed walking, relaxed (equivalent to 70 W/m <sup>2</sup> )	met	1.20	Metabolic rate equivalent to typical office activities – filing, seated, slow speed walking, relaxed (equivalent to 70 W/m <sup>2</sup> )
v	0.2 m/s	Air velocity at occupant level based on an overhead linear slot diffuser. Occupant stationary.	v	0.2 m/s	Air velocity at occupant level based on an overhead linear slot diffuser. Occupant stationary.

## RESULTS AND DISCUSSION

Based on the computational thermal modelling of the generic ABCB (2010) BCA deemed to satisfy compliant office/education building, the yearly average internal space mean radiant and dry bulb air temperature, calculated as an area weighted average, were 0.02 per cent different. This negligible difference is in accordance with Dwyer (2006), whereby the operative temperature can be considered equal to the air temperature.

For the purposes of the development of the three cases investigated, operative temperature is considered to be equal to dry bulb air temperature and, by extension, dry bulb temperature to be equal to mean radiant temperature.

It is acknowledged that where the mean radiant temperature significantly differs to the dry bulb temperature further analysis is required of appropriate operational space temperature range to satisfy a specific PMV scale. This could be necessary where the performance of the facade is thermally poor relative to that proposed under BCA 2010 Section J requirements. Typical thermal weaknesses in a building include a large percentage of glazing area to total facade area and/or a low performing glazing performance when considering both thermal conductance and solar radiation transmission into the internal space.

PMV and the corresponding PPD were determined for each of the generic simulation cases. As summarised in Table 5, it can be seen that Case 1 provides similar thermal comfort performance to that calculated for the Base Case.

Case 2 achieves a PMV of between -1.0 and +1.0. Although this equates to a larger number of people dissatisfied than in Case 1, the PMV range is still deemed to be within an acceptable band as the space is considered only slightly warm to slightly cold, with a maximum number of people dissatisfied of 25 per cent.

Table 5: Calculate predicted mean vote and predicted people dissatisfied for specific air temperature ranges

Case	Air conditioning Set point (°C)	Overall temperature range (°C)	Predicted Mean Vote (PMV)	Predicted People Dissatisfied (PPD)
Base	22.0 ± 1.5	21.0 – 24.0	Between -0.5 to +0.5	<10%
1	23.5 ± 2.5	21.0 – 26.0	-0.5 to +0.5	10%
2	23.5 ± 3.5	20.0 – 27.0	-1.0 to +1.0	25%

The results presented in Figure 3, Figure 4 and Table 6 illustrate the reduction in operational energy consumption and greenhouse gas emissions when the temperature range is elevated from the Base Case 21 – 24°C to a range of 21 – 26°C under Case 1. Both cases meet the PPD ≤ 10 per cent criteria with Case 1 achieving a 6.5 per cent reduction in total operational energy and 6.7 per cent reduction in greenhouse gas (GHG) emissions due to the expanded temperature range.

As outlined in Table 6, Case 2 provides an opportunity to further expand the operating temperature range as a means of improving building energy efficiency. However, Case 2 results in a greater percentage of people dissatisfied than that predicted for the Base Case and Case 1.

Table 6: Energy and GHG emissions improvement from Base Case

Case	Overall temperature range (°C)	HVAC operational improvement from Base Case		Total building operational improvement from Base Case	
		Energy	GHG	Energy	GHG
Base	21.0 – 24.0	-	-	-	-
1	21.0 – 26.0	16.8%	18.3%	6.5%	6.7%
2	20.0 – 27.0	30.5%	26.8%	11.8%	10.0%

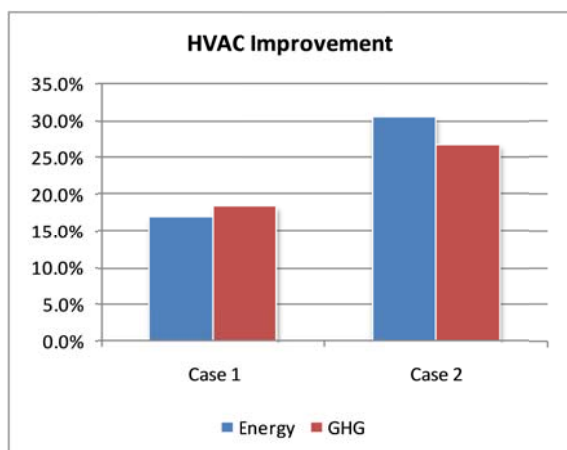


Figure 3: HVAC improvement in energy and greenhouse gas emissions for Case 1 and Case 2 compared to the Base Case

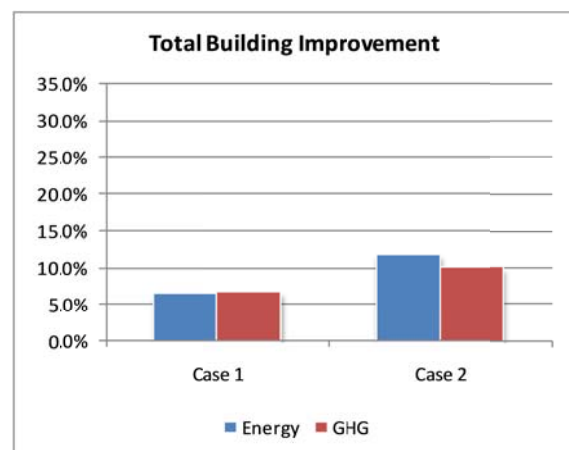


Figure 4: Total building improvement in energy and greenhouse gas emissions for Case 1 and Case 2 compared to the Base Case

## **RMIT SAB Academic Office Spaces**

The aim of the computational thermal modelling of RMIT SAB Academic office spaces was to investigate the operational energy consumption of the facility when the operational temperature range is widened from the typical 21 – 24°C to 20 – 26°C, whilst satisfying the Green Star thermal comfort criteria of achieving a PMV between -1 and +1 for 98 per cent of building operational hours.

Assessment of the thermal comfort in the academic office space from the computer simulation showed that the percentage of time where the target PMV was achieved reduced by only 0.1 per cent, from 99.9 per cent to 99.8 per cent, when the operational temperature range was extended from 21 – 24°C to 20 – 26°C. Both cases achieve the 98 per cent of hours comfort criteria, satisfying the Green Star thermal comfort requirements.

The simulations undertaken showed an improvement in energy and greenhouse gas emissions across the total building operation of 9.0 per cent and 7.0 per cent, respectively, from the 21 – 24°C case compared to the 20 – 26°C case. Where considering just the building's HVAC system operational energy consumption, the reduction for the elevated temperature band was 15 per cent.

Note that the generic model was based on BCA 2010 and the Case 2 temperature range of 20 – 27°C was equivalent to a PMV range of -1 to +1. RMIT SAB targeted the same PMV range as the generic model, however, had a temperature range of 20 – 26°C. This variation in temperature is a function of a less stringent earlier version of the BCA being applied to SAB. The 2010 version of the BCA stipulates high performance facade requirements which, as outlined in Section 2.2, reduce the impact of the mean radiant temperature, a key influence in overall thermal comfort.

## **RMIT SAB Portal Spaces**

As discussed in Section 3.0, the portal spaces utilise non-conventional mechanical system components as part of a mixed mode operation where the space can run in either a natural ventilation or full air conditioned mode.

The key design principle for this style of system is to maximise the number of hours where the space can operate in natural ventilation mode. This form of HVAC operation will be the most energy efficient as all mechanical equipment serving the space will be controlled to shutdown as automated openable windows at high and low level naturally ventilates the space. The hours of natural ventilation operating are maximised when the operational temperature range is widened and internal gains within the space are minimised.

An analysis of the Melbourne TRY weather data indicates that between the hours of 8:00 and 18:00 considering a six day week, 7 per cent of the time the external ambient temperature is between the internal space temperature range of 21 – 24°C, compared to 16 per cent of time for a temperature range of 20 – 26°C. This assessment of the mixed mode system's effectiveness assumes that where the external space temperature is within the internal temperature range there is opportunity to naturally ventilate the internal space. Based on this assumption, the elevated temperature range of 20 – 26°C compared to 21 – 24°C provides an approximate 130 per cent improvement in the number of hours that the mixed mode system can run in passive operation.

Although the elevated temperature band indicates significant opportunity where external conditions are favourable and opportunity exists to operate the portals in natural ventilation, the temperature band can be further extended with the operation of ceiling/wall fans or evaporative cooling. Figure 5 and Figure 6 illustrate the relationship between PMV, air temperature and relative humidity following the same design assumptions on clothing levels, metabolic rate and correlation between air and mean radiant temperature as outlined in Section 2.3.

With the implementation of ceiling/wall fans, the velocity of the air increases in the space, providing opportunity to maintain thermal comfort criteria by elevating the upper temperature limit from 26°C



to 28°C. Figure 5 presents this concept where the air speed increases from the typical 0.2 m/s to greater than 0.8 m/s.

With the upper temperature limit set at 28°C, the potential hours where a natural ventilation mode can run with the fans in operation was calculated at 20 per cent of total hours based on an assessment of the Melbourne TRY weather data to maintain the same level of thermal comfort of -1 to +1 PMV. It should be noted that the operation of the portal spaces in a natural ventilation mode will require continuous monitoring of the outdoor air ventilation rates via carbon dioxide sensors to ensure sufficient outdoor air is delivered to the space. With the operation of the ceiling/wall fans, there is potential that air movement may disrupt air buoyancy driving ventilation – something that will be closely monitored during passive system operation.

Where the space is operating at the lower temperature limit of 20°C, the operation of ceiling fans has a negative impact on the thermal comfort in the space as localised draughts create an uncomfortable environment for occupants. Typically, mechanical systems are designed to ensure air movement, especially in periods of heating, does not exceed 0.2 m/s. CIBSE (2006) notes that air speeds greater than about 0.3 m/s are probably unacceptable except in naturally ventilated buildings in summer when high air speeds may be desirable for their cooling effect.

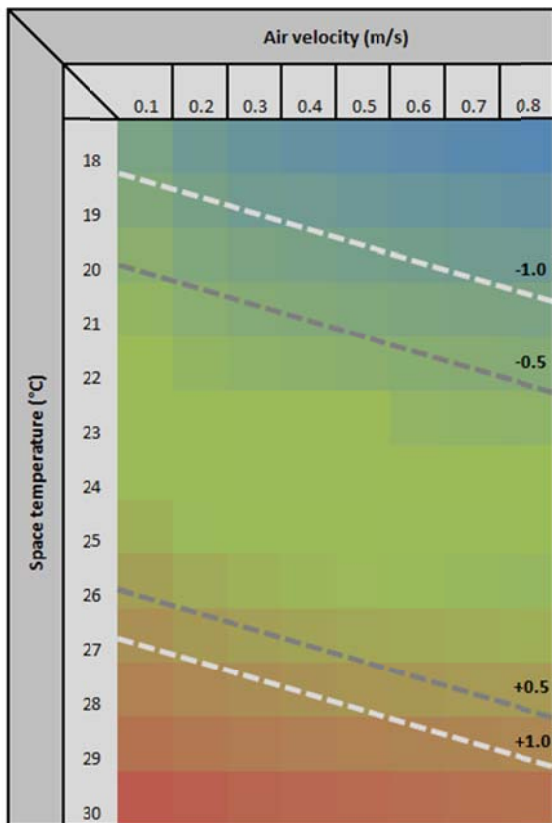


Figure 5 - Predicted mean vote contour plot calculated based on varying air speed and space temperature

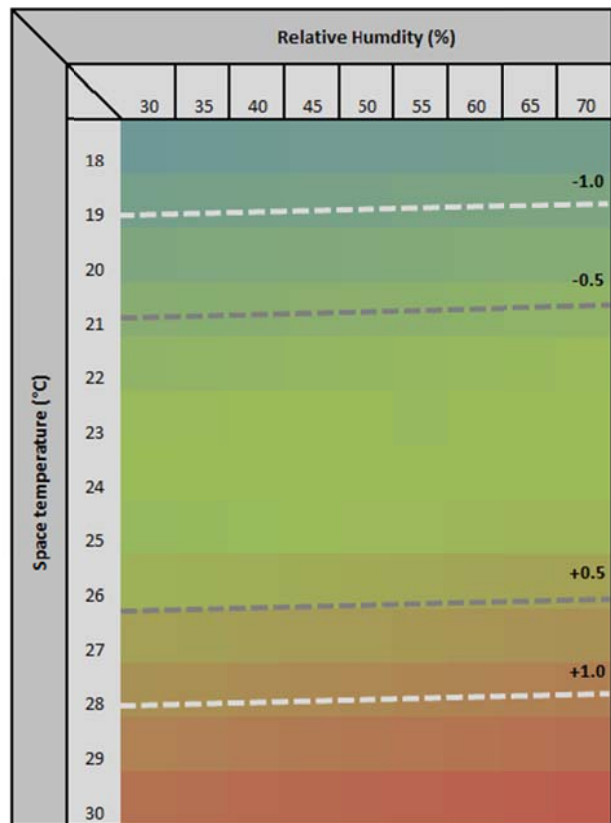
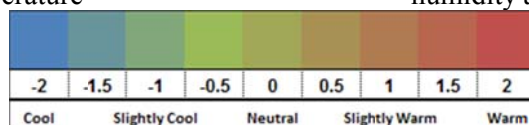


Figure 6 - Predicted mean vote contour plot calculated based on varying relative humidity and space temperature



The PMV scale was developed for air conditioned buildings. When considering truly naturally ventilated spaces and not spaces that have mixed mode operation, the ASHRAE (2004) standard should be adopted where an adaptive thermal comfort scale has been developed that provides a

correlation between internal space operative temperatures and mean monthly outdoor air temperatures.

During summer periods in Melbourne, it is not uncommon to have days where the external relative humidity is less than 35 per cent and the external air temperature is greater than 28°C. An assessment of the TRY weather data indicates that through the summer months of December to February there are approximately 120 hours where the relative humidity is less than 35 per cent and air temperature greater than 28°C during the hours of 8:00 to 18:00, six days a week. These hours provide opportunity to implement evaporative cooling as a mechanism for conditioning the space through a system that consumes minimal energy consumption. The quantifiable energy benefit of an evaporative cooling system was not completed as part of this analysis due to limitations in the modelling process. This concept, although enabling the space to hold an upper temperature range for a greater period of time, does not allow the upper space temperature band to widen as was the case with the ceiling/walls fans described above.

Figure 6 presents a correlation between PMV, relative humidity and space temperature. In accordance with CIBSE (2006), humidity has little effect on feelings of warmth unless the skin is damp with sweat. It is only where the temperature in the space raises to above approximately 28°C that moisture in the air may become apparent and impact thermal comfort. The true benefit of the evaporative cooling is the humidification of air in natural ventilation mode.

## **CONCLUSION**

Thermal comfort is a complex measure that not only considers clothing levels and metabolic rate, but also the temperature, humidity and air speed within the environment a person occupies. In Australia, no mandatory requirements are set for temperature or thermal comfort criteria within education or office spaces. The Green Star thermal comfort requirements provide guidance for designers of new buildings striving to achieve a high indoor environment quality for building occupants.

The computer thermal modelling completed for the generic and RMIT SAB case studies showed that a high level of thermal comfort of PMV -1 to +1, equivalent to 75 per cent of people satisfied within the space can be achieved by widening the internal space air temperature. For RMIT SAB, the modelling compared adjusting the temperature range from 21 – 24°C to 20 – 26°C, and showed an improvement in total operational energy consumption of approximately 9 per cent and greenhouse gas emissions of 7 per cent. This improvement in operational efficiency with the HVAC systems operating at an elevated temperature band showed a negligible reduction in the number of hours that the target thermal comfort PMV range could be satisfied through the year.

The analysis of the RMIT SAB portals' non-standard mechanical systems highlighted improvements of between 15 per cent and 20 per cent in the number of hours of natural ventilation mode operation compared to a fully air conditioned system operating at a temperature range of 20 – 26°C. This improvement was shown through simulation to not compromise the thermal comfort target.

Further research is required to understand the relationship between radiant temperature and air temperature within an internal space in more detail. This research would consider the implementation active radiant systems such as in slab heating or chilled ceilings to maximise thermal comfort and provide improved overall building energy efficiency. This assessment would need to consider a more adaptable relationship than simply the air temperature range being based on the radiant temperature equalling the internal air temperature where benefits of these HVAC systems are radiant heating and cooling capacity.

## **ACKNOWLEDGEMENTS**

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# **FUTURE DIRECTIONS IN COURSE QUALITY ASSURANCE**

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## **ABSTRACT**

The Course Quality Assurance System at Queensland University of Technology (QUT) has as its centrepiece an exemplar of data visualisation known as the Individual Course Report. This report provides every course coordinator with an annual snapshot of their performance data evaluated against QUT and national benchmarks. In this article, the impact of the Individual Course Report is explored through the case study of one undergraduate course identified as underperforming. The case study features an innovative, ethnographic approach to working with course teams and highlights the importance of context, collaboration and appropriate support in creating evidence-based action plans for course improvement.

Keywords: quality assurance, data visualisation, ethnographic evaluation, cultural change.

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## INTRODUCTION

The vision of course quality at Queensland University of Technology (QUT) is simple. First, a course should be viable. Second, students should experience a positive learning environment during their enrolment in a course. Third, a course should have positive outcomes for completing students and finally, these three elements should be monitored annually. This essential definition of quality remains true despite the varying contexts of different discipline areas and course types. Please note that at QUT *course* refers to the degree or award e.g. Bachelor of Law, while a *unit* refers to a subject studied within that award e.g. Legal Foundations A.

Like other universities, in the last decade QUT has experienced an exponential growth in the variety and density of data that can be used to describe course performance in the areas of viability, student experience and course outcomes. With over 350 courses and majors and around 40,000 enrolled students, this quantity of constantly changing information has become difficult to navigate. Increasingly, academic and professional staff time has been spent gathering data from disparate sources, attempting to consolidate and summarise it to meet national reporting agendas, with little capacity left over for interpretation or meaningful action.

Faced with this challenge, QUT's Office of Teaching Quality Curriculum Review and Improvement Team (CRI) and QUT's Corporate Reporting and Analysis team (QCR) joined forces to take a fresh approach to visualising and sharing course performance data. The goal was to engage academic teams in evidence-based action planning for course improvement while at the same time providing a means for reporting performance at faculty and whole-of-university levels. The early results have been encouraging. The story begins with Course Quality System.

## THE COURSE QUALITY SYSTEM AT QUT

At QUT, four main reporting elements make up the annual cycle of Course Quality Assurance.

**1. The Individual Course Report (ICR).** This report is a three-page data snapshot of the performance of each course and major, produced in January each year. At this time, courses that are deemed to be underperforming are identified. Between January and March, all Course Coordinators are required to view and briefly comment on their Individual Course Reports, listing their action plans for the coming year.

**2. The Consolidated Courses Performance Report (CCPR).** After March, the Individual Course Reports for each course and major are consolidated into a faculty and university wide report. Released in May, the Consolidated Courses Performance Report amalgamates data and analysis for consideration by key governance committees. Advances in data management and reporting processes have enabled what was previously a 100-page document to be presented as a concise 12-page report.

**3. The Underperforming Courses Status Update (UCSU).** In July, those responsible for courses that were deemed to be underperforming are asked to fulfil a second reporting requirement – a brief status update on the action plans they identified at the beginning of the year.

**4. The Strategic Faculty Courses Update (SFCU).** In September, faculties are required to provide a brief outline of the anticipated strategic direction of their academic programmes for the coming year, noting any changes to curriculum that are planned and identifying key stakeholders.

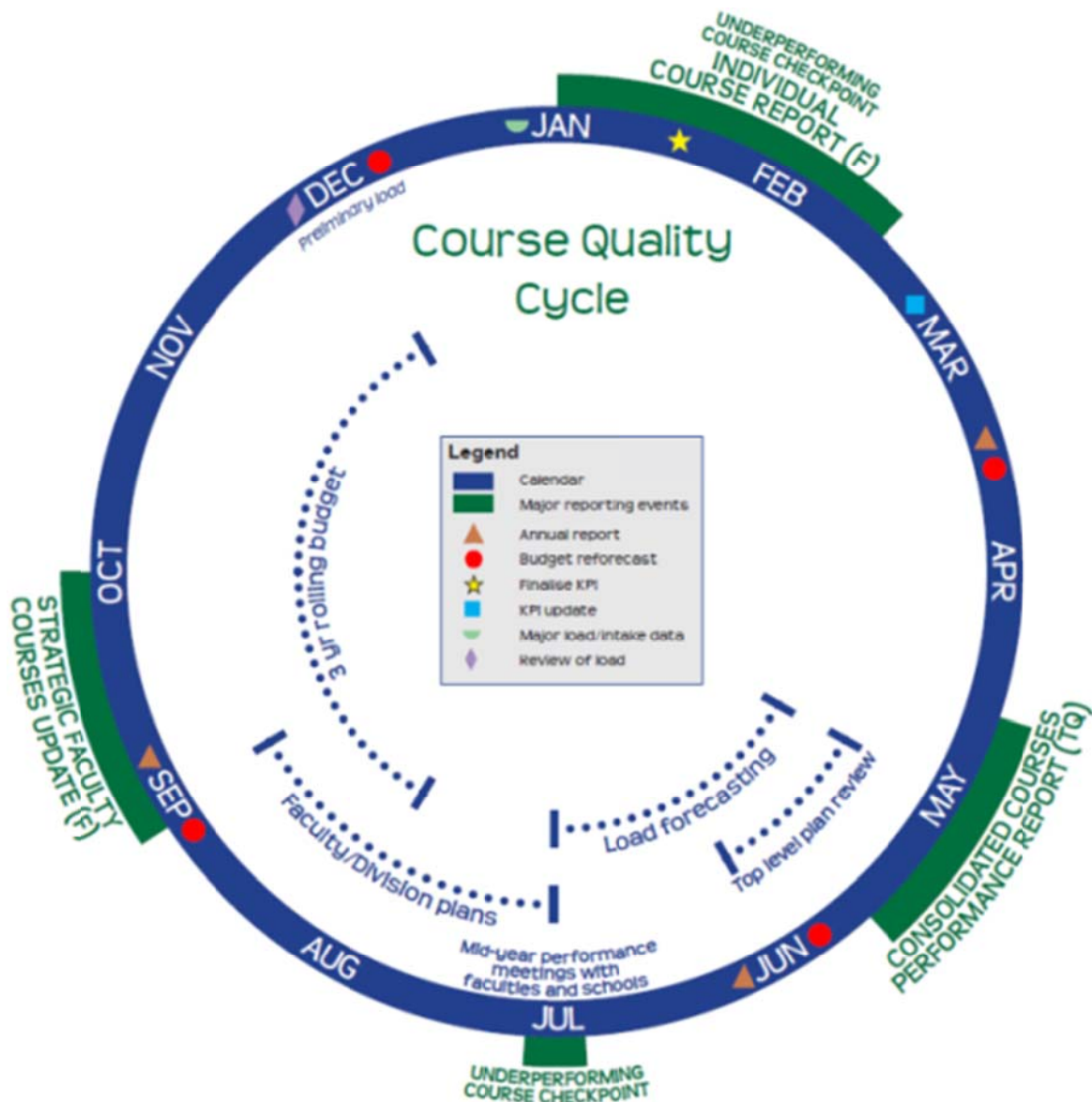


Figure 1: The cyclic map of course quality assurance activities at QUT.

This article particularly focuses on the Individual Course Report and presents a case study of how one course team has been working within the Course Quality Cycle. For further information on other components of the Course Quality System, refer to Towers, Alderman, Nielsen, & McLean (2010).

### **The Individual Course Report (ICR) – the key element in the Course Quality Cycle.**

The Individual Course Report is a key element in the Course Quality Assurance Cycle. As outlined in the previous section, this report is an annual snapshot of course performance data provided online to course coordinators in a concise three-page format (see Figure 2). The snapshot pulls together quantitative data from a variety of sources, categorising them into the three core dimensions of course quality:

- Course viability (e.g. course enrolments, Year 12 cut off score for entry to course, first preferences ratios);
- Learning environments (e.g. attrition, unit progression rates, student experience surveys); and

- Learning outcome measures (e.g. Course Experience Questionnaire, Graduate Destination Survey, course completions).



Figure 2: An ICR for a hypothetical course at QUT.

The online snapshot includes text fields for Course Coordinators to make observations about their data, provide contextual details and outline actions for the coming year. Each course is also attributed an Overall Performance Score. The performance metric uses 11 of the 28 data sets available in the Individual Course Report to identify each course on a sliding scale, from underperforming to high-performing. Courses identified as underperforming warrant further scrutiny and are required to provide a status update on their action plans, and qualify for more intense analysis and support from the Curriculum Review and Improvement team. High-performing courses provide exemplary cases of best practice in specific disciplines. The Overall Performance Score and identification of underperforming courses is specifically designed to facilitate risk management at Course, Faculty and University levels.



Figure 3: The sliding scale provided in the header of each ICR, showing the course's Overall Performance Score.

### Obstacles to Academic Staff Engagement in the Course Quality Cycle

Despite an overall positive response from academic and professional staff to the online convenience of the Individual Course Report snapshot, a variety of reasons is used to resist the changes brought about by the Course Quality process. Offence at having performance made visible; outcry at the label 'underperforming'; disagreement with the data – for example, the use of student opinion surveys as a measure of the learning environment; the timing of course reporting deadlines and dismay at being asked to do 'one more' administrative task all factor in negative responses. These manifestations of resistance are not uncommon to organisations in general (Bruckman, 2008) or to the higher education sector in particular (Diamond, 2006). Despite this, the Curriculum Review and Improvement team has earned a positive reputation for engaging the course teams of underperforming courses with their data and supporting them in evidence-based action planning.



## THE COURSE ENVIRONMENT PORTFOLIO – AN OUTLINE OF THE PROCESS

One of the keys to the team’s success has been their willingness to recognise that, although the Individual Course Report is an impressive breakthrough in data communication, it can only ever be a conversation starter. It provides a valuable outline of course performance but will always lack the ‘ethnographic colour’ of the real life of a course. Being willing to listen to the stories and experiences of the course team and document this ‘ethnographic colour’ has shown the significance of the unique academic, industry, and political environments from which a course emerges and has highlighted the influence of this environment on how a course team functions; how they understand change and see innovative solutions.

This holistic and ‘conversational’ approach to looking at the life of a course has been undertaken systematically. A mapping tool called the ‘Course Environment Portfolio’ is used to focus course team discussions and enable the Curriculum Review and Improvement team facilitators to track the collection of a broad range of qualitative and quantitative data. This tool is based on a Quality Achievement Matrix that was first applied in the Australian vocational education sector (Australian Quality Council, 2000) and adapted by the CRI team to better suit the university environment and QUT context.

	1. Leadership	Score	2. Data Analysis	Score	3. Stakeholders	Score	4. Staff	Score	5. Students	Score	6. Marketing and Communication	Score	7. Course	Score
Outcomes	OUTCOME: Leadership in Course Coordination is systemic, recognised and valued		OUTCOME: Evidence based approaches to annual course planning are valued, integrated and rigorous		OUTCOME: Industry, Professional body and QUT stakeholder involvement is valued, monitored and regularly reviewed		OUTCOME: Staff and their industry, academic and administrative expertise are valued, acknowledged and supported		OUTCOME: The student experience is valued, monitored and supported		OUTCOME: Marketing and communications are valued, effective and evaluated		OUTCOME: Curriculum design and delivery is aligned, holistic and has ongoing momentum	
Excellence	1.5 Course leadership contributes to the alignment of Faculty/QUT T&L plans and policy		2.5 Data analysis outcomes align and support strategic planning for the course		3.5 The course team actively seeks benchmarking opportunities with stakeholders		4.5 Staff discipline area and industry expertise is current		5.5 Senior students are celebrated and supported in their transition forwards		6.5 Benchmarking activities are regularly pursued		7.5 Benchmarking activities are regularly pursued to inform course planning and innovation	
	1.4 Leadership creates a positive culture that provides opportunities for development and values and rewards contributions		2.4 Institutional expertise is sought in the validation and improvement of data gathering and analysis		3.4 Annual stakeholder feedback informs strategic direction and course innovation		4.4 Staff succession planning and risk management strategies are effective and ongoing		5.4 Students, including alumni, are represented in a range of course forums		6.4 Institutional expertise is sought to extend and monitor effectiveness of communication approaches		7.4 The curriculum structure supports the course purpose, direction and desired outcomes	
	1.3 Course team members contribute their expertise to decision making		2.3 All forms of stakeholder and student feedback are considered in planning and are used in an ethical manner		3.3 Course team members are represented on professional committees, at conferences and in research projects		4.3 Staff are actively involved in T&L development through training, awards, grant applications, mentoring & project leadership		5.3 Student diversity and learning needs are recognised, supported and evaluated		6.3 Marketing and communication plans are linked to the priority action areas identified for the course		7.3 Assessment is mapped in detail and evaluated at whole of course, year and major levels	
Foundation	1.2 The course has a clear philosophy, purpose and direction		2.2 A gap analysis is undertaken to determine where further data about the course is needed		3.2 Regular opportunities for stakeholder interactions are evaluated and new opportunities are actively sought		4.2 Orientation of staff to the course environment is planned, timely and effective		5.2 Student entry pathways are aligned with transition and support strategies		6.2 Media and communication items are mapped, monitored and evaluated		7.2 Graduate capabilities, course objectives, teaching & assessment are mapped, aligned and monitored	
	1.1 The course has an active course team and effectively structured meetings		2.1 The ICR, Course Quality Cycle and policy informs the course team in planning activities		3.1 Stakeholders have defined roles and responsibilities		4.1 Recruitment of staff is rigorous and systematic		5.1 Students are provided with effective course advice and academic support		6.1 Strengths and weaknesses are identified, communication standards established and regularly reviewed		7.1 Delivery elements (eg mode, timetable, space allocation) support desired course outcomes	

**0 Points** - no evidence of activity  
**1 Point** - some activity  
**2 Points** - activity  
**3 Points** - outstanding activity

Figure 4: The Course Environment Portfolio used to guide curriculum conversations and data collection

The Course Environment Portfolio features seven key continua. Each continuum reflects a priority area of course management such as Leadership, Data Analysis or Marketing and Communications. For each continuum, five levels of achievement are described, from basic performance to excellence. For example, a basic expectation for the Leadership continuum is that *‘the course has an active course team and effectively structured meetings’* while excellence in leadership requires that *‘activities contribute to the alignment of Faculty/QUT Teaching and Learning Plans and policies.’*

Over a series of conversations, data, artefacts and examples are collected and logged against each continuum and level of achievement. Items might include meeting minutes, course advertising materials, staff email announcements, staff development attendance lists, student focus group transcripts, alumni event calendars, records of co-curricula student activities and a variety of other serendipitous finds. At times, the investigation trail is directed by issues that emerge along the way and if possible the Curriculum Review and Improvement team uses their expertise to seek and analyse further data from university systems on behalf of the course team.

At the end of the process, after all available data has been logged, each cell in each of the seven continuums is evaluated and given a score between 0 (for no evidence of activity) to 3 (for outstanding activity). The resulting Portfolio chart is shared with the course team. Gaps in the continua are immediately obvious and strengths and weaknesses identified. Outmoded assumptions, new ideas, possible solutions, areas that need further investigation, and priorities are all discussed until four main actions are decided upon for the coming year. This four-point action plan, based on a wide range of evidence and robust, longitudinal participation from the course team is the final goal of the Course Environment Portfolio and ideally represents a cultural shift in the life of the course that translates into positive performance outcomes.

While literature on the use of ethnographic data in university management, such as that gathered for the Course Environment Portfolio, is uncommon in Australia, it is not a new approach. Fetterman (1990) began using the term 'ethnographic auditing' to describe a number of projects conducted at Stanford University and other higher education institutions during the 1980s that emphasised the importance of the roles of culture, values and the physical environment in education management. By the mid 1990s the term 'empowerment evaluation' replaced the notion of auditing and a stronger focus on collaboration, supporting stakeholders in self-evaluation and promoting the continued use of evaluation principles in daily practice was evident (Fetterman 1998; Fetterman & Wandersman 2007).

The use of the Course Environment Portfolio aligns strongly with Empowerment Evaluation principles and with Fetterman's main goal of fostering improvement. From its inception, the focus of QUT's Course Quality Assurance System has been on identifying risks and areas for improvement. The Individual Course Report has been designed to 'empower' course coordinators and other university stakeholders by easing access to data. The requirement for Course Coordinators to log their action-plans and status updates at key points in the annual quality cycle emphasises the role of stakeholder self-determination and the use of the Course Environment Portfolio highlights a collaborative and capacity-building approach that focuses on self-evaluation, goal setting and the continued use of evaluation principles. Antin (2005) has insightfully described Empowerment evaluation as 'straddling the boundaries between evaluation and training' (p23) and for the Curriculum Review and Improvement Team this exactly explains our remit in regards to those courses identified as underperforming.

## **A CASE IN POINT - THE BACHELOR OF JUSTICE**

As part of QUT's Course Quality cycle, the Bachelor of Justice came onto the radar of the Curriculum Review and Improvement team in 2009. The Individual Course Report (ICR) measured it as underperforming with five negative flags and only one positive flag, resulting in a score of -4, one of the lowest scores in the university. The flags showed a range of problems that had an impact on all three categories of quality assurance indicators - viability, student experience and course outcomes. Both enrolments and first preferences had been dropping over the last three years, showing that the course had lost popularity with prospective students. Fewer first preferences also increased the risk of migration to other courses as students try to manoeuvre into their first choice after enrolment. Both the attrition rates of commencing students and total attrition over the whole duration of the course were over the university's recommended outer limit of 25 per cent. Students that were staying in the course experienced high failure rates in a number of units and for those students that completed the degree, the percentage that continued to full time study was significantly below the national average.

There were also negative indicators around two of the scales from the national Course Experience Questionnaire where the Generic Teaching Scale and the Overall Satisfaction Index both rated more than 15 per cent below the national average for courses from other institutions in the same Broad Field of Education.

### **Course Status Within the Faculty**

The Bachelor of Justice has close to 500 students and provides an important service to the justice professions and the wider community. It is the flagship course of the School of Justice located within the Faculty of Law at QUT. In 1991, after the Fitzgerald inquiry into police misconduct, the School was established to fulfil the recommendation that all police recruits undertake tertiary study before being sworn in. The Bachelor of Justice was initially established for this purpose but since then has expanded to support students entering a wide range of other vocations in the criminal justice system. These include careers in national intelligence and security, crime policy and prevention, national defence and protective services, corrective services, juvenile justice and the public service in areas of policy and legislation advice.

Despite performing this important function, the Bachelor of Justice has often been perceived as the ‘poor cousin’ to traditional law degrees. The Bachelor of Laws at QUT is more exclusive with a Year 12 cut off score for entry to the course of 6, whereas the Bachelor of Justice requires a cut off score of 13. Consequently, poorer academic skills and lower career aspirations are commonly attributed to Justice students. The Law school is approximately three times larger than the School of Justice with 35 more non-sessional staff, giving Justice less representation on committees and less impressive outcomes in research and grant funding. While the faculty’s student body is listed as being the ‘*Law and Justice Students’ Association*’, it is common knowledge that few Justice students attend events with the assumption being they can’t afford to pay the fees. This cultural environment of low self-esteem and poor performance for Justice was made more difficult by the fact that the School of Justice had been without a head of school for an extended period, resulting in uncertain leadership for the degree.

### **Starting the Course Environment Portfolio Conversation**

The opportune time for the Curriculum Review and Improvement team to enter this course environment came when a new head of school for the School of Justice was appointed. By default, the head would also be the Course Coordinator for the Bachelor of Justice. As a senior academic new to the QUT environment, the head of school welcomed our help in unpacking the negative course performance indicators and taking a more holistic approach to understanding the life of the Bachelor of Justice through the use of the Course Environment Portfolio (Alderman, Duncan & Quadrelli 2009). A course team of 8 was nominated from within the school that included representative academic staff from first year core units and majors, key administrative staff and the Head of School and also included the Faculty’s Learning and Teaching Developer who would work more closely with us as an ‘insider’ on some aspects of data gathering.

### **The Meeting Pattern**

Once the course team was confirmed, an initial meeting was conducted to introduce the Portfolio process and establish the basic willingness of members to participate. Over the next three months, a series of more than 20 meetings, data discussions and curriculum conversations ensued. The meetings followed a pattern whereby the Curriculum Review and Improvement team would present data to the course team, engage them in lively conversation and document any assumptions emerging on the day. The CRI team would then work independently to gather further data from university systems to validate or invalidate those assumptions. Meanwhile the Learning and Teaching Developer would assist in gathering artefacts and other qualitative evidence from the course environment before we all returned to the course team with our new findings. While cooperation was sought from the course

team, care was taken not to increase their workload. The bulk of data preparation occurred behind the scenes. This cycle of moving more deeply into the available data and lived experience of the stakeholders and then presenting back to the course team was repeated four times before the Portfolio mapping process was complete.

### **Assumptions and Evidence**

The first meeting with the course team was also the first time the group had come together as a whole. Previously, isolated pockets of activity had been the norm with a focus on individual units rather than a whole-of-course approach. An air of discouragement and frustration was evident as the team viewed their flagging red Individual Course Report and low performance score. They had two reigning assumptions about why their course was performing poorly. Firstly, they assumed course attrition was high because many students used the Bachelor of Justice, with its lower OP, as a pathway to Law. Secondly, they assumed that other students left because they could not handle the academic challenge of university study. In particular, they felt that students who had TAFE entry into the course (approximately 30 per cent of enrolments), were those that most struggled with university systems and practices, having been given credit for introductory units. Since the idea of ‘dumbing down’ the curriculum was not considered an option, alternative plans for course improvement that might address these problems remained limited.

It is not easy for course teams to move past their assumptions without more in-depth analysis of available data. Team members are not employed as business analysts. They are discipline area experts, teachers and academic researchers. Deeper levels of student data are not easy to access from university systems or simple to analyse, even for the experienced. The attrition formula used to calculate whether a student is counted as continuing or exiting is complex. In short, it was imperative that the course team received extra support from the Curriculum Review and Improvement team to examine the data in more detail. Over the next few weeks, the Curriculum Review and Improvement team retrieved, analysed and charted 4 years of data showing students’ movement throughout the course from 2005 to 2008 inclusive. Data were gathered about students’ entry standing, grade point average, point of exit from the course and destination if that was to another course within QUT.

When the Curriculum Review and Improvement team met with the course team again, two main findings were charted and discussed. First, it was important to make clear how the national formula for attrition is calculated. If a student leaves the institution altogether, that is counted as attrition. However, if a student stays at the institution and transfers to a course in a different Broad Field of Education – for example from the Bachelor of Justice (Field = Society and Culture) to the Bachelor of Nursing (Field = Health) –that is also counted as attrition. If a student transfers between courses in the same Broad Field – for example, from the Bachelor of Justice to the Bachelor of Law, it is not counted as attrition. Therefore, the assumption that high attrition was due to students using the course as a pathway to Law was incorrect because Law and Justice are in the same Field. Not only that, the detailed analysis revealed that a much lower proportion of students was transferring to Law than initially thought. Over a four-year period, only 8 per cent of students who enrolled in the Bachelor of Justice transferred to a Law degree at QUT whereas 20 per cent had left QUT altogether and another 2 per cent had transferred to a course in a different Broad Field of Education.

Second, when looking at the academic performance data of the students who had exited the Bachelor of Justice, it was found that 61 per cent of students that left the course had a passing Grade Point Average (GPA). Therefore, the assumption that students left because they were academically challenged was also incorrect. Furthermore, when those students who had a ‘technical and further education’ (TAFE) entry to the course were tracked, it was found that 64 per cent graduated from the course compared to only 21 per cent of standard entry students. Of those TAFE entry students who did not complete, half still had a passing GPA. Therefore, in contrast to the reigning assumption, TAFE entry students were by far the most successful cohort in the Bachelor of Justice. At this point, the course team could only speculate that if their students were not using the course as a pathway to Law at QUT and academic challenge was not their reason for leaving, then students must have been

moving to courses at other universities or the Police Academy. Data on these matters were not held within QUT's systems and therefore the speculation was difficult to validate.

Meanwhile other documents and artefacts pertaining to the life of the course were also being collected. These included marketing materials used at Tertiary Studies Expos, plans for a new online course portal, maps of the degree structure, School of Justice information booklets, staff newsletters, university policy and approval documents, curriculum change documents, and careers booklets. All of these contributed to a clearer picture of course activity. Qualitative data such as student survey comments were thematically analysed by the Curriculum Review and Improvement team at a course level and at a unit level for some problem subjects.

During the three month period of creating the Course Environment Portfolio, new activities also took place as the head of school settled into her role and staff began to rally together. These activities were included in the portfolio. For example, the Head of School appeared in a radio interview on the topical issue of 'girls and cyber-bullying'. Media around Australia later picked up the interview and these reports were added to the Portfolio. Motivated by questions arising from the Curriculum Review and Improvement data analysis, a School of Justice research assistant was tasked with planning a telephone survey of students who had left the course in order to establish their reasons for leaving. It was hoped to confirm if they had moved to the Police Academy or to another university. These survey drafts and pilot results were collected. When a one-day retreat was scheduled for all School of Justice academics, the Curriculum Review and Improvement team was invited to present data collected so far, providing yet another opportunity to gather documents to include in the Portfolio.

### **Evaluating and Summarising the Course Environment Portfolio**

At the end of the three-month period, the time came to evaluate the Portfolio and chart the documents collected against each continuum and level of proficiency. The Curriculum Review and Improvement Team undertook this task with the help of the Faculty of Law's Learning and Teaching Developer. Lively discussions took place as we handled artefacts and data, shared our experiences and insights and finally attributed each item to a specific place on the chart, scoring and colour coding the chart accordingly. The process helped consolidate and summarise a wide range of elements into a single picture and made the strengths and weaknesses of course activities immediately visible. This final picture of the life of the course was then presented to the head of school and the course team.

The Portfolio evaluation revealed that although some excellent exemplars of course activity had been noted, their impact had been patchy and they had not addressed underlying issues. Whole-of-course goals that would unite efforts and place activities in context had been lacking. In particular, in the *Leadership* continuum it was noted that the course did not require industry accreditation and therefore lacked regular feedback and review from a formal panel of industry stakeholders. In the *Marketing and Communication* continuum it could be seen that while some quality student communications had been produced over the years, such as expo flyers and course handbooks, no master list of these items existed. Originals were not easy to locate and development of new items did not build on past achievements. A vision of what a good suite of communication media might look like and a structure for managing these various documents was missing. A third problem area could be seen in the *Students* continuum where the use of student support processes and counselling was neglected and awareness of the real needs of cohorts within the Justice course was low.

By far, the most exciting time is at the end of the Portfolio process. Standing back and viewing the whole course environment for the first time enables priorities and directions to become clear and effective action planning to crystallise. During these final discussions, the course team identified four main areas of action. First, it was decided that an industry advisory panel would be formed to lift the profile of the course, strengthen connection with the 'real world' and inform future curriculum developments. Second, a course mission statement would be developed to unite stakeholders and create a sense of consistency throughout course communications. Third, a communication calendar would be created to encourage stakeholders to be more involved in course events and to contribute

regularly through well-advertised opportunities. Finally, further data and stakeholder feedback would be systematically sought to answer some outstanding questions from the data analysis so far in preparation for curriculum review.

After the results of the Portfolio were presented to the course team, it was time for the Curriculum Review and Improvement team to withdraw their intensive focus and leave the Bachelor of Justice academic and administrative staff to get on with the job of realising their new found vision. From time to time, the Curriculum Review and Improvement team was invited to return to the School of Justice to attend special meetings and functions where we could observe for ourselves some of the progress being made - a testament to the positive relationships we had developed.

### **Observing Cultural Change**

The Curriculum Review and Improvement team looks for three main areas of change after conducting the Course Environment Portfolio process for an underperforming course. First, it wants to see changes in the culture of the course team. Second, it wants to see changes in the student experience and third, it wants to see changes in the course's performance as recorded on the Individual Course Report. As well, the team expects changes to occur largely in that order. In other words, without a change in course team culture, change in the student experience is unlikely and therefore improvement in course performance data is unlikely.

For the Bachelor of Justice course team, positive changes in culture started to show during the Portfolio process and were clearly observable in final meetings and in later meetings and functions to which the Curriculum Review and Improvement team was invited. At the final meetings, it was evident that clear roles and responsibilities had been established. There was high ownership of the action plans by team members and a positive feeling about the future. Actions were seen as practical, achievable and worthwhile and were already underway. People trusted the directions chosen and felt empowered to move forward. Extra activities were beginning to naturally collect around identified priorities adding to the momentum.

After the final Portfolio meetings, the head of school organised an end-of-year party for the school, which was fully attended by the course team and the Executive Dean of the Faculty of Law – a show of the improving status of the School within the Faculty. At the Graduation Ceremony in December that year, a record number of academic staff attended to celebrate the achievements of Bachelor of Justice students, a significant improvement on staff attendance figures from previous years. Regular and well-organised course team meetings had continued into the New Year in the Curriculum Review and Improvement team's absence and action plans were updated as progress was made. Consultations continued with outside experts such as the Office of Teaching Quality's Director of First Year Experience who advised on orientation programs. Course Team members had attended university-wide staff development workshops on course design for 'real world' learning and the University's Curriculum Approval team offered high praise regarding the course's preparation for review and their use of evidence in curriculum design decisions. The Blackboard online portal for the course was launched and had a record 4,000 hits with the head of school being invited to speak at university forums about the success of this online approach to cohort building and communication.

By April of the year following the Team's intervention, when comments were required for the 2010 Individual Course Report, the head of school was able to show the high level of involvement of the course team, listing nine different activities that were underway:

1. Early intervention strategy involving the SUCCESS PROGRAMME.
2. A new first year unit to address lack of policing content in first year.
3. Establishment of Industry Advisory Group of Justice Professionals.
4. Enhanced social Engagement with students through new Justice Students Community Site, creation of Student Engagement working party.
5. Enhanced real world learning opportunities in core units.

6. Promotion of Student support mechanisms and employment of a Support Officer.
7. Establishment of Justice Course Review Team (with OTQ) to explore further enhancements.
8. Enhancing student interaction with academic staff.
9. Enhanced commitment to student service through new student inquiries system within 24-48 hour turnaround time.

The beginnings of change in the experience of students enrolled in the Bachelor of Justice were also observable. The popularity of the Justice Online community site, student participation in faculty activities, records of the involvement of the University's Student Success Programme with first year Justice students and use of the newly established student inquiry service in the School of Justice all indicate immediate and positive changes to their experience of the course environment.

However, to see these changes flow into more systematic course performance indicators such as attrition, student progression and Course Experience Questionnaire ratings, a longer time frame is needed. Since attrition is calculated by the March Census date of the following year, the results of improvements undertaken during 2010 will not be apparent until mid 2011 and will not appear as statistics on the Individual Course Report until 2012. Early changes at the unit level may be seen in the scores and comments resulting from the University's electronic Learning Experience Survey and pass/fail rates but these won't be evident as a whole until the release of the 2011 Individual Course Report. Changes in the Course Experience Questionnaire (CEQ) conducted with graduates will take even longer to appear with the 2012 results being the first opportunity for improvements in the whole-of-course to show.

## **CONCLUSION**

Data, such as those provided in the Individual Course Report, are an important conversation starter. However, course teams can benefit from further help in understanding the data as well as the culture in which they work if course performance figures are to translate into effective action planning within a Course Quality Assurance cycle. The Course Environment Portfolio, which promotes the use of evidence, systematic approaches to discussing data and recognition of the whole environment in which a course exists, is a useful tool for making this happen. It is true that the Portfolio process is intensive in both time and the quality of support, however, it can only be considered worthwhile for this course with over \$4 million in annual revenue and the lives and careers of 500 students at stake.

While the Individual Course Report was the starting point for intervention in this course, improvement in course performance data will not show immediately. It will take a minimum of two years until any related improvements begin to show in Individual Course Report indicators. However, changes in the course team culture were immediate and rewarding. This Course Environment Portfolio showed that leadership can quickly change from a 'putting out fires' approach to a grounded and systematic approach featuring a 'do-able' focused set of strategic priorities. Ad hoc course team meetings can shift to regular structured meetings at which team members have set roles and responsibilities and are fully engaged in collaboration and problem-solving. Academic and administrative staff can move from feeling overwhelmed, isolated and unable to move forward to feel that they are empowered to focus on key directions and able to communicate with others about their progress. Overall, the culture around the course team can change from underperforming and feeling like the 'poor cousin' to outstanding performance in course management with the capacity to circumvent problems as they arise. The dynamic and clear sense of course identity that results can only have a positive flow-on effect on the daily experience of staff and students.

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# **CULTURAL CHANGE THROUGH TECHNOLOGY-AN UNINTENDED CONSEQUENCE**

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## **ABSTRACT**

Intellectual capital is one of the most important assets an organisation has. Knowledge management aims to capture and leverage an organisation's knowledge, create new knowledge, increase collaboration and generate innovation. Information technology is an enabler, supporting knowledge management practices. The Faculty of Commerce at the University of Wollongong introduced SharePoint as its knowledge management tool. In doing so, the Faculty inadvertently experienced a dramatic shift in organisational culture from one where knowledge was tacit, private and protected to a more open culture where knowledge was made explicit, public, accessible and ordered. This shift occurred largely because of the social processes of teamwork and collaboration that were the basis of the implementation of SharePoint. This paper will show that with stakeholder engagement, communication and project management successful deployments of technology can create a culture of information sharing and partnership and generate an open environment.

Keywords: knowledge, technology, collaboration, change, culture.

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## **INTRODUCTION**

Intellectual capital is one of the most important assets an organisation has. The way in which this capital is managed is critical to organisational sustainability and longevity. Several authors state that knowledge management has emerged out of an increasingly and globally competitive climate that requires organisations to compete in real time, leveraging innovation, technological advantage and corporate knowledge to maintain position (Murphy, 2002, p. 18; Lawson & Samson, 2003, p. 2). In this climate, traditional approaches to the management of intellectual capital do not meet the challenges of efficiency, timeliness and knowledge dissemination (Asgarkhani, 2004, p. 32).

Many organisations have initiated knowledge management projects, and failure rates are estimated to be as high as 80 per cent (Payman, Jafari, & Fathian, 2005). Failure is attributable to the usual culprits of project management and change management failure, such as lack of leadership, lack of engagement and inadequate resourcing. In deciding to pursue a knowledge management project within the Faculty of Commerce at the University of Wollongong, management were acutely aware that central to success was the buy-in and support of staff. The methodology used centred on teamwork, collaboration and engagement and it was genuine commitment to these methods that provided the motivation for staff to embrace knowledge management and, quite unexpectedly, to move beyond it to create communities of learning.

This paper will provide the background to the knowledge management project, as well as outlining the process undertaken to implement the project and showing the outcomes.

## **BACKGROUND**

### **Knowledge Management**

Knowledge management aims to capture and leverage an organisation's knowledge, create new knowledge, increase collaboration and generate innovation. Information technology is an enabler, supporting knowledge management practices. The risk to an organisation in not managing knowledge is that intrinsic knowledge is lost with staff turnover and changing practices and new knowledge can be generated only narrowly. In order to minimise this risk, the Faculty of Commerce at the University of Wollongong made a strategic decision to introduce Microsoft SharePoint as the knowledge management tool to capture and share knowledge. The decision was prompted by management when it was observed that the Faculty had duplicate records, minimal electronic records, physical storage constraints, multiple intranets and internet systems, multiple share drives and, that the PC hard drive was where most information and data was kept, making the information largely inaccessible to other staff members.

It was determined that the Faculty needed a Faculty-based central information repository that would reduce duplication, improve accessibility to information, assist in the retention of intellectual capital, streamline workflow processes and capture and share vital information among staff. The Faculty also identified that it would be beneficial to have a tool that aided collaboration, assisted in connecting people and enabled users to receive, create and organise information in order to get the job done.

### **Cultural Change**

What the Faculty did not anticipate was the impact the process of deployment and the system would have on the culture within the Faculty. Current research tells management practitioners that cultural change is complex, shared and socially constructed (Schein, 1992). Cultures are often entrenched and to change them takes a minimum of three to five years; targeted change strategies are rarely successful (Kotter & Heskett, 1992). Most of us are familiar with the cultural iceberg (French & Bell, 1984); not a hopeful picture. It was anticipated that there would be deep resistance to knowledge sharing as many behaviours were entrenched, the organisational structure supported unit and school-

based silos and there was a culture of knowledge hoarding to protect jobs. The underlying belief was that “if the knowledge I have is accessible, then its uniqueness becomes eroded and my value to the organisation also reduces. Therefore, if I hold onto my knowledge, I remain indispensable to the organisation. My value increases, I can resist change and my job is protected.” This thinking is fundamentally flawed, but it was prevalent in the organisation. It was driven largely by previous sweeping, radical changes, which had resulted in a culture of blame, distrust and fear.

## **METHODS: WHAT WE DID**

The project, scope and requirements were defined following standard project management processes. As identified in project management research and literature (PMBOK<sup>®</sup> guide), the key components of successful project completion requires senior management champions, adequate resourcing, teamwork that includes the right people and skills on the team, project management skills and planning, stakeholder engagement, planning, communication and problem solving.

A knowledge audit was conducted in order to understand current processes and issues and to map where knowledge, communications and content were being housed. It was important to acknowledge and understand that information management was more than just technology. As important were the business processes and practices that underpin the creation, use and sharing of information. It was important to look at the information itself, including architecture of information, metadata, content and templates. The people, process, technology and content were addressed, all of which are central to the success of information management projects.

In order to ensure success of the project it was imperative that internal stakeholders were engaged, consulted and supportive of the outcomes. We needed to gain sufficient adoption to ensure that information was captured in SharePoint. It was also important to learn from others who had successfully implemented knowledge management systems. External stakeholders were consulted, so that we could learn from their experiences in SharePoint implementations as well as reviewing best practice.

In researching best practice in knowledge management and SharePoint, a number of people and resources were consulted including but not limited to:

- Knowledge Management Standards Australia
- Internal Knowledge Management Academic specialists
- SharePoint external contacts (corporate and educational) who had deployed the software
- SharePoint industry specialists
- Internal content management specialists.

A working party was formed with representatives from each unit and department. The working party was responsible for putting forward requirements, critiquing components and testing and championing the project in their relevant areas. The most vocal opponents to SharePoint were invited to join the working party. This was a deliberate strategy to address resistance to change, as it was clear that opponents would be highly critical of any change efforts. Understanding their requirements and the basis of their opposition and catering for this, within reasonable limits, ensured that the final functionality of SharePoint met user requirements.

The working party defined the functions needed and priorities for development. They also defined and tested the look, feel, structure, access and controls for SharePoint. Documentation was developed for users, outlining good practice, file-naming conventions and help wikis. Information and training sessions were conducted for staff and continue to run each month for new staff and for staff requiring assistance in certain areas.

The roll out of SharePoint was a phased implementation approach with the first site being a test pilot site. Following success of the pilot site, and implementation of the relevant modifications from that test, each unit was migrated individually. Redundant content was archived during the migration process. The archived information will be able to be migrated straight into the University's new universal records management system, which is currently in development.

Information technology staff were utilised and engaged for the technical components of the project including:

- Security structure and layering

Understand how the external Lightweight Directory Access Protocol (LDAP) University directory would be utilised to import user information into SharePoint in order to have appropriate user accounts that would support a layered security structure.

- Templates

Develop a template for the SharePoint system that would give a consistent look and feel throughout the site. It was important to develop a template that was in line with the University standards and brand and resembled the UOW Intranet. This would be beneficial to the user experience where a number of University systems were being utilised for various needs.

- Server requirement

Server hardware that would support the system and its daily use was required as well as a system that would also support the back end requirements of SharePoint. It was also necessary to have a dual server with one server to support the interface i.e. look and feel, along with content and the second server to support back-end security and software features as well as housing back ups. It was important to have a second server that was taking frequent back-ups in the event that if one server went down, business would be able to continue as normal.

- Remote access

SharePoint operates via a web interface that allows staff to access SharePoint offsite and work on information as if they were in the office. This has been of benefit to professional staff and academics who travel or are frequently out of the office as it allows them to access the information and work from the most current version. It reduces errors, duplication and incorrect versions of documents being updated or accessed.

- Technical support

SharePoint is a system being used by the Faculty of Commerce at the University of Wollongong and being supported by the Faculty's IT Unit. The system has received much interest from the broader University community with presentations being provided to other Faculties and Divisions. SharePoint is currently used within divisional units of the University and is currently being used by the University Information Systems Technology Division (ITS) who manage all systems for the University. They are looking to utilise SharePoint more broadly in the near future.

At the end of migration an evaluation and review was conducted and any further modifications implemented. The evaluation process included meeting with key staff from each unit or division who collated feedback from end users in their area. This process documented the benefits, limitations and additional features that staff would like to see. Outcomes of these meetings were collated and key issues prioritised and addressed.

## RESULTS

### Outcomes

The Faculty achieved its objective of providing a simplified system for the storage of information, reducing duplication, improving access to information and capturing tacit knowledge. Information was accessible and public and it was easier and more efficient for staff to locate the information they required. Inefficiencies were reduced as staff did not waste time searching multiple locations or servers or waiting until the person whose hard drive the information was stored on was available to release it.

The rollout of SharePoint achieved a consistent approach to the storage and communication of information. The project was successful because it drew on three critical components of people, process and technology. Figure 1 illustrates the convergence between these three critical processes.

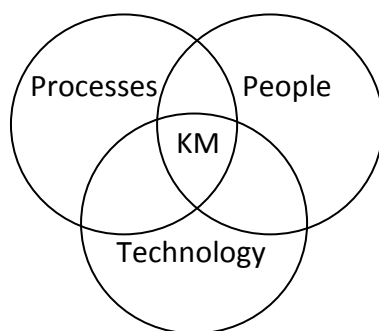


Figure 1: Process convergence

The project clearly identified the benefits to end users, communication was comprehensive and applied consistently to all staff. An inclusive approach was used to engage with staff and to ensure that the system was useful and usable and was appropriately supported. The project delivered both tangible and visible benefits to all staff within the Faculty. It also delivered some welcome though unexpected outcomes.

There was significant cultural change in people, structure and teams. The silo organisational structure was reduced significantly through the establishment of the cross-disciplinary working party and through the formation of self-directed teams in each unit who were responsible for the implementation within their units. The project deliberately sought to influence through self-directed teams. Staff autonomy over the project was considered extremely important. Research conducted by Thomas (2000) found that when staff perceive that their perspectives are a critical part of the process or that they are responsible for decisions that may have an impact on project success, autonomous and responsible employees will feel pride in contributing to the project objectives.

Once staff understood the benefits of SharePoint in terms of its functionality and its ability to make marked improvements in work functions, the majority of staff were keen to embrace SharePoint. It was determined that staff would set the controls around information, i.e. who had access to what, so that the practice of knowledge hoarding was not initially directly confronted. Over time, however, staff behaviour shifted to reduced controls around their information and sharing took place more openly. This occurred as staff received recognition from other staff that they held important and valuable information, and how useful it could be. This outcome is supported by a 2007 Gartner report (Mann, 2007) which found that recognising individual competence is a strong motivating factor towards knowledge sharing.

Staff were made aware of and given access to the SharePoint information available to them outside of their own unit. As the implementation teams were largely self-directed, they began to explore each

other's sites and information. Access to processes and templates resulted in the schools learning from each other and has resulted in streamlined processes and standards across the schools as they discovered easier and better ways of doing things through the sharing of information and the learning that came from that. Tacit knowledge (historical information) was being captured through this learning experience providing valuable information as well as understanding to newer staff. Teaching schedules, timetabling and casual academic teaching staff support processes are now streamlined across units rather than having three different processes for each of the schools in the Faculty. In addition, through the documentation of processes and the revision of processes, the teams have moved towards continuous improvement to update and refresh processes over time.

The impact of moving to standardised processes underpinned by continuous improvement has meant that the blame culture has also changed. Gradually staff have moved from looking for someone to blame when a process fails to identifying the factors that led to a system or process failure or hiccup and identifying ways to ensure that the issue does not recur, and then documenting this improvement in SharePoint.

Research Centres started utilising SharePoint in order to collaborate on work and house documentation that could be accessed easily by a number of members. This made research with people in multiple areas and dispersed locations more efficient and effective. It also allowed these Centres to display the work that was being conducted by the Faculty to the broader community. The Centres have also utilised some of the social media tools of SharePoint, such as discussion forums and blogs, with research partners.

Consistent communication and engagement with users, pre and post rollout of SharePoint, ensured that the transition to the system was smooth. Issues were addressed as roll-out occurred and changes or modifications to workspaces were negotiated to ensure a mutually beneficial outcome. Flexibility in the layout (components) of workspaces ensured that each workspace was unique and met the needs of the individual units, yet maintained a consistent look and feel. Although teams were largely self-directed they were well supported by the Project Manager and IT Team during the process, providing advice, structure and resources.

## **NEXT STAGES**

SharePoint will continue to evolve within the Faculty. As content and usage grows so too does the burden of maintenance and archiving of content. The Faculty will address records management guidelines and implementation of archiving processes and protocols to ensure that the content of SharePoint is live working content, and that formal records are treated and archived within the appropriate system and in compliance with legislation. In addition, the system has capacity to improve administrative efficiency through the utilisation of the workflow and approvals for forms and documents capacity that has yet to be implemented. Although most units are using the calendar functions within SharePoint, more advanced functionality could be achieved in the future. Finally, in the absence of other technologies for wikis and blogs, the Faculty will utilise this functionality in SharePoint to further aid communication, especially for research groups.

## **CONCLUSION**

Projects fundamentally require change management and change management strategies are especially important in an environment where previous silo units are required to work together to achieve project outcomes. Research shows that project success under such conditions is not likely. However, the experience of the implementation of SharePoint, a tool used to generate and share information and knowledge, was that with good communication, stakeholder engagement, support to units, self-directed teams, sound project management and appropriate resourcing, projects can be successful. In

fact, they can create positive unintentional outcomes to create cohesive collegial working relationships, to break down silos and generate a culture of information sharing.

## **ACKNOWLEDGMENTS**

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# **BRUCE – THANK GOD YOU’RE HERE**

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## **ABSTRACT**

An online system for the recording of unit guides was developed at Deakin University in 2008. This system allows unit chairs to enter information for their units, lodge this information with the administrative team for their faculty, and ultimately have the information presented online in a logical and unified manner. This system has benefited both academic and administrative staff members, in that a key feature of the system is the significant reduction in time spent by academic staff in creating and updating unit guides, and the time spent by administrative staff in relation to quality checking and compliance. Published unit guides are available to staff, current students and future students alike.

Keywords: BRUCE, unit guides, online, publish, report

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## INTRODUCTION

Deakin University has over 34,000 higher education students and employs approximately 2,600 full time and fractional full-time staff (Deakin University, 2009). Among other things, the University's strategic plan (Deakin University, 2010), outlines the University's intention to be a catalyst for positive change, for the individuals and the communities it serves. In accordance with the University's mission statement and strategic goals, a new system to increase quality assurance and decrease administrative burden upon academic staff was developed. This system was developed to manage the production and storage of unit guides. A unit guide outlines the unit content, its learning objectives, assessment, and rules governing the teaching and learning in that unit. It also includes generic faculty and University compliance and policy information. Unit guides are important because they ensure that all students studying the unit, regardless of campus, mode or lecturer, have an equivalent understanding of the requirements of the unit. The unit guide forms the learning contract between the student and the Faculty.

BRUCE is an acronym for *Better Repository for University Course Enquiries*, an online system originally developed to assist Deakin University in managing its course and unit publications data for current and prospective students (handbooks and marketing collateral). This system was enhanced to provide a space for academic and administrative staff to develop, check and publish unit guides in an online format. BRUCE is a PHP web application that is linked back into the Curriculum subsystem within Callista Student Management System, and BRUCE is wholly built and supported by Deakin's Information Technology Services Division.

BRUCE was introduced in 2003 with two main functions: a search facility enabling prospective and current students to search the course and unit catalogue; and administration functionality that enables staff to create, accurately maintain and report on curriculum information not able to be stored in the Callista student enrolment system.

In 2006, a Unit Guide Working Party was established, following discussions between management staff in faculties about the multitude of databases and data sources containing unit guide information. It was chaired by the Faculty General Manager from the Faculty of Business and Law, and included members from all four faculties, the student administration, and information technology services. The Working Party examined the range of information stored on Callista and BRUCE that could potentially be pre-populated into unit guides, removing the need to update curriculum outside of Callista and BRUCE. This would also ensure a more consistent process to produce, edit, deliver and store unit guides across faculties. The Working Party hoped to reduce previously experienced concerns pertaining to inaccuracy, unauthorised editing of standardised University content, multiple sources of data in unsecured locations and the high reliance upon individuals to operate and maintain localised systems.

## METHODS

The initial pilot, held in Semester 2, 2007, resulted in a number of unit guides from the faculties of Business and Law and Science and Technology being migrated from Microsoft Word and Excel format into BRUCE. Post-migration, unit chairs were granted access to BRUCE where they were able to edit and save changes to their unit guides. After quality checking by administrative staff, the completed unit guides were then made available to students via a dedicated website and Deakin's online learning tool: Deakin Studies Online (DSO). Feedback was sought from the unit chairs involved in this pilot and subsequent pilots conducted in 2008 with the following responses received:

- academic staff emphasised the importance of being able to copy elements across unit guides where they are multi-coded or cross-listed units resulting in content not having to be entered and edited more than once;
- that the outlay of elements be amended so that staff are made aware of which elements they can and cannot edit via the use of popup text instructions and colour coding; and

- fine tuning in relation to the final format of the unit guide that would be presented to students (spacing, font and file format).

In its Strategic Plan, Deakin outlines one of its key values as continuous improvement: ‘Deakin strives to continually improve (sic) the efficiency and the effectiveness of all its activities, ensuring that it is both responsive to academic needs and strategically focused’ (Deakin University, 2010). In accordance with this value, the Unit Guide Working Party reviewed the advice received from staff during the pilot and created a list of enhancements to be considered in consultation with the University Information Technology Services Division. In 2009, the project team’s outstanding contribution to ‘Academic Support’ was recognised by the Vice-Chancellor, and they were provided with the necessary funding (\$50,000) to introduce the enhancements defined during the pilots.

## **RESULTS**

Following the release of a number of enhancements, the new system is now working effectively in two faculties with all unit guides online as of Trimester 1, 2009, and from 2010 incorporated enhancements made possible by University funding received and utilised in 2009.

The University has received positive feedback from staff and students, and unit chairs are now updating their unit information and submitting their unit guides for quality checking via the online system. Importantly, there is the ability to record standardised information, which is keyed once by administrators and applied to all unit guides, ensuring compliance and ease of update. Academic staff often report frustration in relation to the increasing administrative and compliance-related tasks they are asked to undertake within their roles. A study by McInnis found that the majority of academic staff sampled in his study conducted in 1996 believed that their administrative load had increased substantially in recent years, with administrative work apparently causing the greatest dissatisfaction when it related to accountability and quality assurance (McInnis 1996, p. 14). The use of standardised content ensures that unit chairs are not having to repeatedly update items that are non-unit specific and reduces the amount of time it takes to complete their guide. Furthermore, standardised content substantially reduces the amount of quality checking required by administrators.

### **Unit Outline Report**

One of the enhancements recommended by the Working Party was in relation to the need to prepare similar information to that contained in unit guides for reaccreditation and review purposes. Unit outlines contain a mixture of information from handbook entries and unit guides such as offering information, learning objectives, aims, graduate attributes, teaching methods and references. The manual development of these unit outlines was an intensely onerous task and exceptionally time consuming. As such, members of the Working Party liaised with staff from the Information Technology Services Division to develop a report function which would extract the necessary information from unit guides and also handbook entries stored within BRUCE, and display the information in accordance to the University unit outline template. This enhancement introduced the need for ‘hidden’ elements – data that are not visible on websites or course catalogues, but is required to display in the unit outline report. These hidden elements are entered by administrative staff, and refer to the online status of the unit and assessment panel membership, both of which are required when undertaking major course reviews and accreditation applications.

### **Report Outputs**

Faculties are often required to provide reports on all units in relation to specific compliance matters such as graduate attribute details, student evaluation responses and assessment practices. Therefore, an enhancement that enables data to be extracted from unit guides based on key criteria was introduced. Administrative staff are now able to easily download reports on any element outlined within unit guides with just the click of a few buttons. This reporting functionality will be invaluable

in relation to the future directions of the Federal Government which has recently established the Tertiary Education Quality and Standards Agency, which will come into effect in 2012 (Gillard, 2009).

### **Quality Checking and Procedure**

To enable prompt quality checking, administrative staff receive an automated email, flagging that a unit guide has been submitted by the unit chair and is ready for checking. In addition, a report function demonstrates quickly which unit guides have and have not yet been published. For unit chairs, the system features a customer service element in that they receive confirmation of their successful submission via an automated email, which thanks them and explains that quality checking will take place prior to the publication of their unit guide to the University current student's website and relevant Deakin Studies Online unit site.

### **File Format (PDF)**

To enable students to print certain elements and to view the guide as a stand-alone document, a Portable Document Format (PDF) function was included in the list of enhancements so that PDF versions of guides could be added to Deakin Studies Online sites. The use of PDF guides was recommended by the academic staff involved in the early pilots and also by members of the Working Party. The PDF version of a unit guide allows for a table of contents, automated headers and footers and is accessible for both PC and Mac users. From Trimester 1, 2011 unit guides will be added to Deakin Studies Online unit sites as PDF versions instead of a web link and it is anticipated that students will be in favour of this format as it has been suggested that PDF conversion and compression equips users with the flexibility and compatibility to deliver efficient outputs (Ritz, 2010, p1).

### **Transparency and Knowledge Sharing**

In accordance with directives from the Department of Education, Employment and Workplace Relations (DEEWR) that there be an increased emphasis upon transparency and empowering students to make well informed choices (DEEWR, 2010, p4), the Unit Guides system has been built to enable an element of transparency. For example, students are able to view unit guides via the current student's website for units that they have not yet undertaken to determine their suitability and identify unit requirements prior to enrolling and committing to study. Unit chairs are also able to utilise the work of other staff to enable appropriate knowledge sharing in areas such as assessment design, and aims and objectives setting.

## **CONCLUSIONS AND FUTURE DIRECTIONS**

Two other faculties are currently considering the introduction of the BRUCE Unit Guide system through a pilot for a select number of units in Trimester 3, 2010-2011. The system enables some autonomy at the faculty level in relation to the template and outlay of elements. Other minor enhancements will be introduced to the system in late 2010, which will include a performance update to the HTML editor where unit chairs edit their information, and improvements to the user interface.

Making Deakin websites and publications accessible to users with disabilities has been a topic of key priority and much discussion during 2010, and it is planned that a major accessibility investigation for unit guides will take place in 2011. Preliminary work was conducted in 2010 through an accessibility audit conducted by an accessibility expert from Deakin's Knowledge Media Division and a visually impaired student who advised on potential issues specific to unit guides.

With the higher education environment becoming more complex, there is a need to develop systems that provide a greater level of academic support and that ensure better quality assurance. Additionally,

sharing common systems across faculties increases consistency as students often undertake elective units from outside their 'home faculty' and may find the intricacies of each faculty difficult and frustrating to grasp.

Reducing the time spent on the update and quality assurance of ongoing administrative tasks such as unit guides has enabled increased focus to be placed upon core university business such as teaching and research. This is reinforced in Deakin's 2010 strategic plan which outlines a need for 'Improving the efficiency and effectiveness of academic support services to ensure that the University has the best possible range and quality of services' (Deakin University, 2010, p28).

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# **CURRENT INITIATIVES TO IMPROVE TERTIARY EDUCATION PERFORMANCE IN NEW ZEALAND**

**Grant Klinkum, Tertiary Education Commission, New Zealand**

## **ABSTRACT**

A refreshed tertiary education strategy has underpinned a strong focus on tertiary education sector performance outcomes in New Zealand over the past eighteen months. The National Party-led Government is seeking to simplify the funding system, reduce central bureaucracy, improve tertiary education provider accountability and significantly lift learner outcomes. New Zealand has entered a new period of constrained funding in tertiary education with a clear focus on linking funding to performance, making performance information publically available, improving quality assurance systems and establishing priorities for provision. Early results of the Government's change agenda include a significant reduction in the size of the Tertiary Education Commission (TEC), changes to the role of the TEC, new legislation designed to secure a sustainable polytechnic sector and a reduction in the number of qualifications. This paper largely draws on published data and the author's personal perspective of issues as an employee of the Tertiary Education Commission. Recent developments in New Zealand tertiary education policy are placed within a longer term reform context. It concludes that although the strategic direction of the past decade has been retained, a significant new phase of using refined policy levers and funding incentives to drive improvements in learner achievement levels and institutional performance is underway.

Keywords: tertiary education, performance, New Zealand.

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## **INTRODUCTION**

With a number of high profile initiatives completed or underway, it is clear that the National Government, elected in late 2008, has given high priority to improving the performance of the tertiary education system. Recent activity consolidates and extends the reforms started by the previous Government in 1999. The pace and scale of activity over the past 18 months have been significant.

While considerable debate exists across the political spectrum about the most effective means to drive further improvements in tertiary education system performance, there is widespread agreement about the role tertiary education has in developing the skills needed to support a strong and innovative economy. There is largely agreement too about strengths and weaknesses in the current system. Provider diversity is valued. The increasing emphasis on using benchmarks and sharing best practice across the system is widely supported. Increased levels of participation in tertiary education are widely acknowledged as a success of the past 15 years. Measuring and rewarding the quality of research is also largely uncontested. So too is investing in effective teaching and learning through government funding of Ako Aotearoa, the National Centre for Tertiary Teaching Excellence. Greater sector ownership of quality assurance arrangements is broadly supported.

There is also a shared understanding by government, providers and the funding agency about areas where further improvement is required. This includes improving transitions from school to tertiary, building better learning progressions and pathways for students, improving links and technology transfer between tertiary research activity and industry and rationalising the qualifications system. It is also widely acknowledged that critical to system success is building literacy, language and numeracy skills in the general population and improving overall course and qualification completion rates, particularly for Māori and Pacific students.

Indicating the government's position on some of these areas, the Minister for Tertiary Education, Steven Joyce, noted in mid-2010 that the system 'is not broken but is not without its issues' (Joyce, 2010a). Challenges the Minister identified were too many qualifications on the register, low completion rates, a lack of increase in the number of degree students graduating despite significant increases in participation, value for money concerns and heavy controls on the sector through price and volume.

What characterises the current phase of tertiary education administration is the proposed means to further drive improvement and a greatly reduced tolerance for slow progress by the Government. To place current initiatives in context and to understand what significance should be accorded to the Government's policy direction, it is necessary to briefly survey the tertiary education reforms from the early 2000s onward.

## **REFORM HISTORY**

Behind the political support for tertiary education reform in the late 1990s was a view that there was insufficient strategic direction across the system, unnecessary competition, a lack of engagement with stakeholders such as industry and professional associations, and uneven standards across providers. The Tertiary Education Advisory Commission (TEAC, 2000, 2001a, 2001b, 2001c) recommended the introduction of a more collaborative tertiary education system, the development of a national strategic statement to guide the system, the use of Charters and Profiles to steer the system, the creation of the Tertiary Education Commission to act as an independent funding and monitoring agency, the separation of funding for teaching and research and the continuation of tertiary education organisations being able to set tuition fees (TEAC, 2000 and 2001).

The Fifth Labour Government, elected in 1999, had sought to moderate, but not essentially change, the impact of market forces on tertiary education while moving toward a system that would have more central steering through the creation of the TEC, new regulatory and funding arrangements and the



publication of the first Tertiary Education Strategy 2002-2007 (McLaughlin, 2003, p. 6). Throughout the reform period of the early 2000s, the concepts of excellence, relevance, access and capability were touchstones used to position the work of the TEC and indicate expectations of the tertiary education sector.

A further iteration of the reforms in 2006 sought to improve ‘relevance and responsiveness, access and learner outcomes, quality, public and government confidence and fiscal certainty’ (Cabinet Policy Committee, 2006a). Central to the second phase of the reforms was the introduction of Investment Plans (instead of Charters and Profiles), with multi-year funding that would support a ‘whole of institution’ approach to considering inputs, capability, outcomes and quality. The creation of Tertiary Education Organisation Capability funding and a new approach to quality assurance were also key parts of the 2006 reforms. Increased fiscal certainty for government was to be obtained by moving toward a more ‘student need’ funding system, rather than driven off student demand and tertiary education organisation generated demand.

Looking back across the last decade some aspects of the reforms have been successful. Most notably, student participation increased significantly in the first half of the decade. The introduction of research funding through the Performance-Based Research Fund and the use of Centres of Research Excellence must also be seen as a significant area of success. Improvements in the quality of investment through the removal of low value provision should also be added as a highlight. More broadly, there have been uneven results across the system with significant remaining challenges.

## **NEW ZEALAND’S TERTIARY EDUCATION PERFORMANCE**

New Zealand has moved from an elite tertiary education system to a mass participatory system in a remarkably short period of time. There were 120,000 students in 1985 and 283,000 in 2001 (McLaughlin, 2003, p. 34). In 2009, the figure had increased to 424,000 domestic students enrolled in formal tertiary education study (MOE, 2010c). If students in non-formal courses and international students are added, the figure exceeded 700,000 learners in 2009 (TEC, 2010a, p. 6). The number of learners in the system needs to be seen in terms of liberal policy settings for student admission, the availability of student loans and allowances, a national commitment to life long learning, and relatively generous state funding levels, rather than as merely a demographic issue.

Of 31 OECD countries in 2007, New Zealand had the fourth-highest level of tertiary education attainment for 25 to 34 year olds at approximately 45 per cent and around 10 percentage points higher than the OECD average (OECD, 2009, p. 13). Some 44 per cent of New Zealanders aged over 15 years held a tertiary education qualification in 1998. A decade later, this had increased to 50 per cent (TEC, 2010a). Another measure of the dramatic increase in tertiary education participation and achievement is that the proportion of the population with a bachelors degree or higher increased from 10 per cent in 1998 to 18 per cent in 2008 (TEC, 2010a, p. 14).

Partially reflecting both policy shifts and the TEC’s engagement with tertiary education organisations, there has been a shift to higher levels of study on the qualifications framework. The proportion of total domestic student enrolments at levels 1 to 3 has shifted from 27 per cent in 2005 to 23 per cent in 2009 and, conversely, enrolments at bachelor’s level as a proportion of all formal enrolments have increased from 30 per cent in 2005 to 33 per cent in 2009. Further illustrating this change has been that between 2008 and 2009 there were an additional 15,500 enrolments in level 5 to 10 programmes and an 11,000 decrease in enrolments for level 1 to 4 certificates (MOE, 2010c).

Despite this progress, there persist some entrenched and concerning patterns of student and system performance. The large increase in participation has not been matched by increases in qualification completions. Completions at level 4 and above between 2004 and 2008 have increased by 8 per cent for domestic students but in the same period, bachelors degree completions have fallen by 2 per cent (MOE, 2010c).

Completion rates are variable across different sub-sectors. In 2008, universities had an 82 per cent course completion rate compared with 68 per cent for institutes of technology and polytechnics, while the course completion rates for Māori students were 75 per cent at universities and 59 per cent at institutes of technology and polytechnics (TEC, 2009c, p. 15). Five-year completion rates for students who initially enrolled in 2004 across all students and all qualifications were 41.4 per cent (TEC, 2009c, p. 19). Even while acknowledging the flexible nature of the New Zealand system, with a large number of mature and part-time students, qualification completion rates at this level inevitably lead to questions about value for money for taxpayers and concerns about students leaving institutions with large loans and incomplete qualifications.

In relation to one of the target learner groups highlighted in the TES, Māori participation constituted 20 per cent of all enrolments in 2009 compared with 15 per cent in 1999 (MOE, 2010c). This level of participation is higher than the proportion of Māori in the population at 17 per cent (Statistics New Zealand, 2010). However, Māori students are overrepresented at lower levels of study; participation rates for Māori aged 18 to 19 in degree level study are less than half the rate for all students (MOE, 2009a, p. 12). The ethnic differential is particularly pronounced in some sub-sectors. In the period 2006-2008, Pacific students at university had a 64 per cent course completion rate across all levels of the framework compared with 85 per cent for students who were not Māori or Pacific (TEC, 2009a, p. 2). Over the same time period, Māori students at institutes of technology and polytechnics across all programmes had a course completion rate of 57 per cent compared with 70 per cent for students who were not Māori or Pacific (TEC, 2009a, p. 4). Qualification completion data varies even more markedly when gender and ethnicity are considered beside each other. Thus, in 2008, 32 per cent of female non-Māori aged 25 had completed a bachelor's degree or higher qualification, but slightly less than 7 per cent of male Māori had achieved at this level (TEC, NZQA, MOE, 2010).

There are significant national development needs at the foundation level of education as well. The 2006 Adult Literacy and Life Skills Survey found that approximately 43 per cent per cent of New Zealand adults have lower literacy skills and 51 per cent lower numeracy skills than those required for full participation in a knowledge society (TEC 2008, p. 6).

Against a backdrop of uneven student educational performance, poor financial performance by some institutes of technology and polytechnics, an increase in low value courses in the mid-2000s and economic recession, the National Party in opposition developed strong views about the need for improved performance within current fiscal baselines.

## **NATIONAL PARTY PRIORITIES IN 2008**

In its 2008 election manifesto, the National Party signalled a clear intention to focus on improving the performance of the tertiary education sector as a whole and on the sector's funding agency, the Tertiary Education Commission. National outlined five commitments in the manifesto: to simplify the tertiary education funding system, reduce central bureaucracy, strengthen quality and accountability, support and encourage students and improve the interface between schools and tertiary education institutions (National Party, 2008). A further manifesto commitment was to ensure that a future National government would move to treat institutions similarly, irrespective of ownership structure. Also in the pre-election period was a commitment to retaining controls on student fees.

None of these commitments sought to overturn the underlying strategic direction or fundamental architecture used to steer tertiary education over the previous decade. Perhaps it is for this reason that considerable progress has been made in each of these commitment areas since National formed a coalition Government.

## **NATIONAL GOVERNMENT PRIORITIES SINCE 2008**

As might be anticipated, the National Government has both refined and extended the initial priorities set out in the manifesto. In particular, a stronger focus on value for money across all aspects of the tertiary education system has been pursued. System wide strategic priorities related to improved student achievement and a focus on priority learner groups have been retained, but the means to reach these ends has evolved considerably over the past eighteen months.

### **A New Tertiary Education Strategy**

Continuity in strategic direction combined with a vigorous position on delivering higher quality services without substantial new funding can be clearly seen in the Government's Tertiary Education Strategy 2010-15 (MOE, 2009a). Despite having a five to ten year strategic timeframe, the new TES reflects the economic stringencies of 2009 with early references in the document to fiscal restraint and the need for both providers and students to use government's investment in tertiary education efficiently and effectively.

Compared with the previous two Tertiary Education Strategy documents, the current strategy has sharper expectations. The focus on priority learner outcomes, improved system performance and research that more directly supports innovation and economic growth is unambiguous. With limited resources, the Government has signalled a clear prioritisation toward students aged under-25, Māori students, Pacific students, students moving from secondary education to tertiary education and foundation-level students. Noting that the substantial increase in participation during the 2000s has been at the sub-degree level, the Tertiary Education Strategy elevates the importance of increasing the number of learners achieving higher-level qualifications. The higher individual and societal returns for young people achieving higher level qualifications is provided as the rationale for giving greater attention to successful transitions from school to tertiary.

Finally, improving literacy, language and numeracy skill outcomes from level one to three study is also given prominence in the document. Improving literacy programmes for young Māori enrolled in levels 1 to 3 programmes with a view to progressing these learners to level 4 and above will support a number of Tertiary Education Strategy objectives simultaneously.

The dimensions of system performance that require attention are enhanced quality assurance arrangements whereby providers are to take more responsibility for continuous improvement and a rationalisation of the number of sub-degree qualifications. Improved pathways for students, shared services between providers, improved availability of performance information, and performance linked funding, along with more fully linking student support to student performance and further expanding international linkages across the tertiary education sector are all highlighted for further work.

The need for institutions to improve course and qualification completion rates as a way to improve public value for money in tertiary education spend is made explicit. While dropping the language of 'distinctive contributions', the current Tertiary Education Strategy sets out the core roles for universities, polytechnics, Wānanga (Government funded Māori tertiary education organisations), private training establishments, industry training organisations and adult and community education providers. Students are extolled to take responsibility for their own performance, while institutions are required to improve the success of target priority learner groups, respond to skill demands, and make better connections with industry and iwi (Māori tribes).

Symbolising the Government's view that there should be minimal but effective central oversight of the system, the expectations in the third Tertiary Education Strategy are pared down. Most of these priorities and challenges were also highlighted in the second Tertiary Education Strategy 2007-2012, a document that included the Statement of Tertiary Education Priorities, 2008-2010. To this extent, strategic continuity across the two documents may be observed. A different policy emphasis can be

seen however in decisions about funding levels for the TEC, and performance expectations of providers and students.

### **Reform of the TEC**

Following the election, one of the first manifesto commitments to be addressed related to the Tertiary Education Commission. The manifesto expressed concern about ‘heavy handed centrally driven control by the TEC’ and described the agency as one that ‘has grown into a large and demanding agency that places excessive compliance burden on education providers and stifles innovation’ (National Party, 2008). Budget 2009 reduced the TEC’s operating budget reduced by almost \$10 million for financial year 2009/2010. Streamlining the TEC was designed to save \$31m over four years. The positions of fifty-five staff were made redundant and all area offices were closed in the middle of 2009. Staffing levels, at approximately 260 full time equivalents (with a full establishment of 298 FTEs), fell to the same level as when the TEC was first established in 2003. Structural changes within the TEC were not merely about living within a new budget baseline of approximately \$59m in the 2009/2010 government financial year. Changes made reflected a particular view by Government about the appropriate roles and responsibilities of the TEC.

Most significantly, the TEC sought a refreshed model for engaging with smaller tertiary education providers that relied on the use of a TEC service centre for e-mail and telephone based advice and a new TEC website was launched to significantly improve access to information for tertiary education organisations. Area advisor positions were disestablished. In-person relationship management was to be focused on the sectors of highest investment: industry training, Wānanga, institutes of technology and polytechnics, and universities.

Two further changes are noteworthy. The size and scope of the Tertiary Advisory Monitoring Unit’s work was changed to streamline its functions, with a focus on preparing six-monthly reports on Tertiary Education Institution’s financial and educational viability for the Minister and for the Cabinet Expenditure Control Committee. The new arrangements ensure that the dual perspectives of an independent ownership interest in the financial and organisational viability of (government ‘owned’) tertiary education institutions and TEC’s view as a funder of tertiary education provision can be used in an integrated way.

Finally, the TEC’s stakeholder engagement function - through which employers, industry and community groups were consulted on their view of tertiary education needs and priorities - was disestablished. The new Government believed that this activity was the rightful work of tertiary education organisations themselves. The enterprise of understanding tertiary education need across all industries, business types, professional associations, community sectors and regions was highly ambitious. Also, the evolving nature of the Investing in a Plan system meant that findings from stakeholders were difficult to embed in the first round of Investment Plan engagements and approvals.

Overall, these changes reflect the desire to streamline the TEC’s own functions, reduce the total number of funds administered by the TEC, engage with tertiary education organisations in proportion to risk and scale of activity, reduce compliance on tertiary education organisations and empower tertiary education organisations to take responsibility for their own self improvement and stakeholder relationships.

### **Fund Rationalisation and Funding Reductions**

Another area of National Government interest signalled in the manifesto – and also a priority for the previous Government – has been reducing compliance and transaction costs both for the sector and within the TEC. In Budget 2009, a significant number of small funds were slated for disestablished in 2010 and 2011 including bilingual tutor grants, academic migrant grants, refugee study grants, English for speakers of other languages assessment services and building research capacity in the social sciences. In some cases there were concerns about fund performance, but an underlying goal

was to reduce the total number of funds as part of a programme to reduce complexity and compliance costs. Another area identified for reduced funding was short courses that focused on regulatory compliance training. The most controversial decision proved to be the reduction of community education funding in high schools by 80 per cent, with a broader goal of reducing adult and community education funding across the whole system by 50 per cent. Community groups and high schools fought a very public and ultimately unsuccessful campaign to overturn this decision.

Capability funding – including competitive project based funding used as an incentive for change in line with government priorities - has largely been discontinued. This included the Encouraging and Supporting Innovation fund involving almost \$9m, institutes of technology and polytechnic Business Links funding of \$6m and Supporting Change funding of \$35m. The move away from funding institutional capability development has been one of the most significant policy changes introduced by the Government. This reflects a philosophical view that paying the full price of provision directly through Student Achievement Component funding allows institutions more choice about how they spend their funding. Budget 2010 disestablished the Tertiary Education Organisation Component fund, with the money being amalgamated again into enrolment driven funding. The Tertiary Education Organisation Component fund had included a core component to fund costs associated with a provider's distinctive role and a strategic fund to support innovation in teaching and learning.

Alongside this rationalisation of funding pools and reduction of funding in some areas has been new investment as well. Reflecting priorities of the Government, redirected funding has been committed to the Youth Guarantee programme, which provided 2000 free course fees in 2010 for 16 and 17 year old students at risk of not being in work, school or training. New initiatives were also announced in both 2009 and 2010 to increase the number of funded medical places, in 2009 to support a significant summer research scholarship scheme, and also in 2009 to fund a 50 per cent increase in the workplace literacy fund (while reducing out year commitments in total for language literacy and numeracy). In Budget 2010, redirected funding was applied to Equivalent Full Time Student system volume with 455 more places for institutes of technology and polytechnics and 765 more for universities in 2011 compared with 2010 and to a 2.2 per cent increase in Student Achievement Component funding rates (MOE, 2010a).

### **Student Support Policy Changes**

A range of changes to student loans and allowances and student fees policy settings have been made over the past eighteen months (MOE, 2010a & MOE 2010b). A simplified approach to increasing student fees has been introduced, involving an Annual Maximum Fee Movement policy which allows for a 4 per cent increase in fees and compulsory course costs for all government funded courses, with the possibility of applying for an exemption to be able to increase fees by up to 8 per cent.

A number of changes were made to student loans policy as part of Budget 2010, reducing eligibility to student loans for permanent residents and Australians (a saving of almost \$80m across four years), placing a life time limit on access to student loans of seven years, and raising student loan administration fees. Most importantly, in terms of policy direction, a performance element has been added which requires students to pass at least half of their course load over two years to retain eligibility for a student loan. In a sign of the Government's resolve in this area, student results from 2009 and 2010 will be used to assess 2011 eligibility. The Government has estimated savings of around \$140m over a four-year period from this policy change.

The manifesto commitment to retain interest free student loans has been honoured, despite the high level of total tertiary education funding directed to students. Throughout OECD countries, an average of 19 per cent of public spending on tertiary education is used to support students, households and other private entities. In New Zealand this figure was approximately 42 per cent in 2006 (OECD, 2009, p. 61). Currently, the government writes off almost half the value of each dollar loaned to students. The Vice-Chancellor of Victoria University of Wellington recently noted: 'I fully accept the need for a fair and low-cost student loan system to ease the very real burdens on students. I do

question the strategic wisdom for New Zealand of denying university places to aspiring students so that enrolled students can borrow money at no cost to themselves' (Walsh, 2010).

A further dimension of supporting students relates to access to tertiary education. The highest profile tertiary education issue in 2010 has been restrictions on tertiary education places, especially in universities, with a number of institutions restricting enrolments or closing off enrolment in the second half of 2010 after meeting or exceeding their government funded enrolment numbers. For a system that has had very open access for two decades, this has come as a shock to the public. Institutions are beginning to prioritise in accordance with the Tertiary Education Strategy however. Waikato University, for example, have said that enrolment priority in 2011 will be given to school leavers, Māori students and those in post graduate study (Boyes, 2010). A significant demographic blip will place more pressure on the system through until 2013 and the Government will need to consider further how to reprioritise funding to support priority groups engaging in both foundation level and higher-level programmes.

### **Sub-sector Specific Initiatives**

One sub-sector under particular scrutiny by the Government has been institutes of technology and polytechnics. Drawing on 2009 data, the TEC's 2010 report on Tertiary Education Institutions (the 31 government 'owned' institutions) performance to the Minister for Tertiary Education and the Cabinet Expenditure Control Committee noted that nine Tertiary Education Institutions were categorised as having some degree of unsatisfactory educational or financial performance. Of these five were institutes of technology and polytechnics. The Education (Polytechnics) Amendment Act 2009 provided for the restructuring of polytechnic councils and the introduction of additional intervention measures to ensure that the TEC can support an educationally and financially viable institute of technology and polytechnics sector.

New councils were appointed in May 2010, each comprising four ministerial appointments and four local appointments. With smaller councils and ministerial appointments of the chair and deputy chair positions, the Government is looking for strong governance focused on educational performance and financial viability. The new legislation also allowed for a more graduated interventions framework in cases of poor performance, including the requirement for an institution to obtain specialist help or produce a performance improvement plan. More severe interventions include the appointment of a crown manager and the disestablishment of a council.

The initiatives detailed in the pages above are significantly progressed. Two further policies, which the National Government sees as important in incentivising the right student and institutional behaviour, are linking student performance results to institutional funding levels and making information about student results publically available.

### **PERFORMANCE-LINKED FUNDING**

Performance-based funding could be said to have existed for a number of years in the context of the existing quality assurance system. Ongoing funding from the Tertiary Education Commission has always required institutions to maintain the confidence of the relevant quality assurance body. In an era of capped funding, performance in relation to achieving planned student participation levels has had an impact on the volume of future Student Achievement Component funding. Where new money has been available for additional student places in the polytechnic and institutes of technology and private training establishment sectors, it has been allocated on the basis of past performance. Building on a new performance framework for Student Achievement Component funding introduced for private training establishments in 2009, funding was withheld from a number of providers pending revised Plans and in two cases it was removed altogether from the lowest performing private training establishments.

In other ways too, funding has been linked to aspects of tertiary education organisation performance. In funds such as Training Opportunities and Youth Training, funding each year is dependent upon evidence of institutions reaching targets specified in the contract. For these funding streams, targets relate to the average proportion of training places filled and the percentage of people leaving the programmes who find work or further training within a specific time span. Similarly, funding streams such as the Intensive Literacy and Numeracy fund have been designed so that future funding is dependent on learners achieving measurable gains in literacy and numeracy and on reaching targets related to the number of learning hours.

What is meant by performance linked funding in the current policy context is linking a proportion of Student Achievement Component funding to student performance results in order to reward teaching and learning performance. Based on 2011 student performance results, institutions will be subject to performance linked funding in 2012, with up to 5 per cent of enrolment driven funding at risk. Performance linked funding will apply to formal funded courses and programmes from level 1 to level 8 on the New Zealand Qualifications Framework. Research degrees at level 9 and 10 are excluded from the system as elements of the Performance-Based Research Fund already reward student performance in this area. All tertiary education sectors will be part of the system, although it will operate in a slightly different way for the Industry Training sector where, for example, progression to higher-level programmes is perhaps a less important measure.

The measures and specific weightings place the greatest emphasis on course and qualification completions. The rationale for focusing on course completions is that completed courses demonstrate measurable learning and are a partial proxy of progress toward a qualification, while students and employers value qualification completions as labour market currency. It is proposed to give progression a modest weighting for level 1 and 2 programmes and no weighting for higher level programmes, reflecting the importance placed on moving students from foundation programmes into higher levels of study that are likely to result in greater personal earnings and economic contribution. At this point, mid-level retention is considered important only from level 5 through to level 8 programmes where there are multiyear programmes and retention acts as a barometer of student progress and institutional performance. Final decisions on how the mechanism will work are yet to be made.

While some shift from part-time to full time study is considered beneficial for the system, raw performance results are likely to be adjusted to acknowledge that part-time students take longer to complete qualifications. Thresholds will be set at a level which incentivises improvement, while allowing for good performance to be recognised with 100 per cent of enrolment driven performance being paid. The thresholds will be published in the year before performance is measured so that institutions know what they are aiming for. A number of different approaches could be taken to setting the exact upper threshold, including using average performance in recent years.

It is not proposed that exceptional performance levels will result in more than 100 per cent of enrolment driven funding being paid. The system is geared toward targeting outliers in the first phase. The intention is to remedy poor performance without destabilising the system. Early modelling of possible impacts suggests that, in keeping with the Government's intentions, the viability of key parts of the system will not be affected. Funding not allocated as a result of tertiary education organisations failing to reach the threshold is likely to be reinvested in the tertiary education system. For example, this money could be invested in unmet student demand or other priority areas.

It is expected that the new policy will result in institutions working harder to ensure that students enrol in programmes that are appropriate for their interests and skill levels and that student progress is monitored more assiduously. There may be unintended consequences. The TEC will need to ensure that performance linked funding does not result in institutions raising entry standards at the expense of improvements in target learner group performance. There may be concern that assessment standards will drop in order to improve outcomes and government funding levels. It is instructive to see that Columbia University's Community College Research Centre has found that although performance

linked funding systems may result in increasing restrictions for entry into specific programmes, there is no evidence of academic standards being lowered as a strategy to improve performance results (Dougherty, 2010b).

New Zealand's decision to adopt performance linked funding is not without precedent. A range of performance-linked systems has been used for example at the State level over the past thirty years in the United States of America, involving at risk funding of between 0.4 per cent through to 5.45 per cent. In some cases, a portion of enrolment driven funding is withheld subject to student performance results and in other cases, additional sums of money have been used to reward performance over and above enrolment-based payments. A number of States have discontinued performance based funding due to pressure on State budgets, a lack of provider support and changing policy settings within State legislatures. Stable systems are characterised by the involvement of tertiary education providers in the development of the system, the introduction of performance based funding through legislation rather than the use of budget provision and maintaining consistency in the use of performance measures (Dougherty & Hong, 2005, Dougherty & Natow 2009, 2010a; Dougherty, 2010b).

Research findings from the US suggest the link between the use of performance linked funding and improvements in performance outcomes is modest (Dougherty, 2010b). This suggests that performance based funding must be seen as one of a number of levers to be used to improve the performance of individual tertiary education organisations and the system as a whole. It may be supposed that institutions with poor educational outcomes that are financially weak will feel its impact most keenly. For these institutions, losing even 1 per cent or 2 per cent of Student Achievement Component funding may be the difference between reporting a surplus or deficit position.

A potentially more challenging dimension of performance linked funding is the possible future inclusion of employment outcomes as a criterion for funding. The Minister for Tertiary Education foreshadowed this in a speech at Victoria University of Wellington in July 2010 when he said 'ultimately I want to see funding linked to employment outcomes, not just internal benchmarks. This will send a strong signal to students about which qualifications and which institutions offer the best career prospects – and that's what tertiary education has got to be about'. The statement elicited a strong response from universities and commentators about the value of a liberal education.

The chief executive of one tertiary education organisation who has come out in favour of the idea has noted that 'Developing some sort of national measure of graduate employment will be a heroic task ...' (Ede, 2010). It may be that collecting data on employment outcomes for making that information publically available would produce the right incentives for institutions and potentially useful information for learners. Ideally, such data collection would be driven by institutions themselves or sub-sectors as part of the close relationships tertiary education organisations should have with industry and employers, rather than being centralised. However, here again there is overseas practice to draw on. In the State of Tennessee, job placement results count for 10 per cent of performance linked funding for community colleges (Tennessee Performance Advisory Funding Committee, 2010).

In the case of New Zealand, performance linked funding will be used in concert with the Investment Plan system which provides opportunities for institutions to demonstrate that their planning reflects Government priorities and meets the needs of their communities of interest, including students. Plan approval (or not) by the Board of Commissioners of the TEC remains the ultimate sanction for poor quality performance. Very poor performing courses and programmes are targeted for attention during Plan engagement between the TEC and tertiary education organisations. Institutes of technology and polytechnics in 2010 have been required to provide, as part of the 2011-13 Investment Plan engagement process, information on how courses with less than 30 per cent achievement will either be restructured or discontinued. Plan commitments are monitored throughout the duration of the Plan, with interventions taken as needed. Sitting alongside these levers are ownership monitoring and interventions (in the case of Tertiary Education Institutions), a well developed self review and



external evaluation review system, the use of benchmarking to increase efficiency and a performance consequences framework.

A comprehensive performance consequences framework from 2011 will see reduced funding, conditions on funding or funding declined where an institution fails to deliver against their performance indicators. Points of influence for the TEC include funding approvals, Plan conditions, frequency of TEC engagement with providers, Plan amendments, suspending or revoking funding, recovering funding or activating a statutory intervention. Outside of the Plan system, budget decisions can and have been used to remove 'low value' provision in areas such as first aid training and regulatory compliance training.

In this way, it may be argued that the lever of performance linked funding adds an important tool to the planning, approval and monitoring levers already available. The impact of performance linked funding is likely to be only as effective as the complementary instruments that sit around it. Capped funding during a period of increased demand has increased attention on prioritising some learner groups and types of provision. Arguably, it has also led to students placing greater value on securing and retaining a university place. This may yet prove to be as effective as performance linked funding in driving overall improvements in system performance.

## **PUBLIC AVAILABILITY OF PERFORMANCE INFORMATION**

Closely related to linking funding to student performance, is making publically available information on tertiary education organisation performance in relation to student outcomes. Although student performance information has been available through the annual reports of some tertiary education organisations, a centralised approach to publishing such information allows for the use of common measures and comparable information.

Performance data on student course and qualification completion, student progression and student retention for institutions receiving Student Achievement Component funding is to be published in 2010 for the first time. The Minister for Tertiary Education sees this information as an input for student study choices (Joyce, 2010a). Publication of district health board outcomes across various surgical and other services in 2009 was used as a model for the development of the reporting format. Information for the university, Wānanga, polytechnic and institute of technology and private training sectors will be published by sub-sector allowing for students and the public to understand one dimension of institutional performance in a comparative format. A page per tertiary education organisation provides results for each of the four measures by level of study broken down into levels 1-2, 3-4, 5-6, 7-8 and 9-10, along with information about the number of equivalent full time students, student ethnicity, level of study, student age and subject area.

Tertiary education organisations have raised a variety of concerns throughout the development of the project including data integrity, the possible distortionary impacts of high numbers of part-time students and the difficulty of comparing very different types of institutions in the private training establishment sector. There were also concerns that an institution could be performing well for a particular demographic, such as Pacific students, but be rated poorly by comparison with institutions enrolling a different student demographic. The reputational impact associated with the publication of performance information is likely to be considerable. It remains to be seen how much interest the media will show in the comparative data, but it can be anticipated that comparatively high performing institutions will seek to use the results in their branding and advertising, as has occurred with performance-based research funding results.

Performance linked funding and the public availability of performance-linked information have been subject to considerable political and sector attention. Doubtless, both policies have an immediate signalling impact and over time will help incentivise improved enrolment processes, pastoral care, and teaching and learning. It is suggested that the careful alignment of these policies with a fuller

application of the tools available within the Investing in a Plan system has the potential to significantly improve overall system and tertiary education organisation performance.

## **FUTURE POLICY DIRECTIONS SIGNALLED BY THE GOVERNMENT**

Beyond the measures discussed above, the Government has foreshadowed a number of areas of focus in the short to medium term. The need to consider relative contributions of public - private cost sharing remains a key issue. Modest increases in private contributions to the cost of tertiary education are unlikely to undermine the high levels of participation in tertiary education. Indeed the historic evidence in New Zealand is that rates of participation significantly increased after fees were introduced and student loans were made available. Shifting a higher proportion of costs to private contributions however increases the Government's financial exposure through greater demand for student loans. Also, raising the level of private contributions is likely to differentially impact on different learner groups and may undermine the goal of improving the performance of target learner groups.

Rather than confirming a three year funding path for institutions in the forthcoming Plan approval round, the Minister for Tertiary Education has decided upon a two year period in order to allow for work to be done on the price government pays for tuition subsidies. The possibility of rationalising the number of funding categories and reviewing subsidy rates against the cost of provision, the mode of delivery and level of provision was signalled in mid-2010. Many dimensions of price are likely to be considered over time – how much should employers, students and the government financially contribute to different levels of study and how should different types of qualifications and different learning modes be funded? Should funding be able to be moved between sub-sectors more easily and what price should be paid for provision in regions where full provision is not economically viable? If significant improvement is not made in the performance of target groups such as Māori and Pacific, should there be further consideration of the subsidy rate for these learner groups?

A further area for system wide attention signalled by the Government is the importance of increasing the internationalisation of New Zealand tertiary education, especially the recruitment of foreign students. Government's aspirations in this area are likely to be wider than catching up to Australia's position as the country with the highest proportion of international students. Opportunities gained from having a portion of a degree completed overseas and offshore delivery opportunities for New Zealand institutions are also considerations. The Government is currently setting international education goals for the next 15 years that will place raised expectation on institutions and the system as a whole. After a welcome increase in international student numbers in 2009 compared with 2008 (MOE, 2010c), tertiary education organisations have responded positively to the Government's encouragement, with some institutions seeking or expanding offshore international education opportunities.

More broadly, ensuring that skills and training meet the needs of employers is likely to be an enduring area of attention for the government and the TEC over the coming years. This goes to the issue of the supply of skills, relevance of qualifications, the structure and pathways of qualifications and relationships with the end users of tertiary education. In relation to qualification approval, Minister Joyce has also signalled that delegations for qualification approval and quality assurance arrangements will be reviewed as a consequence of the perception that the number of qualifications has rapidly expanded due to sub-sector regulation of qualifications (Joyce, 2010b). Reflecting the Minister's often quoted concern about there being 6,000 qualifications on the framework, the number has already been reduced by 15 per cent by retiring or removing out of date qualifications and further change may be expected.

Finally, it is likely that the Government will work to develop a broader view of school to tertiary transitions. One context for this is the need to ensure that there are clear routes to vocational study and

that senior secondary school is linked to next steps in education, not merely through a small number of specific funds, but because of clearly defined study and career pathways.

## **CONCLUSION**

The Government has sought to move tertiary education away from central steering during a period of increased student demand and financial constraint. In doing this, the Government has focused on introducing new mechanisms to improve student outcomes and institutional performance. This has resulted in changes to the TEC's operational funding level and its roles, a more explicit Tertiary Education Strategy, removal of capability funding and a decrease in the number of funds, new legislation aimed at a more effective and viable polytechnic sector, significant student support changes and reduced tolerance for poor tertiary education organisation performance. New levers linking funding to student performance and highlighting student performance information in the public arena will augment the Investing in a Plan system.

Behind this considerable activity and impetus since late 2008, there remains an enduring focus on improving the performance of target learner groups, lifting system performance and improving the quality of research. Continuity of strategic direction may be seen in the emphasis on creating responsive institutions meeting the needs of students and industry, efficient and financially viable tertiary education organisations and high quality teaching and learning that leads to improved student course and qualification completion rates. The refreshed means being utilised to realise these goals have created considerable momentum in the sector.

Future work on the price government pays for tertiary education provision, re-conceptualising the relationship between the secondary and tertiary sectors, opportunities to further internationalise the tertiary education sector, and streamlining qualifications to better meet employer needs will further progress what are widely agreed strategic priorities for New Zealand's tertiary education system.

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# CLIMATE CHANGE IN ACADEMIA

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## ABSTRACT

In these times of economic uncertainty within the Australian economy, it has been necessary for the tertiary education sector to implement changes to the very essence of its structure in order to respond to demands from multiple bodies, including the federal government, industry, and internally from the higher education sector. Academic development units are not immune to this uncertainty and the pressures resulting from this need for change. The Griffith Institute for Higher Education (GIHE) has recently experienced a greater reliance on the experience and knowledge of para-academics to assist in the provision of teaching and learning services. Whilst this provides an opportunity for para-academics to enrich, build, and enhance their qualifications and expertise, does this translate into progressive acceptance of these staff as academic equivalents? A review of the nature of these changes and an anticipation regarding reactions from the University community about the impact these changes might have on the perceived value of the unit will be raised in this paper.

Keywords: Higher education, para-academic, future directions.

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## INTRODUCTION

The future direction of Australia's higher education sector faces multiple challenges, not just economically, but also from those identified through the Review of Australian Higher Education report, as fundamental to support Australia's ongoing commitment to educational reform (Department of Education, Employment and Workplace Relations [DEEWR], 2008, p.5). Without an expansion of the higher education system, Australia faces a substantially staggered economic and social future, suffering under the lack of knowledge (Coaldrake, 2000, p.8). As observed by the then Minister for Education, 'Events are forcing us to make new calls on our higher education system. We must have new and greater expectations' (Gillard, 2009).

Some of the challenges to Australia's higher education system that need to be addressed include:

- Increasing '...the proportion of young Australians with undergraduate qualifications...' (Gillard, 2009);
- Improving Australia's Organisation for Economic Co-operation and Development (OECD) position, to match those countries whose institutions inject significant finances into research (DEEWR, 2008, pp.xi-xii);
- Creating cohesion between the tertiary education sector and in-need schools (DEEWR, 2009, p.5);
- Improving research capabilities within each institution (DEEWR, 2009, p.5); and,
- Determining how best to maintain and improve '...high quality teaching and learning...' (DEEWR, 2009, p.5).

The Australian Government has recognised that these challenges require significant funding in order to succeed (DEEWR, 2009, p.5). The 10-year Australian Federal Government reform plan will see additional funding of approximately \$5.4 billion injected into the higher education and research sectors to help meet these challenges (DEEWR, 2009, pp.5-9).

The Griffith Institute for Higher Education (GIHE), is Griffith University's internationally recognised academic development unit charged with the responsibility of improving '...the quality of learning and teaching at Griffith University' (Griffith University, 2010, p.3). The unit aims to achieve this by producing and delivering academically relevant workshops; working with academic staff and executives on University strategic initiatives; supporting academics through the provision of information and leadership to assist colleagues achieve their targeted goals; and, undertaking research that strengthens the '...quality of student teaching, the student learning experience and outcomes' (Griffith University, 2010, p.3).

Griffith University places substantial emphasis on the important role a highly skilled workforce plays in the achievement of its nationally and internationally significant strategic priorities (Griffith University, 2008, p.2). The GIHE is central to Griffith University's capacity to assist in the achievement of these strategic priorities (Griffith University, 2008, p.16). 'The University will continue, through the GIHE, to provide high-quality professional development programs and resources that align with the University's learning and teaching philosophy and strategic objectives' (Griffith University, 2008, p.16).

The implicit challenge of determining how best to maintain and improve '...high quality teaching and learning...' (DEEWR, 2009, p.5) is matched perfectly with GIHE's charter to improve the quality of learning and teaching at Griffith University (Griffith University, 2010, p.3). Strategically-aligned and highly-considered academic and professional support staff at the GIHE complements the unit as a whole and helps to sustain a very successful academic development operation (Griffith University, 2010, p.19-20). These positions include a combined Director and Dean (Student Outcomes) position, an Associate Director, senior academic staff, and various administrative and research staff.



Macfarlane (2010) identifies para-academic positions as those whose concentration is predominantly on a single aspect of academia. Positions such as educational developers, e-learning coordinators and business development managers are examples of para-academic positions (see Figure 1, Macfarlane, 2010).

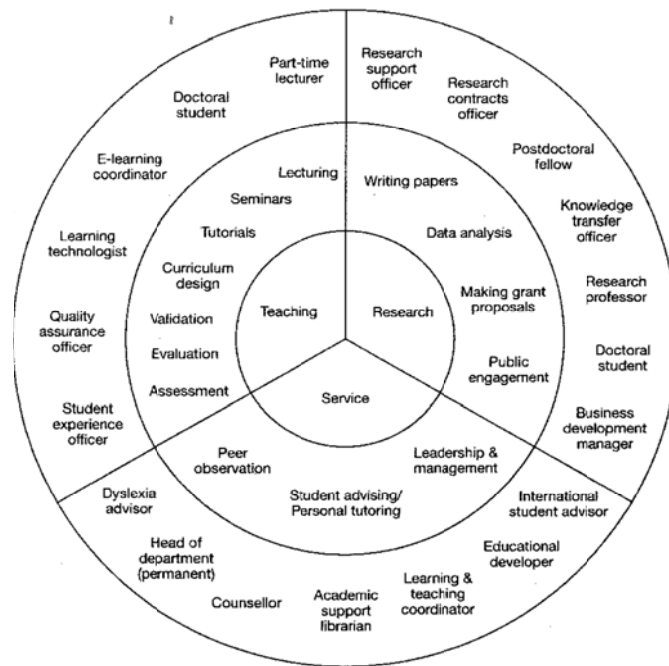


Figure 1. Types of para-academics in higher education.

Para-academic positions have evolved not simply because of the knowledge-expansion of professional support staff (Macfarlane, 2010). A distinct need has been created for professional support experts to carry out tasks that could be considered too time consuming and of an insufficient academic focus for traditional academics to carry out on a regular basis (Coaldrake, 2000). Macfarlane (2010) offers a clear visual representation of the evolution of these changes to the support, para-academic and traditional academic positions (see Figure 2, Macfarlane, 2010).

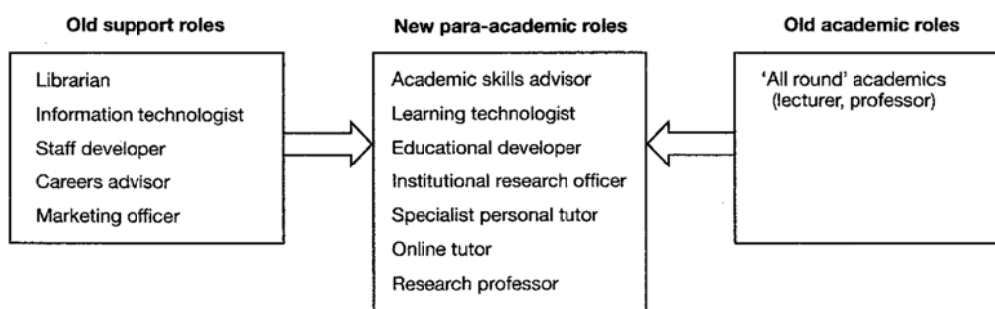


Figure 2. Source/origin of para-academics.

A 1997 inquiry into the United Kingdom higher education sector commented that ‘Clearly the role and profile of administrative and support functions in higher education has altered quite considerably over recent years. Many staff have found themselves taking on higher levels of responsibility and playing an increasingly central role in the delivery of higher education’ (Dearing, 1997).

Acting on several long-term and planned University initiatives, the GIHE introduced three para-academic positions to assist in the achievement of key strategic initiatives (Griffith University, 2008,

p.6). The creation of the blended learning consultant, curriculum support officer, and manager, teaching quality enhancement positions provide an exploratory introduction to this topic. Each of these positions is intrinsically involved in the support of the University's strategic initiatives (Griffith University, 2008, p.16).

## **METHODS**

The qualitative method used in the collection of data for this paper involved the initial identification of appropriate GIHE staff, and one brief round of interviews to establish an understanding of the individual and of the positions. Three GIHE para-academics were interviewed for this paper as a starting point for what may be a basis for data collection and the development of future papers.

## **DISCUSSION**

### **Exploring the position: Blended Learning Consultant**

A 'blended learning' style of teaching encourages academic staff to utilise various educational styles such as those involving information and communication technologies (ICTs), mixed with media and educational resources, multiple methods of teaching, a range of learning types, and face-to-face communication (Griffith University, 2009a). Griffith University has acknowledged the value a blended learning style of teaching and learning can add to the climate of academia (Griffith University, 2009b).

The GIHE blended learning consultant position commenced in November 2009 and was created in direct response to a strategic initiative from the University's Deputy Vice Chancellor (Academic). The consultant operates in collaboration with four Group-based blended learning advisors who seek to generate a higher usage of ICTs in both the teaching and learning environments throughout the University. The position is responsible for providing professional development information and instruction to groups of staff. A vignette of how the appointee to the blended learning consultant position views this role follows.

I do not consider this to be a traditionally-held academic position in terms of undergraduate/postgraduate teaching. Whilst I do not convene or moderate a course or professional development program, there is responsibility to contribute to the developmental design and delivery of components of these programs.

I recognise there may be concern throughout the University's academic community that similar positions are being created at the expense of traditional academic roles. However, this position should free the GIHE academics from tasks that whilst important in themselves, are time consuming and are not considered of a sufficiently high standard to be called quality academic work. Whilst recognising this position allows GIHE academics the opportunity to continue to pursue valuable research, teaching or service-related activities, I suggest it may take some time to be positively accepted throughout the University's academic community.

You have to be honest and upfront about who you are, and what you are doing here. Establishing credibility and respect with academic colleagues within GIHE is a matter that needs careful acknowledgement.

### **Exploring the position: Curriculum Support Officer**

As Whitchurch (2009) explains, a future direction for a university, and one which may become more prevalent, is that of an altered organisational format where more staff work on specific projects and portfolios, outside of the accepted academic or professional structure.

The curriculum support officer position was established as a twelve-month seconded position, commencing in February 2010. Primary objectives of the position are to assist GIHE (deliver to the University) ‘...in the areas of teaching and curriculum development and quality enhancement, professional development of teaching staff engaged in curriculum development, other key activities including GIHE representation in Group or School Communities’ (Griffith University, 2009c). A vignette of how the appointee to the curriculum support officer position views this role follows.

I see the essence of this position as one of offering support to GIHE senior academics, allowing them time to undertake more traditional academic activities, such as conducting teaching and research at a higher level. This ultimately saves the senior academics’ time, and provides them with the opportunity to operate in accordance with their qualifications.

Finding new ways of supporting and engaging academics whilst meeting targeted objectives is central to the way I see this position. Providing the opportunity for such objectives to be met, also allows me to further extend my personal knowledge base and expertise.

This extremely supportive assessment of the curriculum support officer position is reinforced by The National Committee of Inquiry into Higher Education (1997); ‘They took tutorials, seminars and even gave lectures in order to free academics for other things.’ Similarly, Gordon and Whitchurch (2007, p.17), Conway (1998, p.1) and Dobson (2000, p.209) recognise the institutional value of a position like this, where professional staff work in conjunction with academic staff. The mixing of academic and administrative roles and responsibilities can also help to provide a flexible workforce who provide an institutional context for ‘...complex knowledge environments’ (Gordon & Whitchurch, 2007, p.16).

### **Exploring the position: Manager, Teaching Quality Enhancement**

Communication and ICTs are central to the continual blossoming of the education industry (Cunningham, Ryan, Stedman, Flew, Tapsall, Bagdon & Coaldrake, 2000). A primary responsibility of the manager, teaching quality enhancement is to manage GIHE’s communication tools and activities designed to improve the quality of learning and teaching at the University. The position is a full-time continuing role that commenced in November 2007. Additional positional responsibilities include supporting the University’s strategic initiatives such as responding to key recommendations from the 2006 GIHE Review, and supporting academic staff with the development of Australian Learning and Teaching Council (ALTC) and institution-based applications for awards and grants. A vignette of how the appointee to the manager, teaching quality enhancement position views this role follows.

I see the fundamentals of the position as that of a University relationship broker; the bridge and network builder between GIHE and the rest of the University – a type of two-way conduit for GIHE and the wider University community. It follows that through this position, support for the developmental aspects of the unit, as well as the delivery of grass-roots feedback to inform staff of the requirements of Griffith University academics is offered. As a communications support role, I understand the capacity this position has to free up academic staff to provide them with the opportunity to concentrate on the higher-level teaching and research aspects of their work.

In the past, academics in higher-level positions would be responsible for investigating the applications of award and grant writers to ascertain names to put forward for recommendation. The position of Manager, TQE develops and delivers the professional assistance required to apply for awards and grants, and to then make recommendations for senior academics to make final decisions regarding submitted grants based on this professional support.

The position presents its own set of complexities and challenges as I attempt to integrate the support of process and protocol-oriented administrative staff and academics who are traditionally less involved or interested in systems knowledge. Although the position has led to issues of credibility, there is a sense that regular, respectful communication, along with collaboration and negotiation with academic and professional staff will ensure all staff are recognised for their traditional values, strengths and contributions to the University as a whole.

The University-wide exposure this position allows, creates privileged opportunities to view the great work the University academics have been able to deliver because of the support given by this position.

## **CONCLUDING REMARKS**

As outlined earlier, this paper has commenced an exploration of the acceptance of para-academic or professional support staff within the academic development unit of Griffith University. It could be concluded from the data collected that these staff value the positions they play within the University, and also that they see these positions as being strategically implemented, purpose-driven, and fundamentally important to the value of the work carried out by the University.

A further conclusion is the acknowledgement from the three para-academics that these positions cannot be categorised as traditional academic roles, but that they are positions which are accepted throughout the University. In addition, each para-academic remains highly committed, enthusiastic and supportive of the position and its place within the complex University environment - providing a unique opportunity to be 'in-tune' with both professional and academic elements of the University.

It could also be concluded that traditional academic acceptance of these para-academic positions is strong, both at Griffith University and at the GIHE, given the support offered by the University to GIHE's ongoing and future direction. Further analysis regarding the depth of the GIHE academics' support of the para-academic could assist in the development of this concept. Coaldrake (2000, p.28) suggests that elements of University life, including academic and para-academic positions, has altered over many years and will continue to do so, offering an increased capacity for these positions to apply profound institutional knowledge and an ability to develop further into the future.

## **ACKNOWLEDGEMENT**

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# **ARE WE MISSING SOMETHING? BENCHMARKING A SUITE OF UNIVERSITY POLICIES**

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## **ABSTRACT**

This paper outlines the process and outcomes of a review of the University of Western Sydney's policies to ensure proper levels of coverage, compliance and approval pathways within its policy suite. Benchmarking of publicly available information was used to ascertain whether the University of Western Sydney's policies provide sufficient protection for the university given the range of issues related to its operation. In addition, the project examined policy approval processes and compliance mechanisms in another higher education organisation and compared these against similar processes at the home institution. Outcomes identified inconsistencies in policy coverage in relationship standards between the university and students, and potential business risk exposure; and the approval authority instruments.

Keywords: policy, benchmarking, review and evaluation, risk management.

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## INTRODUCTION

University policy documents generally concern themselves with internal matters relating to the principles on which the institution stands, management of exposure to risk, and to interpret and apply legislative requirements. The process for setting university policy is usually enshrined in the legislation that enacts the university. A governing body such as a council or board is given the overall responsibility of setting the organisation's policies. Other sub-committees or positions, such as an academic board or a Vice-Chancellor, may be delegated certain policy responsibilities within the university's act or by-laws.

The policy development and approval regime can determine the shape of an institution's policy suite, however, a number of other factors influence an organisation's policy profile (Althaus, Bridgman, & Davis, 2007, p46). Within the tertiary education industry, the strategic direction of the university effects its policy decisions and needs. External influences such as sector reform or government policy and new legislation can also impact on internal university policy. Expectations of staff, students and society in general change over time; policy can guide this change or be reactive to these external pressures. Universities also need to be responsive to critical incidents, and to be risk resilient. Policy development processes such as policy life cycles like those outlined by Althaus et al. (2007, p37) and Hatwell & Jensen (2008), assist organisations to respond to internal and external issues. Review processes assist in ensuring that policy documents meet the contemporary requirement of the organisation and its stakeholders (Althaus et al. 2007, p190).

In 2010, the Policy and Governance Unit at the University of Western Sydney (UWS) undertook a project to review comprehensively its policy suite in order to determine the currency of its policy profile. The objectives of the project were to ensure appropriate levels of coverage, compliance and approval pathways, and to identify and action outstanding policies. The key element of the project was to compare the UWS set of policies and approval processes with those of a comparable university. The underlying theme of the project was framed around risk management; that is the UWS's potential exposure to risk through disparity in policy coverage and potential risk of inadequate approval processes. At the beginning of July 2010, the UWS had 182 policy and related documents such as procedures, guidelines and plans, on its policy website. These policy documents cover the myriad issues faced by a modern university, ranging across academic rules and procedures, setting behavioural standards, meeting legislative requirements, governance processes, health and safety, matters relating to working at the University, and privacy, security and risk management. These documents represent the evolution of the University's policy suite since the amalgamation of its three former federated members, and their various policies, in 2000. The historic versions of current policies listed on the UWS policy website tracks the changes in policies since that time.

The policy review process at UWS is managed through its policy document management and development system, the Policy DDS. Every policy has a set review date, usually three years after publication but this can vary depending on the type of policy. The Policy DDS system auto-generates a review notification to the responsible manager four months before the date of review. The relevant manager reviews the policy for currency and institutes any required action such as minor amendments or a full review. A senior executive must approve the outcome of the review. Individual units have responsibility for policy development within in their portfolio, with the Policy and Governance Unit managing the policy process centrally. The Policy and Governance Unit also provides policy development support and resources to managers. In terms of policy development support, the Policy and Governance Unit (2009) encourages policy reviewers to consider the policy in terms of the full policy suite and the sector generally. Good policy review practices also include looking at similar policies and at best practice in the industry (Hatwell & Jensen, 2008). Whilst under the review process individual policies at the UWS are considered in terms of what is happening in the sector, the overall policy requires review in terms of industry practice from time-to-time.



## **METHOD**

A benchmarking process was determined to be the most suitable method in which to undertake the review. Benchmarking is a mechanism used by organisations to improve performance by identifying and adapting best practice (Stapenhurst, 2009, p6). It usually relates to business performance -faster production, reduced costs, higher quality, increased competitiveness and so on - by collecting and analysing a range of operational data. In terms of the policy suite review project, benchmarking may not have seemed the obvious method in which to undertake the comparison. However, as a standardisation analysis, the processes underpinning benchmarking can be adapted to identify a partner organisation, to collect and analyse information, and to assist in identifying gaps.

### **Selecting a Benchmarking Partner**

In selecting a benchmarking partner, it is common to develop selection criteria (Andersen & Pettersen, 1996, p41). Cook (1995, p13) notes that as benchmarking is usually a measure of one organisation's performance against the best practice of another organisation, generally a leader in the field is sought as the benchmarking partner. As this review was devised as a desk-based project, only information in the public domain could be used so whilst best practice was important, other criteria were developed, as follows (in no particular order):

- 1) Location - A NSW-based university to account for the same state legislative requirements,
- 2) Accessibility - A large range of policy and related documents were readily available on the university's public website,
- 3) Policy Development Process - The university's policy development process was available on-line, and was consistent with a mature policy development framework, and that the majority of policies listed were developed under that policy development process,
- 4) Best Practice - some recognition of best practice in the sector.

In addition, a multi-campus profile was determined to be important but not essential.

A desk-based audit of other NSW university policy websites was undertaken to determine suitability in terms of the criteria. Whilst all NSW universities list policies on their websites, many did not meet criterion three. The University of Technology Sydney (UTS) and the University of Wollongong (UOW) websites were the two most suitable based on the criteria. The UOW was selected as the benchmarking partner because Freeman (2010) rated the UOW's policy framework as best practice, with its policy website rating highly among the 13 institutions reviewed as part of that study. Finally, the UOW's strategic plan was reviewed to ensure that the potential benchmarking partner's strategic directions were not significantly different to that of the home institution. Whilst each organisation has particular foci, the strategic plans were not as different as to believe that their policy directions would be divergent. A summary of the two strategic directions are listed in Table1.

### **Collecting the Data**

In order to make a comparative analysis, the policy documents listed on each university central policy site were transferred to a number of spreadsheets. These documents included all those listed on the central site including policies, procedures, guidelines, standards, codes and legislation. Only the information available on the central policy site was used to undertake the analysis – no further information or clarification was sought. Even though the author was aware that potentially similar documents were available elsewhere on the UWS website this information was not used in the comparison process.

Information on each policy document was captured - a summary of the document, the approval authority and the category in which the home institution had allocated the document. The lists of policy documents of the two universities were compared to each other to determine whether there were certain issues covered by UOW that were not covered by the UWS policy suite. The titles of the documents, the document summaries and categories were used to establish whether there were deficiencies in policy coverage at the UWS.

Table 1 – Overview of Strategic Directions of Benchmarked Institutions

University of Wollongong*	University of Western Sydney#
<b>Mission, Vision and Principles</b>	<b>Mission, Vision, Beliefs and Values</b>
<p>To be an international University recognised for originality and enterprise in exploring, communicating and applying knowledge to enrich individuals, their communities and the environment</p> <p>MISSION Our mission is to excel through:</p> <ul style="list-style-type: none"> <li>• Research and teaching of world-class standard and impact</li> <li>• A learning environment that supports, informs and inspires our diverse student community</li> <li>• Staff initiative, enthusiasm and commitment to the University's goals</li> <li>• Collaboration and enterprise that provide innovative and timely ideas and solutions for the University and its community partners</li> </ul> <p>PRINCIPLES We share a commitment to promoting and celebrating:</p> <ul style="list-style-type: none"> <li>• Excellence through initiative, enterprise and achievements that take society forward</li> <li>• Intellectual openness and freedom of opinion</li> <li>• Integrity</li> <li>• Mutual respect and collegiality</li> <li>• Diversity of cultures, ideas and peoples</li> <li>• Indigenous perspectives and reconciliation</li> <li>• Foresight, quality and accountability as an institution</li> <li>• Community partnerships and mutual development</li> <li>• Equity and social justice</li> <li>• Responsible stewardship of the natural environment</li> </ul>	<p>Our Mission To be a university of international standing and outlook, achieving excellence through scholarship, teaching, learning, research and service to its regional, national and international communities, beginning with the people of Greater Western Sydney.</p> <p>Our Vision Bringing knowledge to life in Greater Western Sydney though community and business engagement with our learning and research.</p> <p>What we Believe in</p> <ul style="list-style-type: none"> <li>* The primacy of the student experience</li> <li>* Environmental and social responsibility</li> <li>* A vibrant and inclusive intellectual community</li> <li>* Opportunity and excellence</li> <li>* Being connected locally and internationally</li> <li>* Valuing and rewarding our staff</li> </ul> <p>Our Values UWS has a shared and explicit set of values which underpin all that it does:</p> <ul style="list-style-type: none"> <li>* excellence and quality in all endeavours</li> <li>* scholarly rigour and integrity</li> <li>* equity of access and inclusiveness</li> <li>* collegiality and participatory decision-making</li> <li>* academic responsibility and freedom</li> <li>* relevance and responsibility to our communities</li> <li>* ethics and accountability</li> </ul>
<b>Strategic Goals 2008–2010</b>	<b>Strategic Goals 2010-2015</b>
<p>Core Goals &amp; Objectives</p> <ol style="list-style-type: none"> <li>1. Excellence and innovation in learning and teaching</li> <li>2. Excellence and innovation in research</li> <li>3. Dynamic engagement with our communities</li> </ol> <p>Enabling Goals &amp; Objectives</p> <ol style="list-style-type: none"> <li>4. Students engaged with learning and University life</li> <li>5. A university of international outlook and achievement</li> <li>6. Versatile, skilled and committed staff</li> <li>7. Business capacity to advance the achievement of our vision</li> </ol>	<p>Key areas of focus 2010-15</p> <ol style="list-style-type: none"> <li>1. Create a superior and engaged learning experience</li> <li>2. Develop focused, relevant and world-class research</li> <li>3. Build organisational and financial strength</li> </ol> <p>Key Performance Indicators &amp; Current Priorities</p> <ul style="list-style-type: none"> <li>* Widening participation</li> <li>* Student retention</li> <li>* International enrolments</li> <li>* Research outcomes</li> <li>* Postgraduate load</li> </ul>

\* University of Wollongong. (2010)

# University of Western Sydney. (2010a)

Part of the original brief was to ascertain the pathways for approval of the policy documents. Accordingly, the policy documents of each institution, as listed on the central policy website, were assessed by approval authority. That is, which university governing body or position approved the document. As the relevant university Act determines the bodies within the organisation that have authority to make policy or to delegate that responsibility, both University Acts were reviewed to determine legislative variances in approval authorities. Additionally, the documents detailing the policy approval processes in each institution were compared.

The *University of Western Sydney Act 1997* (the UWS Act), the *University of Western Sydney By-Laws (2005)*, the *UWS Rules* and the *Delegations (Administrative) Policy* set the authorities for approval of policies at the University. The Board of Trustees has, under the UWS Act, the

responsibility for broad policy development but also has the authority to delegate those powers to an officer of the University or committee; and the Academic Senate has responsibility for policies relating to academic matters. The Vice-Chancellor, under the *UWS Rules* has responsibility to develop policies on administrative and financial matters, and under the *Delegations (Administrative) Policy* has delegation to approve policies. UWS also has the *Policy, Procedure and Guidelines Policy*, which advises that the policy approval authorities are the Board of Trustees, the Academic Senate and the Vice-Chancellor.

The *University of Wollongong Act* (the UOW Act), the *University of Wollongong By-Laws (1991)* and its policy on *Delegations of Authority Policy* provide the authorities for policy approval. Under the UOW Act the University Council can delegate its responsibility. The Administrative Committee is a formal committee of the University Council delegated with particular responsibility for monitoring policies and performance including making recommendations on administrative policies. The Administrative Committee is also able to approve administrative policies. The UOW's *Standard on UOW Policy* advises that the University Council and/or the Administrative Committee is required to approve new policies, except where that responsibility is delegated by the resolution of the University Council.

The definitions of the two institutions' policy document titles were compared to each other to ensure that the analysis was actually comparing "like to like". Table 2 shows that the definitions as outlined in the relevant university's "policy document" policy. The UWS limits its policy documents to policies, procedures and guidelines but the UOW also has codes, standards and rules. Although guidelines are not defined in the UOW's *Standard on UOW Policy*, many guidelines were listed on the central policy website. The UWS's site included plans, which were undefined.

Table 2 – Definitions of the Policy Titles of the Benchmarked Institutions

University of Wollongong*	University of Western Sydney#
<p><u>Code of Practice or Conduct</u> - a statement of rules and expectations which have been approved in some formal way but without the legal force of legislation or regulations. They focus on duties and responsibilities for particular circumstances, often outlining the required standard of behaviour.</p> <p><u>Policy</u> - a statement that outlines non-discretionary governing principles and intentions in order to guide University practice. Policies apply to the University as a whole. They comply with all relevant legislation and rules and shall be approved by the highest delegated authority being the University Council and/or Administrative Committee.</p> <p><u>Procedure</u> - a documented instruction that gives directions to carry out specified actions. For the purposes of procedures that support policy, they are mandated directions.</p> <p><u>Rule</u> - an authoritative, prescribed direction for conduct. Rules are made in accordance with the UOW Act and are approved by the University Council. They have the same force and effect as By-Laws.</p> <p><u>Standards</u> - dictate an action in particular circumstance or the state of affairs on a particular issue. They establish a precept from a recognised authority with no deviation. Standards may be established internally, but also externally and be adopted by the University. Standards which have University wide effect have the same status and requirements as Policy.</p>	<p><u>Guideline</u> - a statement that is advisory or explanatory in nature and provides guidance on how University policies and procedures might best be implemented or applied.</p> <p><u>Policy</u> - a statement that sets out the University's official position in relation to a particular issue and any mandatory requirements.</p> <p><u>Procedure</u> - a statement that sets out the University's standard and required practice for implementation of a University policy.</p>

\* University of Wollongong. (2007)

# University of Western Sydney. (2006a)

## RESULTS

### Analysing the Data

UWS has many more policies than UOW (158 versus 88), however, the documents relating to procedures are much reduced (7 versus 28). Similarly, UWS has fewer guidelines listed – 11

compared to 37. The *UWS Policy Template Structure* explains that the policy template has five sections: purpose and context; definitions; policy statement; procedures and guidelines (University of Western Sydney, 2006a). Accordingly, a UWS policy may also include either or both procedures and guidelines in the relevant sections of the policy. The UWS has no documents defined as a standard, code or rule because there is no scope for these document types within the *UWS Policy, Procedure and Guideline Policy*; only policies, procedures and guidelines are mentioned (University of Western Sydney, 2006b). Although Clause 44 of the *UWS By-Law 2005* does refer to making of rules, a rule is not a defined document type (NSW Legislation, 2005). There are some documents listed on the UWS central policy website that by their title might suggest a standard, code or rule, such as the *UWS Code of Conduct* and the *UWS Doctor of Philosophy Rule* but these are classified as policies (University of Western Sydney, 2010b). For the purpose of this analysis, policies of UWS are treated as equivalent to the codes, policies, rules and standards of UOW.

At each institution the documents were classified as per the type of document listed in Table 2; the number of documents in each type are listed in Table 3 for both universities.

Table 3 - Type of Policy Documents at the Benchmarked Institutions

	University of Wollongong	University of Western Sydney
Guidelines	37	11
Legislation	2	3
Plans	0	3
Policies	88	158
Procedures	28	7
Rules	5	0
Standards	4	0
Codes	9	0
Total	173	182

Each university classified the documents listed on their central policy website by a category, generally relating to a broad component of the University's business, as a "quick link" or search option. UWS has one additional category (Community Relations) containing five documents and there were 16 documents on the UOW website that were not categorised. However, the nine other categories are reasonably similar in both name and number of documents. The exception is the UOW category "Facilities and Services" and UWS category "University Premises". The UWS category "Behaviour and Standards" does cover equity-based policies and therefore is considered similar to the UOW category "Equity and Diversity". The documents are classified by each University into a category and these are listed in Table 4.

Table 4 - Categories of Policy Documents at the Benchmarked Institutions

University of Wollongong		University of Western Sydney	
Equity and Diversity	10	Behaviour and Standards	15
Facilities and Services	2	University Premises	13
Finance and Internal Audit	16	Financial Management	16
Governance	12	Governance and Management	14
Information Technology	17	Information Technology	10
Learning and Teaching	46	Learning at UWS	37
Occupational Health and Safety	5	Health and Safety	10
Research	16	Research	22
Staff	33	Working at UWS	40
Not Categorised	16	Community Relations	5

Of the 173 documents on UOW central policy website, UWS had at least one document covering the same or similar issues of 136 of those policy records. This meant that there were 37 UOW documents not covered by a similar UWS policy document. The categories of those documents are listed in Table 5. UOW has four codes that are not covered by any UWS document. These were the *Code of Practice – Casual Academic Teaching*, *Code of Practice – Students*, *Library Code of Conduct* and the *Code of practice – Student Professional Experience*. These might reasonably be considered to be the sort of document covered by the UWS category “Behaviours and Standards”. UWS had 59 documents that did not cover issues at UOW. These were predominantly in the categories of “Working at UWS” and “Learning at UWS”. An analysis of these documents has not been included as this was not part of the brief for this project but could be the basis for further investigation.

Table 5 – UOW Policy Documents Not Covered by a UWS Policy Document

Category		Type of Documents	Code and Policy Document Titles
Finance and Internal Audit	2	2 Policies	Business Continuity Policy Project Management Policy
Governance	2	2 Policies	Production of Marketing Material and Use of UOW Brand Policy Quality Assurance Policy – UOW Administration
Information Technology	5	2 Policies, 2 Procedures, 1 Guideline	IT Server Security Policy IT User Account Management Policy
Learning and Teaching	9	3 Codes, 3 Policies, 3 Guidelines	Code of Practice – Casual Academic Teaching Code of Practice – Students Library Code of Conduct Ethical Objection by Students to the Use of Animals and Animal Products in Coursework Subjects Fees Policy Information Literacy Integration Policy
Occupational Health and Safety	1	1 policy	Smoke Free Policy
Staff	7	1 policy, 3 procedures, 3 guidelines	Development Program Assistance Policy
Not categorised	9	1 code, 6 procedures, 1 guideline	Code of Practice – Student Professional Experience

In analysing the policy approval pathways for both institutions, only the “policies” were considered. For UWS, the approval process for policies was reviewed; for UOW, the approval process of codes, standards, rules and policies was examined. Procedures and guidelines were not included in the assessment of the approval pathways. The UWS Board of Trustees approved 12 of the 158 policies at UWS; the policies were in the categories Behaviours and Standards, Financial Management, Governance and Management, and Working at UWS. The Academic Senate approved 40 policies in two main categories – Teaching and Learning, and Research –, both of which are in their portfolio. The Vice-Chancellor approved the remaining policies, 106 over all categories. If the Academic Senate approvals are included in the Board of Trustee’s tally, the Board has approved approximately 40 per cent of University policies.

Eighteen policies on the UOW central policy website were not available for viewing without a password and therefore some of the details of the documents could not be discerned. This included the approving authority, and therefore these were excluded from the investigation. This left a balance of 106 documents. The UOW University Council approved all nine codes, all five rules and two of the four standards and 36 of the policies. These documents were in all categories. The Academic Senate approved three policies and one standard in the Learning and Teaching category. The Administrative Committee approved one standard and 18 policies in a range of categories but not in Learning and Teaching. The Vice-Chancellor approved 11 policies, almost all in Information Technology and the Pro Vice-Chancellor (Information Technology) approved one policy, also in the category of Information Technology. Including the Administrative Committee as a standing committee of the University Council, the University Council approved 67 per cent of all codes, policies, rules and standards at UOW.

## **DISCUSSION**

The project scope was to ensure appropriate levels of coverage, compliance and approval pathways, and to identify and action outstanding policies. The results highlighted two important points in relation to the list of policy and related documents located in the UOW's policy directory. The first was that the UOW had established a number of codes of practice that were based on enhancing the student experience and maximising students' potential. In addition, the UOW has codes of conduct for students which the UWS does not as yet have. Such codes are important in establishing the University's expectation of both students staff. The second was that UOW has a number of policies related to risk management such as the *Business Continuity Policy* (business risk), the *Production of Marketing Material and Use of UOW Brand Policy* (brand risk) and the *IT Server Security Policy* (information risk) that UWS does not. Additionally, the UWS *Risk Management Policy* has not been reviewed since 2007 (University of Western Sydney, 2010b). These areas represent gaps in the UWS policy suite that should be further explored.

In terms of the policy approval pathways, the highest approving body at the UOW, the University Council approved about two thirds of all codes, policies, rules and standards, whilst at UWS approximately the same amount of policies are approved by the Vice-Chancellor. The UWS Board of Trustees only approved two fifths of all policies. Whilst the Vice-Chancellor does have responsibility for developing policies in administrative and financial areas, the policies approved by the Vice-Chancellor have extended to all categories of policies. Given the difference between UOW and UWS, the policy approval pathways at UWS require further investigation to determine whether the policies currently approved with authority by the Vice-Chancellor should be submitted to the Board of Trustees for approval. This may include exploring whether policy approval responsibilities could be delegated to standing committees of the Board of Trustees, or a particular standing committee established and charged with policy development and approval responsibility, similar to the Administrative Committee at the UOW. Those policies, in particular, where the Vice-Chancellor has a specific role identified within the policy, should be considered in this process to ensure segregation of duties.

## **CONCLUSIONS**

A benchmarking project comparing the policy documents listed on the central policy websites of UWS and UOW identified disparities between the UOW and the UWS policy suites. Primarily, UOW has a number of codes of conduct or practice relating to expectations of students and their experience, whereas UWS does not. Also, UOW had three policies addressing areas in which the university might be exposed to risk that were not covered in the UWS suite of policy documents. Furthermore, the defined approval trail at the UOW resulted in the majority of policy type documents being approved by the University Council or one of its standing committees. However, at UWS the majority of policies are approved by the Vice-Chancellor. Based on these outcomes, the specific differences in policy coverage should be more closely examined with a view to actioning any outstanding policies. The differentiation in policy approval also requires a closer investigation of the policy content to determine whether an alternative approval authority, such as the Board of Trustees, or a standing committee, is warranted. There is the opportunity to undertake further examination of appropriate policy coverage by expanding the review to consider policies within each category, and to benchmark with a wider number of institutions, including overseas.

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**Association for Tertiary Education Management and  
Tertiary Education Facilities Managers Association**

**Tertiary Education and Management Conference 2010**

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## **EDITORS' INTRODUCTION**

**Ian R Dobson & Maree Conway**

The Tertiary Education Management (TEM) conference has been a major annual event on the higher education calendar for over thirty years. TEM conferences grew out of conferences held in earlier years by the Association for Tertiary Education and Management (ATEM) and its predecessor, the Association for Tertiary Education Administration (AITEA). The first AITEA conference was held in 1977 on the dual themes of National Policies in Higher Education and Education as a Profession. Conferences were held annually by ATEM since then until 1992, when the then Australasian Association of Higher Education Facilities Directors (AAAPA) became a partner in running the conference, which became known as the ATEM and AAPP Conference. In 2003, the title of the Conference was changed to the Tertiary Education Management Conference to reflect the focus of the conference rather than the two host associations.

The contemporary Tertiary Education Management Conference is organised via a partnership between ATEM and the Tertiary Education Facilities Management Association (TEFMA) (previously the Australasian Association of Higher Education Facilities Officers (AAPP)). It attracts around 600 professional managers and higher education researchers from universities, TAFE institutes, polytechnics, wānanga, government departments, private providers and other organisations. The Conference is the flagship activity each year. It is the opportunity for TEFMA and ATEM to bring its members together for a significant period of professional development, for ATEM/TEFMA to co-host and listen to significant figures in tertiary management and administration as plenary speakers, and to network with like organisations and clients through formal links and sponsorship arrangements.

The conference was re-badged in 2003, to become the Tertiary Education Management Conference, with the aim of building the conference to be the pre-eminent professional development activity for managers in tertiary education. The conference is organised by an organising committee with members from both ATEM and TEFMA. In the interests of professionalism, the conference has used the services of a professional conference organiser, appointed by the TEMC and TEFMA councils either through a tender process or through other arrangements. For the past several years, Leishman Associates has filled this role.

The TEM conference is the only one in the tertiary sector which covers the full range of functions in institutions, and is designed to allow participants to build strong networks across Australia and New Zealand. TEMC has a strong practitioner focus to support the sharing of knowledge and 'know how', and also provides opportunities to focus on big-picture issues as well. It allows participants to reflect on their management practice in a regional, national and global context.

Publishing scholarly work is not new to ATEM. It has been proprietor of a scholarly journal for the past 32 years: the Journal of Higher Education Policy and Management. However, even if ATEM is primarily an association of tertiary education managers, its journal attracts papers from researchers and managers from around the world. ATEM has had a co-proprietor since 2009, the L H Martin Institute for Higher Education Leadership and Management.

One of the changes in content over the Journal's life to date has been a steady decline in the number of practitioner papers published (Dobson, 2009). The main reasons for this have been the relative decline in the number of such papers submitted to the Journal, against the rapid increase in the number of papers submitted by academics. Of course, there is also a section of the tertiary education management 'industry' that has policy, analysis and institutional research and management as its prime interests. Some of the occupants of these newer higher education positions are the university officers that Celia Whitchurch has described in terms of their 'changing identities' (Whitchurch, 2006). The authors of these papers are not drawn exclusively from outside university administrations.

The TEM conference has always been rich with the sort of practitioner research that no longer has many opportunities to be published. To this end, those responsible for organising TEM Conferences agreed a couple of years ago to introduce a 'refereed stream' of papers into the Conference. One of the reasons for this was to try to create a new space in which practitioner research and development can be published. Such material, although based on a background of scholarship and empiricism, will often not be accepted by scholarly journals, often on the grounds that it is based on experience or practice from a single institution. This volume represents an attempt to overcome the hiatus in the publication of material with a practice-driven bent.

But, as the American TV evangelist used to say a number of years ago, 'the kingdom of heaven does not come for free'! Peer-reviewed papers published as part of a refereed stream are counted in the formal annual collection of publications, so there are externally defined standards to be met. The requirements for what can be accepted in a conference 'refereed stream' is laid down by the Department of Innovation, Industry, Science and Research for the Higher Education Research Data Collection (HERDC).

To be eligible for inclusion in HERDC, the conference publication must meet the definition of research as amplified in the key characteristics of research publications and must:

- be peer reviewed on the full paper
- be presented at conferences, workshops or seminars of national or international significance
- be published in full; the papers may appear in a number of different formats, e.g. a volume of proceedings, a special edition of a journal, a normal issue of a journal, a book or a monograph, CD Rom or conference or organisational web site.

Quoting from the 2009 HERDC Guidelines: 'For the purposes of the HERDC, an acceptable peer review process is one that involves an assessment or review of the research publication in its entirety by independent, qualified experts before publication. Independent in this context means independent of the author.'

Peer review is relevant for journal articles and conference publications being counted in the [HERDC] Research Publications Return - Return 2.'

The main reason for this amorphous process is that duly refereed papers accepted for inclusion in a conference refereed stream are eligible to be included in an institution's publications, in the E1 category. Material on the collection and the process can be retrieved from:

<http://www.innovation.gov.au/Section/Research/Pages/highereducationresearchdatacollection.aspx>

For the TEM Conference 2010, 16 papers were submitted and reviewed, and of these, 11 were accepted for inclusion in the refereed stream. Reviewers' comments were reported to authors, and of those papers deemed 'acceptable' several had to be resubmitted having corrected references and adjusted papers to meet the pre-stated style guide.

This is the first time conference organisers have actually 'published' its peer-reviewed conference papers, but it definitely will not be the last. Your feedback you could offer will be gratefully received.

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# **INTERVENTION FOR RETENTION: HOW CAN ACADEMIC AND SOCIAL SUPPORT HELP UNIVERSITIES KEEP THEIR STUDENTS?**

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## **ABSTRACT**

Tinto's influential model of retention (1975; 2006) depicts academic and social integration as key factors affecting a student's decision to continue their study program. This paper reports on individual interviews with international students who were failing their courses at Central Queensland University Sydney and were subscribed to a monitoring program that assisted them improve their academic performance. Specific social and academic factors affecting their performance prior to and during their 'monitored' study are examined. The outcomes of this research will provide universities with a framework to improve international student retention through the identification and support of students at risk.

Keywords: international students, retention, student support, social integration

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## **INTRODUCTION**

Government funding for Australian universities has continually diminished over several decades placing significant financial pressure on universities. In addressing this fiscal challenge, universities have become more reliant on the international student market. However, this market has been critically affected by recent events and concerns particularly in relation to the safety and wellbeing of international students, changes to skilled migration limiting permanent residency options for international students and a strong Australian dollar. The retention of all students is an ongoing concern for universities but in the context of current threats to the continuing success of Australian international higher education, it is timely to consider the factors affecting the retention of international students and invest in strategies to ensure that such students successfully complete their study programmes. In an increasingly competitive national and global market, understanding how to retain international students can preserve the important investment of economic and cultural capital these students deliver to Australian learning and teaching communities. This paper provides a case study of the factors affecting retention of international students at Central Queensland University, Sydney.

## **BACKGROUND**

### **Measuring Retention**

Retention is a complex measure and reporting is somewhat controversial (Norton, 2010) as a consequence of factors such as increasingly common flexible and part-time study options. Retention is defined by the Commonwealth Government's Learning and Teaching Performance Fund as '... the percentage of students in a particular year who neither graduate nor continue studying in an award course at the same institution in the following year' (Crosling & Heagney 2009, p.9). Student attrition is the inverse ratio report of students who leave an institution before completing their programme of study. As the retention of students is one criterion affecting the Australian government's university funding decisions, it is an issue of sector-wide concern. Studies into student retention have focused primarily on the first year experience as it is during the first 'transitional' year of study that students are most likely to withdraw (Kift & Field 2008; Mannan 2007; Crosling & Heagney 2009; Norton 2010).

Retention is conventionally measured annually over two terms. An attrition rate of slightly over 18 per cent in Australia is currently reported (Trounson & Healy 2009) with expected completion rates for first programme at 71-74 per cent (Marks, cited in Norton 2010, p. 57). Recent figures from the UK indicate attrition of between 13-18 per cent (Thomas 2002, p. 424). Attrition at Central Queensland University (CQU) in Sydney is between 7 and 8 per cent per term, counting all students enrolled in a programme that did not graduate and did not continue with their programme. In 'normal reporting' (two terms per year) this would be approximately 15 per cent which is a strong outcome in the sector. As CQU offers three terms in a year, the term by term figure is preferred as the clearest method of tracking retention. This figure includes all non-graduating students regardless of year of study, although it should be acknowledged that international students have limited opportunity to change provider in their first year.

Government regulations associated with international student enrolment in Australian universities prohibit a student from changing provider for the first six months of study (Australian Education International 2010). This is effectively two terms of study or a full academic year at a standard university. Measuring and reporting international student retention and attrition in their first year of study needs to account for this regulation but its effects are not noted in general statistical reports (Trounson & Healy 2009; Gilmore 2009). As reports indicate international student attrition is lower than domestic student rates (Gilmore 2009; Grebennikov 2009), factors which contribute to better retention of international students, including the impact of regulations prohibiting change in provider, warrant investigation. Whilst diploma programmes and some postgraduate programmes are only

comprised of two terms of fulltime study, for most international students, the decision to stay or go to another provider is therefore most likely to be encountered in their third term decision. Few studies have attended to the issue of international student retention yet, clearly, the international student market is both important and somewhat distinct.

### **Understanding Retention of International Students**

The literature on retention recognises that students decide to persist at or leave an institution for a range of reasons including personal, social and organisational factors (Tinto 1975, 2006; Thomas 2002). Whilst students will continue to leave their programme of study for personal and social reasons that cannot necessarily be resolved by the university, all institutions can aim to ensure students do not leave because of institutional failures. As the recruitment investment in international students is a particularly expensive endeavour, institutions need to maximise their returns by retaining those international students they recruit. Whilst the institutional commitment to supporting international students might not be the only factor affecting the successful completion of their programmes with a single provider, this commitment is critically important for the often isolated and vulnerable international student (Marginson, Nyland & Sawir. 2010; Kell & Vogel, 2008). In the past, student attrition was perceived to be the result of individual factors: 'Students failed, not institutions', (Tinto 2006, p.1) but current theorists view the environment, particularly the institution, as complicit in decisions to drop-out or persist with studies.

Studies into retention consistently identify the crucial importance of student engagement or involvement as a driver of retention (Krause & Coates 2008; Tinto 2006; ACER 2008) and emphasise that student engagement is critical in the first year of study where students are most at risk of withdrawing. Institutional activities and approaches that promote student engagement should positively influence the '...time, energy and resources students devote to activities designed to enhance learning at university,' (Krause 2005, p.3). For several years, the CQU approach to learning and teaching has been to adopt Chickering and Gamson's *Seven Principles for Good Practice in Undergraduate Education* (1991) which identifies a range of critical factors supporting student engagement:

- Level of contact between students and staff
- Reciprocity and cooperation among students
- Active learning
- Prompt feedback
- Awareness of the time needed to be spent on the task
- High expectations
- Respecting of diverse talents and ways of learning

In addition to this focus on engaging curriculum and pedagogy, a more holistic focus on building social and academic integration for international students has been a key institutional objective. As student engagement is affected by students' sense of belonging and institutional 'fit' (Bean & Eaton 2002; Thomas 2002; Norton 2010). As international students are more likely to feel isolated and lonely due to their distance from their social network (Khawaja & Dempsey 2008; Marginson et al. 2010), institutions need to work hard to promote integration for international students to ensure their personal as well as academic wellbeing, which are inevitably interrelated. In the context of CQU Sydney where students from over 50 different cultural and language backgrounds are studying, Thomas' recommendation for an institutional 'habitus' that is inclusive and accepting of difference.. [and]... celebrates and prizes diversity' (p.431) as well as 'promoting social networks' (p.436) is particularly useful. CQU strives to create such a 'habitus' through a range of services and initiatives.

### **Social and Academic Integration at CQU**

The approach to student retention at CQU Sydney campus is based on the value expressed by Tinto that '...student retention is everyone's business'. Braxton & McClendon (2002) agree and suggest that

there are numerous people and departments within universities that impact on student retention. In line with this, all campus staff recruitment, training and performance review and development highlight quality customer service provision regardless of staff category or department (see Owens & Loomes 2007). Staff are made aware of the importance of their role in retaining students and how their everyday engagement with students in and out class is an opportunity to enhance student integration into their learning community.

Tinto's influential model of retention (1975) depicts academic and social integration as the key factors affecting a student's decision to continue their study programme with a higher education provider.

Tinto's model has been developed with domestic students in mind and may be expanded (as above) to consider additional and differential *External Factors (International)* that can and do affect international student decisions to continue or discontinue their studies. These factors include social, economic, natural and political events unfolding in home communities as well as internationally. From currency exchange rates to financial crises and natural disasters, the external factors affecting international student ability and motivation to complete their studies are diverse. In addition, international student decisions are affected by education and immigration policies of the Australian government in a manner that domestic student decisions are not. It is the estimate of some commentators (Murray 2010) that international student numbers in Australia may drop by up to 20 per cent in 2010 as a combined outcome of factors including concerns about student safety, less opportunity for skilled employment and residency and a strong Australian dollar. These factors do not affect domestic student retention and Tinto's model may be usefully expanded to incorporate 'international' external factors as contributing to student retention.

Tinto's model emphasises the critical importance of social and academic integration to a successful study experience. CQU has expanded its efforts in providing student opportunity for interaction and integration with staff, other students and the local community over the last few years. Academic integration is achieved through a curriculum and pedagogy that emphasises collaborative and active learning and a proactive and effective Learning Support Unit. Social integration commences as soon as the students arrive on campus (see Appendix 1 for a summary of activities). A fully facilitated enrolment process allows students to integrate with staff members from all areas of the campus from marketing and recruitment to academic staff. Students are timetabled into a thorough orientation programme which includes social activities such as luncheon with students and staff, personalised campus tours and city bus tours. External guest speakers are invited to participate in orientation such as community police officers and health fund representatives.

Other social integration activities are scheduled throughout each term. These include:

- Sporting activities: cricket, soccer, table tennis, basketball, volleyball.
- Social activities: end of term jazz party, parties to celebrate a wide range of cultural festivals such as Chinese New Year and Indian Independence Day, excursions such as trip to the snow fields.
- Community activities: Relay for Life, Seven Bridges Walk, tree planting and charity and fundraising events.
- Communication activities: English conversation corner, interviewing skills workshops, oral communication workshops, academic writing workshops.
- Work-related activities: practitioner presentations, volunteer conference support, job seeking skills workshops, Tax-help project (ATO).

In addition, students are invited to participate in the campus Environmental Committee, the Academic-student Liaison Group and the Occupational Health and Safety Committee. These provide excellent forums for meeting staff and other students, contributing to the campus environment and enhancing a sense of belonging, inclusion and empowerment for participant students. An earlier study explored student participation and satisfaction with these social integration activities (see Owens &

Loomes 2010). This study builds on that research, seeking to identify how such efforts to promote social and academic integration of international students are related to retention.

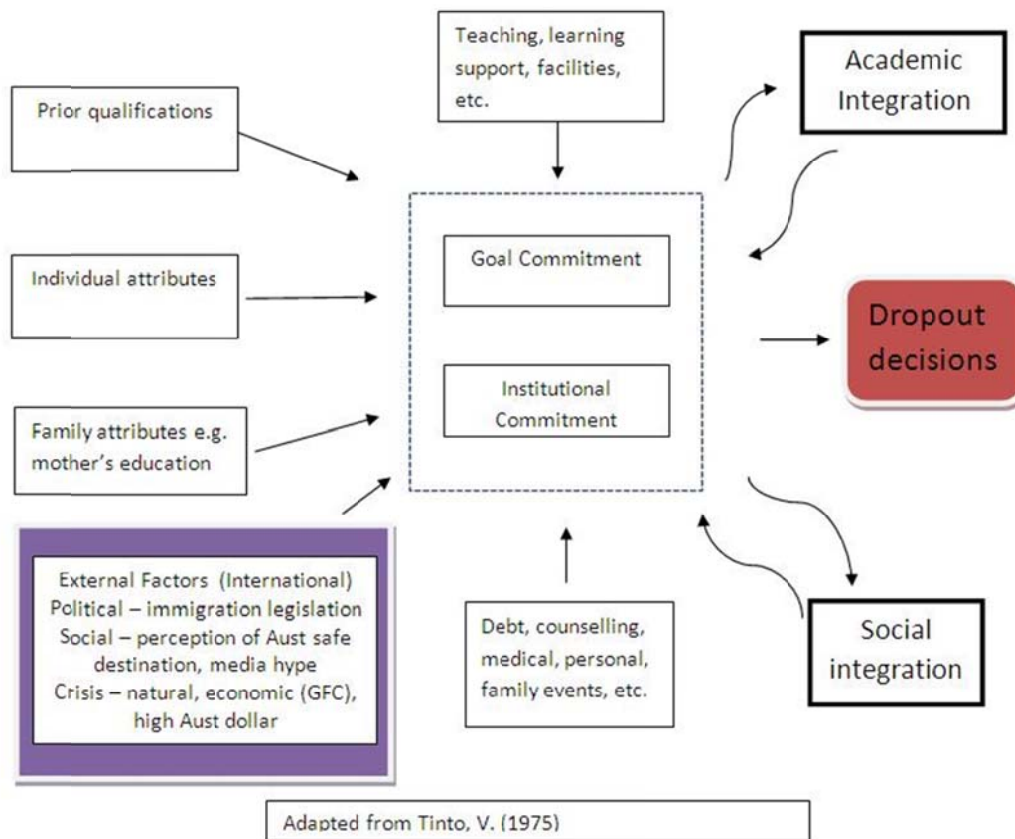


Figure 1: Tinto’s Model of Student Retention (plus ‘External Factors’)

### The Monitoring Academic Progress (MAP) programme

Students who fail to achieve satisfactory progress despite the suite of standard ‘integration’ activities are identified as ‘at risk’ in regular internal reporting systems. They are provided with a personalised support programme (MAP) by the CQU Student Services department. The MAP process has three levels, MAP 1, MAP 2 (must ‘show cause’ why enrolment should not be cancelled) and MAP 3 (the student’s enrolment is cancelled). The process includes monitoring attendance reports and assignment submissions throughout the term to identify low attendance or disengagement. In addition, each term when grades are released a report is run to identify any student who has failed more than 50 per cent of their courses or has multiple fails for a single course. These students are then contacted via telephone, email or SMS and invited in for an interview to discuss their attendance and assignment work and what might be prohibiting their engagement in classes and assessment work. The student forms an ongoing relationship with the Student Services staff member who meets with them regularly over the term to review their progress and monitor their wellbeing. Students are offered additional learning support through the Learning Skills Unit, which has been very effective in improving academic performance. If personal issues are identified, the student is referred to confidential counselling funded initially by the university. Over time, a number of serious issues have been identified during these interviews, such as mental health issues, depression and suicidal thoughts. These are taken very seriously and in some cases students have been taken immediately to a professional counsellor, psychologist or to a hospital if deemed necessary. A student ‘graduates’ from the monitoring programme when they have achieved two successful terms (passed more than 50 per cent of their subjects). Since term 2, 2008, 234 MAP students from CQU have graduated from their degree programmes.

## RESEARCH METHOD

International students score well on conventional measures of retention - spending more time on campus, engaging in online materials and working less than their domestic peers (Krause 2005) - but continue to experience difficulty engaging with their studies. Therefore, qualitative studies of international student retention that seek to explore and explain their perspectives are valuable:

To understand engagement is to understand that for some it is a battle when they encounter university teaching practices which are difficult to understand, and a 'language' which is alien. Some students actively engage in the battle and lose – what do we do for them? (Krause 2005, p.11).

Retention is most frequently reported as statistical data and there is little qualitative, in depth reporting of the experiences of international students in the context of institutional efforts to engage and retain them through and beyond first year. As 'knowing why students leave does not tell us, at least not directly, why students persist,' (Tinto 2006. p.6) this study focuses on understanding the experiences in relation to social and academic integration for a cohort of 'at risk' students who have persisted in their studies despite failing courses. As failing courses is considered a critical drop out event, 'at risk' students who have failed 50 per cent or more of their courses would be expected to leave their institution in higher numbers. Yet the MAP programme at CQU Sydney maintains an internal retention rate equivalent to the general campus-wide retention rate of approximately 15 per cent per year (two terms). This is, in itself, a strong achievement. However, this statistic does not produce a rich understanding of how such a recovery programme works for international students.

In-depth individual interviews were selected as the most appropriate method to allow MAP 'graduate' interviewees to provide a rich description of factors they felt contributed to their study problems and study successes in a confidential and unthreatening environment. Their evaluation of the MAP programme as well as their engagement with the wider range of academic and social integration activities were of central interest to establishing the basis of their decisions to remain at CQU. Interview questions addressed their academic and personal challenges, their views of the monitoring programme, their views and experiences in relation to the social activities provided by the university, their ongoing study intentions and their experiences of good service in and out of the classroom (see Appendix 2).

Seven students were selected from a list of 30 students who had recently graduated from MAP, based on their availability for interview. All students were studying business, accounting or IT programmes (three were postgraduates and four were undergraduates) and had completed a minimum of three terms of study. Students originated from China, India, Saudi Arabia and Vietnam. Two women and five men participated. A research staff member who had no contact with MAP programme or the Student Services staff conducted interviews. They were transcribed for later transcription and analysis. Students were assured of confidentiality in the reporting of their comments. They were encouraged to provide critical as well as positive comments on their study experience at the campus. Transcripts were analysed to identify common experiences, opinions and themes as well as exceptions to common understandings of interviewees.

Although retention literature generally identifies students as 'drop outs', 'throw outs' and 'persisters', a further group of interest is emerging at CQU: the 'returners' – students who left CQU prior to completing their degree, but then returned to resume their studies. As such students can provide valuable insight into international student decisions about persisting and leaving specific to CQU, this research included a telephone survey of a cohort of 'returners' Thirty-seven 'returning' students were identified in regular reporting during term 1, 2010 enrolment. Seven of these students were randomly contacted by telephone and asked a series of questions to establish why they left, where they went and why they returned (see Appendix 3). Feedback from these two research activities is summarised

below and then discussed in relation to retention literature and key issues affecting international study in Australia.

## RESEARCH RESULTS

### Interview Results– Persisters

The most common challenges in passing the courses identified by students in interviews were English proficiency and disparities between prior and current study (in both culturally different contexts and different discipline areas). Many students pointed out the combined effect of a radical change in cultural context, a change in learning and teaching paradigm, and encountering a ‘new’ field of study with specialised language within the wider context of studying in English as a second language, meant comprehension was difficult and existing learning strategies were ineffective. Most students referred to a difficult ‘settling in’ period where they had to adapt to independent study. As all students indicated they had previously worked in examination-only learning contexts, they had many issues in trying to complete written assignments, which two students admitted they did not take seriously, assuming the examination was the key to passing. A significant problem with time management emerged for several of the students who were seeking to balance study and work in an environment where they did not receive the direction from teachers which they had been used to:

*‘... I lost all control, in high school you know, teachers are always checking on you but at uni you have to do everything yourself, it’s a big change you know...,’  
(Chinese male undergraduate).*

*‘In India I studied very well after coming here I lost myself somewhere..totally! I was like crying, crying, crying daily, what happened to me? I was not able to cope’ (Indian female postgraduate).*

Several students identified personal problems and health issues were also affecting their studies and homesickness was mentioned as a common experience. Not surprisingly, all students reported being very stressed at the point at which they were experiencing these challenges. Interestingly, all students nominated their own personal effort, motivation, commitment and focus as the key factor in improving their study performance but they also noted regularly that working with staff in the monitoring programme had powerfully affected their motivation.

All students felt the monitoring programme was a positive experience for them because of the constant contact, friendly interest in their progress and staff responsiveness which helped the students start to self-regulate their learning, manage their stress and inspired them to perform.

*‘The good thing about the programme is .. checking my own things. How am I going with my assignments? I have to report to someone every two weeks and I have to show them what I have done, how I have improved. When I knew that, I was keeping track also,’ (Indian male postgraduate).*

Several students explained that their MAP staff advisor was like their ‘friend’, ‘mate’, ‘buddy’ or ‘family’ and they felt they could discuss all their problems openly with their advisor and receive good advice which was effective in diminishing their stress.

*‘MAP? Oh I think it is really good. I like it because if I have any problems I can tell them and they can tell me the best way to do it,’ (Vietnamese female undergraduate).*

Indeed, many students continued to visit their staff advisor for a chat after they graduated from MAP and referred student-friends to the service regularly whenever they were confused or required advice on a wide range of matters. One student suggested the programme should be strengthened by penalties

so it would be taken more seriously by other students. Another student explained that she was a little distressed at the number of letters she received from the monitoring staff. As she had failed courses for two terms, she viewed any letters from the university with some dread.

All postgraduate students had attended the Learning Skills Unit to access assistance with assignment work and referencing in particular. They were very positive about this resource and appreciated the individual support they received as well as workshops on essay writing, report writing and so on.

*'I took my assignment here and said I don't know anything about this, can you help me out? I had a case study where I had to study the whole summary and search the internet as well, search online. I said please can you select me one of the topics here and help me write it down... and help me? They gave me all the materials and made it very simple,' (Indian female postgraduate).*

The undergraduate students had less contact with the Learning Skills Unit but attended for occasional help mainly with understanding referencing. It was widely acknowledged that the Learning Skills Unit did a 'great job' but there were several complaints that they were not able to get an appointment as the service is popular and you have to book early in the term. One student claimed she was too busy to go to an appointment.

When students were asked what factors besides MAP and the Learning Skills Unit had helped them succeed in their studies, students referred to individual teachers from their discipline or from the the Learning Skills Unit, and their friends at university. Improved time management, improved learning strategies and English comprehension as well as self-discipline and motivation were also discussed.

Two students had experienced significant difficulty balancing work and study.

*'I like to work. I already kept this job a long time and if I not working, I feel guilty with my boss. If I study really bad, I feel guilty with my parents. Sometimes a lot of pressure,' (Vietnamese female undergraduate).*

This student solved her problem by telling her boss she could not work one month before examinations while another student spread his annual study load so that he studied part-time across three terms equivalent to fulltime load across two terms.

Most of the students said they had not considered leaving CQU stating they were 'very comfortable here'.

*'The good feedback for CQU is I have visited all the universities and CQU is the best, so don't leave CQU, but leave **with** CQU (laughter),' (Indian male postgraduate).*

*'No. Never. This university really good university, good reputation, it counts, I don't want to leave, I want my certificate from this uni. No matter if I fail or pass, I will finish my programme here. They have good reputation but also they have good study, they keep on monitoring the students, they don't even leave a single student stranded or in trouble, whatever it is,' (Indian female postgraduate).*

Comments included the convenience CQU offered being located in the CBD near transport and work, a flexible, work-friendly timetable and the organisation of all departments in one building. Several students explained that they did not consider themselves academic 'high achievers' and referred to several leading Australian universities when they explained that they felt they were at the right university for their 'level' of academic skill.

*'It may not be the best uni but it is good for your ability as an international student,' (Vietnamese female undergraduate).*

*'No, I am very comfortable here, even though our govt is paying for me so I can go to any uni I want to. Most of my friends are at Sydney Uni , UNSW, UTS, UWS but I still love the uni here, maybe the place is easier than other unis ,the staff here are good, I find it easy to have everything in one building,' (Saudi Arabian male undergraduate).*

One student said she thought about leaving CQU every time she failed a course but acknowledged that the problem would be the same at any university. All students expressed the intention to complete their studies at CQU.

All students had attended at least one social event during their study – mostly the end of term party. All students felt that social interaction and organised activities were very important, particularly for international students. The challenges of socialising in a second language and the urgent need to do this to improve communication skills as well as establish a network of friends were discussed:

*'New international students; they need to talk...' (Chinese male undergraduate).*

*'I believe that social communication can improve language very well. That is what I believe!' (Chinese male undergraduate).*

Several students complained that the activities being offered were inadequate. Two students felt that students 'flew away' home or to work after classes which made socialising difficult. More events and a wider range of events were proposed. Several students said they were too busy to attend many social events but still saw the value in organised events so that those students who needed to could interact, make connections and share problems. Some students had more 'local' social networks than others as a consequence of prior Australian study, work and club memberships.

In addition to extending social activity options, students suggested that to improve its services CQU might increase the number of books in the library, increase access to computers during peak study periods and provide feedback on annual and term-based student surveys. Students were very positive in their recommendations of CQU to friends.

*'I always tell my friends good things about the uni,' (Indian female postgraduate).*

*'Oh yes, always, even my girlfriend I bought her to study here actually... You can see I do recommend CQU. People say to me I will got here, go there, I say no need to go there... I say I am studying at CQU, having a good experience, teachers are good, staff is really good, everything is available, transport, everything is really close to the campus,' (Indian male postgraduate).*

*'(Laugh) I'm telling them!'* (Saudi Arabian male undergraduate).

*'So far, so good.. I have been here three years,' (Chinese male undergraduate).*

When asked to recount one good experience of customer service students selected staff and services from a wide range of departments including Faculty, student administration, student finance, student services, the Learning Skills Unit. All students were able to name the staff who they perceived as being very helpful. When asked to recount a good teaching experience, students were very positive in their commentary. 'Wonderful', 'awesome', 'amazing', 'one of the best' 'really good' were the adjectives used most frequently to describe teachers they had worked with. It was acknowledged that some teachers were 'better than others' but all students named multiple teachers as inspiring and powerful. Many of these teachers were long-term employees with senior course leadership roles in various disciplines. The main characteristics these students identified as distinguishing the best teachers were providing an active and interactive classroom experience, using real world examples



and materials, spending time consulting individually with students and giving prompt and meaningful feedback.

*'...they always support me like (X) will keep on asking me questions in the class no matter if I sit in the first row or the last no matter,.. he keep on asking me questions and he used to give advice to me. In the first semester he used to keep saying, you have to do your assignment like this.. Immediately when I get the assignment marks he will call me to the office and say to me you are wrong here and you did this very well here so keep on... and (XX) was the same he did the same thing,' (Indian female postgraduate).*

*'The teaching is really good.. (Y) is one of the best, (YY), (YYY), (YYY) all really good! They have broad knowledge. Is students are working on a matter they can take them beyond the limit.. they are really able to deliver the information not just out of the books. They know the workplace,' (Indian male postgraduate).*

*'I have had 22 teachers and think most of them were very helpful,' (Saudi Arabian male undergraduate).*

All students intended looking for a good job after graduation. Most intended to seek employment in Australia but move to their home country or another country to work if that was not possible. All students would consider re-enrolling for a further qualification at CQU. As all students had an inclination to start a career in Australia, they were sensitive to recent changes in skilled migration and experienced some uncertainty about their options. One student expressed a changed intention to apply for permanent residency:

*'After graduation for me, uh... I decide to go back home because Australia you know, before I was try to get PR. I love here, I love living here,..it's a lovely place,... but the politics, the immigration, it is too hard, too harsh, you know so I decide to go back home. I believe the CQU degree will get me a good job in China, (Chinese male undergraduate).*

### **Telephone Interview Results – Returners**

Phone interviews were conducted with seven 'returner' students to ascertain why they left, where they went and why they chose to return. The group included students studying a range of courses with the majority originating from India and China. Their academic transcripts revealed that most of these students were not performing well prior to leaving CQU, however their performance significantly improved on their return.

Half of the students interviewed had participated in social events and the majority of them had attended the Learning Skills Unit while studying at CQU. The interviews revealed varying reasons for leaving CQU, which included financial, personal and family reasons and also pressure from their education agent. None of the students stated that they were dissatisfied with their education experience at the CQU Sydney campus. On leaving CQU several students returned to their home country, others were not studying and two went to another provider.

When the students were asked why they returned to CQU Sydney campus, their responses were very similar. They said 'wanted to stay with CQU', 'really like it', 'didn't want to leave but had to for financial reason'. The students were asked if they would tell their friends positive things about CQU Sydney. All of them said yes except for one student who said they would recommend Sydney University and University NSW first and then CQU.

The students were asked if CQU could do anything better to ensure their studies were successful. Overall, the students' comments suggested that there wasn't much that needed to be done to improve

their experience. A few suggestions were: more books in the library, additional help finding articles for study, exams were too hard and more contact with tutors.

Finally, the group were asked about their plans following graduation. A few were going back to their home country to work, others would seek work in their relevant field in Sydney, and two were going on to complete further studies.

## **DISCUSSION OF RESULTS**

Results from both MAP student interviews and returner interviews provided highly encouraging feedback in relation to CQU efforts to support international students through social and academic integration activities and programmes. It is important to remember that all students in this research were either high-risk attrition as a consequence of failing their courses, or had previously withdrawn from CQU. Their decision to persist in (or return to) their studies and their capacity to improve their academic outcomes is an achievement that is against the odds for such students.

It is evident from MAP 'graduate' comments that they were powerfully affected by the personalised support and attention provided by campus staff from teaching and non-teaching areas. Because of appropriate advice and support, these students were spending more time on their studies and had improved their time management skills, were better able to access resources supporting study and were more motivated in their efforts to learn. Enhanced self regulation was a further outcome to the monitoring programme. These are classic signs of improved engagement and involvement. As more than one-third of university students in Australia recently confessed to finding it '...difficult to motivate themselves to study' (Krause 2005, p.7), such an outcome is significant beyond the international student sector. It has been pointed out that there are a '...wide range of interacting personal and social attributes as well as institutional practices which impact on both retention rates and performance,' (Thomas 2002, p. 426). As such, it can be difficult to identify issues specific to individual students other than by interpersonal counselling and support. A range of studies in the US has established that counselling aids retention (Wilson, Mason & Ewing, 1997; Turner & Berry 2000; Norton 2010). Whilst personal counselling involves significant resource and cost, the alternative in lost tuition fees and dissatisfied students is an unattractive and uneconomic alternative.

A few of the students interviewed experienced a profound sense of loss of control in the first year of their studies. Such an effect is not uncommon for students entering the relative freedom of a university from the context of secondary school where they are formally monitored and controlled by teaching and non-teaching staff and universities are therefore both 'arenas for anxiety as much as for the development of independence,' (Norton 2010, p. 55). Attribution theory identifies an internal 'locus of control' as important for successful study outcomes in that it creates an individual who believes he or she is instrumental in their own success or failures, whereas an external 'locus of control' drives an individual to attribute failures or success to fate or chance (Bean & Eaton 2002, p. 77). It is evident in interview commentary that opportunities to discuss their individual study problems and experiences with a compassionate and skilled advisor assisted these students manage their stress and anxiety, recover their sense of control and to see their own effort as central to success. A 'transition pedagogy' (Kift & Field 2008; Scott, Shah, Grebennikov & Singh 2008) which provides an integrated programme of academic challenge, active learning, student and staff interactions, enriching learning experiences, supportive learning environment and work integrated learning (Kift & Field 2008, p.2/10) is recommended for institutions seeking to mediate the increasing diversity of entering students. Through its academic and social integration programmes CQU is building a successful 'transition pedagogy' suitable for culturally diverse international students. This transition pedagogy is in turn supported by the more intensive and personalised MAP programme which this research indicates is able to both identify and assist those who are not successfully transitioning.

MAP students valued active and interactive class work particularly when it aided them to connect with other students and develop a study network. This supports the sector-wide understanding that

collaborative learning, as well as social interaction, plays an important role in assisting students build peer groups ‘...that play a role in the learning of course content and in the establishment of memberships in the collegiate social communities (Tinto cited in Braxton & McClendon 2002, p.62). In addition, students emphasised the continuing struggle to improve their English and valued formal and informal opportunities to do this by interacting with staff, other students as well as attending language development sessions and accessing English development resources made available by CQU. The capacity for teachers to use accessible language in their classes and provide plentiful explanation and exempling to assist comprehension was noted and well received by students. Essentially, ‘...the more students interact with students and staff, the more likely they are to persist’ (Astin cited in Thomas 2002, p.427). The frequency and accessibility of staff and student interactions appears to support international student engagement and persistence.

A further message evident from interview results is that these international students feel a sense of belonging or a sense of ‘fit’ with CQU. ‘Institutional fit and loyalty lead to the intention to persist which leads to actual persistence,’ (Bean & Eaton 2002, p.77). For many students this sense of ‘fit’ was related to their perceptions of themselves as having ‘limited’ academic skills and talents thereby benefitting from the supportive learning environment and services offered by CQU; a level of support they did not anticipate receiving at other, more highly-ranked institutions. CQU Sydney emphasises quality of teaching above all other academic endeavours.

According high status to teaching can enhance student relationships with staff (Thomas 2002). It is now a ‘widely accepted notion that actions of the faculty, particularly in the classroom, are key to institutional efforts to enhance student retention,’ (Tinto 2006, p.5) but is still more limited than it should be (Tinto 2006). The opportunity to engage personally and in groups with teaching staff was evidently occurring and was highly valued by students. Of particular importance to engaging students in learning is providing quality, timely feedback (Kift & Field 2008; Chickering & Gamson 1991).

Most students in this research indicated that feedback on their assignments was of high quality but some commented this was not consistent for all tutors. In addition to academic feedback, students wanted to know outcomes to student satisfaction surveys they were asked to complete regularly across terms. Feedback, both academic and non-academic, is emphasised in the literature and in this research as critically important to maintaining the engagement of students and thereby engendering persistence and loyalty.

Key outcomes for CQU Sydney from this research involve expanding social integration activities, further resourcing personalised counselling and tutoring, and providing clear and regular feedback on student survey data.

## **CONCLUSION**

This research has contributed to detailing some of the mechanisms that universities can adopt to enhance social and academic integration and positively influence retention for international students at Australian universities. Personalised student support programmes can achieve positive outcomes for international students who are not transitioning to their new study context successfully and are therefore highly likely to withdraw from their study programme. Institutions that invest in such support programmes can expect to achieve improved retention of ‘at risk’ students and better protect their significant recruitment investment in these international students. Pedagogical and bureaucratic approaches that value diversity and difference and promote engagement, collaboration and a ‘student-centred’ work culture and organisational arrangement can generate international student loyalty and a sense of belonging at ‘foreign’ institutions.

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## APPENDIX 1

### Term Integration - Social, Academic and University Commitment

Arrive on Campus	Greeted by friendly marketing staff
Enrolment	Facilitated enrolment, assisted by all staff, in particular, academic staff providing course advice Student timetabled into Learning Skills Workshops
Campus Tour	Students given group tour of campus to meet staff and be familiarised with campus facilities and support
Orientation	Information. Also a comprehensive Orientation Guide is provided on line to be accessed throughout the term. Luncheon with other new students and staff provided
Bus Tour	New students are invited to join bus tour of Sydney to help with familiarisation
Learning Skills Workshops	Held over six weeks to assist students with academic writing, references etc. Student can make a personal appointment as well
Classes Commence	Teaching, learning and assessment designed to facilitate maximum interaction between staff and students
Library Literacy Classes	Library literacy classes held in subject specific classes by key library staff. Students can also visit the library for one on one assistance
Student Attendance Check	Report run to determine students with poor attendance. Student contacted if required. Placed on monitoring programme if deemed necessary
Midterm social activity held	Staff from Student Services hold social integration activity to assist with integration
Exam preparation and revision classes held	Assist students who may not have sat exams in an Australian institution
End of Term Party	Chance to relax and meet new friends
Release of results	If student fails more than 50 per cent or multiple fails then placed on monitoring programme

## APPENDIX 2

### Interview questions for MAP graduates:

1.	What were the main challenges you encountered in trying to pass your courses?
2.	Was there anything else that affected your ability to be successful in your studies?
3.	What features of the Monitoring programme did you like?
4.	What features of Monitoring programme did you dislike?
5.	Did you attend the Learning Skills Unit?
6.	If so, what sort of sessions were most useful? If not, why not?
7.	Would you tell a friend positive things about the MAP programme?
8.	Who or what else has contributed to the improvement in your studies?
9.	Have you ever thought of leaving CQU? Why? Why not?
10.	Do you intend to continue your studies at CQU? Why? Why not?
11.	Do you attend any of the social events held on or off campus such as: end of term party, cultural festivals, sporting activities or community?
12.	How important do you think these social activities are for students?
13.	Is there something CQU doesn't offer that might better support your studies?
14.	Would you tell a friend positive things about CQU?
15.	Can you tell me about one experience of what you think is really good service you have had at the campus?
16.	Can you tell me about one example of what you think is good teaching practice that you have experienced in your studies at the campus?
17.	What do you plan to do after graduation?
18.	Would you consider re-enrolling at CQU if you decided to study for another degree.?

## APPENDIX 3

### Returners telephone interview questions

1.	What was the reason you decided to leave CQU
2.	Can you tell me what provider you went to (if any) when you left CQU and the reasons that you selected this provider?
3.	Where you on a monitoring programme (MAP) prior to leaving CQU?
4.	Did you attend the Learning Skills Unit before you left CQU?
5.	What factor made you decided to return to CQU?
6.	Could CQU do anything better to ensure your studies are successful?
7.	Do you attend social events whilst at CQU such as: end of term party, cultural festivals, sporting events or community events?
8.	Are you currently on the monitoring programme (MAP)?
9.	Would you tell your friends positive things about CQU?

# **THE LONG MARCH: DEVELOPING THE CURTIN LEADERSHIP FRAMEWORK**

**Tony Brown, Curtin University of Technology, Australia**

## **ABSTRACT**

The use of leadership frameworks for developing the capability of organisations, including universities, is widespread. An eclectic range of theories describe what leadership 'is' or how leadership is 'done'. However, there is opposition to the application of management models to academic leadership roles. This paper summarises the journey undertaken to develop the Curtin Leadership Framework and provides an insight into Curtin's approach to future directions in career and leadership development. Recommendations include the use of action learning and collegial decision-making along with the need to contextualise leadership for an academic audience when developing a whole of university leadership framework.

Keywords: Academic leadership, management, capability framework, leadership development

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## **INTRODUCTION**

In October 1934, the communist First Red Army reportedly travelled some 10,000 kilometres, first west, then north to escape the stranglehold of the Nationalist army. Of the approximately 100,000 who started out only 10,000 survived the 370-day journey across some of the harshest terrain in China. This march and later successful military campaigns led to the eventual establishment of the Peoples Republic of China under Mao's leadership.

The creation of a leadership and management development framework for Curtin University has likewise been a long march albeit a far less dramatic journey. In late 2007 Curtin established an Organisational Development Unit (ODU) and amongst the University's 'to do' list for the new unit was the design and implementation of a leadership framework suitable for academic and general (or professional) staff in leadership and management roles across the University.

Then in 2009, Curtin adopted a new long-term vision: *To be an international leader shaping the future through our graduates and research, and positioned among the top 20 universities in Asia by 2020* (Curtin 2009a). Implementing the new vision, along with its associated strategies and initiatives, has resulted in each area within the University examining its priorities and capacity for delivering outcomes that assist in positioning Curtin in the top 20 universities in Asia by 2020.

One of the strategies linked to the new vision is to 'Develop a culture of excellence and innovation' (Curtin 2009b). An enabling initiative is to 'Further develop and implement the Curtin Leadership and Management Development Framework' (Curtin 2009b). Curtin's Organisational Development Unit has a key role to play given that the prime responsibility for developing leadership and management capacity is assigned to the Unit. Fundamental to this is the leadership framework.

This paper will provide a summary of the journey, the long march, Curtin's Organisational Development Unit (ODU) has undertaken in developing the Curtin Leadership and Management Development Framework. At the same time, an examination of the Framework and associated learning activities provides an insight into Curtin's approach to future directions in career and leadership development. The paper will briefly summarise the leadership literature, followed by a discussion on leadership frameworks before the Curtin experience is presented. The paper concludes with some reflections and recommendations for others contemplating developing a leadership framework.

## **THE LEADERSHIP LITERATURE**

Numerous theoretic perspectives and disciplines inform the leadership literature – power, motivation, organisational behaviour, management, psychology, and sociology to name a few. There is an eclectic range of theories to explain what leadership 'is' or how leadership is 'done' (Brown 2006).

Is it nature or nurture that determines whether a person becomes a leader? Three theory groups – trait, behavioural and contingency – are commonly reported by researchers while a fourth classification, contemporary theories, has emerged over the past two decades. Trait theory suggests that either a person has leadership traits or they don't (i.e. 'nature') which, in turn, implies that leadership development should only be provided to those with identified leadership traits (though perhaps not yet developed).

Behavioural approaches look at 'what effective leaders do' (Cole, 2001, p. 611) by focussing on the task–person dichotomy and suggest that leaders can be 'made' by learning appropriate leadership behaviours (Lussier & Achua, 2004; Onsmann, 2003). Contingency theories of leadership suggest that 'optimal leader behaviour is contingent upon (i.e. depends upon) the situation' (Arnold, Cooper & Robertson, 1998, p342). Contingency theories extend behavioural approaches but focus on the context

of leader-follower interactions. Arnold et al. note that ‘Contingency theories of leadership propose that different situations demand different leader behaviours’ (1998, p. 342).

Contemporary leadership approaches have been popularised by so called ‘gurus’ – authors such as Covey, Kouzes and Posner, Goleman, Wheatley, and Blanchard. Strategic leadership, transformational leadership, charismatic leadership, team leadership, values-based leadership and servant leadership are examples of popular contemporary theories. Transformational leadership, proposed by Burns (1977, cited in Doyle & Smith 2001) distinguishes between visionary (transformational) leaders who act as change agents by engaging with willing followers and transactional leaders who ‘exchange rewards contingent upon performance and use positional resources in order to encourage desired behaviours’ (Shivers-Blackwell, 2004, p. 43). It is argued that Burns’ theory was ‘the first comprehensive theory of leadership for modern scholars’ (Sorenson 2000).

The plethora of leadership theories can be confusing to both current and aspiring leaders, not to mention those charged with the responsibility of providing appropriate development programmes and processes. Which theory or approach should be used to guide leadership development in a university setting? There is considerable debate (and, in some cases, hostility) as to the applicability of business models to university settings, particularly when applying leadership theories to those in academic leadership roles (Brown 2006; Scott, Coates & Anderson 2008). With this in mind, what does the literature discuss regarding higher education leadership?

### **Higher Education Leadership**

Scott et al. note in their recent study of academic leadership capabilities in Australian Higher Education institutions that ‘Existing research sheds comparatively little systematic light on the distinctions between academic leadership and leadership in other contexts’ (2008, p5). It is important to note that the authors’ comments relate to those in (positional) academic leadership roles and not professional or general staff in leadership roles in Australian universities. Arguably so-called business leadership approaches are seen as broadly applicable to leaders in non-academic leadership roles. For example, Marshall, Adams & Cameron’s (2001) findings, drawing on Ramsden’s (1998) model and the transformational leadership approach, support the task–people constructs implicit in behavioural and contingency theories previously discussed.

The recent Australian ‘Learning Leaders’ study of academic leadership reported five capability clusters: personal, interpersonal, cognitive, role-specific, and generic (Scott et al. 2008). The authors note that this capability framework is ‘already validated in studies of successful early career graduates in nine professions [accounting, architecture, primary school education, engineering, information technology, journalism, law, nursing and the sport industry] (Vescio 2005) and in a study of 322 effective [primary and high] school leaders (Scott 2003)’ (Scott et al. 2008, p. 18). The authors report that ‘Robinson et al. (2008) in their macro analysis of leadership studies in education have noted that the traditions of instructional leadership and transformational leadership are starting to integrate’ (Scott et al. 2008). Hence there is sufficient evidence in the higher education leadership literature to support the broad application of so-called ‘business’ models of leadership and leadership development in higher education and, more specifically, academic leadership, settings.

### **LEADERSHIP FRAMEWORKS**

The use of leadership frameworks for developing the leadership capacity and capability of organisations is widespread in Australia and internationally. A number of organisations have adopted generic or existing frameworks while others have developed their own customised framework.

A framework ‘explains graphically or in narrative form, the main dimensions to be studied – the key factors or variables – and the presumed relationships amongst them’ (Miles and Huberman, 1984 cited

in Scott et al., 2008, p18). Leadership frameworks have multiple uses: they provide focus for leadership development programme designers; they allow staff to understand the organisation's key performance attributes; they can be used as a tool in career planning, succession planning, performance reviews, position descriptions and for selection criteria.

Some frameworks are referred to as capability frameworks, others as competency frameworks and still others as leadership frameworks. Are competency and capability 'two sides of the same coin'? Often the terms are used interchangeably. However the Australian Council for Educational Leaders notes that competence is seen to denote static, context free skills whereas capability is seen as dynamic, future-focussed abilities that allow leaders to successfully navigate unfamiliar and changing circumstances (ACEL 2009). Similarly the study by Scott et al. reported that 'competencies were seen [by participants attending the researchers' workshops] as being associated more with managing than leading; that being competent is 'the ability to perform set tasks to a specified standard' whereas capability 'entails the emotional and cognitive capacity to figure out when and when not to draw on specific competencies, along with the capacity to learn from experience' (2008, p. 10,11).

According to Silzer (in Hollenbeck, McCall & Silzer, 2006, p. 403) leadership frameworks 'help organisations by:

- Openly communicating which leader behaviours are important,
- Helping to discriminate the performance of individuals,
- Linking leader behaviours to the strategic directions and goals of the business, and
- Providing an integrative model of leadership that is relevant across many positions and leadership situations'.

## **THE CURTIN LEADERSHIP FRAMEWORK**

Just as the First Red Army struck west to avoid the encircling nationalist forces before heading north to their destination, the team at Curtin's Organisational Development Unit (ODU) spent months in 2008 reviewing the leadership and leadership development literature before striking towards their objective – the creation of a leadership and management development framework suitable for Curtin's academic and professional staff. During this phase the team deliberately looked for, and identified, examples of leadership frameworks, particularly those used in higher education settings. The unearthed frameworks ranged from research/theoretical models to pragmatic approaches to the needs of particular organisations.

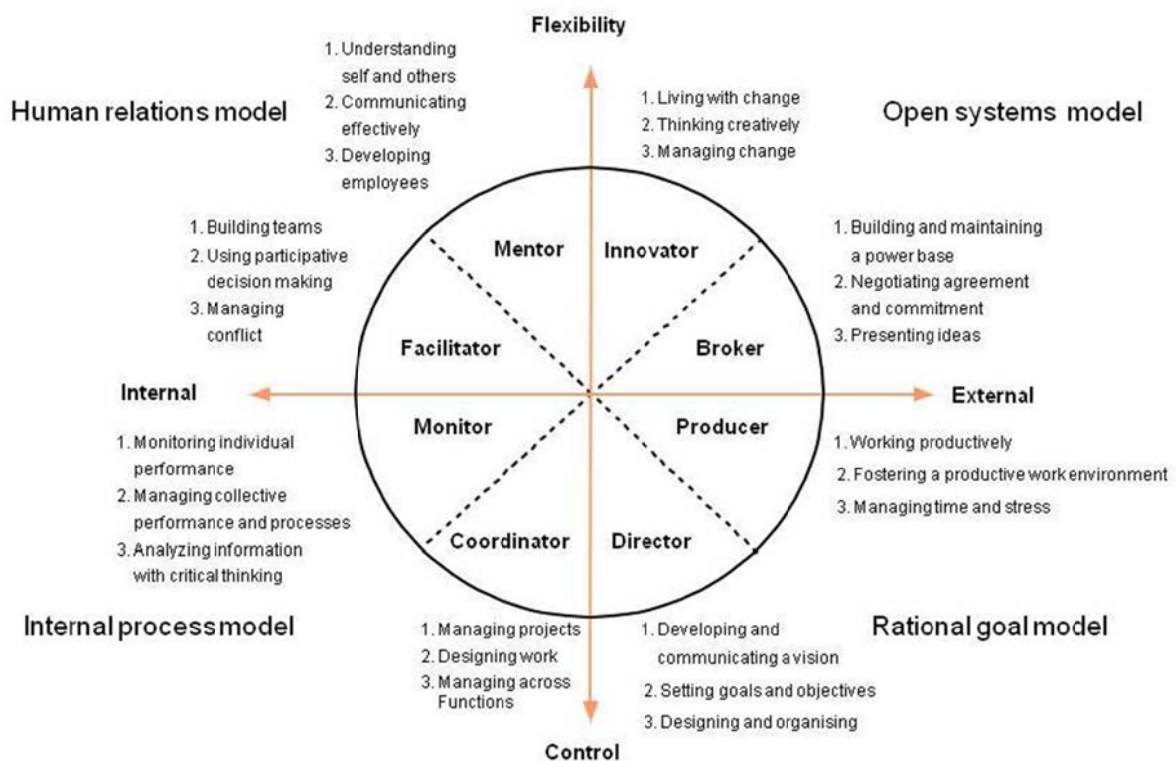
In addition, the team endeavoured to identify the theoretical constructs and frameworks underpinning existing and past leadership development programmes at Curtin for academic staff, senior and mid-level academic and professional staff leaders and postgraduate students. The competing values framework (Quinn, Faerman, Thompson & McGrath 2003) was identified as a potentially suitable framework for the Curtin Leadership and Management Development Framework.

The competing values framework (CVF) is based on four models of management that evolved over the twentieth century: the rational goal model, the internal process model, the human relations model, and the open systems model (Quinn, et al. 2003). By the latter part of the last century Quinn et al. note that 'it had become clear that no one model was sufficient...and that it was in fact necessary to see each of the four models as elements of a ...larger integrated model' (2003, p. 11). As Figure 1 depicts, the competing values framework features eight leadership roles (e.g. mentor, innovator) and 24 competencies. The tensions between the internal and external roles and the need for flexibility **and** control as a leader are another feature of the CVF.

The CVF is a key leadership model taught in the MBA and Master of Business Leadership programmes at Curtin and was the leadership model used in the pilot of a new development programme for Curtin's course coordinators. Two members of the ODU team were also familiar with

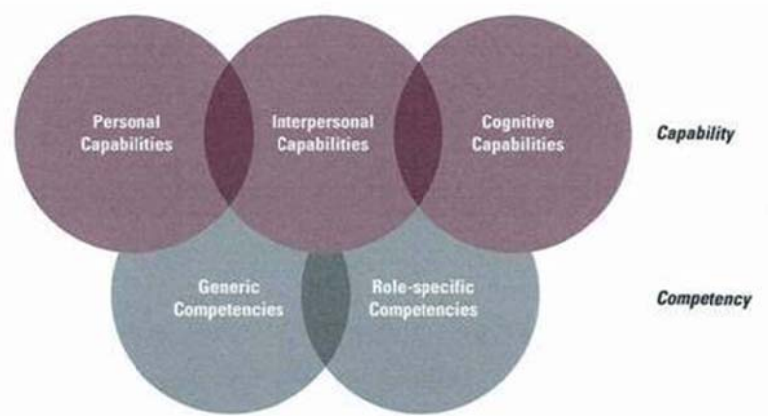
the CVF and saw it as an ideal framework for Curtin. Was the journey over? Subsequent inquiries identified that the initial course coordinator programme participants reacted unfavourably to ‘the business and management language’ of the CVF and it was thus discarded for subsequent cohorts (Jones, Ladyshewsky, Oliver & Flavell, 2008, p. 40). The long march continued.

While the ODU team was conducting its research the Australian Learning and Teaching Council (ALTC) was funding research projects across Australia with the purpose of developing ‘systematic, structured and sustainable models of academic leadership in higher education’ (ALTC 2010). Numerous ALTC projects have focused on institutional leadership development or developing the leadership capacity of academic staff in formal and informal leadership roles. In ensuring the widespread dissemination of project reports the ALTC encourages universities to consider, adapt and adopt suitable programmes, methodologies or approaches to higher education leadership and leadership development.



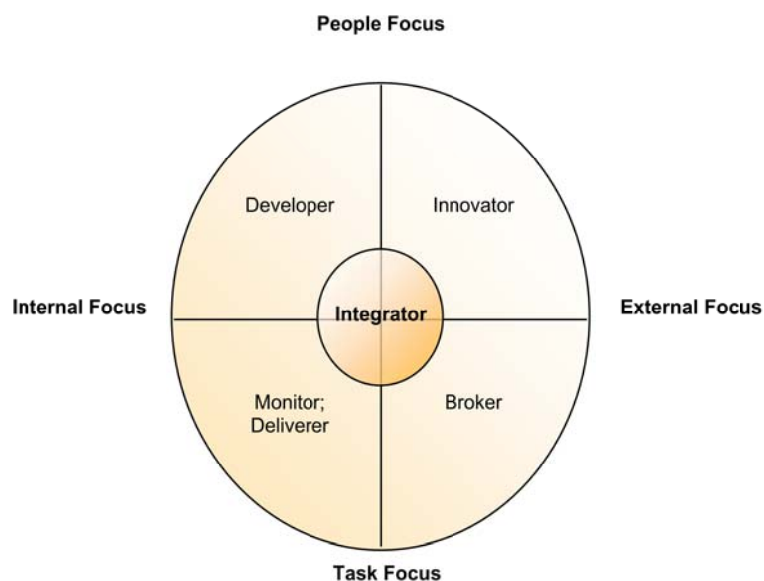
**Figure 1:** Competing values framework (Quinn, et al. 2003)

One ALTC funded project was the above-mentioned academic leadership programme for course coordinators. Another project, *learning leaders in times of change*, was said to be ‘the first study to systematically access the ‘insider's view’ of different university roles... The project canvassed more than 500 Australian higher education leaders from 20 institutions from heads of programme to deputy vice-chancellors, about the contexts and challenges they face and the *key capabilities that underpin their work* [emphasis added]’ (UWS, 2008). The academic leadership capability framework (learning leaders’ project) is shown below at Figure 2. This framework includes over 40 behavioural capabilities and competencies in five clusters. *Learning leaders* highlighted that formal, workshop based programmes are not the most effective approach to developing the leadership capability of individuals.



**Figure 2:** Academic leadership capability framework (Scott, et al. 2008)

Two other ALTC funded projects featured an adaptation of the competing values framework: the integrated competing values framework (ICVF) (Jones et al. 2008; Vilkinas 2009). The project reports suggest that academic leaders, including course coordinators, found the ICVF to be a useful framework that assisted in identifying their leadership development needs. The ICVF (see Figure 3) maintained many of the features of the CVF but with a reduced number of roles and the inclusion of a central ‘integrator’ role. The ICVF’s vertical axis is labelled people focus and task focus in contrast to the CVF labels of flexibility and control.

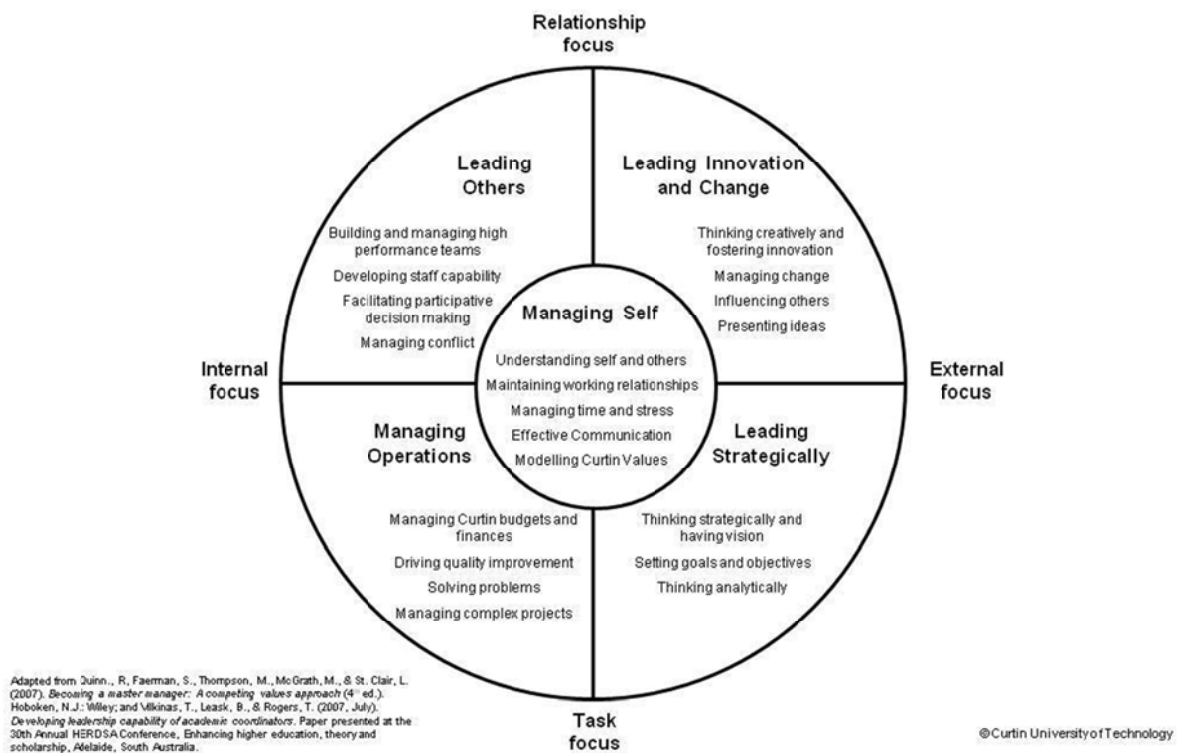


**Figure 3:** Integrated Competing Values Framework (Vilkinas 2009)

By early 2009, the ODU project team had identified numerous frameworks but focussed attention on eight for detailed consideration. While visual presentation differed, many frameworks had common capabilities or competencies. The project team concluded that none was exactly what was needed for Curtin at this time. For example, academic staff were resistant to the business language of the CVF; the learning leaders framework was too oriented to teaching and learning, whilst the ICVF’s roles were considered too ‘soft’ to be applied across the entire University. The team wondered if two frameworks were required – one for academic leaders and one for professional staff leadership roles – something to be avoided to minimise the academic-professional staff divide.

Utilising an action learning approach the project team compared and contrasted the eight frameworks. The analysis yielded a list of twenty capabilities that represented an amalgam of the capabilities across the frameworks. A Leadership and Management Development Reference Group (established to provide advice to the ODU team) subsequently endorsed the twenty capabilities. In June 2009 almost 80 members of Curtin’s senior leadership group were invited to rank the top ten capabilities (of the twenty) that the University should focus on to assist it realising its ‘top 20 in Asia by 2020’ vision. This activity effectively endorsed the list of 20 capabilities and provided the ODU team with the most important capabilities to include in its development programmes.

The next step was to create a model to represent the twenty capabilities visually. Within the list of twenty capabilities the team identified five clusters and each of these clusters nominally matched the four quadrants and central ‘integrator’ role of the integrated competing values framework but without using the CVF/ICVF role nomenclature. In addition, the ICVF’s ‘people focus’ label was changed to ‘relationship focus’. Thus, the draft Curtin framework as depicted at figure 4 draws on the CVF, ICVF, and contingency theory. The reference group, whose membership comprised a majority of academic representatives, agreed that the draft framework would ‘work’ for staff in academic and professional roles, and approved the draft for further development.



**Figure 4:** Draft Curtin leadership framework

In late 2009, an external consultant was engaged to develop a series of behavioural statements to support each capability. The consultant and the project leader agreed that one set of behavioural statements was inappropriate for all levels of management (supervisors through to the vice-chancellor) and decided four broad management levels was appropriate – coordinator/supervisor; manager; director/head of school; and senior executive. A series of approximately 80 behavioural statements (three to five per capability) per management level was created with the assumption that leaders at more senior levels would be able to demonstrate the lower level capabilities.

By April 2010 the draft framework’s management levels and behavioural statements had undergone their first revision by the reference group. Then in May, the project leader commenced a three-month consultation period by presenting the draft framework (including the behavioural statements) at faculty and central area senior management meetings. The presentations provided an opportunity to

inform the Curtin community of the broader application of the framework and the variety of approaches the ODU incorporates within development programmes. The approaches include individually led work-based projects, action learning groups, the establishment of peer-based networks (communities of practice), real-life workplace simulations, coaching and/or mentoring, and self-managed learning. Some suggestions to fine tune the framework have been received but, to date, the anecdotal and documented feedback from staff on the framework and its intended application has been overwhelmingly positive.

A suite of leadership and management development programmes is being developed drawing on the Framework's capabilities. To date programmes have been developed for targeted groups of staff – from aspiring and first time supervisors through to the Vice-Chancellor and her executive team. The project team is planning to take the revised, final version of the Curtin framework to Academic Board and Curtin's Planning and Management Committee in October or November 2010 with an expectation that the framework will be endorsed for use from January 2011. The long march is (almost) over!

## **REFLECTIONS AND RECOMMENDATIONS**

Even though the development of the Curtin leadership framework has been a long march – some two and a half years, the prolonged process has provided numerous benefits including that it:

- allowed the project team time to use an action learning approach resulting in a number of capability iterations to reach the current framework,
- demonstrated that a participative decision making approach – within the project team, the reference group and the broader Curtin community – leads to greater acceptance,
- highlighted that 'business' leadership frameworks must fit the organisational context – the language of business models needs to be adapted to suit higher education institutions to be acceptable to academic leaders in particular,
- afforded the opportunity to learn from current ALTC leadership projects,
- draws on existing, accepted frameworks yet fits the Curtin context and supports the University's 'top 20 in Asia by 2020' vision, and
- provides a framework for leadership development, career management, succession planning, recruitment and selection and performance management.

From the Curtin experience the key recommendations for others considering creating a leadership framework are to:

- use collegial processes to build a coalition of support across the institution,
- keep an open mind and 'it' (the appropriate solution) will come,
- draw on both the general and higher education specific leadership research literature but ensure your framework's language 'speaks' to academic leaders, and above all else
- be prepared for a long march!

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# **THE MEANINGFUL ENHANCEMENT OF INDIGENOUS CULTURE THROUGH TECHNOLOGY: A DIGITAL ACKNOWLEDGMENT OF DHARAWAL COUNTRY**

**Jade Kennedy and Theresa Hoynes, University of Wollongong, Australia**

## **ABSTRACT**

The University of Wollongong (UOW) has introduced the protocols of Welcomes to Country and Acknowledgement of Country to open certain events, functions and ceremonies. It has become evident that there is a significant lack of understanding around these customs and that they are becoming merely institutionalised acts of political correctness. The Faculty of Commerce at UOW identified these issues as impeding its journey to becoming an 'indigenous friendly' environment and has drawn on the work of Karl Weick to help guide it in a dedicated sense-making process. The Faculty undertook a series of engagement initiatives with the local Illawarra Aboriginal community to increase its understanding of their traditional customs. In turn, the Faculty has used technology to enhance the sense making for its staff and students in relation to the Acknowledgment and Welcome practices. This collaboration has forged a genuine relationship, inspired much knowledge sharing and resulted in the creation of a digital Acknowledgment of Dharawal Country.

Keywords: Indigenous, protocols, technology, Acknowledgment of Country, sense making, meaning

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## **INTRODUCTION**

The University of Wollongong (UOW) has introduced the protocols of Welcomes to Country and Acknowledgment of Country to open certain events, functions and ceremonies. These practices are becoming increasingly common across higher educational institutions, and within these contexts are intended to reflect the unique position of the Indigenous people of Australia. It is evident, however, that there is a significant lack of understanding around these customs and that many non-indigenous people often feel uncertain as to how to arrange a Welcome or conduct an Acknowledgment of Country. This uncertainty reflects a gap in knowledge related to the interpretation or sense making of these traditional practices. This presents a danger that in becoming institutionalised, these practices will lose their meaning and could be seen as mere acts of political correctness.

Additionally, many Aboriginal communities are disengaged from higher educational organisations, and there is much evidence supporting the poor participation of Aboriginal and Torres Strait Islander people within higher educational institutions (Gunstone, 2008; O'Rourke, 2010; Universities Australia, 2008). It has been observed that this poor participation and engagement within the sector, facilitates the appropriation of traditional Aboriginal customs by people who are not culturally informed or connected to community or country. It is regrettable that people of sincere intent but with little or no understanding of cultural protocols such as Welcomes and Acknowledgments of Country are prone to misinterpreting the true meaning of these practices as they have been communicated to meet the needs of institutions. The challenge lies in creating meaningfulness or sense making around these practices so that their intent and integrity remains intact.

The Faculty of Commerce at UOW noticed that the issues surrounding Welcomes to Country and Acknowledgments of Country directly impeded its journey to becoming an 'indigenous friendly' environment. It did understand that 'commerce' was not a traditional discipline of study for indigenous students and had therefore committed to a strategy to engage Aboriginal and Torres Strait Islander people. It had also identified that by incorporating Welcomes and Acknowledgments into common practice it was attempting to give genuine respect and facilitate engagement. What the Faculty had not anticipated was the impact of its own institutionalisation of these customs and the difficulties that arose in embedding these protocols within the Faculty. The Faculty lacked a depth of understanding of Welcomes and Acknowledgments of Country, and needed to create sense and meaning around these traditional customs. Sense making in this context became fundamental, allowing an understanding of what an event means, the stories that support the event and the subsequent actions that occur as a result of this process (Weick, Sutcliffe & Obstfeld, 2005). It is the actions that result from sense making that bring meaning into existence and provide a basis that allows people to be able to act into the future (Abolafia, 2010).

The Faculty sought to create meaning through the establishment of a genuine two-way relationship with the local Illawarra Aboriginal community. This relationship provided the basis for the Faculty to attempt to learn the true meaning of 'Country', to understand the stories behind Country for Dharawal people and gain a better understanding of traditional Aboriginal customs, protocols and practices. The Faculty identified the most appropriate ways of making sense of these cultural practices that would enable the Faculty of Commerce at UOW to meaningfully embed them in practice and to be perceived by indigenous Australians as a friendly environment.

## **METHODS**

The Faculty of Commerce at UOW undertook a series of engagement initiatives with the local Illawarra Aboriginal community in its attempt to create sense and meaning around Dharawal Country. It was recognised that there are many barriers to engaging Aboriginal people and communities with universities and higher educational organisations (IHEAC, 2006, James & Devlin, 2006), and it was understood that the Illawarra Aboriginal community were uncertain, apprehensive and to a certain extent distrustful when it came to involvement with the University as there has been an inconsistent

history of engagement. It was for these reasons that the Faculty placed emphasis on the building of genuine relationships with the local Aboriginal community organisations, Elders, custodians, cultural knowledge-holders and community members. It was also of great significant for the Faculty that these relationships were on-going and two-way, (ngapartji ngapartji), involving both respect and reciprocity.

The Faculty of Commerce started by establishing an Indigenous Strategy Working Party, to generate, guide and oversee initiatives that worked towards making the Faculty a more indigenous friendly environment. The working party included both academic and general staff members from the Faculty of Commerce, representatives from Woolyungah, the UOW Indigenous Centre, and several Aboriginal community members. All initiatives and decisions regarding the Faculty's engagement with the Aboriginal community went through this group.

Over the course of six months the Faculty began breaking down barriers and building its relationship with the Illawarra Aboriginal community through regular meetings with its Elders and cultural custodians. The Illawarra Aboriginal Corporation's (IAC) Elders group was targeted as an initial point of engagement. These conversations began with Faculty members simply attending the Elder's art and craft sessions, information and presentation sessions or their luncheons, and engaging them in conversations about themselves and their experiences on country. Sense making around the meaning of Country to Dharawal people began to emerge, as sense making is fundamentally a social activity where stories are preserved, retained or shared (Isabella 1990; Maitlis, 2005). However, the learning became a reciprocal process. As Watson (1995) states, the audience for sense making includes the speakers themselves, and it became evident that the Elders were finding ways of articulating oral histories and stories for the Faculty to comprehend and relate to the structures of its institution.

The regularity of these conversations exposed the Faculty to the Aboriginal community, increasing trust and sharing to the point that traditional Custodians and cultural knowledge-holders felt it necessary that 'Country' be communicated 'on Country'. This involved visiting sites of significance and other places of importance to the Dharawal people and hearing the dreamings, stories and Aboriginal histories that pertained to the meanings associated with the area. This was a slow and respectful process, undertaken and initiated on the terms of the traditional custodians that gave the Faculty a privileged insight and appreciation of Dharawal Country and the Dharawal people's connections to their ancestral lands.

In working with the Dharawal Elders it became apparent that the Faculty was being instructed in cultural knowledge in ways that the Elders would use with their own people or children. This generosity, inspired the Faculty to undertake further initiatives that directly engaged with the community and encouraged 'ngapartji ngapartji' and the growth of the two-way relationship it was attempting to establish.

Following the success of engagement and the increased understanding and appreciations of Country, the Faculty commenced the creation of a 'short-film' Acknowledging Dharawal Country that followed the model of digital story-telling. The intent of the film was to convey the meaning of the connection and relationship the Dharawal people have with their Country. Further, it was developed to share the significance of the traditional custom of Acknowledging Country through the use of a digital medium and to challenge the impression that this custom is a 'tokenistic' act performed at the beginning of events.

## **RESULTS**

For the Faculty of Commerce at UOW, the relationships built on time, trust and reciprocity with the local Illawarra Aboriginal Elders and community, were in themselves greater in impact than the outcomes of initiatives undertaken. The on-going nature of these relationships corresponds with the on-going nature of sense making (Weick, 1993) and the fact that it is described by Currie and Brown

(2003) as an evolving product of conversations with ourselves and with others, gives encouragement to the Faculty that gaps in knowledge can be addressed when they appear.

The engagement initiatives have presented the Faculty with opportunities to create sense and meaning through the experiences it has shared on a journey to becoming a more indigenous friendly environment. They have also enlightened the Faculty's comprehension of Dharawal Country and the meaning of traditional customs such as Welcomes and Acknowledgments of Country. Following are the main outcomes achieved thus far.

### **Five Key Concepts**

The generous sharing of knowledge through the process of relationship-building has facilitated the articulation of five key concepts or beliefs of the Dharawal in describing one's relationship with Country. They are country, kinship, culture, journey and connectedness:

- 'Country' refers to one's nature and natural surroundings. It includes lands and waters, trees and plant-life, animals, birds, fish and reptiles.
- 'Kinship' reflects the system by which people are related to each other. It defines one's roles, responsibilities and obligations within a relationship.
- 'Culture' is represented in art, song and dance, language, stories and oral histories. However, culture is said by the Dharawal to be present in your everyday being.
- 'Journey' refers to the lived experiences that occur 'on Country', one's story, one's history.
- 'Connectedness' reflects the core belief that binds Dharawal people to their Country. It speaks of the inter-relationship of everything and that nothing can be considered in isolation, just as none of the concepts or beliefs can be considered without the other.

### **Acknowledgment of Dharawal Country Short Film**

The digital Acknowledgment of Dharawal Country is the meshing of the traditional custom of Acknowledging Country with modern technologies. It is the embodiment of the five key concepts outlined above and depicts these progressively over via imagery viewed didgeridoo music performed by a local Elder. The digital story relates a traditional story from the Wodi Wodi, one of the 13 tribes of the Dharawal people. It is a story of travelling from the ocean to the escarpment; a story of travelling across Country. It is designed to encourage and inspire people not from Country to recognise and value their own connectedness to Dharawal Country and to learn how to show respect through the acknowledgment of this.

### **Acknowledgment of Country protocols**

A set of guidelines and protocols have been created to sit alongside the digital Acknowledgment of Dharawal Country to assist and support users of the short-film or people wishing to organise a Welcomes to Country and Acknowledgment of Country. Unlike most protocols, they are constructed not to direct policy or sit within a governance framework, but instead are designed to be functional; they are in a practical book form and are user based.

### **Koori Kids Fun Day**

The Koori Kids Fun Day was focused on engaging Aboriginal children from the Illawarra area through sporting and cultural activities on the UOW Wollongong campus. ('Koori' is the term is used by the aboriginal people in the states of Victoria, parts of New South Wales and Tasmania to describe themselves). The Day involved University staff and students. The day was supported by the broader community and it was aimed at breaking down the barriers between the University and the local Aboriginal community. Its main objective was to form positive associations and experiences for the children and their families relating to the Faculty and University.

More than 40 local Koori kids and their families attended. The success of this day impressed upon the Faculty, the University and the broader community the need to engage through fun, social activities. The University needs to engage with Aboriginal people and to provide opportunities for the local Aboriginal community to create stories and meaning about the University. The University needs to engage in sense making with the local community, about itself. There has been a strong drive to embed this day into the UOW annual calendar.

### **Mural – Agulia**

This painting was designed by three local Aboriginal artists, and completed through the contributions of the children in attendance at the Koori Kids Fun Day. This triptych is yet another story of Dharawal Country, and is aligned with two of the sacred mountains of the Wollongong region: Mt Kembla and Mt Keira. The placing of the children's handprints on this artwork, from an Aboriginal perspective, provides a significant form of connectedness for the individual kids themselves and their families. This is an age-old Aboriginal practice that in this instance goes beyond the usual perceptions of engagement and therefore the artwork now provides the keystone in the relationship between the particular children, and their families (who gave their handprints) and the Faculty of Commerce. The painting hangs at the entrance to the Faculty of Commerce building.

### **AIME – Australian Indigenous Mentoring Experience**

UOW is the largest host of the AIME programme servicing 140 indigenous children from more than seven Department of Education identified priority funded schools. The programme aligns university students as study mentors to indigenous students. Since initiating this strategy, over 100 Commerce students have registered to participate in AIME from a baseline of zero.

## **DISCUSSION**

In trying to exert a positive influence on the sense making process to create meaning and organisation around these traditional customs, the Faculty, University and community has experienced some truly positive outcomes as well as some unexpected impacts. Room for improvement has also become apparent. Because of the project, the Faculty has offered a scholarship to undertake research into sense making processes for Acknowledgments and Welcomes so that the conclusions that inform actions are based on firm evidence and evaluation. The Faculty expects this research to be of benefit to communities and institutions and outcomes from the research should be available within 12-18 months.

The focus of this discussion then, is based on evidence received through evaluations, feedback and the experiences of those involved. The project was successful in the development of genuine relationships with the local Aboriginal community. Feedback from the children, the parents and the community was overwhelmingly positive. In order to achieve its goal of being indigenous friendly, the Faculty has formed alliances with other faculties to host, on an annual basis, a Koori Kids fun day. The fun day will be improved upon and the agenda for the day will change. It will shift from engaging with the community to create material for the short film, to engaging with the community so that the community can create meaning regarding the University. As we have learnt through our sense making process, in order to create meaning, actions or experiences need to occur that provide opportunities for reframing mental models. Story telling is an effective way of relabeling and communicating experiences. It also fits well with Aboriginal culture. So the day will include parents and carers. It will include activities and visits from inspirational Aboriginal athletes, food and celebrations. A digital story of the day will also be created by the kids and carers for them to take away with them.

The Faculty has been inundated with requests for the film. The requests have come from a range of organisations, groups and institutions. Some of the requests have been genuinely motivated by a desire to create meaning and respect through Welcomes and Acknowledgements and some have not.

Some of the requests for the film surprised the Faculty. It is customary to give respect to an Aboriginal person delivering a Welcome through payment. Some feedback suggested that organisations could now save money by not having to pay an Elder or Dharawal representative to attend a function to give a Welcome because the film superseded that custom. Some organisations have told us that they will just create their own DVD and use it without engaging in community consultation or involvement.

Such feedback was a major stumbling block in the project as it indicated that meaning had not been created and that we had actually created a means to circumvent practices that were about engagement, respect, integrity and intent. We also received feedback associated with this from members of the Aboriginal community who were concerned that we were reducing opportunities for engagement through the short film.

Both of these perspectives demonstrate misunderstanding of the intent of the film. The Faculty continues its practice of engaging and paying community members for the delivery of a Welcome to Country and we clearly communicate this as a priority for the University. The University is committed to ongoing engagement with local Aboriginal communities. The intent with the short film is that it will continue to evolve with new images, sounds and content based on advice from the community. Though it is not possible for the Faculty to guarantee that the film won't be misused, the Faculty will work to prevent misuse of the film as much as possible. The Protocols stipulate clearly the way in which the film is to be used. Distribution of the film occurs through discussion so that the intent of the film is made clear to users.

In response to the issue about creating other DVDs and using them, the Faculty, in collaboration with the Faculty of Education, has decided to be proactive and a stage 2 project is in development. Stage 2 will involve working with the local Aboriginal community, the Elders group, children and teachers from a selection of priority-funded primary schools in the region to create a digital Acknowledgement of Country that is specific to each school. In this way, meaning for Acknowledgements and Welcomes becomes contextualised to each school and draws on their individual stories and traditions. The digital stories would become an educative tool within the school system to cover key learning areas, including indigenous perspectives, culture, information technology and literacy.

In taking definitive action around the issues regarding Welcomes and Acknowledgements, the Faculty and the University has learnt a great deal. It is anticipated that, through ongoing partnerships, research and actions, the meaning behind traditional practices will become embedded in organisational structures in a way that facilitates understanding and respect.

## **CONCLUSION**

The Faculty of Commerce embarked on a journey to make the Faculty an indigenous friendly environment, recognising that indigenous participation in Commerce was extremely low. In order to achieve this objective the Faculty introduced Welcomes to Country and Acknowledgements of Country in its standard practices for events. In doing this, The Faculty came to realise that the 'standardisation' of the practice was reducing people's understanding of and regard for these traditional practices. The Faculty needed to understand and make sense of the meaning of these traditional practices for the Dharawal community and began a process to capture and create stories, images, art and music around the Acknowledgement of Dharawal country. The digital Acknowledgement of Dharawal Country has resulted in partnerships and opportunities that extend beyond the creation of the short film.

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# **FROM AUDIT TO EVALUATION – SO WHERE WILL IT TAKE US?**

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## **ABSTRACT**

For some years, the New Zealand tertiary sector has used an audit model to measure institutional performance. The current and previous governments had concerns about sector performance and questioned the robustness of this quality assurance system. In 2006, the New Zealand Qualifications Authority was commissioned to investigate other models. This paper discusses the development of the new system of self-assessment, external evaluation and review, and describes the journey of a regional polytechnic from the old to the new system including its experience of external evaluation. It also makes some suggestions as to where this might take the sector in the future.

Keywords: quality assurance; audit; self-assessment; evaluation; improvement

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## INTRODUCTION

The tertiary sector in New Zealand comprises eight universities, 20 institutes of technology and polytechnics, three wānanga (publicly-owned tertiary institutions that provide education in a Māori cultural context) and a large number of private training establishments, government training organisations, and industry training organisations. Quality assurance for the university sub-sector is provided through legislation to the New Zealand Vice Chancellors' Committee which established the New Zealand Universities Academic Audit Unit to develop and conduct quality reviews. The remainder of the tertiary sector is covered, under legislation, by the New Zealand Qualifications Authority, which developed a quality assurance monitoring system. The model adopted in the early 1990s was a standards-based audit system. In March 2006, the then Labour Government Cabinet considered a paper titled *Tertiary education reforms: the next steps*, which set out a package of changes to tertiary education (Cabinet Policy Committee, 2006a). Broadly, these reforms were to create a fundamentally different investment system for tertiary education, a system of planning, funding, quality and monitoring that would drive access, quality and relevance within a distinctive contributions framework.

This paper discusses the developments that have occurred following that Cabinet Policy Committee paper including the theoretical underpinning of the new system, which was trialled in a selection of non-university tertiary institutions in 2008, and subsequently after regulatory changes, began to be implemented from the latter part of 2009. The paper then tells the story of a regional polytechnic's experiences of being the first polytechnic to be evaluated using the new model of quality assurance in April 2010, and conclude with some personal perspectives of where this move from audit to evaluation might take the tertiary sector in the future.

## DEVELOPING A NEW QUALITY ASSURANCE MODEL

### The Former Academic Audit Model

Early in the 1990s, the New Zealand Qualifications Authority established a system of academic quality audits that were measured against eight standards. The system required tertiary institutions (except universities) to establish a quality management system supported by policies and processes to meet the standards and then undertake an audit by an external panel every four years. Following negotiation, the New Zealand Qualifications Authority delegated authority to the sub-sector's peak body Institutes of Technology and Polytechnics New Zealand (formerly the Association of Polytechnics New Zealand), to develop its own academic audit system along the same model that the Qualifications Authority had developed. Subsequently the Institutes of Technology and Polytechnics New Zealand established its own quality assurance body; New Zealand Polytechnics Programmes Committee, which was later renamed Institutes of Technology and Polytechnics Quality. This quality assurance body used its own framework of 12 standards with the four yearly audit cycle, which also included a mid-term quality review (Institutes of Technology and Polytechnics Quality, 2005; New Zealand Polytechnics Programmes Committee, 2003). This latter process was primarily a follow-up review to ensure that any recommendations that had been made by the panel during the full audit were being implemented. Upon the satisfactory completion of the four-yearly review the polytechnic would be awarded quality assured status. Institutes of Technology and Polytechnics Quality had also been delegated approval to accredit and approve this subsector to deliver qualifications up to undergraduate degree level. The New Zealand Qualifications Authority undertook accreditation and approval of any post-graduate qualifications for the subsector (Bourke, 2009).

### Rationale for a Shift in the Quality Assurance System

The former Labour Government (1999-2008) and the current National Government, which also held office prior to 1999, had concerns about accountability and variability of practice in the tertiary sector, and a greater concern about the polytechnic sector. While many will argue that this was primarily

because of some questionable behaviour in a small number of polytechnics and wānanga, the whole sector got caught up in the government's focus on review. As mentioned in the introduction, the Labour Government's Cabinet had agreed to a set of changes in the tertiary education system, through the statements in the *Tertiary education reforms: The next steps*. There were three interrelated components to the reforms and the third component is the most relevant to this paper. That component is '...a more rigorous quality, reporting and monitoring regime centred around the performance of the institutions in relation to the expectations established through the profile' (Cabinet Policy Committee, 2006a, p1). The whole thrust of the reforms was to shift the focus from inputs to outcomes, and every component of the new quality assurance system needed to ensure accountability and responsibility by tertiary institutions to the government and the public. Following this initial paper, a raft of proposals was put to the Cabinet Policy Committee; the most relevant here is the *Tertiary education reforms paper 4: Quality assurance and monitoring system* (Cabinet Policy Committee, 2006b).

While the Tertiary Education Commission was given overall responsibility for the development of the tertiary education reforms, in December 2006 the Government agreed that the New Zealand Qualifications Authority, in close association with the Tertiary Education Commission, should lead the work associated with developing quality assurance processes. The New Zealand Qualifications Authority established an Expert Advisory Group. The membership of this group included individuals with experience in evaluation, quality assurance and/or the tertiary education sector. Professor Gary Hawke, well known for his leadership in the major tertiary education reforms in the late 1980s, chaired the Group. The objective of the Group was to advise on the development and implementation of a robust quality assurance system that supports the tertiary education reforms (New Zealand Qualifications Authority, 2007a).

### **Determining the Model**

Over the ensuing months, the Expert Advisory Group met a number of times and presented reports of their thinking to the New Zealand Qualifications Authority. Concurrently with this, the Qualifications Authority had established its own operational team to research quality assurance models in other jurisdictions, receive and consider the advice from the Expert Advisory Group, and publish consultation documents to the sector. Some comment on the research in other jurisdictions, especially OECD countries is made later in the paper. Aspects of the Qualifications Authority research findings have influenced the overall design of the new system for New Zealand.

As mentioned in the previous section one of the key shifts was from measuring inputs to measuring outcomes and accountability to stakeholders including students and government. To facilitate this shift in the quality assurance system a fundamental change had to be made from the audit model against a set of standards, to evaluating outcomes by systematically answering questions about quality, value or importance (Davidson, 2009).

One way to explain the fundamental differences between systems-based audit and an outcomes-focused evaluation is to use the analogy of baking a cake. A systems-based audit would focus mainly on ensuring that the:

- baker was suitably qualified
- appropriate equipment was used
- kitchen was clean
- right ingredients were used and in the right quantities.

In an evaluative approach the baker will, in the first instance, start assessing the quality of the cake from the angle of how well the final product satisfied the customer. So the questions would be:

- Did it taste right?
- Did it have the right texture?
- Did it look appetising?
- Was it safe to eat?

And most importantly:

- Is there anything I want to improve? (New Zealand Qualifications Authority 2009a)

Early in the process, the University sub-sector, via the New Zealand Vice Chancellor's Committee, decided not to participate in the proposed new system but instead opted to retain a watching brief as it was developed and rolled out across the rest of the sector. They held the view that their system of quality assurance was already very evaluative in its approach and also that it was covered under separate legislation from the rest of the sector,

By October 2007, the New Zealand Qualifications Authority put out a discussion paper on the principles of an evaluative approach to quality assurance. This provided a two-component approach. The first - Self-Assessment – was referred to as the processes a tertiary education organisation uses to establish evidence of its own effectiveness (New Zealand Qualifications Authority, 2007b). The second component is External Evaluation and Review. The purpose of External Evaluation and Review is to provide an independent and robust evaluation of the individual organisation's self-assessment. External evaluation would use the results of self-assessment along with other evidence to validate the organisation's self-assessment and make judgements about the quality of the organisation (New Zealand Qualifications Authority, 2007b).

In framing their approach to self-assessment for Tertiary Education Organisations, five areas of focus were proposed:

- (a) the attainment of high educational standards and excellence, relevant to learners' abilities
  - (b) the education and other gains for learners, i.e. the value added
  - (c) the quality of the learning experience, including teaching
  - (d) tertiary education organisation contribution to valued employer, regional and national outcomes
  - (e) tertiary education organisation compliance with regulatory requirements
- (New Zealand Qualifications Authority, 2007b)

Over the next few months, these were clarified into five key evaluation questions which Tertiary Education Organisations would address in developing their own self-assessment practices and would be used in the External Evaluation and Review process for validation and judgements on the quality of the tertiary organisation. In designing the questions, they were put into two groups: those that evaluate outcomes, (that is changes that happen to learning, employing organisations, communities and the economy that are at least partially caused by tertiary institutions' programmes and activities); and those that evaluate process (people and things that are put into or accepted into the institution, programmes systems and services that the institution delivers, and products and trained learners that are produced by or through the institutions' programmes and activities) (Davidson, 2009).

These five questions were:

Outcomes questions:

1. How well do learners achieve?
2. What is the value of the outcomes for key stakeholders, including learners?

Process questions:

3. How well do programmes and activities match the needs of learners and other stakeholders?
4. How effective is the teaching?
5. How well are learners guided and supported?

Along with the key evaluation questions, design work was done to produce a set of outcome and process indicators to guide institutions as how to interpret each key evaluation question and examples of the evidence to support the indicators. The indicators were developed using systems-modelling research and sector advisory feedback and provided detail around background research information, why the indicator was important and how prompts that might aid evaluative conversation might be applied (New Zealand Qualifications Authority, 2008).

While the intention is for tertiary education organisations to develop their own approach to self assessment using the key evaluation questions and indicators as a guide, as mentioned earlier there is a planned process for periodic External Evaluation and Review. More detail of this is provided in a later section as this was largely an evolving process following a trial which is also described later in the paper. However for the purpose of outlining the development of External Evaluation and Review, suffice it to say that a site visit is conducted by a team of two to four trained evaluators, including a lead evaluator. The team, through their in-depth questioning, triangulate any documented evidence with their findings through questioning, and make judgements about the institution's educational performance and its capability in self-assessment. This is built up by using rubrics to determine how well the institution meets the key evaluation questions in a series of mandatory and agreed focus areas. The New Zealand Qualifications Authority has subsequently published guidelines for organisational Self Assessment and External Evaluation and Review (New Zealand Qualifications Authority 2009a; 2009b). Institutes of Technology and Polytechnics Quality has also published its own set of guidelines for External Evaluation and Review (Institutes of Technology and Polytechnics Quality, 2010).

The use of evaluative rubrics is a broad-brush way of defining what good, excellent (etc) performance would look like in practice (Davidson, 2009). The final approved model includes four performance rankings that are applied across a number of focus areas – Excellent, Good, Adequate and Poor, and for the final judgement of the institution's performance the four are – Highly Confident, Confident, Not yet Confident and Not Confident.

The existing gazetted criteria were sufficiently flexible that no legislative change was required to authorise the shift from audit to evaluation and the New Zealand Qualifications Authority and Institute of Technology and Polytechnics Quality Boards have subsequently approved the process, the latter having particular focus on the way External Evaluation and Review will take place in the polytechnic sub-sector. Later in the paper we will discuss one polytechnic's experience of Self Assessment and External Evaluation and Review, including a description of how the new quality assurance model has evolved further as it is being implemented.

### **NZQA Research and Other Models**

The New Zealand Qualifications Authority conducted some in-depth research into approaches to quality assurance in other countries, particularly OECD countries. A high-level report was produced (New Zealand Qualifications Authority, 2007c). One of the first things this report discusses is the concept of quality in higher education in an attempt to gain some consensus of meaning. It is interesting to note that they found that 'quality' as an abstract idea is open to many interpretations. Concepts of quality as - exceptional; perfection or consistency; fitness for purpose; value for money; transformation – are cited from Harvey and Green (1993, cited in New Zealand Qualifications Authority, 2007c). In noticing the concept of 'transformation', they cite Margaret Horsborough (1999, cited in New Zealand Qualifications Authority, 2007c) who argued that if the purpose of higher education is to transform learners, then quality monitoring should relate to the process of transformation and learner outcomes. This concept certainly appears to have emerged in the final Self Assessment External Evaluation and Review model for the non-university tertiary institutions in New Zealand.

Viktoria Kis (2005), in her research into current practices in OECD countries as part of her internship at the Education and Training Policy Division, Directorate for Education, OECD, identifies the range of approaches to quality assurance in higher education. These primarily cover three approaches – accreditation, assessment and audit. She also identified that three basic methods for quality review usually involved some sort of self-review, followed by a peer-review and/or external review. Similarly, she found that amongst the data gathering instruments commonly found were – self-review report; site visits, surveys and performance indicators. A number of these aspects have appeared in the new quality assurance system adopted by the New Zealand Qualifications Authority.

The research also makes significant recognition of work done by Finnie and Usher (2005). This is a large piece of research that looks at current practises in Canada and other OECD countries and identifies that broadly there are four approaches to quality measurement. These are minimum standards – that are mostly qualitative; rankings/indicators – quantitative; learning impacts – quantitative; and continual improvement – qualitative.

One area of interest is the ‘learning impacts’ approach. Finnie and Usher make specific reference to the development of the National Survey of Student Engagement which was piloted in 75 higher education institutions in Canada in 2000 (Finnie & Usher, 2005, p13). Similarly, they refer to another example of measuring learning impacts, that is, the approach pioneered in Australia a few years earlier following the 1998 West Report on universities (West, 1998). West made general recommendations on the skills and attributes graduates should acquire. As a result, the Australian Council for Educational Research developed the Graduate Skills Assessment instrument. It is worth noting that Australia now uses the *Australasian Universities Survey of Student Engagement* as a tool for measuring student engagement and it is being trialled in New Zealand in 2010.

Continuing on the theme of approaches to quality assurance identified by Finnie and Usher is the ‘continual improvement’ approach. They indicate that while the ‘ranking/indicators’ and ‘learning impacts’ approaches were gaining momentum in North America in the 1990s, there was some discontent with the ‘minimum standards’ approach but no real discontent with the basic approach to self-audit followed by some external oversight (Finnie & Usher, 2005, pp15-16). This led to developments that moved beyond minimum standards to more performance benchmarking which required institutions to meet performance targets based on results at other organisations. They also reference the ISO model of continuous improvement concepts and organisational accreditation. This has been noted as a model that could be applied to education where an institution would develop its own method of defining and monitoring quality while the government’s role is to certify that institutions are in fact doing an adequate job of it. Furthermore, Finnie and Usher identify that Australia moved some way toward this model in 1998 when they established the Australian Universities Quality Agency. This agency encourages institutions to develop data in support of their own planning processes and then audits the effectiveness of the universities’ quality management process (Finnie & Usher, 2005, p16). The New Zealand Qualifications Authority also cite the Australian Universities Quality Agency as carrying out whole-of-institution quality audits with a focus on managing continuous quality improvement.

The New Zealand Universities Academic Audit Unit undertakes institutional academic audits on a cyclical basis. The last cycle of audits carried out during 2003-2006 were focused on continuous improvement in relation to teaching quality, programme delivery and the achievement of learning outcomes (New Zealand Qualifications Authority, 2007c). While the term ‘audit’ is used, as mentioned earlier in this paper, the New Zealand Vice Chancellors’ Committee believe that the whole process of preparing a self-review document followed by an external review has many traits of the evaluative approach. This is an explanation of their decision not to participate in the new model for non-university tertiary institutions but keep a watching brief during its implementation.

The next section will tell the story of a regional polytechnic’s implementation of Self Assessment and experience of being the first polytechnic to undergo an External Evaluation and Review.

### **The Former Internal Academic Audit – Process**

Academic audit at Bay of Plenty Polytechnic had been developed from an approach of collaboration and institutional commitment that was meant to lead to continuous improvement rather than a pure tick box ISO type compliance model of audit. It could be asserted that, in the main, this was also the way in which the New Zealand Polytechnics Programmes Committee (later Institutes of Technology and Polytechnics Quality) model rolled out. So much of the intent can be gleaned from the language used and how it was interpreted.

From an internal perspective the model used leaned toward continuous improvement rather than compliance (Hausman, 1998) and the language used described ‘findings, actions and recommendations’. The latter reflected what people needed to discuss and consider for the best approach for the future; with the former an expectation of considered action as an outcome of the findings. From an Institutes of Technology and Polytechnics Quality audit perspective, these terms were replaced by findings, non-compliances of either high or low risk requiring corrective actions (immediate fix-its); recommendations (Bay of Plenty Polytechnic actions) and suggestions.

We needed to consider the best way to implement audit at Bay of Plenty Polytechnic. The Polytechnic at that stage was structured into five schools with each school having an Academic Adviser with responsibility for school quality assurance and a centralised Senior Academic Adviser responsible for providing advice to assist with cross-polytechnic consistency. To implement academic audit at Bay of Plenty Polytechnic we used a model, shown in Table 1, of awareness heightening, training, use of a consistent approach and model, team briefing and conduct of audit, reporting and closing the loop.

We learned from this that there were some challenges with closing the loop and to ensure that all requirements were acted on. We also experienced challenges in ensuring that we used effective mechanisms for sharing some of the good practice that was identified.

### **The Self-Assessment and External Evaluation and Review Trial 2008**

Bay of Plenty Polytechnic was one of eight tertiary education organisations to participate in the trial of the Self Assessment External Evaluation and Review process. This provided the chance to work with the five key evaluation questions, the draft evaluation indicators, to identify areas of interest for the trial, and to work with a mentor.

Three self-assessment projects were undertaken. The first examined existing processes of internal academic audit, annual programme review and Te Waka Hourua criteria for approval and review of programmes. (Note: Te Waka Hourua is a metaphor that relates to two peoples travelling together towards the same goal - the partnership between the indigenous Māori, and Pakeha, New Zealanders who are not of Māori blood lines). Te Waka Hourua is a subcommittee of Bay of Plenty Polytechnic’s Academic Board that ensures curriculum and delivery reflects the dual heritage of Aotearoa/New Zealand (Bay of Plenty Polytechnic, 2007). The second project examined assessment and the third examined graduate outcomes and their value to both graduates and employers. Findings were reported in terms of the findings for Bay of Plenty Polytechnic, feedback for the New Zealand Qualifications Authority in relation to the trial of the evaluation indicators, and strategies for Bay of Plenty Polytechnic to build the findings into everyday business. Valuable outcomes were achieved that were able to feed into existing business processes and further improve the learning environment for students. With hindsight it is now possible to look at this selection of projects for the trial and consider that while each of these might have had its merits, a thinking ‘outside of the box’ around programme evaluation methodology may have been a better way to go.

The positive component of the experience is that we as an organisation learned from the experience. The negative component is that we may have learned more if we had treated these as broader opportunities for more staff to be involved and learn more from the experience rather than just a few people being involved. We also learned that the external evaluation panel in the trial experienced challenges in dealing with the rubrics and that some of the external evaluators needed to develop skills of evaluative questioning rather than compliance mentality questioning.

### **Implementation of the Full Self Assessment External Evaluation and Review**

After the trial, the New Zealand Qualifications Authority approved the final criteria for Self Assessment External Evaluation and Review and included the sixth question of ‘How effective are governance and management in supporting educational achievement?’ The New Zealand



Qualifications Authority then commenced External Evaluation and Review and by June 2010, 77 External Evaluation and Review reports had been published.

Table 1: Model for the implementation of internal academic audit at Bay of Plenty Polytechnic.

Stage	What was involved
Awareness heightening	The Quality Management System was restructured to reflect the 12 polytechnic standards, relevant policies attached and procedures written that showed those responsible and possible audit evidence
Training of key people	All Academic Advisers participated in Internal Audit training carried out by an external trainer. This was followed up by other interested staff being trained, once again by external trainers but in an onsite environment
Development of a consistent approach and model of audit	A four yearly cycle of audit was approved by Academic Board and developed so that each audit <ol style="list-style-type: none"> <li>1. had it's clearly identified Terms of reference</li> <li>2. identified two specific programme areas in each school</li> <li>3. identified audit evidence that was already available or needed to be available</li> <li>4. showed expectations for triangulation (documentation, staff, students, industry where relevant)</li> <li>5. showed initial questions for each group for further audit group development</li> <li>6. provided a template for the audit report</li> <li>7. showed the timeframe expected</li> </ol> In addition, each audit used a team of two people with the more experienced auditor supporting the newer. Team changes were attempted to prevent group think and to share the knowledge.
Briefing so that all people were on the same page	Prior to the audit a meeting was held to clarify the terms of reference and further refine questions
Conduct of the audit	The audit was carried out and each audit generally took 1.5 days per team member to include preparation, interview and write up. The conduct stage used a triangulation approach of reading documentation such as policy and practice expectation, and evidence of how that was met; talking with a range of people who could support or refute the policy and practice expectation and sighting further documentation that showed that the policy and practice was in effect for this particular programme.
Reporting and closing the loop	Reporting involving sending the written report to the programme team and then face to face follow up for clarification and any correction. The reports were received at School Boards of Studies for discussion and implementation of action plans.  At an institutional level, a collated report was provided to Academic Board and contained any polytechnic wide issues that needed to be addressed.

For the polytechnic sector, the quality assurance body chose to appoint two Lead Evaluators (Dr Peter Hodder and Mark Dingle) and a Principal Adviser (Dr John Harré) with the intention being that this composition would aid consistency of approach. Other members of the evaluation team were then drawn from the New Zealand Qualifications Authority's pool of evaluators.

### Self evaluation and Bay of Plenty Polytechnic

We moved into the self-evaluation mode by developing a strategy that was designed to use the best examples of practice identified in the polytechnic sector. That is, be inclusive through the use of an internal advisory committee; develop capability through a series of workshops held for staff; and use

the existing practice of programme and teaching evaluations, student retention and completion reporting and analysis data and annual programme review as mechanisms for developing a more robust examination of the health of programmes. Attempts were made to develop an annual programme review that was a more collaborative process so that all members of the teaching team were involved in discussions about what was working well in the programme and what required a fix. We also introduced a layered approach to the annual programme review, so that the reports were discussed at a School Board of Studies. The Head of School then provided a 'state of the School's health' by reviewing all annual programme reviews, and then a further layer of analysis and reporting to Academic Board about the overall annual programme reviews across the polytechnic to identify any trends and matters that needed to be addressed at an institutional level.

The Otago Polytechnic process of evaluative conversation, involving senior staff and programme staff, was trialled and Business Units carried out a self-evaluation to examine how they contributed both to the Polytechnic's Strategic Directions and also to supporting students and student outcomes. At the stage of writing this paper, evaluative conversations have been trialled in three areas:

- a course based , level 6 programme with large student numbers in both full-time and part-time study with a diverse group of academic staff
- a small level 2 programme with a small teaching team where the programme is designed to feed students into higher level qualifications
- a cluster of three programmes at levels 2, 3 and 5 where each programme feeds to another level, there are graduate outcomes at all three levels, and a shared teaching team across the programmes.

Each level of evaluation has produced useful outcomes and will continue to be rolled out in a trial-learning mode over the next 12 months.

### **External Evaluation and Review**

Bay of Plenty Polytechnic was the first polytechnic to experience External Evaluation and Review in April 2010 and for us it was a positive, collegial and constructive process. A small amount of initial strategic, policy and self-assessment documentation had been provided to the Lead Evaluator and then a scoping meeting was held four weeks prior to the external evaluation and review. This meeting ensured that the areas selected to be focussed on at the external evaluation and review were areas of importance to Bay of Plenty Polytechnic. Further documentation specific to the areas of focus were provided, for example, annual programme reviews and student evaluations of programmes. During the external evaluation and review visit the team met with a range of senior managers, programme managers, academic staff, industry, students and Council members.

Comment from staff about the experience included the following statements

- It was casual, good discussion
- Pushed for time/ ran out of time (several different staff)
- Initial idea of external evaluation and review took me out of my comfort zone – worked through it, the discussion was great - we've all come on from there and have learned so much (Group Leader)
- Some questions seemed abstract (tutor)
- Needed to make sure we clarified language (Head of School)
- It 'felt' cooperative, consultative, collaborative

An oral report back was given at the end of the visit in an open forum that about 45 staff attended. This provided real strengths to build on and share, and evidenced pointers for improvement.

## **Some Important Differences**

A key shift from audit to the external evaluation and review is that judgements about Confidence in both Capability in Self Assessment and Performance with Educational Outcomes are made. The report is provided to the Polytechnic to check for factual accuracy, this aspect being quite important. The final report is the report of the External Evaluation and Review Team. This means that, should the polytechnic disagree with the content of the report, unless it is a 'factual accuracy' then a polytechnic could be in a situation of disagreeing with a report, and the report being published with that particular rider.

With audit, it was only the audit summary that was publicly available unless the conditions of the Official Information Act were used. With External Evaluation and Review, there is a much more detailed report provided to the public. This describes the scope, process used and judgements of Capability in Performance with Educational Outcomes and Self-Assessment for the overall polytechnic. It also uses a rating scale for each of the focus areas using terminology that moves from Excellent, to Good, to Adequate to Poor. Clearly, this language carries important messages to the students and business community of the provider.

The public report carries the confidence levels for the polytechnic and summary statements for each of the polytechnic focus areas. An additional report is provided to the polytechnic that provides greater detail at the focus area level that can be used to share the good practice and to identify improvements to be worked on. This report, if used from the viewpoint of being 'external and objective eyes', is potentially very helpful for ongoing improvement.

Yes – we are happy with our overall judgement at Highly Confident for Institutional Educational Performance and Confident in Capability in Self Assessment and the report was published on the Institutes of Technology and Polytechnics Quality website on 21 June 2010.

## **SO WHERE DO WE THINK THAT THIS WILL TAKE US NEXT?**

An important lesson we learned was that some of the important self-evaluation actions that happen are the everyday, and ongoing, discussions in programme teams about student monitoring of progress, and provision of intervention support that is so second nature that it was not clearly articulated to the External Evaluation and Review Team. This learning has led to the development of a new, more comprehensive, and whole of organisation model for self-evaluation that will guide and support every day practice for teaching and business units – this is currently waiting on final discussion, implementation and adoption.

We realised that there is so much more that we could do to share ideas across the polytechnic and this needs to be a focus for the future. We are starting by discussing the many areas of excellent practice that were identified, with the intention of using these practices for improvement in other programmes and across other Schools at Bay of Plenty Polytechnic. We also realised that the self-evaluation model fits well with other different forms of organisational decision making that are in a current discussion stage for change.

From another viewpoint, we are aware of the public nature of the reports and the potential for them to be used not only benchmarking, but also for league tables to be developed. By comparison, the compulsory school sector in New Zealand has experienced the league tables' impact of Educational Review Office reports over a number of years. A current newspaper series 'What makes your school special?' in the Bay of Plenty Times (Udy, 2010) highlights how the Education Review Office reports can be positively interpreted and the need for the Education Review Office reports to be viewed from perspectives of the principal, students, and teachers as well as the Education Review Office. It will be an interesting idea to be followed for the non-university tertiary institutions in the future.

Our overall view is that the philosophy and model of institutional self assessment will lead to a much wider acceptance of continuous improvement in tertiary institutions in New Zealand.

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# **EDUCATION FACILITIES: LOW ENERGY CONSUMPTION, HIGH THERMAL COMFORT. ARE THEY MUTUALLY EXCLUSIVE?**

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## **ABSTRACT**

As we look to our future, it is a carbon-constrained future. Thus, as we design education facilities today, we are focussing on reducing their energy usage and greenhouse gas generation. However, we cannot forget about the students and staff occupying these buildings and their needs for high levels of thermal comfort that enhance engagement and productivity. The RMIT University Swanston Academic Building (SAB), an education facility in Melbourne targeting a Five-star Green Star Education v1 rating, is presented as a case study. Computational building simulation demonstrated that a high level of thermal comfort can be achieved by widening the internal space air temperature range from 21 – 24°C to 20 – 26°C, providing an improvement in operational building total energy consumption of approximately nine per cent and greenhouse gas emissions of seven per cent.

Keywords: Thermal comfort, low energy building, air conditioning, predicted mean vote

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## INTRODUCTION

In the design of education facilities, there is currently a strong focus on reducing energy consumption and greenhouse gas emissions as part of minimising climate change. With this low energy and carbon approach, the building occupants, students and staff must not be forgotten as the high performing building should also provide a high level of thermal comfort and productivity.

This balance between achieving a high level of thermal comfort and providing a building with low energy consumption can be a difficult challenge for both designers and operators. Research conducted by Hoyt, Lee, Zhang, Arens & Webster (2009) showed in a number of North American climates that where the temperature band for an air conditioning system is widened, a substantial saving in building energy can be achieved. Hoyt et al. (2009) report a reduction in heating ventilation and air conditioning (HVAC) energy consumption of 10 per cent for each degree Celsius increase or decrease in the space set point.

The common approach to improving thermal comfort within a space is to narrow the operational temperature band of the internal air conditioned space. This philosophy is contrary to the approach of Hoyt et al. (2009) to widen the space temperature band to improve overall building operational efficiency.

For a building targeting a Green Building Council of Australia (GBCA) Green Star rating, this balance is a common challenge as design teams strive to achieve the maximum points within both the Energy and Indoor Environment Quality environmental categories during design and construction.

In order to explore the impact of these apparent competing interests, a generic computational thermal simulation of a Building Code of Australian 2010 compliant educational office building's HVAC energy consumption is analysed for varying space temperature ranges that achieve specific thermal comfort criteria.

This generic analysis informed the design of the proposed RMIT University Swanston Academic Building (SAB). The proposed SAB will be a 33,000 m<sup>2</sup>, 11-storey education facility in Melbourne and is targeting a 5 star Green Star Education v1 rating. A key component of achieving this rating is maximising the facility's overall operational energy efficiency, thermal comfort and productivity. Findings are presented from an analysis of energy consumption and thermal comfort for SAB in order to investigate the question of whether or not low energy consumption and high thermal comfort are mutually exclusive.

## THERMAL COMFORT

Occupant thermal comfort is a subjective sensation that varies between people and is defined as a thermal balance with the surrounding environment. This heat balance of a human body is obtained when the internal heat production in the body is equal to the loss of heat to the environment (CIBSE, 2006).

As defined in ASHRAE (2004), there are six primary factors that affect overall thermal sensation separated into two categories – human parameters and environmental – as summarised in Table 1.

Table 1: Key parameters that influence thermal comfort (ASHRAE, 2004)

<b>Environmental parameters</b>	<b>Human parameters</b>
Dry bulb air temperature (°C)	Metabolic rate
Mean radiant temperature (°C)	Clothing insulation
Relative air speed (m/s)	
Humidity (%)	

## Predicted Mean Vote

For moderate thermal environments, an index known as Predicted Mean Vote (PMV) is a measure that calculates a value on a thermal scale by combining the environmental parameters outlined in Table 1 with the human factors of clothing and activity level. The value calculated is a mean value of the votes of a large group of people on a seven point scale from cold to hot, as outlined in Figure 1 (ISO, 2005). It should be noted that the index applies to air conditioned spaces and should be used only for values of PMV no greater than -2 to +2 (ISO, 2005), that is, cool to warm on the thermal scale.

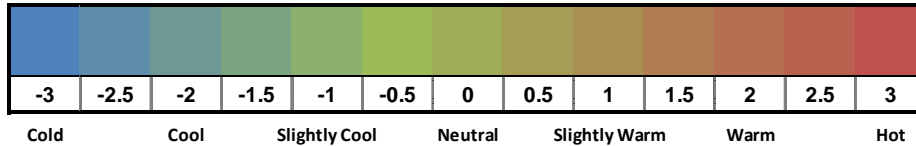


Figure 1: Predicted mean vote thermal scale

People are thermally dissimilar and, therefore, no environment will thermally satisfy everyone at the same time. Within the International Standard ISO 7730, the predicted percentage of people dissatisfied (PPD) is a calculation at each PMV. As PMV increases or decreases from zero, PPD increases as the number of dissatisfied people increases (Dwyer, 2006). Even at a PMV equal to zero, 5 per cent of a large group of people will be dissatisfied as they are either uncomfortably cool or warm.

Within GBCA (2008), a calculated PMV of no greater than +1.0 to -1.0 for 98 per cent of yearly operational hours is considered acceptable. A single point is awarded within the Green Star Education v1 rating tool for satisfying this consistently high level of thermal comfort. A maximum of two points are awarded for achieving a PMV between +0.5 to -0.5.

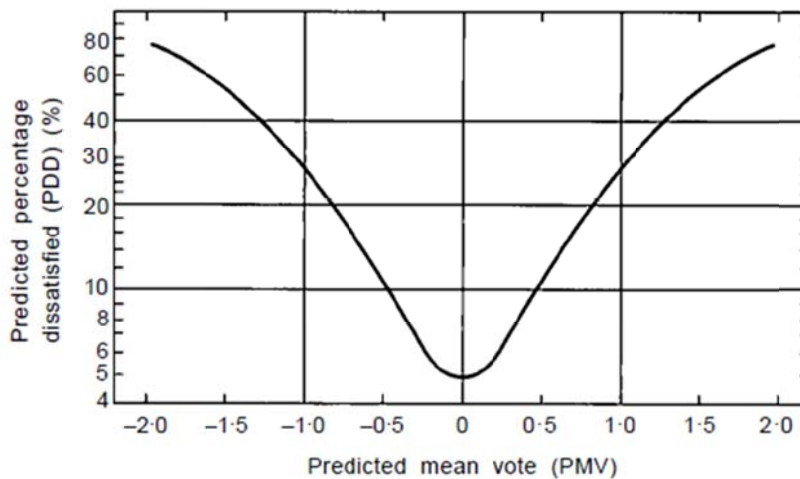


Figure 2: PPD as a function of PMV (CIBSE, 2006)

## Operative Temperature

Operative temperature, also known as dry resultant temperature, is a measure that considers dry bulb temperature and mean radiant temperature at a particular air velocity. Dwyer (2007) outlines that at low velocities of less than or equal to 0.2 m/s, operative temperature is simply the average of the mean radiant and dry bulb temperatures.

The mean radiant temperature is influenced by the thermal condition of building surfaces, including walls, ceilings and floors. Where a particular surface is either cooler or warmer than surrounding



surfaces, a variation in mean radiant temperature will alter the space’s ability to provide a thermally comfortable environment. The element of a building that influences radiant temperature most significantly is the external facade. A facade is typically the weakest component of a building envelope’s interaction with the external environment. Facade surfaces generally have greater fluctuations in surface temperature due to either heat conduction gains or losses. Combined with the transmission of solar radiation through the opaque glazing element, internal surfaces as well as the facade surface are impacted.

Consequently, where the total solar radiation transmitted through the building is minimised, the mean radiant temperature is more closely related to the internal space temperature as variations in surface temperature are reduced.

Dwyer (2006) states that well insulated buildings without large areas of external glazing or extreme air change rates will result in the mean radiant temperature and internal air temperature being similar. So, in practice the operative temperature is comparable to the air temperature, which is readily measured.

### Operational Temperature Range

**Error! Reference source not found.** provides a summary of acceptable thermal comfort bands for internal office/education spaces from a number of industry-recognised sources. The thermal comfort is based on summer and winter air conditioning set points and an overall temperature range. The table highlights the variation in temperature ranges between sources, where within Australia it is considered common practice that actively conditioned spaces are designed and operated with an internal air temperature range of 21 – 24°C, equating to an air conditioning set point of 22.5 ± 1.5°C.

Table 2: Operational space temperature range references

Reference	Space Type	Temperature Set point		Overall temperature range (°C)	Description
		Winter (°C)	Summer (°C)		
CIBSE (2006)	Office open plan	22.0 ± 1.0	23.0 ± 1.0	21.0 – 24.0	Environmental Design CIBSE Guide A
CIBSE (2006)	Education / teaching	20.0 ± 1.0	22.0 ± 1.0	19.0 – 23.0	Environmental Design CIBSE Guide A
ISO (2005)	Office	22.0 ± 1.0	24.5 ± 1.0	21.0 – 25.5	International Standard ISO 7730:2005 Table A.5 Category A criteria
de Dear, Brager, Cooper (1997)	General	22.5 ± 1.2	23.5 ± 1.2	21.3 – 24.7	ASHRAE RP-884 Developing an Adaptive Model of Thermal Comfort and Preference
Australian Government Comcare (1995)	Office	22.0 ± 2.0	23.0 ± 1.0	20.0 – 24.0	Air conditioning and thermal comfort in Australian Public Service offices
WorkSafe Victoria (2008)	Office	N/A	N/A	20.0 – 26.0	General temperature guidance provided in Appendix E – Amenities and facilities planning checklist

Interestingly, CIBSE (2006) presents the overall temperature set points for an office to be 1°C higher in summer and 2°C less in winter when compared to the set points outlined in the same document for

an education teaching space. This variation in temperature is attributed to a higher metabolic rate used in the calculation of the set points for the education teaching space.

All documents referenced in Table 2 provide an internal temperature range as guidance only and do not specify criteria as a mandatory requirement.

## METHODOLOGY

The analysis considered two separate computational building thermal energy simulations. All simulations were completed within Integrated Environmental Solutions (IES) Virtual Environment (VE) software version 6 and developed in accordance with the Green Building Council of Australia Education v1 Energy Calculator Guide (GBCA, 2010).

The analysis utilised CSIRO Melbourne 1971 Test Reference Year (TRY) weather data, as used for all building thermal computational models and in accordance with the ABCB (2006) Protocol for Building Energy Analysis Software.

The first simulation developed was of a generic model of a Building Code of Australia 2010 compliant educational office building. The energy consumption of the HVAC was analysed for three different space temperature ranges to achieve specific thermal comfort criteria. The cases assessed are outlined in **Error! Reference source not found.**

Table 3: Air temperature range

Case	Air conditioning Set point (°C)	Overall temperature range (°C)
Base	22.0 ± 1.5	21.0 – 24.0
1	23.5 ± 2.5	21.0 – 26.0
2	23.5 ± 3.5	20.0 – 27.0

The findings from the initial generic analysis form the foundation of the assessment for the cellular and open plan RMIT SAB academic office space case study. The system proposed for the office space utilises ceiling mounted active chilled beams combined with a central air conditioning system that delivers primary tempered air to the beam within the space.

The thermal comfort target for the project was to achieve a PMV of between -1.0 and +1.0 across all spaces for 98 per cent of the hours of occupancy. This criterion provides a high level of thermal comfort whilst satisfying the GBCA (2008) requirements. Based on the findings of the generic analysis, the standard 21 to 24°C design criterion was extended to 20 to 26°C and was still able to ensure a comparable thermal environment as outlined in Section 4.

The case study of RMIT SAB considers also the student portals – spaces that function as a student meeting, learning and interaction area within the building. These spaces are orientated in multiple directions and elevations across the building, with each portal having its own unique character, views, solar access and microclimate.

Thermal comfort conditions within the portal spaces are maximised with the implementation of a mixed mode HVAC system. The system regulates the space via the operation of a combination of openable windows, ceiling fans and evaporative cooling when conditions outside are favourable. Where the external conditions are not appropriate, or the temperature range within the space cannot be maintained, the HVAC system will revert to a full air conditioned mode of operation.

All assessments discussed for the generic education/office space and RMIT SAB academic offices focus on the interaction of mean radiant temperature with air temperature within the PMV calculation as a means of improving the operational performance of SAB in accordance with Dwyer (2006).

The mechanical system design of the portal spaces was developed and assessed in a manner to capitalise on the benefit of two alternate environmental parameters, relative humidity and air speed, within the PMV calculation to satisfy a criteria of -1.0 and +1.0 across all spaces for 98 per cent of the hours of occupancy, whilst improving overall building energy efficiency.

For the purposes of all analysis and results, the metabolic rate of each occupant was based on 70 W/m<sup>2</sup> sensible heat loss, in accordance with a person undertaking typical office activities that include filing, sitting, slowly walking, and relaxed.

### Thermal Comfort Assumptions For PMV Calculation

There are a range of building design factors that influence thermal comfort and energy consumption, primarily, the HVAC system, facade design and, on a human level, clothing and metabolic rate. For the purposes of this analysis, a number of variables have been assumed constant in accordance with the Green Star Education v1 Technical Manual (GBCA, 2008), as outlined in **Error! Reference source not found.**

Table 4 - Key predicted mean vote assumptions

For assessment of PMV > 0 (positive)			For assessment of PMV < 0 (negative)		
clo	0.60	Clothing unit equivalent to light business attire (trousers with shirt / dress)	clo	0.95	Clothing unit equivalent to medium business attire (trousers with shirt and jumper / winter dress, stockings and jacket)
met	1.20	Metabolic rate equivalent to typical office activities – filing, seated, slow speed walking, relaxed (equivalent to 70 W/m <sup>2</sup> )	met	1.20	Metabolic rate equivalent to typical office activities – filing, seated, slow speed walking, relaxed (equivalent to 70 W/m <sup>2</sup> )
v	0.2 m/s	Air velocity at occupant level based on an overhead linear slot diffuser. Occupant stationary.	v	0.2 m/s	Air velocity at occupant level based on an overhead linear slot diffuser. Occupant stationary.

## RESULTS AND DISCUSSION

Based on the computational thermal modelling of the generic ABCB (2010) BCA deemed to satisfy compliant office/education building, the yearly average internal space mean radiant and dry bulb air temperature, calculated as an area weighted average, were 0.02 per cent different. This negligible difference is in accordance with Dwyer (2006), whereby the operative temperature can be considered equal to the air temperature.

For the purposes of the development of the three cases investigated, operative temperature is considered to be equal to dry bulb air temperature and, by extension, dry bulb temperature to be equal to mean radiant temperature.

It is acknowledged that where the mean radiant temperature significantly differs to the dry bulb temperature further analysis is required of appropriate operational space temperature range to satisfy a specific PMV scale. This could be necessary where the performance of the facade is thermally poor relative to that proposed under BCA 2010 Section J requirements. Typical thermal weaknesses in a building include a large percentage of glazing area to total facade area and/or a low performing glazing performance when considering both thermal conductance and solar radiation transmission into the internal space.

PMV and the corresponding PPD were determined for each of the generic simulation cases. As summarised in Table 5, it can be seen that Case 1 provides similar thermal comfort performance to that calculated for the Base Case.

Case 2 achieves a PMV of between -1.0 and +1.0. Although this equates to a larger number of people dissatisfied than in Case 1, the PMV range is still deemed to be within an acceptable band as the space is considered only slightly warm to slightly cold, with a maximum number of people dissatisfied of 25 per cent.

Table 5: Calculate predicted mean vote and predicted people dissatisfied for specific air temperature ranges

Case	Air conditioning Set point (°C)	Overall temperature range (°C)	Predicted Mean Vote (PMV)	Predicted People Dissatisfied (PPD)
Base	22.0 ± 1.5	21.0 – 24.0	Between -0.5 to +0.5	<10%
1	23.5 ± 2.5	21.0 – 26.0	-0.5 to +0.5	10%
2	23.5 ± 3.5	20.0 – 27.0	-1.0 to +1.0	25%

The results presented in Figure 3, Figure 4 and Table 6 illustrate the reduction in operational energy consumption and greenhouse gas emissions when the temperature range is elevated from the Base Case 21 – 24°C to a range of 21 – 26°C under Case 1. Both cases meet the PPD ≤ 10 per cent criteria with Case 1 achieving a 6.5 per cent reduction in total operational energy and 6.7 per cent reduction in greenhouse gas (GHG) emissions due to the expanded temperature range.

As outlined in Table 6, Case 2 provides an opportunity to further expand the operating temperature range as a means of improving building energy efficiency. However, Case 2 results in a greater percentage of people dissatisfied than that predicted for the Base Case and Case 1.

Table 6: Energy and GHG emissions improvement from Base Case

Case	Overall temperature range (°C)	HVAC operational improvement from Base Case		Total building operational improvement from Base Case	
		Energy	GHG	Energy	GHG
Base	21.0 – 24.0	-	-	-	-
1	21.0 – 26.0	16.8%	18.3%	6.5%	6.7%
2	20.0 – 27.0	30.5%	26.8%	11.8%	10.0%

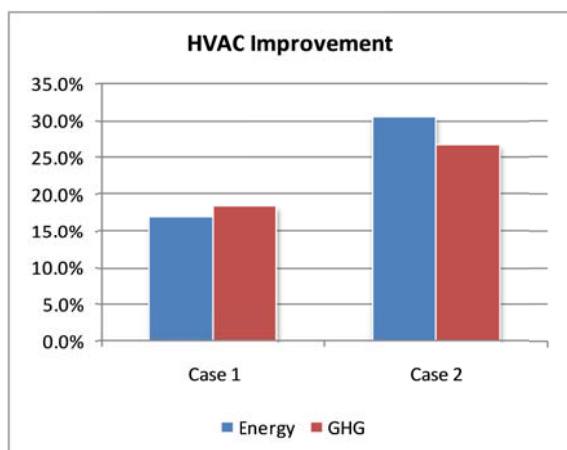


Figure 3: HVAC improvement in energy and greenhouse gas emissions for Case 1 and Case 2 compared to the Base Case

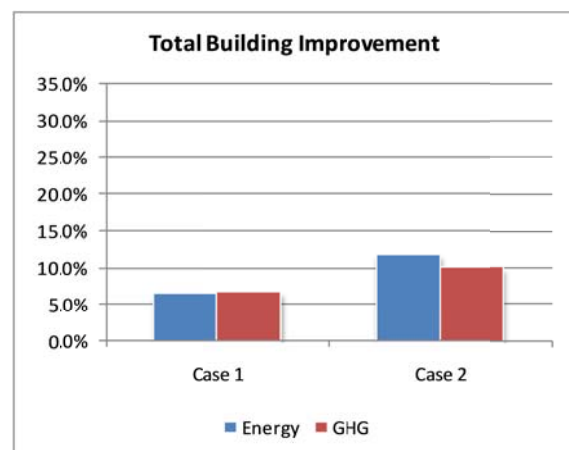


Figure 4: Total building improvement in energy and greenhouse gas emissions for Case 1 and Case 2 compared to the Base Case

## **RMIT SAB Academic Office Spaces**

The aim of the computational thermal modelling of RMIT SAB Academic office spaces was to investigate the operational energy consumption of the facility when the operational temperature range is widened from the typical 21 – 24°C to 20 – 26°C, whilst satisfying the Green Star thermal comfort criteria of achieving a PMV between -1 and +1 for 98 per cent of building operational hours.

Assessment of the thermal comfort in the academic office space from the computer simulation showed that the percentage of time where the target PMV was achieved reduced by only 0.1 per cent, from 99.9 per cent to 99.8 per cent, when the operational temperature range was extended from 21 – 24°C to 20 – 26°C. Both cases achieve the 98 per cent of hours comfort criteria, satisfying the Green Star thermal comfort requirements.

The simulations undertaken showed an improvement in energy and greenhouse gas emissions across the total building operation of 9.0 per cent and 7.0 per cent, respectively, from the 21 – 24°C case compared to the 20 – 26°C case. Where considering just the building's HVAC system operational energy consumption, the reduction for the elevated temperature band was 15 per cent.

Note that the generic model was based on BCA 2010 and the Case 2 temperature range of 20 – 27°C was equivalent to a PMV range of -1 to +1. RMIT SAB targeted the same PMV range as the generic model, however, had a temperature range of 20 – 26°C. This variation in temperature is a function of a less stringent earlier version of the BCA being applied to SAB. The 2010 version of the BCA stipulates high performance facade requirements which, as outlined in Section 2.2, reduce the impact of the mean radiant temperature, a key influence in overall thermal comfort.

## **RMIT SAB Portal Spaces**

As discussed in Section 3.0, the portal spaces utilise non-conventional mechanical system components as part of a mixed mode operation where the space can run in either a natural ventilation or full air conditioned mode.

The key design principle for this style of system is to maximise the number of hours where the space can operate in natural ventilation mode. This form of HVAC operation will be the most energy efficient as all mechanical equipment serving the space will be controlled to shutdown as automated openable windows at high and low level naturally ventilates the space. The hours of natural ventilation operating are maximised when the operational temperature range is widened and internal gains within the space are minimised.

An analysis of the Melbourne TRY weather data indicates that between the hours of 8:00 and 18:00 considering a six day week, 7 per cent of the time the external ambient temperature is between the internal space temperature range of 21 – 24°C, compared to 16 per cent of time for a temperature range of 20 – 26°C. This assessment of the mixed mode system's effectiveness assumes that where the external space temperature is within the internal temperature range there is opportunity to naturally ventilate the internal space. Based on this assumption, the elevated temperature range of 20 – 26°C compared to 21 – 24°C provides an approximate 130 per cent improvement in the number of hours that the mixed mode system can run in passive operation.

Although the elevated temperature band indicates significant opportunity where external conditions are favourable and opportunity exists to operate the portals in natural ventilation, the temperature band can be further extended with the operation of ceiling/wall fans or evaporative cooling. Figure 5 and Figure 6 illustrate the relationship between PMV, air temperature and relative humidity following the same design assumptions on clothing levels, metabolic rate and correlation between air and mean radiant temperature as outlined in Section 2.3.

With the implementation of ceiling/wall fans, the velocity of the air increases in the space, providing opportunity to maintain thermal comfort criteria by elevating the upper temperature limit from 26°C

to 28°C. Figure 5 presents this concept where the air speed increases from the typical 0.2 m/s to greater than 0.8 m/s.

With the upper temperature limit set at 28°C, the potential hours where a natural ventilation mode can run with the fans in operation was calculated at 20 per cent of total hours based on an assessment of the Melbourne TRY weather data to maintain the same level of thermal comfort of -1 to +1 PMV. It should be noted that the operation of the portal spaces in a natural ventilation mode will require continuous monitoring of the outdoor air ventilation rates via carbon dioxide sensors to ensure sufficient outdoor air is delivered to the space. With the operation of the ceiling/wall fans, there is potential that air movement may disrupt air buoyancy driving ventilation – something that will be closely monitored during passive system operation.

Where the space is operating at the lower temperature limit of 20°C, the operation of ceiling fans has a negative impact on the thermal comfort in the space as localised draughts create an uncomfortable environment for occupants. Typically, mechanical systems are designed to ensure air movement, especially in periods of heating, does not exceed 0.2 m/s. CIBSE (2006) notes that air speeds greater than about 0.3 m/s are probably unacceptable except in naturally ventilated buildings in summer when high air speeds may be desirable for their cooling effect.

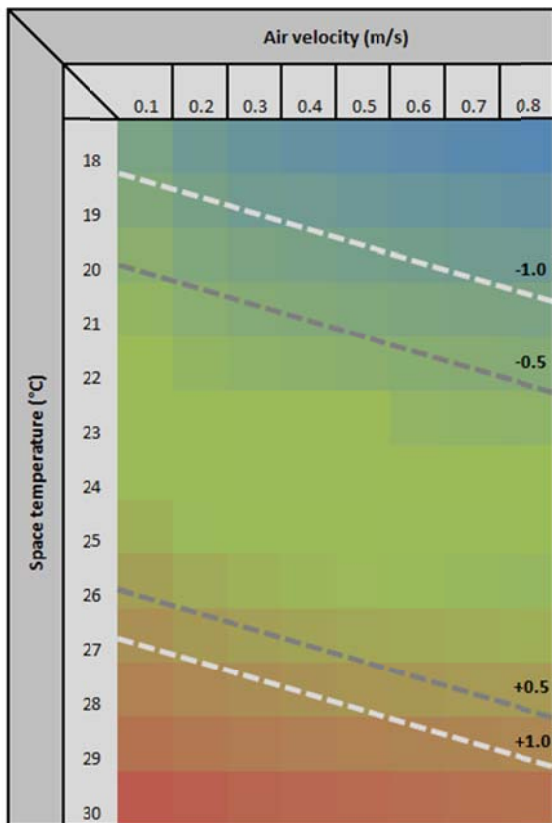


Figure 5 - Predicted mean vote contour plot calculated based on varying air speed and space temperature

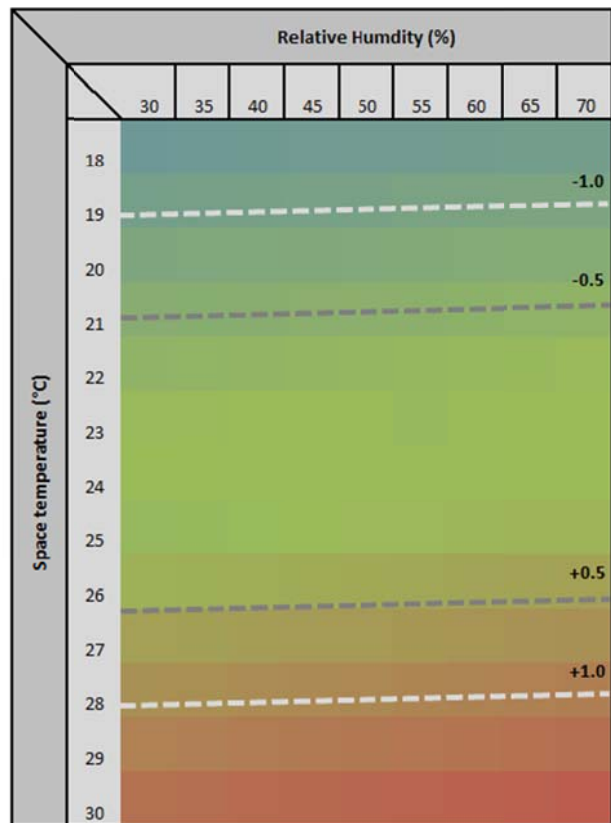
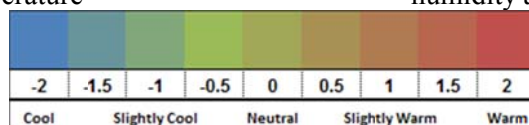


Figure 6 - Predicted mean vote contour plot calculated based on varying relative humidity and space temperature



The PMV scale was developed for air conditioned buildings. When considering truly naturally ventilated spaces and not spaces that have mixed mode operation, the ASHRAE (2004) standard should be adopted where an adaptive thermal comfort scale has been developed that provides a

correlation between internal space operative temperatures and mean monthly outdoor air temperatures.

During summer periods in Melbourne, it is not uncommon to have days where the external relative humidity is less than 35 per cent and the external air temperature is greater than 28°C. An assessment of the TRY weather data indicates that through the summer months of December to February there are approximately 120 hours where the relative humidity is less than 35 per cent and air temperature greater than 28°C during the hours of 8:00 to 18:00, six days a week. These hours provide opportunity to implement evaporative cooling as a mechanism for conditioning the space through a system that consumes minimal energy consumption. The quantifiable energy benefit of an evaporative cooling system was not completed as part of this analysis due to limitations in the modelling process. This concept, although enabling the space to hold an upper temperature range for a greater period of time, does not allow the upper space temperature band to widen as was the case with the ceiling/walls fans described above.

Figure 6 presents a correlation between PMV, relative humidity and space temperature. In accordance with CIBSE (2006), humidity has little effect on feelings of warmth unless the skin is damp with sweat. It is only where the temperature in the space raises to above approximately 28°C that moisture in the air may become apparent and impact thermal comfort. The true benefit of the evaporative cooling is the humidification of air in natural ventilation mode.

## **CONCLUSION**

Thermal comfort is a complex measure that not only considers clothing levels and metabolic rate, but also the temperature, humidity and air speed within the environment a person occupies. In Australia, no mandatory requirements are set for temperature or thermal comfort criteria within education or office spaces. The Green Star thermal comfort requirements provide guidance for designers of new buildings striving to achieve a high indoor environment quality for building occupants.

The computer thermal modelling completed for the generic and RMIT SAB case studies showed that a high level of thermal comfort of PMV -1 to +1, equivalent to 75 per cent of people satisfied within the space can be achieved by widening the internal space air temperature. For RMIT SAB, the modelling compared adjusting the temperature range from 21 – 24°C to 20 – 26°C, and showed an improvement in total operational energy consumption of approximately 9 per cent and greenhouse gas emissions of 7 per cent. This improvement in operational efficiency with the HVAC systems operating at an elevated temperature band showed a negligible reduction in the number of hours that the target thermal comfort PMV range could be satisfied through the year.

The analysis of the RMIT SAB portals' non-standard mechanical systems highlighted improvements of between 15 per cent and 20 per cent in the number of hours of natural ventilation mode operation compared to a fully air conditioned system operating at a temperature range of 20 – 26°C. This improvement was shown through simulation to not compromise the thermal comfort target.

Further research is required to understand the relationship between radiant temperature and air temperature within an internal space in more detail. This research would consider the implementation active radiant systems such as in slab heating or chilled ceilings to maximise thermal comfort and provide improved overall building energy efficiency. This assessment would need to consider a more adaptable relationship than simply the air temperature range being based on the radiant temperature equalling the internal air temperature where benefits of these HVAC systems are radiant heating and cooling capacity.

## **ACKNOWLEDGEMENTS**

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# **FUTURE DIRECTIONS IN COURSE QUALITY ASSURANCE**

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## **ABSTRACT**

The Course Quality Assurance System at Queensland University of Technology (QUT) has as its centrepiece an exemplar of data visualisation known as the Individual Course Report. This report provides every course coordinator with an annual snapshot of their performance data evaluated against QUT and national benchmarks. In this article, the impact of the Individual Course Report is explored through the case study of one undergraduate course identified as underperforming. The case study features an innovative, ethnographic approach to working with course teams and highlights the importance of context, collaboration and appropriate support in creating evidence-based action plans for course improvement.

Keywords: quality assurance, data visualisation, ethnographic evaluation, cultural change.

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## INTRODUCTION

The vision of course quality at Queensland University of Technology (QUT) is simple. First, a course should be viable. Second, students should experience a positive learning environment during their enrolment in a course. Third, a course should have positive outcomes for completing students and finally, these three elements should be monitored annually. This essential definition of quality remains true despite the varying contexts of different discipline areas and course types. Please note that at QUT *course* refers to the degree or award e.g. Bachelor of Law, while a *unit* refers to a subject studied within that award e.g. Legal Foundations A.

Like other universities, in the last decade QUT has experienced an exponential growth in the variety and density of data that can be used to describe course performance in the areas of viability, student experience and course outcomes. With over 350 courses and majors and around 40,000 enrolled students, this quantity of constantly changing information has become difficult to navigate. Increasingly, academic and professional staff time has been spent gathering data from disparate sources, attempting to consolidate and summarise it to meet national reporting agendas, with little capacity left over for interpretation or meaningful action.

Faced with this challenge, QUT's Office of Teaching Quality Curriculum Review and Improvement Team (CRI) and QUT's Corporate Reporting and Analysis team (QCR) joined forces to take a fresh approach to visualising and sharing course performance data. The goal was to engage academic teams in evidence-based action planning for course improvement while at the same time providing a means for reporting performance at faculty and whole-of-university levels. The early results have been encouraging. The story begins with Course Quality System.

## THE COURSE QUALITY SYSTEM AT QUT

At QUT, four main reporting elements make up the annual cycle of Course Quality Assurance.

**1. The Individual Course Report (ICR).** This report is a three-page data snapshot of the performance of each course and major, produced in January each year. At this time, courses that are deemed to be underperforming are identified. Between January and March, all Course Coordinators are required to view and briefly comment on their Individual Course Reports, listing their action plans for the coming year.

**2. The Consolidated Courses Performance Report (CCPR).** After March, the Individual Course Reports for each course and major are consolidated into a faculty and university wide report. Released in May, the Consolidated Courses Performance Report amalgamates data and analysis for consideration by key governance committees. Advances in data management and reporting processes have enabled what was previously a 100-page document to be presented as a concise 12-page report.

**3. The Underperforming Courses Status Update (UCSU).** In July, those responsible for courses that were deemed to be underperforming are asked to fulfil a second reporting requirement – a brief status update on the action plans they identified at the beginning of the year.

**4. The Strategic Faculty Courses Update (SFCU).** In September, faculties are required to provide a brief outline of the anticipated strategic direction of their academic programmes for the coming year, noting any changes to curriculum that are planned and identifying key stakeholders.

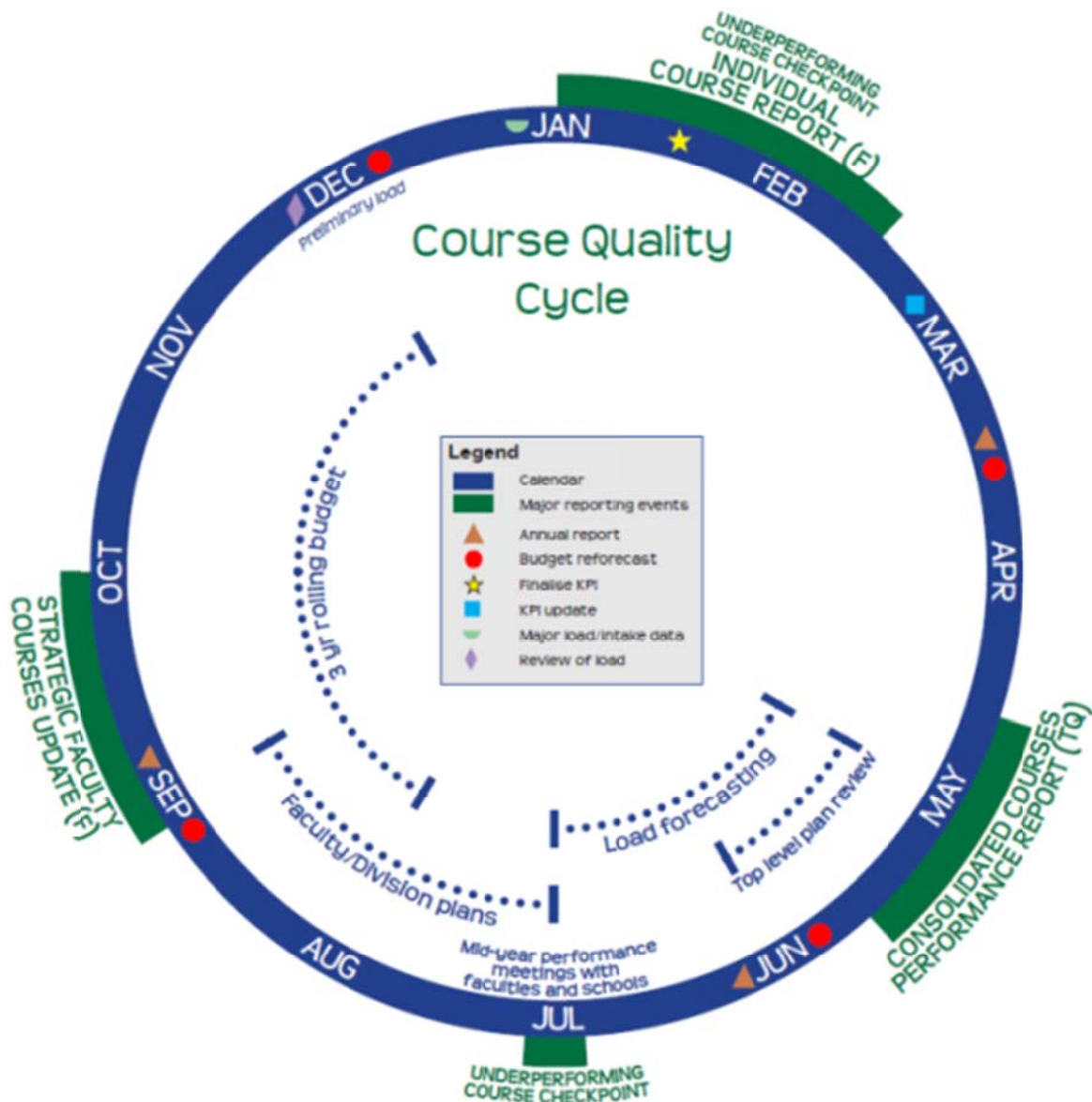


Figure 1: The cyclic map of course quality assurance activities at QUT.

This article particularly focuses on the Individual Course Report and presents a case study of how one course team has been working within the Course Quality Cycle. For further information on other components of the Course Quality System, refer to Towers, Alderman, Nielsen, & McLean (2010).

### The Individual Course Report (ICR) – the key element in the Course Quality Cycle.

The Individual Course Report is a key element in the Course Quality Assurance Cycle. As outlined in the previous section, this report is an annual snapshot of course performance data provided online to course coordinators in a concise three-page format (see Figure 2). The snapshot pulls together quantitative data from a variety of sources, categorising them into the three core dimensions of course quality:

- Course viability (e.g. course enrolments, Year 12 cut off score for entry to course, first preferences ratios);
- Learning environments (e.g. attrition, unit progression rates, student experience surveys); and

- Learning outcome measures (e.g. Course Experience Questionnaire, Graduate Destination Survey, course completions).



Figure 2: An ICR for a hypothetical course at QUT.

The online snapshot includes text fields for Course Coordinators to make observations about their data, provide contextual details and outline actions for the coming year. Each course is also attributed an Overall Performance Score. The performance metric uses 11 of the 28 data sets available in the Individual Course Report to identify each course on a sliding scale, from underperforming to high-performing. Courses identified as underperforming warrant further scrutiny and are required to provide a status update on their action plans, and qualify for more intense analysis and support from the Curriculum Review and Improvement team. High-performing courses provide exemplary cases of best practice in specific disciplines. The Overall Performance Score and identification of underperforming courses is specifically designed to facilitate risk management at Course, Faculty and University levels.



Figure 3: The sliding scale provided in the header of each ICR, showing the course's Overall Performance Score.

### Obstacles to Academic Staff Engagement in the Course Quality Cycle

Despite an overall positive response from academic and professional staff to the online convenience of the Individual Course Report snapshot, a variety of reasons is used to resist the changes brought about by the Course Quality process. Offence at having performance made visible; outcry at the label 'underperforming'; disagreement with the data – for example, the use of student opinion surveys as a measure of the learning environment; the timing of course reporting deadlines and dismay at being asked to do 'one more' administrative task all factor in negative responses. These manifestations of resistance are not uncommon to organisations in general (Bruckman, 2008) or to the higher education sector in particular (Diamond, 2006). Despite this, the Curriculum Review and Improvement team has earned a positive reputation for engaging the course teams of underperforming courses with their data and supporting them in evidence-based action planning.

## THE COURSE ENVIRONMENT PORTFOLIO – AN OUTLINE OF THE PROCESS

One of the keys to the team’s success has been their willingness to recognise that, although the Individual Course Report is an impressive breakthrough in data communication, it can only ever be a conversation starter. It provides a valuable outline of course performance but will always lack the ‘ethnographic colour’ of the real life of a course. Being willing to listen to the stories and experiences of the course team and document this ‘ethnographic colour’ has shown the significance of the unique academic, industry, and political environments from which a course emerges and has highlighted the influence of this environment on how a course team functions; how they understand change and see innovative solutions.

This holistic and ‘conversational’ approach to looking at the life of a course has been undertaken systematically. A mapping tool called the ‘Course Environment Portfolio’ is used to focus course team discussions and enable the Curriculum Review and Improvement team facilitators to track the collection of a broad range of qualitative and quantitative data. This tool is based on a Quality Achievement Matrix that was first applied in the Australian vocational education sector (Australian Quality Council, 2000) and adapted by the CRI team to better suit the university environment and QUT context.

	1. Leadership	Score	2. Data Analysis	Score	3. Stakeholders	Score	4. Staff	Score	5. Students	Score	6. Marketing and Communication	Score	7. Course	Score
Outcomes	OUTCOME: Leadership in Course Coordination is systemic, recognised and valued		OUTCOME: Evidence based approaches to annual course planning are valued, integrated and rigorous		OUTCOME: Industry, Professional body and QUT stakeholder involvement is valued, monitored and regularly reviewed		OUTCOME: Staff and their industry, academic and administrative expertise are valued, acknowledged and supported		OUTCOME: The student experience is valued, monitored and supported		OUTCOME: Marketing and communications are valued, effective and evaluated		OUTCOME: Curriculum design and delivery is aligned, holistic and has ongoing momentum	
Excellence	1.5 Course leadership contributes to the alignment of Faculty/QUT T&L plans and policy		2.5 Data analysis outcomes align and support strategic planning for the course		3.5 The course team actively seeks benchmarking opportunities with stakeholders		4.5 Staff discipline area and industry expertise is current		5.5 Senior students are celebrated and supported in their transition forwards		6.5 Benchmarking activities are regularly pursued		7.5 Benchmarking activities are regularly pursued to inform course planning and innovation	
	1.4 Leadership creates a positive culture that provides opportunities for development and values and rewards contributions		2.4 Institutional expertise is sought in the validation and improvement of data gathering and analysis		3.4 Annual stakeholder feedback informs strategic direction and course innovation		4.4 Staff succession planning and risk management strategies are effective and ongoing		5.4 Students, including alumni, are represented in a range of course forums		6.4 Institutional expertise is sought to extend and monitor effectiveness of communication approaches		7.4 The curriculum structure supports the course purpose, direction and desired outcomes	
	1.3 Course team members contribute their expertise to decision making		2.3 All forms of stakeholder and student feedback are considered in planning and are used in an ethical manner		3.3 Course team members are represented on professional committees, at conferences and in research projects		4.3 Staff are actively involved in T&L development through training, awards, grant applications, mentoring & project leadership		5.3 Student diversity and learning needs are recognised, supported and evaluated		6.3 Marketing and communication plans are linked to the priority action areas identified for the course		7.3 Assessment is mapped in detail and evaluated at whole of course, year and major levels	
Foundation	1.2 The course has a clear philosophy, purpose and direction		2.2 A gap analysis is undertaken to determine where further data about the course is needed		3.2 Regular opportunities for stakeholder interactions are evaluated and new opportunities are actively sought		4.2 Orientation of staff to the course environment is planned, timely and effective		5.2 Student entry pathways are aligned with transition and support strategies		6.2 Media and communication items are mapped, monitored and evaluated		7.2 Graduate capabilities, course objectives, teaching & assessment are mapped, aligned and monitored	
	1.1 The course has an active course team and effectively structured meetings		2.1 The ICR, Course Quality Cycle and policy informs the course team in planning activities		3.1 Stakeholders have defined roles and responsibilities		4.1 Recruitment of staff is rigorous and systematic		5.1 Students are provided with effective course advice and academic support		6.1 Strengths and weaknesses are identified, communication standards established and regularly reviewed		7.1 Delivery elements (eg mode, timetable, space allocation) support desired course outcomes	

**0 Points** - no evidence of activity  
**1 Point** - some activity  
**2 Points** - activity  
**3 Points** - outstanding activity

Figure 4: The Course Environment Portfolio used to guide curriculum conversations and data collection

The Course Environment Portfolio features seven key continua. Each continuum reflects a priority area of course management such as Leadership, Data Analysis or Marketing and Communications. For each continuum, five levels of achievement are described, from basic performance to excellence. For example, a basic expectation for the Leadership continuum is that *‘the course has an active course team and effectively structured meetings’* while excellence in leadership requires that *‘activities contribute to the alignment of Faculty/QUT Teaching and Learning Plans and policies.’*



Over a series of conversations, data, artefacts and examples are collected and logged against each continuum and level of achievement. Items might include meeting minutes, course advertising materials, staff email announcements, staff development attendance lists, student focus group transcripts, alumni event calendars, records of co-curricula student activities and a variety of other serendipitous finds. At times, the investigation trail is directed by issues that emerge along the way and if possible the Curriculum Review and Improvement team uses their expertise to seek and analyse further data from university systems on behalf of the course team.

At the end of the process, after all available data has been logged, each cell in each of the seven continuums is evaluated and given a score between 0 (for no evidence of activity) to 3 (for outstanding activity). The resulting Portfolio chart is shared with the course team. Gaps in the continua are immediately obvious and strengths and weaknesses identified. Outmoded assumptions, new ideas, possible solutions, areas that need further investigation, and priorities are all discussed until four main actions are decided upon for the coming year. This four-point action plan, based on a wide range of evidence and robust, longitudinal participation from the course team is the final goal of the Course Environment Portfolio and ideally represents a cultural shift in the life of the course that translates into positive performance outcomes.

While literature on the use of ethnographic data in university management, such as that gathered for the Course Environment Portfolio, is uncommon in Australia, it is not a new approach. Fetterman (1990) began using the term 'ethnographic auditing' to describe a number of projects conducted at Stanford University and other higher education institutions during the 1980s that emphasised the importance of the roles of culture, values and the physical environment in education management. By the mid 1990s the term 'empowerment evaluation' replaced the notion of auditing and a stronger focus on collaboration, supporting stakeholders in self-evaluation and promoting the continued use of evaluation principles in daily practice was evident (Fetterman 1998; Fetterman & Wandersman 2007).

The use of the Course Environment Portfolio aligns strongly with Empowerment Evaluation principles and with Fetterman's main goal of fostering improvement. From its inception, the focus of QUT's Course Quality Assurance System has been on identifying risks and areas for improvement. The Individual Course Report has been designed to 'empower' course coordinators and other university stakeholders by easing access to data. The requirement for Course Coordinators to log their action-plans and status updates at key points in the annual quality cycle emphasises the role of stakeholder self-determination and the use of the Course Environment Portfolio highlights a collaborative and capacity-building approach that focuses on self-evaluation, goal setting and the continued use of evaluation principles. Antin (2005) has insightfully described Empowerment evaluation as 'straddling the boundaries between evaluation and training' (p23) and for the Curriculum Review and Improvement Team this exactly explains our remit in regards to those courses identified as underperforming.

## **A CASE IN POINT - THE BACHELOR OF JUSTICE**

As part of QUT's Course Quality cycle, the Bachelor of Justice came onto the radar of the Curriculum Review and Improvement team in 2009. The Individual Course Report (ICR) measured it as underperforming with five negative flags and only one positive flag, resulting in a score of -4, one of the lowest scores in the university. The flags showed a range of problems that had an impact on all three categories of quality assurance indicators - viability, student experience and course outcomes. Both enrolments and first preferences had been dropping over the last three years, showing that the course had lost popularity with prospective students. Fewer first preferences also increased the risk of migration to other courses as students try to manoeuvre into their first choice after enrolment. Both the attrition rates of commencing students and total attrition over the whole duration of the course were over the university's recommended outer limit of 25 per cent. Students that were staying in the course experienced high failure rates in a number of units and for those students that completed the degree, the percentage that continued to full time study was significantly below the national average.

There were also negative indicators around two of the scales from the national Course Experience Questionnaire where the Generic Teaching Scale and the Overall Satisfaction Index both rated more than 15 per cent below the national average for courses from other institutions in the same Broad Field of Education.

### **Course Status Within the Faculty**

The Bachelor of Justice has close to 500 students and provides an important service to the justice professions and the wider community. It is the flagship course of the School of Justice located within the Faculty of Law at QUT. In 1991, after the Fitzgerald inquiry into police misconduct, the School was established to fulfil the recommendation that all police recruits undertake tertiary study before being sworn in. The Bachelor of Justice was initially established for this purpose but since then has expanded to support students entering a wide range of other vocations in the criminal justice system. These include careers in national intelligence and security, crime policy and prevention, national defence and protective services, corrective services, juvenile justice and the public service in areas of policy and legislation advice.

Despite performing this important function, the Bachelor of Justice has often been perceived as the ‘poor cousin’ to traditional law degrees. The Bachelor of Laws at QUT is more exclusive with a Year 12 cut off score for entry to the course of 6, whereas the Bachelor of Justice requires a cut off score of 13. Consequently, poorer academic skills and lower career aspirations are commonly attributed to Justice students. The Law school is approximately three times larger than the School of Justice with 35 more non-sessional staff, giving Justice less representation on committees and less impressive outcomes in research and grant funding. While the faculty’s student body is listed as being the ‘*Law and Justice Students’ Association*’, it is common knowledge that few Justice students attend events with the assumption being they can’t afford to pay the fees. This cultural environment of low self-esteem and poor performance for Justice was made more difficult by the fact that the School of Justice had been without a head of school for an extended period, resulting in uncertain leadership for the degree.

### **Starting the Course Environment Portfolio Conversation**

The opportune time for the Curriculum Review and Improvement team to enter this course environment came when a new head of school for the School of Justice was appointed. By default, the head would also be the Course Coordinator for the Bachelor of Justice. As a senior academic new to the QUT environment, the head of school welcomed our help in unpacking the negative course performance indicators and taking a more holistic approach to understanding the life of the Bachelor of Justice through the use of the Course Environment Portfolio (Alderman, Duncan & Quadrelli 2009). A course team of 8 was nominated from within the school that included representative academic staff from first year core units and majors, key administrative staff and the Head of School and also included the Faculty’s Learning and Teaching Developer who would work more closely with us as an ‘insider’ on some aspects of data gathering.

### **The Meeting Pattern**

Once the course team was confirmed, an initial meeting was conducted to introduce the Portfolio process and establish the basic willingness of members to participate. Over the next three months, a series of more than 20 meetings, data discussions and curriculum conversations ensued. The meetings followed a pattern whereby the Curriculum Review and Improvement team would present data to the course team, engage them in lively conversation and document any assumptions emerging on the day. The CRI team would then work independently to gather further data from university systems to validate or invalidate those assumptions. Meanwhile the Learning and Teaching Developer would assist in gathering artefacts and other qualitative evidence from the course environment before we all returned to the course team with our new findings. While cooperation was sought from the course



team, care was taken not to increase their workload. The bulk of data preparation occurred behind the scenes. This cycle of moving more deeply into the available data and lived experience of the stakeholders and then presenting back to the course team was repeated four times before the Portfolio mapping process was complete.

### **Assumptions and Evidence**

The first meeting with the course team was also the first time the group had come together as a whole. Previously, isolated pockets of activity had been the norm with a focus on individual units rather than a whole-of-course approach. An air of discouragement and frustration was evident as the team viewed their flagging red Individual Course Report and low performance score. They had two reigning assumptions about why their course was performing poorly. Firstly, they assumed course attrition was high because many students used the Bachelor of Justice, with its lower OP, as a pathway to Law. Secondly, they assumed that other students left because they could not handle the academic challenge of university study. In particular, they felt that students who had TAFE entry into the course (approximately 30 per cent of enrolments), were those that most struggled with university systems and practices, having been given credit for introductory units. Since the idea of ‘dumbing down’ the curriculum was not considered an option, alternative plans for course improvement that might address these problems remained limited.

It is not easy for course teams to move past their assumptions without more in-depth analysis of available data. Team members are not employed as business analysts. They are discipline area experts, teachers and academic researchers. Deeper levels of student data are not easy to access from university systems or simple to analyse, even for the experienced. The attrition formula used to calculate whether a student is counted as continuing or exiting is complex. In short, it was imperative that the course team received extra support from the Curriculum Review and Improvement team to examine the data in more detail. Over the next few weeks, the Curriculum Review and Improvement team retrieved, analysed and charted 4 years of data showing students’ movement throughout the course from 2005 to 2008 inclusive. Data were gathered about students’ entry standing, grade point average, point of exit from the course and destination if that was to another course within QUT.

When the Curriculum Review and Improvement team met with the course team again, two main findings were charted and discussed. First, it was important to make clear how the national formula for attrition is calculated. If a student leaves the institution altogether, that is counted as attrition. However, if a student stays at the institution and transfers to a course in a different Broad Field of Education – for example from the Bachelor of Justice (Field = Society and Culture) to the Bachelor of Nursing (Field = Health) –that is also counted as attrition. If a student transfers between courses in the same Broad Field – for example, from the Bachelor of Justice to the Bachelor of Law, it is not counted as attrition. Therefore, the assumption that high attrition was due to students using the course as a pathway to Law was incorrect because Law and Justice are in the same Field. Not only that, the detailed analysis revealed that a much lower proportion of students was transferring to Law than initially thought. Over a four-year period, only 8 per cent of students who enrolled in the Bachelor of Justice transferred to a Law degree at QUT whereas 20 per cent had left QUT altogether and another 2 per cent had transferred to a course in a different Broad Field of Education.

Second, when looking at the academic performance data of the students who had exited the Bachelor of Justice, it was found that 61 per cent of students that left the course had a passing Grade Point Average (GPA). Therefore, the assumption that students left because they were academically challenged was also incorrect. Furthermore, when those students who had a ‘technical and further education’ (TAFE) entry to the course were tracked, it was found that 64 per cent graduated from the course compared to only 21 per cent of standard entry students. Of those TAFE entry students who did not complete, half still had a passing GPA. Therefore, in contrast to the reigning assumption, TAFE entry students were by far the most successful cohort in the Bachelor of Justice. At this point, the course team could only speculate that if their students were not using the course as a pathway to Law at QUT and academic challenge was not their reason for leaving, then students must have been

moving to courses at other universities or the Police Academy. Data on these matters were not held within QUT's systems and therefore the speculation was difficult to validate.

Meanwhile other documents and artefacts pertaining to the life of the course were also being collected. These included marketing materials used at Tertiary Studies Expos, plans for a new online course portal, maps of the degree structure, School of Justice information booklets, staff newsletters, university policy and approval documents, curriculum change documents, and careers booklets. All of these contributed to a clearer picture of course activity. Qualitative data such as student survey comments were thematically analysed by the Curriculum Review and Improvement team at a course level and at a unit level for some problem subjects.

During the three month period of creating the Course Environment Portfolio, new activities also took place as the head of school settled into her role and staff began to rally together. These activities were included in the portfolio. For example, the Head of School appeared in a radio interview on the topical issue of 'girls and cyber-bullying'. Media around Australia later picked up the interview and these reports were added to the Portfolio. Motivated by questions arising from the Curriculum Review and Improvement data analysis, a School of Justice research assistant was tasked with planning a telephone survey of students who had left the course in order to establish their reasons for leaving. It was hoped to confirm if they had moved to the Police Academy or to another university. These survey drafts and pilot results were collected. When a one-day retreat was scheduled for all School of Justice academics, the Curriculum Review and Improvement team was invited to present data collected so far, providing yet another opportunity to gather documents to include in the Portfolio.

### **Evaluating and Summarising the Course Environment Portfolio**

At the end of the three-month period, the time came to evaluate the Portfolio and chart the documents collected against each continuum and level of proficiency. The Curriculum Review and Improvement Team undertook this task with the help of the Faculty of Law's Learning and Teaching Developer. Lively discussions took place as we handled artefacts and data, shared our experiences and insights and finally attributed each item to a specific place on the chart, scoring and colour coding the chart accordingly. The process helped consolidate and summarise a wide range of elements into a single picture and made the strengths and weaknesses of course activities immediately visible. This final picture of the life of the course was then presented to the head of school and the course team.

The Portfolio evaluation revealed that although some excellent exemplars of course activity had been noted, their impact had been patchy and they had not addressed underlying issues. Whole-of-course goals that would unite efforts and place activities in context had been lacking. In particular, in the *Leadership* continuum it was noted that the course did not require industry accreditation and therefore lacked regular feedback and review from a formal panel of industry stakeholders. In the *Marketing and Communication* continuum it could be seen that while some quality student communications had been produced over the years, such as expo flyers and course handbooks, no master list of these items existed. Originals were not easy to locate and development of new items did not build on past achievements. A vision of what a good suite of communication media might look like and a structure for managing these various documents was missing. A third problem area could be seen in the *Students* continuum where the use of student support processes and counselling was neglected and awareness of the real needs of cohorts within the Justice course was low.

By far, the most exciting time is at the end of the Portfolio process. Standing back and viewing the whole course environment for the first time enables priorities and directions to become clear and effective action planning to crystallise. During these final discussions, the course team identified four main areas of action. First, it was decided that an industry advisory panel would be formed to lift the profile of the course, strengthen connection with the 'real world' and inform future curriculum developments. Second, a course mission statement would be developed to unite stakeholders and create a sense of consistency throughout course communications. Third, a communication calendar would be created to encourage stakeholders to be more involved in course events and to contribute

regularly through well-advertised opportunities. Finally, further data and stakeholder feedback would be systematically sought to answer some outstanding questions from the data analysis so far in preparation for curriculum review.

After the results of the Portfolio were presented to the course team, it was time for the Curriculum Review and Improvement team to withdraw their intensive focus and leave the Bachelor of Justice academic and administrative staff to get on with the job of realising their new found vision. From time to time, the Curriculum Review and Improvement team was invited to return to the School of Justice to attend special meetings and functions where we could observe for ourselves some of the progress being made - a testament to the positive relationships we had developed.

### **Observing Cultural Change**

The Curriculum Review and Improvement team looks for three main areas of change after conducting the Course Environment Portfolio process for an underperforming course. First, it wants to see changes in the culture of the course team. Second, it wants to see changes in the student experience and third, it wants to see changes in the course's performance as recorded on the Individual Course Report. As well, the team expects changes to occur largely in that order. In other words, without a change in course team culture, change in the student experience is unlikely and therefore improvement in course performance data is unlikely.

For the Bachelor of Justice course team, positive changes in culture started to show during the Portfolio process and were clearly observable in final meetings and in later meetings and functions to which the Curriculum Review and Improvement team was invited. At the final meetings, it was evident that clear roles and responsibilities had been established. There was high ownership of the action plans by team members and a positive feeling about the future. Actions were seen as practical, achievable and worthwhile and were already underway. People trusted the directions chosen and felt empowered to move forward. Extra activities were beginning to naturally collect around identified priorities adding to the momentum.

After the final Portfolio meetings, the head of school organised an end-of-year party for the school, which was fully attended by the course team and the Executive Dean of the Faculty of Law – a show of the improving status of the School within the Faculty. At the Graduation Ceremony in December that year, a record number of academic staff attended to celebrate the achievements of Bachelor of Justice students, a significant improvement on staff attendance figures from previous years. Regular and well-organised course team meetings had continued into the New Year in the Curriculum Review and Improvement team's absence and action plans were updated as progress was made. Consultations continued with outside experts such as the Office of Teaching Quality's Director of First Year Experience who advised on orientation programs. Course Team members had attended university-wide staff development workshops on course design for 'real world' learning and the University's Curriculum Approval team offered high praise regarding the course's preparation for review and their use of evidence in curriculum design decisions. The Blackboard online portal for the course was launched and had a record 4,000 hits with the head of school being invited to speak at university forums about the success of this online approach to cohort building and communication.

By April of the year following the Team's intervention, when comments were required for the 2010 Individual Course Report, the head of school was able to show the high level of involvement of the course team, listing nine different activities that were underway:

1. Early intervention strategy involving the SUCCESS PROGRAMME.
2. A new first year unit to address lack of policing content in first year.
3. Establishment of Industry Advisory Group of Justice Professionals.
4. Enhanced social Engagement with students through new Justice Students Community Site, creation of Student Engagement working party.
5. Enhanced real world learning opportunities in core units.

6. Promotion of Student support mechanisms and employment of a Support Officer.
7. Establishment of Justice Course Review Team (with OTQ) to explore further enhancements.
8. Enhancing student interaction with academic staff.
9. Enhanced commitment to student service through new student inquiries system within 24-48 hour turnaround time.

The beginnings of change in the experience of students enrolled in the Bachelor of Justice were also observable. The popularity of the Justice Online community site, student participation in faculty activities, records of the involvement of the University's Student Success Programme with first year Justice students and use of the newly established student inquiry service in the School of Justice all indicate immediate and positive changes to their experience of the course environment.

However, to see these changes flow into more systematic course performance indicators such as attrition, student progression and Course Experience Questionnaire ratings, a longer time frame is needed. Since attrition is calculated by the March Census date of the following year, the results of improvements undertaken during 2010 will not be apparent until mid 2011 and will not appear as statistics on the Individual Course Report until 2012. Early changes at the unit level may be seen in the scores and comments resulting from the University's electronic Learning Experience Survey and pass/fail rates but these won't be evident as a whole until the release of the 2011 Individual Course Report. Changes in the Course Experience Questionnaire (CEQ) conducted with graduates will take even longer to appear with the 2012 results being the first opportunity for improvements in the whole-of-course to show.

## **CONCLUSION**

Data, such as those provided in the Individual Course Report, are an important conversation starter. However, course teams can benefit from further help in understanding the data as well as the culture in which they work if course performance figures are to translate into effective action planning within a Course Quality Assurance cycle. The Course Environment Portfolio, which promotes the use of evidence, systematic approaches to discussing data and recognition of the whole environment in which a course exists, is a useful tool for making this happen. It is true that the Portfolio process is intensive in both time and the quality of support, however, it can only be considered worthwhile for this course with over \$4 million in annual revenue and the lives and careers of 500 students at stake.

While the Individual Course Report was the starting point for intervention in this course, improvement in course performance data will not show immediately. It will take a minimum of two years until any related improvements begin to show in Individual Course Report indicators. However, changes in the course team culture were immediate and rewarding. This Course Environment Portfolio showed that leadership can quickly change from a 'putting out fires' approach to a grounded and systematic approach featuring a 'do-able' focused set of strategic priorities. Ad hoc course team meetings can shift to regular structured meetings at which team members have set roles and responsibilities and are fully engaged in collaboration and problem-solving. Academic and administrative staff can move from feeling overwhelmed, isolated and unable to move forward to feel that they are empowered to focus on key directions and able to communicate with others about their progress. Overall, the culture around the course team can change from underperforming and feeling like the 'poor cousin' to outstanding performance in course management with the capacity to circumvent problems as they arise. The dynamic and clear sense of course identity that results can only have a positive flow-on effect on the daily experience of staff and students.

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# **CULTURAL CHANGE THROUGH TECHNOLOGY-AN UNINTENDED CONSEQUENCE**

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## **ABSTRACT**

Intellectual capital is one of the most important assets an organisation has. Knowledge management aims to capture and leverage an organisation's knowledge, create new knowledge, increase collaboration and generate innovation. Information technology is an enabler, supporting knowledge management practices. The Faculty of Commerce at the University of Wollongong introduced SharePoint as its knowledge management tool. In doing so, the Faculty inadvertently experienced a dramatic shift in organisational culture from one where knowledge was tacit, private and protected to a more open culture where knowledge was made explicit, public, accessible and ordered. This shift occurred largely because of the social processes of teamwork and collaboration that were the basis of the implementation of SharePoint. This paper will show that with stakeholder engagement, communication and project management successful deployments of technology can create a culture of information sharing and partnership and generate an open environment.

Keywords: knowledge, technology, collaboration, change, culture.

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## **INTRODUCTION**

Intellectual capital is one of the most important assets an organisation has. The way in which this capital is managed is critical to organisational sustainability and longevity. Several authors state that knowledge management has emerged out of an increasingly and globally competitive climate that requires organisations to compete in real time, leveraging innovation, technological advantage and corporate knowledge to maintain position (Murphy, 2002, p. 18; Lawson & Samson, 2003, p. 2). In this climate, traditional approaches to the management of intellectual capital do not meet the challenges of efficiency, timeliness and knowledge dissemination (Asgarkhani, 2004, p. 32).

Many organisations have initiated knowledge management projects, and failure rates are estimated to be as high as 80 per cent (Payman, Jafari, & Fathian, 2005). Failure is attributable to the usual culprits of project management and change management failure, such as lack of leadership, lack of engagement and inadequate resourcing. In deciding to pursue a knowledge management project within the Faculty of Commerce at the University of Wollongong, management were acutely aware that central to success was the buy-in and support of staff. The methodology used centred on teamwork, collaboration and engagement and it was genuine commitment to these methods that provided the motivation for staff to embrace knowledge management and, quite unexpectedly, to move beyond it to create communities of learning.

This paper will provide the background to the knowledge management project, as well as outlining the process undertaken to implement the project and showing the outcomes.

## **BACKGROUND**

### **Knowledge Management**

Knowledge management aims to capture and leverage an organisation's knowledge, create new knowledge, increase collaboration and generate innovation. Information technology is an enabler, supporting knowledge management practices. The risk to an organisation in not managing knowledge is that intrinsic knowledge is lost with staff turnover and changing practices and new knowledge can be generated only narrowly. In order to minimise this risk, the Faculty of Commerce at the University of Wollongong made a strategic decision to introduce Microsoft SharePoint as the knowledge management tool to capture and share knowledge. The decision was prompted by management when it was observed that the Faculty had duplicate records, minimal electronic records, physical storage constraints, multiple intranets and internet systems, multiple share drives and, that the PC hard drive was where most information and data was kept, making the information largely inaccessible to other staff members.

It was determined that the Faculty needed a Faculty-based central information repository that would reduce duplication, improve accessibility to information, assist in the retention of intellectual capital, streamline workflow processes and capture and share vital information among staff. The Faculty also identified that it would be beneficial to have a tool that aided collaboration, assisted in connecting people and enabled users to receive, create and organise information in order to get the job done.

### **Cultural Change**

What the Faculty did not anticipate was the impact the process of deployment and the system would have on the culture within the Faculty. Current research tells management practitioners that cultural change is complex, shared and socially constructed (Schein, 1992). Cultures are often entrenched and to change them takes a minimum of three to five years; targeted change strategies are rarely successful (Kotter & Heskett, 1992). Most of us are familiar with the cultural iceberg (French & Bell, 1984); not a hopeful picture. It was anticipated that there would be deep resistance to knowledge sharing as many behaviours were entrenched, the organisational structure supported unit and school-

based silos and there was a culture of knowledge hoarding to protect jobs. The underlying belief was that “if the knowledge I have is accessible, then its uniqueness becomes eroded and my value to the organisation also reduces. Therefore, if I hold onto my knowledge, I remain indispensable to the organisation. My value increases, I can resist change and my job is protected.” This thinking is fundamentally flawed, but it was prevalent in the organisation. It was driven largely by previous sweeping, radical changes, which had resulted in a culture of blame, distrust and fear.

## **METHODS: WHAT WE DID**

The project, scope and requirements were defined following standard project management processes. As identified in project management research and literature (PMBOK<sup>®</sup> guide), the key components of successful project completion requires senior management champions, adequate resourcing, teamwork that includes the right people and skills on the team, project management skills and planning, stakeholder engagement, planning, communication and problem solving.

A knowledge audit was conducted in order to understand current processes and issues and to map where knowledge, communications and content were being housed. It was important to acknowledge and understand that information management was more than just technology. As important were the business processes and practices that underpin the creation, use and sharing of information. It was important to look at the information itself, including architecture of information, metadata, content and templates. The people, process, technology and content were addressed, all of which are central to the success of information management projects.

In order to ensure success of the project it was imperative that internal stakeholders were engaged, consulted and supportive of the outcomes. We needed to gain sufficient adoption to ensure that information was captured in SharePoint. It was also important to learn from others who had successfully implemented knowledge management systems. External stakeholders were consulted, so that we could learn from their experiences in SharePoint implementations as well as reviewing best practice.

In researching best practice in knowledge management and SharePoint, a number of people and resources were consulted including but not limited to:

- Knowledge Management Standards Australia
- Internal Knowledge Management Academic specialists
- SharePoint external contacts (corporate and educational) who had deployed the software
- SharePoint industry specialists
- Internal content management specialists.

A working party was formed with representatives from each unit and department. The working party was responsible for putting forward requirements, critiquing components and testing and championing the project in their relevant areas. The most vocal opponents to SharePoint were invited to join the working party. This was a deliberate strategy to address resistance to change, as it was clear that opponents would be highly critical of any change efforts. Understanding their requirements and the basis of their opposition and catering for this, within reasonable limits, ensured that the final functionality of SharePoint met user requirements.

The working party defined the functions needed and priorities for development. They also defined and tested the look, feel, structure, access and controls for SharePoint. Documentation was developed for users, outlining good practice, file-naming conventions and help wikis. Information and training sessions were conducted for staff and continue to run each month for new staff and for staff requiring assistance in certain areas.



The roll out of SharePoint was a phased implementation approach with the first site being a test pilot site. Following success of the pilot site, and implementation of the relevant modifications from that test, each unit was migrated individually. Redundant content was archived during the migration process. The archived information will be able to be migrated straight into the University's new universal records management system, which is currently in development.

Information technology staff were utilised and engaged for the technical components of the project including:

- Security structure and layering

Understand how the external Lightweight Directory Access Protocol (LDAP) University directory would be utilised to import user information into SharePoint in order to have appropriate user accounts that would support a layered security structure.

- Templates

Develop a template for the SharePoint system that would give a consistent look and feel throughout the site. It was important to develop a template that was in line with the University standards and brand and resembled the UOW Intranet. This would be beneficial to the user experience where a number of University systems were being utilised for various needs.

- Server requirement

Server hardware that would support the system and its daily use was required as well as a system that would also support the back end requirements of SharePoint. It was also necessary to have a dual server with one server to support the interface i.e. look and feel, along with content and the second server to support back-end security and software features as well as housing back ups. It was important to have a second server that was taking frequent back-ups in the event that if one server went down, business would be able to continue as normal.

- Remote access

SharePoint operates via a web interface that allows staff to access SharePoint offsite and work on information as if they were in the office. This has been of benefit to professional staff and academics who travel or are frequently out of the office as it allows them to access the information and work from the most current version. It reduces errors, duplication and incorrect versions of documents being updated or accessed.

- Technical support

SharePoint is a system being used by the Faculty of Commerce at the University of Wollongong and being supported by the Faculty's IT Unit. The system has received much interest from the broader University community with presentations being provided to other Faculties and Divisions. SharePoint is currently used within divisional units of the University and is currently being used by the University Information Systems Technology Division (ITS) who manage all systems for the University. They are looking to utilise SharePoint more broadly in the near future.

At the end of migration an evaluation and review was conducted and any further modifications implemented. The evaluation process included meeting with key staff from each unit or division who collated feedback from end users in their area. This process documented the benefits, limitations and additional features that staff would like to see. Outcomes of these meetings were collated and key issues prioritised and addressed.

## RESULTS

### Outcomes

The Faculty achieved its objective of providing a simplified system for the storage of information, reducing duplication, improving access to information and capturing tacit knowledge. Information was accessible and public and it was easier and more efficient for staff to locate the information they required. Inefficiencies were reduced as staff did not waste time searching multiple locations or servers or waiting until the person whose hard drive the information was stored on was available to release it.

The rollout of SharePoint achieved a consistent approach to the storage and communication of information. The project was successful because it drew on three critical components of people, process and technology. Figure 1 illustrates the convergence between these three critical processes.

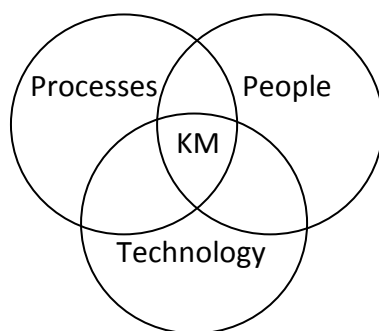


Figure 1: Process convergence

The project clearly identified the benefits to end users, communication was comprehensive and applied consistently to all staff. An inclusive approach was used to engage with staff and to ensure that the system was useful and usable and was appropriately supported. The project delivered both tangible and visible benefits to all staff within the Faculty. It also delivered some welcome though unexpected outcomes.

There was significant cultural change in people, structure and teams. The silo organisational structure was reduced significantly through the establishment of the cross-disciplinary working party and through the formation of self-directed teams in each unit who were responsible for the implementation within their units. The project deliberately sought to influence through self-directed teams. Staff autonomy over the project was considered extremely important. Research conducted by Thomas (2000) found that when staff perceive that their perspectives are a critical part of the process or that they are responsible for decisions that may have an impact on project success, autonomous and responsible employees will feel pride in contributing to the project objectives.

Once staff understood the benefits of SharePoint in terms of its functionality and its ability to make marked improvements in work functions, the majority of staff were keen to embrace SharePoint. It was determined that staff would set the controls around information, i.e. who had access to what, so that the practice of knowledge hoarding was not initially directly confronted. Over time, however, staff behaviour shifted to reduced controls around their information and sharing took place more openly. This occurred as staff received recognition from other staff that they held important and valuable information, and how useful it could be. This outcome is supported by a 2007 Gartner report (Mann, 2007) which found that recognising individual competence is a strong motivating factor towards knowledge sharing.

Staff were made aware of and given access to the SharePoint information available to them outside of their own unit. As the implementation teams were largely self-directed, they began to explore each

other's sites and information. Access to processes and templates resulted in the schools learning from each other and has resulted in streamlined processes and standards across the schools as they discovered easier and better ways of doing things through the sharing of information and the learning that came from that. Tacit knowledge (historical information) was being captured through this learning experience providing valuable information as well as understanding to newer staff. Teaching schedules, timetabling and casual academic teaching staff support processes are now streamlined across units rather than having three different processes for each of the schools in the Faculty. In addition, through the documentation of processes and the revision of processes, the teams have moved towards continuous improvement to update and refresh processes over time.

The impact of moving to standardised processes underpinned by continuous improvement has meant that the blame culture has also changed. Gradually staff have moved from looking for someone to blame when a process fails to identifying the factors that led to a system or process failure or hiccup and identifying ways to ensure that the issue does not recur, and then documenting this improvement in SharePoint.

Research Centres started utilising SharePoint in order to collaborate on work and house documentation that could be accessed easily by a number of members. This made research with people in multiple areas and dispersed locations more efficient and effective. It also allowed these Centres to display the work that was being conducted by the Faculty to the broader community. The Centres have also utilised some of the social media tools of SharePoint, such as discussion forums and blogs, with research partners.

Consistent communication and engagement with users, pre and post rollout of SharePoint, ensured that the transition to the system was smooth. Issues were addressed as roll-out occurred and changes or modifications to workspaces were negotiated to ensure a mutually beneficial outcome. Flexibility in the layout (components) of workspaces ensured that each workspace was unique and met the needs of the individual units, yet maintained a consistent look and feel. Although teams were largely self-directed they were well supported by the Project Manager and IT Team during the process, providing advice, structure and resources.

## **NEXT STAGES**

SharePoint will continue to evolve within the Faculty. As content and usage grows so too does the burden of maintenance and archiving of content. The Faculty will address records management guidelines and implementation of archiving processes and protocols to ensure that the content of SharePoint is live working content, and that formal records are treated and archived within the appropriate system and in compliance with legislation. In addition, the system has capacity to improve administrative efficiency through the utilisation of the workflow and approvals for forms and documents capacity that has yet to be implemented. Although most units are using the calendar functions within SharePoint, more advanced functionality could be achieved in the future. Finally, in the absence of other technologies for wikis and blogs, the Faculty will utilise this functionality in SharePoint to further aid communication, especially for research groups.

## **CONCLUSION**

Projects fundamentally require change management and change management strategies are especially important in an environment where previous silo units are required to work together to achieve project outcomes. Research shows that project success under such conditions is not likely. However, the experience of the implementation of SharePoint, a tool used to generate and share information and knowledge, was that with good communication, stakeholder engagement, support to units, self-directed teams, sound project management and appropriate resourcing, projects can be successful. In

fact, they can create positive unintentional outcomes to create cohesive collegial working relationships, to break down silos and generate a culture of information sharing.

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# **BRUCE – THANK GOD YOU’RE HERE**

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## **ABSTRACT**

An online system for the recording of unit guides was developed at Deakin University in 2008. This system allows unit chairs to enter information for their units, lodge this information with the administrative team for their faculty, and ultimately have the information presented online in a logical and unified manner. This system has benefited both academic and administrative staff members, in that a key feature of the system is the significant reduction in time spent by academic staff in creating and updating unit guides, and the time spent by administrative staff in relation to quality checking and compliance. Published unit guides are available to staff, current students and future students alike.

Keywords: BRUCE, unit guides, online, publish, report

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## INTRODUCTION

Deakin University has over 34,000 higher education students and employs approximately 2,600 full time and fractional full-time staff (Deakin University, 2009). Among other things, the University's strategic plan (Deakin University, 2010), outlines the University's intention to be a catalyst for positive change, for the individuals and the communities it serves. In accordance with the University's mission statement and strategic goals, a new system to increase quality assurance and decrease administrative burden upon academic staff was developed. This system was developed to manage the production and storage of unit guides. A unit guide outlines the unit content, its learning objectives, assessment, and rules governing the teaching and learning in that unit. It also includes generic faculty and University compliance and policy information. Unit guides are important because they ensure that all students studying the unit, regardless of campus, mode or lecturer, have an equivalent understanding of the requirements of the unit. The unit guide forms the learning contract between the student and the Faculty.

BRUCE is an acronym for *Better Repository for University Course Enquiries*, an online system originally developed to assist Deakin University in managing its course and unit publications data for current and prospective students (handbooks and marketing collateral). This system was enhanced to provide a space for academic and administrative staff to develop, check and publish unit guides in an online format. BRUCE is a PHP web application that is linked back into the Curriculum subsystem within Callista Student Management System, and BRUCE is wholly built and supported by Deakin's Information Technology Services Division.

BRUCE was introduced in 2003 with two main functions: a search facility enabling prospective and current students to search the course and unit catalogue; and administration functionality that enables staff to create, accurately maintain and report on curriculum information not able to be stored in the Callista student enrolment system.

In 2006, a Unit Guide Working Party was established, following discussions between management staff in faculties about the multitude of databases and data sources containing unit guide information. It was chaired by the Faculty General Manager from the Faculty of Business and Law, and included members from all four faculties, the student administration, and information technology services. The Working Party examined the range of information stored on Callista and BRUCE that could potentially be pre-populated into unit guides, removing the need to update curriculum outside of Callista and BRUCE. This would also ensure a more consistent process to produce, edit, deliver and store unit guides across faculties. The Working Party hoped to reduce previously experienced concerns pertaining to inaccuracy, unauthorised editing of standardised University content, multiple sources of data in unsecured locations and the high reliance upon individuals to operate and maintain localised systems.

## METHODS

The initial pilot, held in Semester 2, 2007, resulted in a number of unit guides from the faculties of Business and Law and Science and Technology being migrated from Microsoft Word and Excel format into BRUCE. Post-migration, unit chairs were granted access to BRUCE where they were able to edit and save changes to their unit guides. After quality checking by administrative staff, the completed unit guides were then made available to students via a dedicated website and Deakin's online learning tool: Deakin Studies Online (DSO). Feedback was sought from the unit chairs involved in this pilot and subsequent pilots conducted in 2008 with the following responses received:

- academic staff emphasised the importance of being able to copy elements across unit guides where they are multi-coded or cross-listed units resulting in content not having to be entered and edited more than once;
- that the outlay of elements be amended so that staff are made aware of which elements they can and cannot edit via the use of popup text instructions and colour coding; and

- fine tuning in relation to the final format of the unit guide that would be presented to students (spacing, font and file format).

In its Strategic Plan, Deakin outlines one of its key values as continuous improvement: ‘Deakin strives to continually improve (sic) the efficiency and the effectiveness of all its activities, ensuring that it is both responsive to academic needs and strategically focused’ (Deakin University, 2010). In accordance with this value, the Unit Guide Working Party reviewed the advice received from staff during the pilot and created a list of enhancements to be considered in consultation with the University Information Technology Services Division. In 2009, the project team’s outstanding contribution to ‘Academic Support’ was recognised by the Vice-Chancellor, and they were provided with the necessary funding (\$50,000) to introduce the enhancements defined during the pilots.

## **RESULTS**

Following the release of a number of enhancements, the new system is now working effectively in two faculties with all unit guides online as of Trimester 1, 2009, and from 2010 incorporated enhancements made possible by University funding received and utilised in 2009.

The University has received positive feedback from staff and students, and unit chairs are now updating their unit information and submitting their unit guides for quality checking via the online system. Importantly, there is the ability to record standardised information, which is keyed once by administrators and applied to all unit guides, ensuring compliance and ease of update. Academic staff often report frustration in relation to the increasing administrative and compliance-related tasks they are asked to undertake within their roles. A study by McInnis found that the majority of academic staff sampled in his study conducted in 1996 believed that their administrative load had increased substantially in recent years, with administrative work apparently causing the greatest dissatisfaction when it related to accountability and quality assurance (McInnis 1996, p. 14). The use of standardised content ensures that unit chairs are not having to repeatedly update items that are non-unit specific and reduces the amount of time it takes to complete their guide. Furthermore, standardised content substantially reduces the amount of quality checking required by administrators.

### **Unit Outline Report**

One of the enhancements recommended by the Working Party was in relation to the need to prepare similar information to that contained in unit guides for reaccreditation and review purposes. Unit outlines contain a mixture of information from handbook entries and unit guides such as offering information, learning objectives, aims, graduate attributes, teaching methods and references. The manual development of these unit outlines was an intensely onerous task and exceptionally time consuming. As such, members of the Working Party liaised with staff from the Information Technology Services Division to develop a report function which would extract the necessary information from unit guides and also handbook entries stored within BRUCE, and display the information in accordance to the University unit outline template. This enhancement introduced the need for ‘hidden’ elements – data that are not visible on websites or course catalogues, but is required to display in the unit outline report. These hidden elements are entered by administrative staff, and refer to the online status of the unit and assessment panel membership, both of which are required when undertaking major course reviews and accreditation applications.

### **Report Outputs**

Faculties are often required to provide reports on all units in relation to specific compliance matters such as graduate attribute details, student evaluation responses and assessment practices. Therefore, an enhancement that enables data to be extracted from unit guides based on key criteria was introduced. Administrative staff are now able to easily download reports on any element outlined within unit guides with just the click of a few buttons. This reporting functionality will be invaluable



in relation to the future directions of the Federal Government which has recently established the Tertiary Education Quality and Standards Agency, which will come into effect in 2012 (Gillard, 2009).

### **Quality Checking and Procedure**

To enable prompt quality checking, administrative staff receive an automated email, flagging that a unit guide has been submitted by the unit chair and is ready for checking. In addition, a report function demonstrates quickly which unit guides have and have not yet been published. For unit chairs, the system features a customer service element in that they receive confirmation of their successful submission via an automated email, which thanks them and explains that quality checking will take place prior to the publication of their unit guide to the University current student's website and relevant Deakin Studies Online unit site.

### **File Format (PDF)**

To enable students to print certain elements and to view the guide as a stand-alone document, a Portable Document Format (PDF) function was included in the list of enhancements so that PDF versions of guides could be added to Deakin Studies Online sites. The use of PDF guides was recommended by the academic staff involved in the early pilots and also by members of the Working Party. The PDF version of a unit guide allows for a table of contents, automated headers and footers and is accessible for both PC and Mac users. From Trimester 1, 2011 unit guides will be added to Deakin Studies Online unit sites as PDF versions instead of a web link and it is anticipated that students will be in favour of this format as it has been suggested that PDF conversion and compression equips users with the flexibility and compatibility to deliver efficient outputs (Ritz, 2010, p1).

### **Transparency and Knowledge Sharing**

In accordance with directives from the Department of Education, Employment and Workplace Relations (DEEWR) that there be an increased emphasis upon transparency and empowering students to make well informed choices (DEEWR, 2010, p4), the Unit Guides system has been built to enable an element of transparency. For example, students are able to view unit guides via the current student's website for units that they have not yet undertaken to determine their suitability and identify unit requirements prior to enrolling and committing to study. Unit chairs are also able to utilise the work of other staff to enable appropriate knowledge sharing in areas such as assessment design, and aims and objectives setting.

## **CONCLUSIONS AND FUTURE DIRECTIONS**

Two other faculties are currently considering the introduction of the BRUCE Unit Guide system through a pilot for a select number of units in Trimester 3, 2010-2011. The system enables some autonomy at the faculty level in relation to the template and outlay of elements. Other minor enhancements will be introduced to the system in late 2010, which will include a performance update to the HTML editor where unit chairs edit their information, and improvements to the user interface.

Making Deakin websites and publications accessible to users with disabilities has been a topic of key priority and much discussion during 2010, and it is planned that a major accessibility investigation for unit guides will take place in 2011. Preliminary work was conducted in 2010 through an accessibility audit conducted by an accessibility expert from Deakin's Knowledge Media Division and a visually impaired student who advised on potential issues specific to unit guides.

With the higher education environment becoming more complex, there is a need to develop systems that provide a greater level of academic support and that ensure better quality assurance. Additionally,

sharing common systems across faculties increases consistency as students often undertake elective units from outside their 'home faculty' and may find the intricacies of each faculty difficult and frustrating to grasp.

Reducing the time spent on the update and quality assurance of ongoing administrative tasks such as unit guides has enabled increased focus to be placed upon core university business such as teaching and research. This is reinforced in Deakin's 2010 strategic plan which outlines a need for 'Improving the efficiency and effectiveness of academic support services to ensure that the University has the best possible range and quality of services' (Deakin University, 2010, p28).

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# **CURRENT INITIATIVES TO IMPROVE TERTIARY EDUCATION PERFORMANCE IN NEW ZEALAND**

**Grant Klinkum, Tertiary Education Commission, New Zealand**

## **ABSTRACT**

A refreshed tertiary education strategy has underpinned a strong focus on tertiary education sector performance outcomes in New Zealand over the past eighteen months. The National Party-led Government is seeking to simplify the funding system, reduce central bureaucracy, improve tertiary education provider accountability and significantly lift learner outcomes. New Zealand has entered a new period of constrained funding in tertiary education with a clear focus on linking funding to performance, making performance information publically available, improving quality assurance systems and establishing priorities for provision. Early results of the Government's change agenda include a significant reduction in the size of the Tertiary Education Commission (TEC), changes to the role of the TEC, new legislation designed to secure a sustainable polytechnic sector and a reduction in the number of qualifications. This paper largely draws on published data and the author's personal perspective of issues as an employee of the Tertiary Education Commission. Recent developments in New Zealand tertiary education policy are placed within a longer term reform context. It concludes that although the strategic direction of the past decade has been retained, a significant new phase of using refined policy levers and funding incentives to drive improvements in learner achievement levels and institutional performance is underway.

Keywords: tertiary education, performance, New Zealand.

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## **INTRODUCTION**

With a number of high profile initiatives completed or underway, it is clear that the National Government, elected in late 2008, has given high priority to improving the performance of the tertiary education system. Recent activity consolidates and extends the reforms started by the previous Government in 1999. The pace and scale of activity over the past 18 months have been significant.

While considerable debate exists across the political spectrum about the most effective means to drive further improvements in tertiary education system performance, there is widespread agreement about the role tertiary education has in developing the skills needed to support a strong and innovative economy. There is largely agreement too about strengths and weaknesses in the current system. Provider diversity is valued. The increasing emphasis on using benchmarks and sharing best practice across the system is widely supported. Increased levels of participation in tertiary education are widely acknowledged as a success of the past 15 years. Measuring and rewarding the quality of research is also largely uncontested. So too is investing in effective teaching and learning through government funding of Ako Aotearoa, the National Centre for Tertiary Teaching Excellence. Greater sector ownership of quality assurance arrangements is broadly supported.

There is also a shared understanding by government, providers and the funding agency about areas where further improvement is required. This includes improving transitions from school to tertiary, building better learning progressions and pathways for students, improving links and technology transfer between tertiary research activity and industry and rationalising the qualifications system. It is also widely acknowledged that critical to system success is building literacy, language and numeracy skills in the general population and improving overall course and qualification completion rates, particularly for Māori and Pacific students.

Indicating the government's position on some of these areas, the Minister for Tertiary Education, Steven Joyce, noted in mid-2010 that the system 'is not broken but is not without its issues' (Joyce, 2010a). Challenges the Minister identified were too many qualifications on the register, low completion rates, a lack of increase in the number of degree students graduating despite significant increases in participation, value for money concerns and heavy controls on the sector through price and volume.

What characterises the current phase of tertiary education administration is the proposed means to further drive improvement and a greatly reduced tolerance for slow progress by the Government. To place current initiatives in context and to understand what significance should be accorded to the Government's policy direction, it is necessary to briefly survey the tertiary education reforms from the early 2000s onward.

## **REFORM HISTORY**

Behind the political support for tertiary education reform in the late 1990s was a view that there was insufficient strategic direction across the system, unnecessary competition, a lack of engagement with stakeholders such as industry and professional associations, and uneven standards across providers. The Tertiary Education Advisory Commission (TEAC, 2000, 2001a, 2001b, 2001c) recommended the introduction of a more collaborative tertiary education system, the development of a national strategic statement to guide the system, the use of Charters and Profiles to steer the system, the creation of the Tertiary Education Commission to act as an independent funding and monitoring agency, the separation of funding for teaching and research and the continuation of tertiary education organisations being able to set tuition fees (TEAC, 2000 and 2001).

The Fifth Labour Government, elected in 1999, had sought to moderate, but not essentially change, the impact of market forces on tertiary education while moving toward a system that would have more central steering through the creation of the TEC, new regulatory and funding arrangements and the

publication of the first Tertiary Education Strategy 2002-2007 (McLaughlin, 2003, p. 6). Throughout the reform period of the early 2000s, the concepts of excellence, relevance, access and capability were touchstones used to position the work of the TEC and indicate expectations of the tertiary education sector.

A further iteration of the reforms in 2006 sought to improve ‘relevance and responsiveness, access and learner outcomes, quality, public and government confidence and fiscal certainty’ (Cabinet Policy Committee, 2006a). Central to the second phase of the reforms was the introduction of Investment Plans (instead of Charters and Profiles), with multi-year funding that would support a ‘whole of institution’ approach to considering inputs, capability, outcomes and quality. The creation of Tertiary Education Organisation Capability funding and a new approach to quality assurance were also key parts of the 2006 reforms. Increased fiscal certainty for government was to be obtained by moving toward a more ‘student need’ funding system, rather than driven off student demand and tertiary education organisation generated demand.

Looking back across the last decade some aspects of the reforms have been successful. Most notably, student participation increased significantly in the first half of the decade. The introduction of research funding through the Performance-Based Research Fund and the use of Centres of Research Excellence must also be seen as a significant area of success. Improvements in the quality of investment through the removal of low value provision should also be added as a highlight. More broadly, there have been uneven results across the system with significant remaining challenges.

## **NEW ZEALAND’S TERTIARY EDUCATION PERFORMANCE**

New Zealand has moved from an elite tertiary education system to a mass participatory system in a remarkably short period of time. There were 120,000 students in 1985 and 283,000 in 2001 (McLaughlin, 2003, p. 34). In 2009, the figure had increased to 424,000 domestic students enrolled in formal tertiary education study (MOE, 2010c). If students in non-formal courses and international students are added, the figure exceeded 700,000 learners in 2009 (TEC, 2010a, p. 6). The number of learners in the system needs to be seen in terms of liberal policy settings for student admission, the availability of student loans and allowances, a national commitment to life long learning, and relatively generous state funding levels, rather than as merely a demographic issue.

Of 31 OECD countries in 2007, New Zealand had the fourth-highest level of tertiary education attainment for 25 to 34 year olds at approximately 45 per cent and around 10 percentage points higher than the OECD average (OECD, 2009, p. 13). Some 44 per cent of New Zealanders aged over 15 years held a tertiary education qualification in 1998. A decade later, this had increased to 50 per cent (TEC, 2010a). Another measure of the dramatic increase in tertiary education participation and achievement is that the proportion of the population with a bachelors degree or higher increased from 10 per cent in 1998 to 18 per cent in 2008 (TEC, 2010a, p. 14).

Partially reflecting both policy shifts and the TEC’s engagement with tertiary education organisations, there has been a shift to higher levels of study on the qualifications framework. The proportion of total domestic student enrolments at levels 1 to 3 has shifted from 27 per cent in 2005 to 23 per cent in 2009 and, conversely, enrolments at bachelor’s level as a proportion of all formal enrolments have increased from 30 per cent in 2005 to 33 per cent in 2009. Further illustrating this change has been that between 2008 and 2009 there were an additional 15,500 enrolments in level 5 to 10 programmes and an 11,000 decrease in enrolments for level 1 to 4 certificates (MOE, 2010c).

Despite this progress, there persist some entrenched and concerning patterns of student and system performance. The large increase in participation has not been matched by increases in qualification completions. Completions at level 4 and above between 2004 and 2008 have increased by 8 per cent for domestic students but in the same period, bachelors degree completions have fallen by 2 per cent (MOE, 2010c).

Completion rates are variable across different sub-sectors. In 2008, universities had an 82 per cent course completion rate compared with 68 per cent for institutes of technology and polytechnics, while the course completion rates for Māori students were 75 per cent at universities and 59 per cent at institutes of technology and polytechnics (TEC, 2009c, p. 15). Five-year completion rates for students who initially enrolled in 2004 across all students and all qualifications were 41.4 per cent (TEC, 2009c, p. 19). Even while acknowledging the flexible nature of the New Zealand system, with a large number of mature and part-time students, qualification completion rates at this level inevitably lead to questions about value for money for taxpayers and concerns about students leaving institutions with large loans and incomplete qualifications.

In relation to one of the target learner groups highlighted in the TES, Māori participation constituted 20 per cent of all enrolments in 2009 compared with 15 per cent in 1999 (MOE, 2010c). This level of participation is higher than the proportion of Māori in the population at 17 per cent (Statistics New Zealand, 2010). However, Māori students are overrepresented at lower levels of study; participation rates for Māori aged 18 to 19 in degree level study are less than half the rate for all students (MOE, 2009a, p. 12). The ethnic differential is particularly pronounced in some sub-sectors. In the period 2006-2008, Pacific students at university had a 64 per cent course completion rate across all levels of the framework compared with 85 per cent for students who were not Māori or Pacific (TEC, 2009a, p. 2). Over the same time period, Māori students at institutes of technology and polytechnics across all programmes had a course completion rate of 57 per cent compared with 70 per cent for students who were not Māori or Pacific (TEC, 2009a, p. 4). Qualification completion data varies even more markedly when gender and ethnicity are considered beside each other. Thus, in 2008, 32 per cent of female non-Māori aged 25 had completed a bachelor's degree or higher qualification, but slightly less than 7 per cent of male Māori had achieved at this level (TEC, NZQA, MOE, 2010).

There are significant national development needs at the foundation level of education as well. The 2006 Adult Literacy and Life Skills Survey found that approximately 43 per cent per cent of New Zealand adults have lower literacy skills and 51 per cent lower numeracy skills than those required for full participation in a knowledge society (TEC 2008, p. 6).

Against a backdrop of uneven student educational performance, poor financial performance by some institutes of technology and polytechnics, an increase in low value courses in the mid-2000s and economic recession, the National Party in opposition developed strong views about the need for improved performance within current fiscal baselines.

## **NATIONAL PARTY PRIORITIES IN 2008**

In its 2008 election manifesto, the National Party signalled a clear intention to focus on improving the performance of the tertiary education sector as a whole and on the sector's funding agency, the Tertiary Education Commission. National outlined five commitments in the manifesto: to simplify the tertiary education funding system, reduce central bureaucracy, strengthen quality and accountability, support and encourage students and improve the interface between schools and tertiary education institutions (National Party, 2008). A further manifesto commitment was to ensure that a future National government would move to treat institutions similarly, irrespective of ownership structure. Also in the pre-election period was a commitment to retaining controls on student fees.

None of these commitments sought to overturn the underlying strategic direction or fundamental architecture used to steer tertiary education over the previous decade. Perhaps it is for this reason that considerable progress has been made in each of these commitment areas since National formed a coalition Government.

## **NATIONAL GOVERNMENT PRIORITIES SINCE 2008**

As might be anticipated, the National Government has both refined and extended the initial priorities set out in the manifesto. In particular, a stronger focus on value for money across all aspects of the tertiary education system has been pursued. System wide strategic priorities related to improved student achievement and a focus on priority learner groups have been retained, but the means to reach these ends has evolved considerably over the past eighteen months.

### **A New Tertiary Education Strategy**

Continuity in strategic direction combined with a vigorous position on delivering higher quality services without substantial new funding can be clearly seen in the Government's Tertiary Education Strategy 2010-15 (MOE, 2009a). Despite having a five to ten year strategic timeframe, the new TES reflects the economic stringencies of 2009 with early references in the document to fiscal restraint and the need for both providers and students to use government's investment in tertiary education efficiently and effectively.

Compared with the previous two Tertiary Education Strategy documents, the current strategy has sharper expectations. The focus on priority learner outcomes, improved system performance and research that more directly supports innovation and economic growth is unambiguous. With limited resources, the Government has signalled a clear prioritisation toward students aged under-25, Māori students, Pacific students, students moving from secondary education to tertiary education and foundation-level students. Noting that the substantial increase in participation during the 2000s has been at the sub-degree level, the Tertiary Education Strategy elevates the importance of increasing the number of learners achieving higher-level qualifications. The higher individual and societal returns for young people achieving higher level qualifications is provided as the rationale for giving greater attention to successful transitions from school to tertiary.

Finally, improving literacy, language and numeracy skill outcomes from level one to three study is also given prominence in the document. Improving literacy programmes for young Māori enrolled in levels 1 to 3 programmes with a view to progressing these learners to level 4 and above will support a number of Tertiary Education Strategy objectives simultaneously.

The dimensions of system performance that require attention are enhanced quality assurance arrangements whereby providers are to take more responsibility for continuous improvement and a rationalisation of the number of sub-degree qualifications. Improved pathways for students, shared services between providers, improved availability of performance information, and performance linked funding, along with more fully linking student support to student performance and further expanding international linkages across the tertiary education sector are all highlighted for further work.

The need for institutions to improve course and qualification completion rates as a way to improve public value for money in tertiary education spend is made explicit. While dropping the language of 'distinctive contributions', the current Tertiary Education Strategy sets out the core roles for universities, polytechnics, Wānanga (Government funded Māori tertiary education organisations), private training establishments, industry training organisations and adult and community education providers. Students are extolled to take responsibility for their own performance, while institutions are required to improve the success of target priority learner groups, respond to skill demands, and make better connections with industry and iwi (Māori tribes).

Symbolising the Government's view that there should be minimal but effective central oversight of the system, the expectations in the third Tertiary Education Strategy are pared down. Most of these priorities and challenges were also highlighted in the second Tertiary Education Strategy 2007-2012, a document that included the Statement of Tertiary Education Priorities, 2008-2010. To this extent, strategic continuity across the two documents may be observed. A different policy emphasis can be



seen however in decisions about funding levels for the TEC, and performance expectations of providers and students.

### **Reform of the TEC**

Following the election, one of the first manifesto commitments to be addressed related to the Tertiary Education Commission. The manifesto expressed concern about ‘heavy handed centrally driven control by the TEC’ and described the agency as one that ‘has grown into a large and demanding agency that places excessive compliance burden on education providers and stifles innovation’ (National Party, 2008). Budget 2009 reduced the TEC’s operating budget reduced by almost \$10 million for financial year 2009/2010. Streamlining the TEC was designed to save \$31m over four years. The positions of fifty-five staff were made redundant and all area offices were closed in the middle of 2009. Staffing levels, at approximately 260 full time equivalents (with a full establishment of 298 FTEs), fell to the same level as when the TEC was first established in 2003. Structural changes within the TEC were not merely about living within a new budget baseline of approximately \$59m in the 2009/2010 government financial year. Changes made reflected a particular view by Government about the appropriate roles and responsibilities of the TEC.

Most significantly, the TEC sought a refreshed model for engaging with smaller tertiary education providers that relied on the use of a TEC service centre for e-mail and telephone based advice and a new TEC website was launched to significantly improve access to information for tertiary education organisations. Area advisor positions were disestablished. In-person relationship management was to be focused on the sectors of highest investment: industry training, Wānanga, institutes of technology and polytechnics, and universities.

Two further changes are noteworthy. The size and scope of the Tertiary Advisory Monitoring Unit’s work was changed to streamline its functions, with a focus on preparing six-monthly reports on Tertiary Education Institution’s financial and educational viability for the Minister and for the Cabinet Expenditure Control Committee. The new arrangements ensure that the dual perspectives of an independent ownership interest in the financial and organisational viability of (government ‘owned’) tertiary education institutions and TEC’s view as a funder of tertiary education provision can be used in an integrated way.

Finally, the TEC’s stakeholder engagement function - through which employers, industry and community groups were consulted on their view of tertiary education needs and priorities - was disestablished. The new Government believed that this activity was the rightful work of tertiary education organisations themselves. The enterprise of understanding tertiary education need across all industries, business types, professional associations, community sectors and regions was highly ambitious. Also, the evolving nature of the Investing in a Plan system meant that findings from stakeholders were difficult to embed in the first round of Investment Plan engagements and approvals.

Overall, these changes reflect the desire to streamline the TEC’s own functions, reduce the total number of funds administered by the TEC, engage with tertiary education organisations in proportion to risk and scale of activity, reduce compliance on tertiary education organisations and empower tertiary education organisations to take responsibility for their own self improvement and stakeholder relationships.

### **Fund Rationalisation and Funding Reductions**

Another area of National Government interest signalled in the manifesto – and also a priority for the previous Government – has been reducing compliance and transaction costs both for the sector and within the TEC. In Budget 2009, a significant number of small funds were slated for disestablished in 2010 and 2011 including bilingual tutor grants, academic migrant grants, refugee study grants, English for speakers of other languages assessment services and building research capacity in the social sciences. In some cases there were concerns about fund performance, but an underlying goal

was to reduce the total number of funds as part of a programme to reduce complexity and compliance costs. Another area identified for reduced funding was short courses that focused on regulatory compliance training. The most controversial decision proved to be the reduction of community education funding in high schools by 80 per cent, with a broader goal of reducing adult and community education funding across the whole system by 50 per cent. Community groups and high schools fought a very public and ultimately unsuccessful campaign to overturn this decision.

Capability funding – including competitive project based funding used as an incentive for change in line with government priorities - has largely been discontinued. This included the Encouraging and Supporting Innovation fund involving almost \$9m, institutes of technology and polytechnic Business Links funding of \$6m and Supporting Change funding of \$35m. The move away from funding institutional capability development has been one of the most significant policy changes introduced by the Government. This reflects a philosophical view that paying the full price of provision directly through Student Achievement Component funding allows institutions more choice about how they spend their funding. Budget 2010 disestablished the Tertiary Education Organisation Component fund, with the money being amalgamated again into enrolment driven funding. The Tertiary Education Organisation Component fund had included a core component to fund costs associated with a provider's distinctive role and a strategic fund to support innovation in teaching and learning.

Alongside this rationalisation of funding pools and reduction of funding in some areas has been new investment as well. Reflecting priorities of the Government, redirected funding has been committed to the Youth Guarantee programme, which provided 2000 free course fees in 2010 for 16 and 17 year old students at risk of not being in work, school or training. New initiatives were also announced in both 2009 and 2010 to increase the number of funded medical places, in 2009 to support a significant summer research scholarship scheme, and also in 2009 to fund a 50 per cent increase in the workplace literacy fund (while reducing out year commitments in total for language literacy and numeracy). In Budget 2010, redirected funding was applied to Equivalent Full Time Student system volume with 455 more places for institutes of technology and polytechnics and 765 more for universities in 2011 compared with 2010 and to a 2.2 per cent increase in Student Achievement Component funding rates (MOE, 2010a).

### **Student Support Policy Changes**

A range of changes to student loans and allowances and student fees policy settings have been made over the past eighteen months (MOE, 2010a & MOE 2010b). A simplified approach to increasing student fees has been introduced, involving an Annual Maximum Fee Movement policy which allows for a 4 per cent increase in fees and compulsory course costs for all government funded courses, with the possibility of applying for an exemption to be able to increase fees by up to 8 per cent.

A number of changes were made to student loans policy as part of Budget 2010, reducing eligibility to student loans for permanent residents and Australians (a saving of almost \$80m across four years), placing a life time limit on access to student loans of seven years, and raising student loan administration fees. Most importantly, in terms of policy direction, a performance element has been added which requires students to pass at least half of their course load over two years to retain eligibility for a student loan. In a sign of the Government's resolve in this area, student results from 2009 and 2010 will be used to assess 2011 eligibility. The Government has estimated savings of around \$140m over a four-year period from this policy change.

The manifesto commitment to retain interest free student loans has been honoured, despite the high level of total tertiary education funding directed to students. Throughout OECD countries, an average of 19 per cent of public spending on tertiary education is used to support students, households and other private entities. In New Zealand this figure was approximately 42 per cent in 2006 (OECD, 2009, p. 61). Currently, the government writes off almost half the value of each dollar loaned to students. The Vice-Chancellor of Victoria University of Wellington recently noted: 'I fully accept the need for a fair and low-cost student loan system to ease the very real burdens on students. I do

question the strategic wisdom for New Zealand of denying university places to aspiring students so that enrolled students can borrow money at no cost to themselves' (Walsh, 2010).

A further dimension of supporting students relates to access to tertiary education. The highest profile tertiary education issue in 2010 has been restrictions on tertiary education places, especially in universities, with a number of institutions restricting enrolments or closing off enrolment in the second half of 2010 after meeting or exceeding their government funded enrolment numbers. For a system that has had very open access for two decades, this has come as a shock to the public. Institutions are beginning to prioritise in accordance with the Tertiary Education Strategy however. Waikato University, for example, have said that enrolment priority in 2011 will be given to school leavers, Māori students and those in post graduate study (Boyes, 2010). A significant demographic blip will place more pressure on the system through until 2013 and the Government will need to consider further how to reprioritise funding to support priority groups engaging in both foundation level and higher-level programmes.

### **Sub-sector Specific Initiatives**

One sub-sector under particular scrutiny by the Government has been institutes of technology and polytechnics. Drawing on 2009 data, the TEC's 2010 report on Tertiary Education Institutions (the 31 government 'owned' institutions) performance to the Minister for Tertiary Education and the Cabinet Expenditure Control Committee noted that nine Tertiary Education Institutions were categorised as having some degree of unsatisfactory educational or financial performance. Of these five were institutes of technology and polytechnics. The Education (Polytechnics) Amendment Act 2009 provided for the restructuring of polytechnic councils and the introduction of additional intervention measures to ensure that the TEC can support an educationally and financially viable institute of technology and polytechnics sector.

New councils were appointed in May 2010, each comprising four ministerial appointments and four local appointments. With smaller councils and ministerial appointments of the chair and deputy chair positions, the Government is looking for strong governance focused on educational performance and financial viability. The new legislation also allowed for a more graduated interventions framework in cases of poor performance, including the requirement for an institution to obtain specialist help or produce a performance improvement plan. More severe interventions include the appointment of a crown manager and the disestablishment of a council.

The initiatives detailed in the pages above are significantly progressed. Two further policies, which the National Government sees as important in incentivising the right student and institutional behaviour, are linking student performance results to institutional funding levels and making information about student results publically available.

### **PERFORMANCE-LINKED FUNDING**

Performance-based funding could be said to have existed for a number of years in the context of the existing quality assurance system. Ongoing funding from the Tertiary Education Commission has always required institutions to maintain the confidence of the relevant quality assurance body. In an era of capped funding, performance in relation to achieving planned student participation levels has had an impact on the volume of future Student Achievement Component funding. Where new money has been available for additional student places in the polytechnic and institutes of technology and private training establishment sectors, it has been allocated on the basis of past performance. Building on a new performance framework for Student Achievement Component funding introduced for private training establishments in 2009, funding was withheld from a number of providers pending revised Plans and in two cases it was removed altogether from the lowest performing private training establishments.

In other ways too, funding has been linked to aspects of tertiary education organisation performance. In funds such as Training Opportunities and Youth Training, funding each year is dependent upon evidence of institutions reaching targets specified in the contract. For these funding streams, targets relate to the average proportion of training places filled and the percentage of people leaving the programmes who find work or further training within a specific time span. Similarly, funding streams such as the Intensive Literacy and Numeracy fund have been designed so that future funding is dependent on learners achieving measurable gains in literacy and numeracy and on reaching targets related to the number of learning hours.

What is meant by performance linked funding in the current policy context is linking a proportion of Student Achievement Component funding to student performance results in order to reward teaching and learning performance. Based on 2011 student performance results, institutions will be subject to performance linked funding in 2012, with up to 5 per cent of enrolment driven funding at risk. Performance linked funding will apply to formal funded courses and programmes from level 1 to level 8 on the New Zealand Qualifications Framework. Research degrees at level 9 and 10 are excluded from the system as elements of the Performance-Based Research Fund already reward student performance in this area. All tertiary education sectors will be part of the system, although it will operate in a slightly different way for the Industry Training sector where, for example, progression to higher-level programmes is perhaps a less important measure.

The measures and specific weightings place the greatest emphasis on course and qualification completions. The rationale for focusing on course completions is that completed courses demonstrate measurable learning and are a partial proxy of progress toward a qualification, while students and employers value qualification completions as labour market currency. It is proposed to give progression a modest weighting for level 1 and 2 programmes and no weighting for higher level programmes, reflecting the importance placed on moving students from foundation programmes into higher levels of study that are likely to result in greater personal earnings and economic contribution. At this point, mid-level retention is considered important only from level 5 through to level 8 programmes where there are multiyear programmes and retention acts as a barometer of student progress and institutional performance. Final decisions on how the mechanism will work are yet to be made.

While some shift from part-time to full time study is considered beneficial for the system, raw performance results are likely to be adjusted to acknowledge that part-time students take longer to complete qualifications. Thresholds will be set at a level which incentivises improvement, while allowing for good performance to be recognised with 100 per cent of enrolment driven performance being paid. The thresholds will be published in the year before performance is measured so that institutions know what they are aiming for. A number of different approaches could be taken to setting the exact upper threshold, including using average performance in recent years.

It is not proposed that exceptional performance levels will result in more than 100 per cent of enrolment driven funding being paid. The system is geared toward targeting outliers in the first phase. The intention is to remedy poor performance without destabilising the system. Early modelling of possible impacts suggests that, in keeping with the Government's intentions, the viability of key parts of the system will not be affected. Funding not allocated as a result of tertiary education organisations failing to reach the threshold is likely to be reinvested in the tertiary education system. For example, this money could be invested in unmet student demand or other priority areas.

It is expected that the new policy will result in institutions working harder to ensure that students enrol in programmes that are appropriate for their interests and skill levels and that student progress is monitored more assiduously. There may be unintended consequences. The TEC will need to ensure that performance linked funding does not result in institutions raising entry standards at the expense of improvements in target learner group performance. There may be concern that assessment standards will drop in order to improve outcomes and government funding levels. It is instructive to see that Columbia University's Community College Research Centre has found that although performance

linked funding systems may result in increasing restrictions for entry into specific programmes, there is no evidence of academic standards being lowered as a strategy to improve performance results (Dougherty, 2010b).

New Zealand's decision to adopt performance linked funding is not without precedent. A range of performance-linked systems has been used for example at the State level over the past thirty years in the United States of America, involving at risk funding of between 0.4 per cent through to 5.45 per cent. In some cases, a portion of enrolment driven funding is withheld subject to student performance results and in other cases, additional sums of money have been used to reward performance over and above enrolment-based payments. A number of States have discontinued performance based funding due to pressure on State budgets, a lack of provider support and changing policy settings within State legislatures. Stable systems are characterised by the involvement of tertiary education providers in the development of the system, the introduction of performance based funding through legislation rather than the use of budget provision and maintaining consistency in the use of performance measures (Dougherty & Hong, 2005, Dougherty & Natow 2009, 2010a; Dougherty, 2010b).

Research findings from the US suggest the link between the use of performance linked funding and improvements in performance outcomes is modest (Dougherty, 2010b). This suggests that performance based funding must be seen as one of a number of levers to be used to improve the performance of individual tertiary education organisations and the system as a whole. It may be supposed that institutions with poor educational outcomes that are financially weak will feel its impact most keenly. For these institutions, losing even 1 per cent or 2 per cent of Student Achievement Component funding may be the difference between reporting a surplus or deficit position.

A potentially more challenging dimension of performance linked funding is the possible future inclusion of employment outcomes as a criterion for funding. The Minister for Tertiary Education foreshadowed this in a speech at Victoria University of Wellington in July 2010 when he said 'ultimately I want to see funding linked to employment outcomes, not just internal benchmarks. This will send a strong signal to students about which qualifications and which institutions offer the best career prospects – and that's what tertiary education has got to be about'. The statement elicited a strong response from universities and commentators about the value of a liberal education.

The chief executive of one tertiary education organisation who has come out in favour of the idea has noted that 'Developing some sort of national measure of graduate employment will be a heroic task ...' (Ede, 2010). It may be that collecting data on employment outcomes for making that information publically available would produce the right incentives for institutions and potentially useful information for learners. Ideally, such data collection would be driven by institutions themselves or sub-sectors as part of the close relationships tertiary education organisations should have with industry and employers, rather than being centralised. However, here again there is overseas practice to draw on. In the State of Tennessee, job placement results count for 10 per cent of performance linked funding for community colleges (Tennessee Performance Advisory Funding Committee, 2010).

In the case of New Zealand, performance linked funding will be used in concert with the Investment Plan system which provides opportunities for institutions to demonstrate that their planning reflects Government priorities and meets the needs of their communities of interest, including students. Plan approval (or not) by the Board of Commissioners of the TEC remains the ultimate sanction for poor quality performance. Very poor performing courses and programmes are targeted for attention during Plan engagement between the TEC and tertiary education organisations. Institutes of technology and polytechnics in 2010 have been required to provide, as part of the 2011-13 Investment Plan engagement process, information on how courses with less than 30 per cent achievement will either be restructured or discontinued. Plan commitments are monitored throughout the duration of the Plan, with interventions taken as needed. Sitting alongside these levers are ownership monitoring and interventions (in the case of Tertiary Education Institutions), a well developed self review and

external evaluation review system, the use of benchmarking to increase efficiency and a performance consequences framework.

A comprehensive performance consequences framework from 2011 will see reduced funding, conditions on funding or funding declined where an institution fails to deliver against their performance indicators. Points of influence for the TEC include funding approvals, Plan conditions, frequency of TEC engagement with providers, Plan amendments, suspending or revoking funding, recovering funding or activating a statutory intervention. Outside of the Plan system, budget decisions can and have been used to remove 'low value' provision in areas such as first aid training and regulatory compliance training.

In this way, it may be argued that the lever of performance linked funding adds an important tool to the planning, approval and monitoring levers already available. The impact of performance linked funding is likely to be only as effective as the complementary instruments that sit around it. Capped funding during a period of increased demand has increased attention on prioritising some learner groups and types of provision. Arguably, it has also led to students placing greater value on securing and retaining a university place. This may yet prove to be as effective as performance linked funding in driving overall improvements in system performance.

## **PUBLIC AVAILABILITY OF PERFORMANCE INFORMATION**

Closely related to linking funding to student performance, is making publically available information on tertiary education organisation performance in relation to student outcomes. Although student performance information has been available through the annual reports of some tertiary education organisations, a centralised approach to publishing such information allows for the use of common measures and comparable information.

Performance data on student course and qualification completion, student progression and student retention for institutions receiving Student Achievement Component funding is to be published in 2010 for the first time. The Minister for Tertiary Education sees this information as an input for student study choices (Joyce, 2010a). Publication of district health board outcomes across various surgical and other services in 2009 was used as a model for the development of the reporting format. Information for the university, Wānanga, polytechnic and institute of technology and private training sectors will be published by sub-sector allowing for students and the public to understand one dimension of institutional performance in a comparative format. A page per tertiary education organisation provides results for each of the four measures by level of study broken down into levels 1-2, 3-4, 5-6, 7-8 and 9-10, along with information about the number of equivalent full time students, student ethnicity, level of study, student age and subject area.

Tertiary education organisations have raised a variety of concerns throughout the development of the project including data integrity, the possible distortionary impacts of high numbers of part-time students and the difficulty of comparing very different types of institutions in the private training establishment sector. There were also concerns that an institution could be performing well for a particular demographic, such as Pacific students, but be rated poorly by comparison with institutions enrolling a different student demographic. The reputational impact associated with the publication of performance information is likely to be considerable. It remains to be seen how much interest the media will show in the comparative data, but it can be anticipated that comparatively high performing institutions will seek to use the results in their branding and advertising, as has occurred with performance-based research funding results.

Performance linked funding and the public availability of performance-linked information have been subject to considerable political and sector attention. Doubtless, both policies have an immediate signalling impact and over time will help incentivise improved enrolment processes, pastoral care, and teaching and learning. It is suggested that the careful alignment of these policies with a fuller

application of the tools available within the Investing in a Plan system has the potential to significantly improve overall system and tertiary education organisation performance.

## **FUTURE POLICY DIRECTIONS SIGNALLED BY THE GOVERNMENT**

Beyond the measures discussed above, the Government has foreshadowed a number of areas of focus in the short to medium term. The need to consider relative contributions of public - private cost sharing remains a key issue. Modest increases in private contributions to the cost of tertiary education are unlikely to undermine the high levels of participation in tertiary education. Indeed the historic evidence in New Zealand is that rates of participation significantly increased after fees were introduced and student loans were made available. Shifting a higher proportion of costs to private contributions however increases the Government's financial exposure through greater demand for student loans. Also, raising the level of private contributions is likely to differentially impact on different learner groups and may undermine the goal of improving the performance of target learner groups.

Rather than confirming a three year funding path for institutions in the forthcoming Plan approval round, the Minister for Tertiary Education has decided upon a two year period in order to allow for work to be done on the price government pays for tuition subsidies. The possibility of rationalising the number of funding categories and reviewing subsidy rates against the cost of provision, the mode of delivery and level of provision was signalled in mid-2010. Many dimensions of price are likely to be considered over time – how much should employers, students and the government financially contribute to different levels of study and how should different types of qualifications and different learning modes be funded? Should funding be able to be moved between sub-sectors more easily and what price should be paid for provision in regions where full provision is not economically viable? If significant improvement is not made in the performance of target groups such as Māori and Pacific, should there be further consideration of the subsidy rate for these learner groups?

A further area for system wide attention signalled by the Government is the importance of increasing the internationalisation of New Zealand tertiary education, especially the recruitment of foreign students. Government's aspirations in this area are likely to be wider than catching up to Australia's position as the country with the highest proportion of international students. Opportunities gained from having a portion of a degree completed overseas and offshore delivery opportunities for New Zealand institutions are also considerations. The Government is currently setting international education goals for the next 15 years that will place raised expectation on institutions and the system as a whole. After a welcome increase in international student numbers in 2009 compared with 2008 (MOE, 2010c), tertiary education organisations have responded positively to the Government's encouragement, with some institutions seeking or expanding offshore international education opportunities.

More broadly, ensuring that skills and training meet the needs of employers is likely to be an enduring area of attention for the government and the TEC over the coming years. This goes to the issue of the supply of skills, relevance of qualifications, the structure and pathways of qualifications and relationships with the end users of tertiary education. In relation to qualification approval, Minister Joyce has also signalled that delegations for qualification approval and quality assurance arrangements will be reviewed as a consequence of the perception that the number of qualifications has rapidly expanded due to sub-sector regulation of qualifications (Joyce, 2010b). Reflecting the Minister's often quoted concern about there being 6,000 qualifications on the framework, the number has already been reduced by 15 per cent by retiring or removing out of date qualifications and further change may be expected.

Finally, it is likely that the Government will work to develop a broader view of school to tertiary transitions. One context for this is the need to ensure that there are clear routes to vocational study and

that senior secondary school is linked to next steps in education, not merely through a small number of specific funds, but because of clearly defined study and career pathways.

## CONCLUSION

The Government has sought to move tertiary education away from central steering during a period of increased student demand and financial constraint. In doing this, the Government has focused on introducing new mechanisms to improve student outcomes and institutional performance. This has resulted in changes to the TEC's operational funding level and its roles, a more explicit Tertiary Education Strategy, removal of capability funding and a decrease in the number of funds, new legislation aimed at a more effective and viable polytechnic sector, significant student support changes and reduced tolerance for poor tertiary education organisation performance. New levers linking funding to student performance and highlighting student performance information in the public arena will augment the Investing in a Plan system.

Behind this considerable activity and impetus since late 2008, there remains an enduring focus on improving the performance of target learner groups, lifting system performance and improving the quality of research. Continuity of strategic direction may be seen in the emphasis on creating responsive institutions meeting the needs of students and industry, efficient and financially viable tertiary education organisations and high quality teaching and learning that leads to improved student course and qualification completion rates. The refreshed means being utilised to realise these goals have created considerable momentum in the sector.

Future work on the price government pays for tertiary education provision, re-conceptualising the relationship between the secondary and tertiary sectors, opportunities to further internationalise the tertiary education sector, and streamlining qualifications to better meet employer needs will further progress what are widely agreed strategic priorities for New Zealand's tertiary education system.

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# CLIMATE CHANGE IN ACADEMIA

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## ABSTRACT

In these times of economic uncertainty within the Australian economy, it has been necessary for the tertiary education sector to implement changes to the very essence of its structure in order to respond to demands from multiple bodies, including the federal government, industry, and internally from the higher education sector. Academic development units are not immune to this uncertainty and the pressures resulting from this need for change. The Griffith Institute for Higher Education (GIHE) has recently experienced a greater reliance on the experience and knowledge of para-academics to assist in the provision of teaching and learning services. Whilst this provides an opportunity for para-academics to enrich, build, and enhance their qualifications and expertise, does this translate into progressive acceptance of these staff as academic equivalents? A review of the nature of these changes and an anticipation regarding reactions from the University community about the impact these changes might have on the perceived value of the unit will be raised in this paper.

Keywords: Higher education, para-academic, future directions.

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## INTRODUCTION

The future direction of Australia's higher education sector faces multiple challenges, not just economically, but also from those identified through the Review of Australian Higher Education report, as fundamental to support Australia's ongoing commitment to educational reform (Department of Education, Employment and Workplace Relations [DEEWR], 2008, p.5). Without an expansion of the higher education system, Australia faces a substantially staggered economic and social future, suffering under the lack of knowledge (Coaldrake, 2000, p.8). As observed by the then Minister for Education, 'Events are forcing us to make new calls on our higher education system. We must have new and greater expectations' (Gillard, 2009).

Some of the challenges to Australia's higher education system that need to be addressed include:

- Increasing '...the proportion of young Australians with undergraduate qualifications...' (Gillard, 2009);
- Improving Australia's Organisation for Economic Co-operation and Development (OECD) position, to match those countries whose institutions inject significant finances into research (DEEWR, 2008, pp.xi-xii);
- Creating cohesion between the tertiary education sector and in-need schools (DEEWR, 2009, p.5);
- Improving research capabilities within each institution (DEEWR, 2009, p.5); and,
- Determining how best to maintain and improve '...high quality teaching and learning...' (DEEWR, 2009, p.5).

The Australian Government has recognised that these challenges require significant funding in order to succeed (DEEWR, 2009, p.5). The 10-year Australian Federal Government reform plan will see additional funding of approximately \$5.4 billion injected into the higher education and research sectors to help meet these challenges (DEEWR, 2009, pp.5-9).

The Griffith Institute for Higher Education (GIHE), is Griffith University's internationally recognised academic development unit charged with the responsibility of improving '...the quality of learning and teaching at Griffith University' (Griffith University, 2010, p.3). The unit aims to achieve this by producing and delivering academically relevant workshops; working with academic staff and executives on University strategic initiatives; supporting academics through the provision of information and leadership to assist colleagues achieve their targeted goals; and, undertaking research that strengthens the '...quality of student teaching, the student learning experience and outcomes' (Griffith University, 2010, p.3).

Griffith University places substantial emphasis on the important role a highly skilled workforce plays in the achievement of its nationally and internationally significant strategic priorities (Griffith University, 2008, p.2). The GIHE is central to Griffith University's capacity to assist in the achievement of these strategic priorities (Griffith University, 2008, p.16). 'The University will continue, through the GIHE, to provide high-quality professional development programs and resources that align with the University's learning and teaching philosophy and strategic objectives' (Griffith University, 2008, p.16).

The implicit challenge of determining how best to maintain and improve '...high quality teaching and learning...' (DEEWR, 2009, p.5) is matched perfectly with GIHE's charter to improve the quality of learning and teaching at Griffith University (Griffith University, 2010, p.3). Strategically-aligned and highly-considered academic and professional support staff at the GIHE complements the unit as a whole and helps to sustain a very successful academic development operation (Griffith University, 2010, p.19-20). These positions include a combined Director and Dean (Student Outcomes) position, an Associate Director, senior academic staff, and various administrative and research staff.

Macfarlane (2010) identifies para-academic positions as those whose concentration is predominantly on a single aspect of academia. Positions such as educational developers, e-learning coordinators and business development managers are examples of para-academic positions (see Figure 1, Macfarlane, 2010).

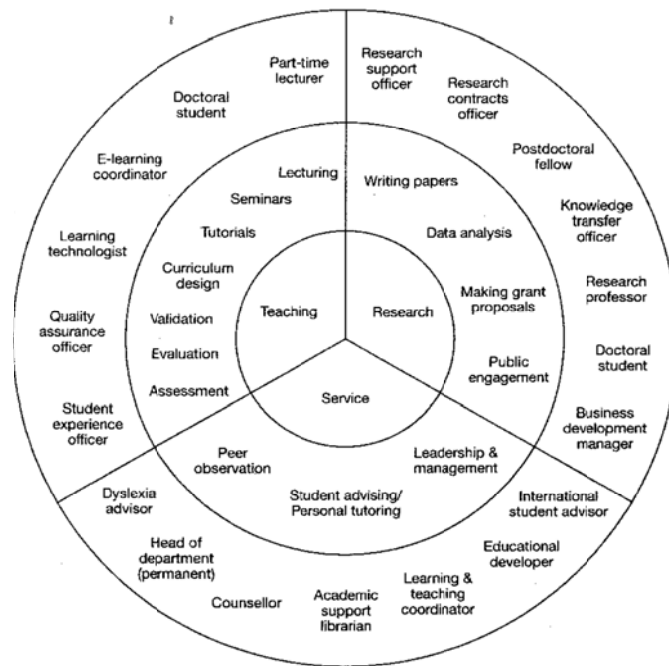


Figure 1. Types of para-academics in higher education.

Para-academic positions have evolved not simply because of the knowledge-expansion of professional support staff (Macfarlane, 2010). A distinct need has been created for professional support experts to carry out tasks that could be considered too time consuming and of an insufficient academic focus for traditional academics to carry out on a regular basis (Coaldrake, 2000). Macfarlane (2010) offers a clear visual representation of the evolution of these changes to the support, para-academic and traditional academic positions (see Figure 2, Macfarlane, 2010).

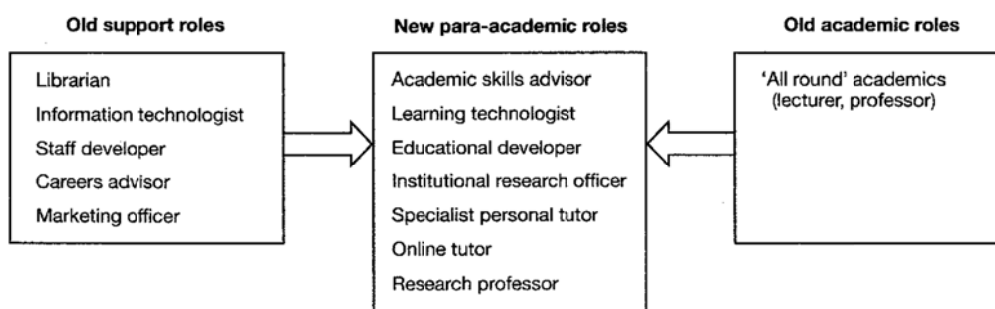


Figure 2. Source/origin of para-academics.

A 1997 inquiry into the United Kingdom higher education sector commented that ‘Clearly the role and profile of administrative and support functions in higher education has altered quite considerably over recent years. Many staff have found themselves taking on higher levels of responsibility and playing an increasingly central role in the delivery of higher education’ (Dearing, 1997).

Acting on several long-term and planned University initiatives, the GIHE introduced three para-academic positions to assist in the achievement of key strategic initiatives (Griffith University, 2008,

p.6). The creation of the blended learning consultant, curriculum support officer, and manager, teaching quality enhancement positions provide an exploratory introduction to this topic. Each of these positions is intrinsically involved in the support of the University's strategic initiatives (Griffith University, 2008, p.16).

## **METHODS**

The qualitative method used in the collection of data for this paper involved the initial identification of appropriate GIHE staff, and one brief round of interviews to establish an understanding of the individual and of the positions. Three GIHE para-academics were interviewed for this paper as a starting point for what may be a basis for data collection and the development of future papers.

## **DISCUSSION**

### **Exploring the position: Blended Learning Consultant**

A 'blended learning' style of teaching encourages academic staff to utilise various educational styles such as those involving information and communication technologies (ICTs), mixed with media and educational resources, multiple methods of teaching, a range of learning types, and face-to-face communication (Griffith University, 2009a). Griffith University has acknowledged the value a blended learning style of teaching and learning can add to the climate of academia (Griffith University, 2009b).

The GIHE blended learning consultant position commenced in November 2009 and was created in direct response to a strategic initiative from the University's Deputy Vice Chancellor (Academic). The consultant operates in collaboration with four Group-based blended learning advisors who seek to generate a higher usage of ICTs in both the teaching and learning environments throughout the University. The position is responsible for providing professional development information and instruction to groups of staff. A vignette of how the appointee to the blended learning consultant position views this role follows.

I do not consider this to be a traditionally-held academic position in terms of undergraduate/postgraduate teaching. Whilst I do not convene or moderate a course or professional development program, there is responsibility to contribute to the developmental design and delivery of components of these programs.

I recognise there may be concern throughout the University's academic community that similar positions are being created at the expense of traditional academic roles. However, this position should free the GIHE academics from tasks that whilst important in themselves, are time consuming and are not considered of a sufficiently high standard to be called quality academic work. Whilst recognising this position allows GIHE academics the opportunity to continue to pursue valuable research, teaching or service-related activities, I suggest it may take some time to be positively accepted throughout the University's academic community.

You have to be honest and upfront about who you are, and what you are doing here. Establishing credibility and respect with academic colleagues within GIHE is a matter that needs careful acknowledgement.

### **Exploring the position: Curriculum Support Officer**

As Whitchurch (2009) explains, a future direction for a university, and one which may become more prevalent, is that of an altered organisational format where more staff work on specific projects and portfolios, outside of the accepted academic or professional structure.

The curriculum support officer position was established as a twelve-month seconded position, commencing in February 2010. Primary objectives of the position are to assist GIHE (deliver to the University) ‘...in the areas of teaching and curriculum development and quality enhancement, professional development of teaching staff engaged in curriculum development, other key activities including GIHE representation in Group or School Communities’ (Griffith University, 2009c). A vignette of how the appointee to the curriculum support officer position views this role follows.

I see the essence of this position as one of offering support to GIHE senior academics, allowing them time to undertake more traditional academic activities, such as conducting teaching and research at a higher level. This ultimately saves the senior academics’ time, and provides them with the opportunity to operate in accordance with their qualifications.

Finding new ways of supporting and engaging academics whilst meeting targeted objectives is central to the way I see this position. Providing the opportunity for such objectives to be met, also allows me to further extend my personal knowledge base and expertise.

This extremely supportive assessment of the curriculum support officer position is reinforced by The National Committee of Inquiry into Higher Education (1997); ‘They took tutorials, seminars and even gave lectures in order to free academics for other things.’ Similarly, Gordon and Whitchurch (2007, p.17), Conway (1998, p.1) and Dobson (2000, p.209) recognise the institutional value of a position like this, where professional staff work in conjunction with academic staff. The mixing of academic and administrative roles and responsibilities can also help to provide a flexible workforce who provide an institutional context for ‘...complex knowledge environments’ (Gordon & Whitchurch, 2007, p.16).

### **Exploring the position: Manager, Teaching Quality Enhancement**

Communication and ICTs are central to the continual blossoming of the education industry (Cunningham, Ryan, Stedman, Flew, Tapsall, Bagdon & Coaldrake, 2000). A primary responsibility of the manager, teaching quality enhancement is to manage GIHE’s communication tools and activities designed to improve the quality of learning and teaching at the University. The position is a full-time continuing role that commenced in November 2007. Additional positional responsibilities include supporting the University’s strategic initiatives such as responding to key recommendations from the 2006 GIHE Review, and supporting academic staff with the development of Australian Learning and Teaching Council (ALTC) and institution-based applications for awards and grants. A vignette of how the appointee to the manager, teaching quality enhancement position views this role follows.

I see the fundamentals of the position as that of a University relationship broker; the bridge and network builder between GIHE and the rest of the University – a type of two-way conduit for GIHE and the wider University community. It follows that through this position, support for the developmental aspects of the unit, as well as the delivery of grass-roots feedback to inform staff of the requirements of Griffith University academics is offered. As a communications support role, I understand the capacity this position has to free up academic staff to provide them with the opportunity to concentrate on the higher-level teaching and research aspects of their work.



In the past, academics in higher-level positions would be responsible for investigating the applications of award and grant writers to ascertain names to put forward for recommendation. The position of Manager, TQE develops and delivers the professional assistance required to apply for awards and grants, and to then make recommendations for senior academics to make final decisions regarding submitted grants based on this professional support.

The position presents its own set of complexities and challenges as I attempt to integrate the support of process and protocol-oriented administrative staff and academics who are traditionally less involved or interested in systems knowledge. Although the position has led to issues of credibility, there is a sense that regular, respectful communication, along with collaboration and negotiation with academic and professional staff will ensure all staff are recognised for their traditional values, strengths and contributions to the University as a whole.

The University-wide exposure this position allows, creates privileged opportunities to view the great work the University academics have been able to deliver because of the support given by this position.

## **CONCLUDING REMARKS**

As outlined earlier, this paper has commenced an exploration of the acceptance of para-academic or professional support staff within the academic development unit of Griffith University. It could be concluded from the data collected that these staff value the positions they play within the University, and also that they see these positions as being strategically implemented, purpose-driven, and fundamentally important to the value of the work carried out by the University.

A further conclusion is the acknowledgement from the three para-academics that these positions cannot be categorised as traditional academic roles, but that they are positions which are accepted throughout the University. In addition, each para-academic remains highly committed, enthusiastic and supportive of the position and its place within the complex University environment - providing a unique opportunity to be 'in-tune' with both professional and academic elements of the University.

It could also be concluded that traditional academic acceptance of these para-academic positions is strong, both at Griffith University and at the GIHE, given the support offered by the University to GIHE's ongoing and future direction. Further analysis regarding the depth of the GIHE academics' support of the para-academic could assist in the development of this concept. Coaldrake (2000, p.28) suggests that elements of University life, including academic and para-academic positions, has altered over many years and will continue to do so, offering an increased capacity for these positions to apply profound institutional knowledge and an ability to develop further into the future.

## **ACKNOWLEDGEMENT**

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# **ARE WE MISSING SOMETHING? BENCHMARKING A SUITE OF UNIVERSITY POLICIES**

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## **ABSTRACT**

This paper outlines the process and outcomes of a review of the University of Western Sydney's policies to ensure proper levels of coverage, compliance and approval pathways within its policy suite. Benchmarking of publicly available information was used to ascertain whether the University of Western Sydney's policies provide sufficient protection for the university given the range of issues related to its operation. In addition, the project examined policy approval processes and compliance mechanisms in another higher education organisation and compared these against similar processes at the home institution. Outcomes identified inconsistencies in policy coverage in relationship standards between the university and students, and potential business risk exposure; and the approval authority instruments.

Keywords: policy, benchmarking, review and evaluation, risk management.

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## INTRODUCTION

University policy documents generally concern themselves with internal matters relating to the principles on which the institution stands, management of exposure to risk, and to interpret and apply legislative requirements. The process for setting university policy is usually enshrined in the legislation that enacts the university. A governing body such as a council or board is given the overall responsibility of setting the organisation's policies. Other sub-committees or positions, such as an academic board or a Vice-Chancellor, may be delegated certain policy responsibilities within the university's act or by-laws.

The policy development and approval regime can determine the shape of an institution's policy suite, however, a number of other factors influence an organisation's policy profile (Althaus, Bridgman, & Davis, 2007, p46). Within the tertiary education industry, the strategic direction of the university effects its policy decisions and needs. External influences such as sector reform or government policy and new legislation can also impact on internal university policy. Expectations of staff, students and society in general change over time; policy can guide this change or be reactive to these external pressures. Universities also need to be responsive to critical incidents, and to be risk resilient. Policy development processes such as policy life cycles like those outlined by Althaus et al. (2007, p37) and Hatwell & Jensen (2008), assist organisations to respond to internal and external issues. Review processes assist in ensuring that policy documents meet the contemporary requirement of the organisation and its stakeholders (Althaus et al. 2007, p190).

In 2010, the Policy and Governance Unit at the University of Western Sydney (UWS) undertook a project to review comprehensively its policy suite in order to determine the currency of its policy profile. The objectives of the project were to ensure appropriate levels of coverage, compliance and approval pathways, and to identify and action outstanding policies. The key element of the project was to compare the UWS set of policies and approval processes with those of a comparable university. The underlying theme of the project was framed around risk management; that is the UWS's potential exposure to risk through disparity in policy coverage and potential risk of inadequate approval processes. At the beginning of July 2010, the UWS had 182 policy and related documents such as procedures, guidelines and plans, on its policy website. These policy documents cover the myriad issues faced by a modern university, ranging across academic rules and procedures, setting behavioural standards, meeting legislative requirements, governance processes, health and safety, matters relating to working at the University, and privacy, security and risk management. These documents represent the evolution of the University's policy suite since the amalgamation of its three former federated members, and their various policies, in 2000. The historic versions of current policies listed on the UWS policy website tracks the changes in policies since that time.

The policy review process at UWS is managed through its policy document management and development system, the Policy DDS. Every policy has a set review date, usually three years after publication but this can vary depending on the type of policy. The Policy DDS system auto-generates a review notification to the responsible manager four months before the date of review. The relevant manager reviews the policy for currency and institutes any required action such as minor amendments or a full review. A senior executive must approve the outcome of the review. Individual units have responsibility for policy development within in their portfolio, with the Policy and Governance Unit managing the policy process centrally. The Policy and Governance Unit also provides policy development support and resources to managers. In terms of policy development support, the Policy and Governance Unit (2009) encourages policy reviewers to consider the policy in terms of the full policy suite and the sector generally. Good policy review practices also include looking at similar policies and at best practice in the industry (Hatwell & Jensen, 2008). Whilst under the review process individual policies at the UWS are considered in terms of what is happening in the sector, the overall policy requires review in terms of industry practice from time-to-time.

## **METHOD**

A benchmarking process was determined to be the most suitable method in which to undertake the review. Benchmarking is a mechanism used by organisations to improve performance by identifying and adapting best practice (Stapenhurst, 2009, p6). It usually relates to business performance -faster production, reduced costs, higher quality, increased competitiveness and so on - by collecting and analysing a range of operational data. In terms of the policy suite review project, benchmarking may not have seemed the obvious method in which to undertake the comparison. However, as a standardisation analysis, the processes underpinning benchmarking can be adapted to identify a partner organisation, to collect and analyse information, and to assist in identifying gaps.

### **Selecting a Benchmarking Partner**

In selecting a benchmarking partner, it is common to develop selection criteria (Andersen & Pettersen, 1996, p41). Cook (1995, p13) notes that as benchmarking is usually a measure of one organisation's performance against the best practice of another organisation, generally a leader in the field is sought as the benchmarking partner. As this review was devised as a desk-based project, only information in the public domain could be used so whilst best practice was important, other criteria were developed, as follows (in no particular order):

- 1) Location - A NSW-based university to account for the same state legislative requirements,
- 2) Accessibility - A large range of policy and related documents were readily available on the university's public website,
- 3) Policy Development Process - The university's policy development process was available online, and was consistent with a mature policy development framework, and that the majority of policies listed were developed under that policy development process,
- 4) Best Practice - some recognition of best practice in the sector.

In addition, a multi-campus profile was determined to be important but not essential.

A desk-based audit of other NSW university policy websites was undertaken to determine suitability in terms of the criteria. Whilst all NSW universities list policies on their websites, many did not meet criterion three. The University of Technology Sydney (UTS) and the University of Wollongong (UOW) websites were the two most suitable based on the criteria. The UOW was selected as the benchmarking partner because Freeman (2010) rated the UOW's policy framework as best practice, with its policy website rating highly among the 13 institutions reviewed as part of that study. Finally, the UOW's strategic plan was reviewed to ensure that the potential benchmarking partner's strategic directions were not significantly different to that of the home institution. Whilst each organisation has particular foci, the strategic plans were not as different as to believe that their policy directions would be divergent. A summary of the two strategic directions are listed in Table1.

### **Collecting the Data**

In order to make a comparative analysis, the policy documents listed on each university central policy site were transferred to a number of spreadsheets. These documents included all those listed on the central site including policies, procedures, guidelines, standards, codes and legislation. Only the information available on the central policy site was used to undertake the analysis – no further information or clarification was sought. Even though the author was aware that potentially similar documents were available elsewhere on the UWS website this information was not used in the comparison process.

Information on each policy document was captured - a summary of the document, the approval authority and the category in which the home institution had allocated the document. The lists of policy documents of the two universities were compared to each other to determine whether there were certain issues covered by UOW that were not covered by the UWS policy suite. The titles of the documents, the document summaries and categories were used to establish whether there were deficiencies in policy coverage at the UWS.

Table 1 – Overview of Strategic Directions of Benchmarked Institutions

University of Wollongong*	University of Western Sydney#
<b>Mission, Vision and Principles</b>	<b>Mission, Vision, Beliefs and Values</b>
<p>To be an international University recognised for originality and enterprise in exploring, communicating and applying knowledge to enrich individuals, their communities and the environment</p> <p>MISSION Our mission is to excel through:</p> <ul style="list-style-type: none"> <li>• Research and teaching of world-class standard and impact</li> <li>• A learning environment that supports, informs and inspires our diverse student community</li> <li>• Staff initiative, enthusiasm and commitment to the University's goals</li> <li>• Collaboration and enterprise that provide innovative and timely ideas and solutions for the University and its community partners</li> </ul> <p>PRINCIPLES We share a commitment to promoting and celebrating:</p> <ul style="list-style-type: none"> <li>• Excellence through initiative, enterprise and achievements that take society forward</li> <li>• Intellectual openness and freedom of opinion</li> <li>• Integrity</li> <li>• Mutual respect and collegiality</li> <li>• Diversity of cultures, ideas and peoples</li> <li>• Indigenous perspectives and reconciliation</li> <li>• Foresight, quality and accountability as an institution</li> <li>• Community partnerships and mutual development</li> <li>• Equity and social justice</li> <li>• Responsible stewardship of the natural environment</li> </ul>	<p>Our Mission To be a university of international standing and outlook, achieving excellence through scholarship, teaching, learning, research and service to its regional, national and international communities, beginning with the people of Greater Western Sydney.</p> <p>Our Vision Bringing knowledge to life in Greater Western Sydney though community and business engagement with our learning and research.</p> <p>What we Believe in</p> <ul style="list-style-type: none"> <li>* The primacy of the student experience</li> <li>* Environmental and social responsibility</li> <li>* A vibrant and inclusive intellectual community</li> <li>* Opportunity and excellence</li> <li>* Being connected locally and internationally</li> <li>* Valuing and rewarding our staff</li> </ul> <p>Our Values UWS has a shared and explicit set of values which underpin all that it does:</p> <ul style="list-style-type: none"> <li>* excellence and quality in all endeavours</li> <li>* scholarly rigour and integrity</li> <li>* equity of access and inclusiveness</li> <li>* collegiality and participatory decision-making</li> <li>* academic responsibility and freedom</li> <li>* relevance and responsibility to our communities</li> <li>* ethics and accountability</li> </ul>
<b>Strategic Goals 2008–2010</b>	<b>Strategic Goals 2010-2015</b>
<p>Core Goals &amp; Objectives</p> <ol style="list-style-type: none"> <li>1. Excellence and innovation in learning and teaching</li> <li>2. Excellence and innovation in research</li> <li>3. Dynamic engagement with our communities</li> </ol> <p>Enabling Goals &amp; Objectives</p> <ol style="list-style-type: none"> <li>4. Students engaged with learning and University life</li> <li>5. A university of international outlook and achievement</li> <li>6. Versatile, skilled and committed staff</li> <li>7. Business capacity to advance the achievement of our vision</li> </ol>	<p>Key areas of focus 2010-15</p> <ol style="list-style-type: none"> <li>1. Create a superior and engaged learning experience</li> <li>2. Develop focused, relevant and world-class research</li> <li>3. Build organisational and financial strength</li> </ol> <p>Key Performance Indicators &amp; Current Priorities</p> <ul style="list-style-type: none"> <li>* Widening participation</li> <li>* Student retention</li> <li>* International enrolments</li> <li>* Research outcomes</li> <li>* Postgraduate load</li> </ul>

\* University of Wollongong. (2010)

# University of Western Sydney. (2010a)

Part of the original brief was to ascertain the pathways for approval of the policy documents. Accordingly, the policy documents of each institution, as listed on the central policy website, were assessed by approval authority. That is, which university governing body or position approved the document. As the relevant university Act determines the bodies within the organisation that have authority to make policy or to delegate that responsibility, both University Acts were reviewed to determine legislative variances in approval authorities. Additionally, the documents detailing the policy approval processes in each institution were compared.

The *University of Western Sydney Act 1997* (the UWS Act), the *University of Western Sydney By-Laws (2005)*, the *UWS Rules* and the *Delegations (Administrative) Policy* set the authorities for approval of policies at the University. The Board of Trustees has, under the UWS Act, the

responsibility for broad policy development but also has the authority to delegate those powers to an officer of the University or committee; and the Academic Senate has responsibility for policies relating to academic matters. The Vice-Chancellor, under the *UWS Rules* has responsibility to develop policies on administrative and financial matters, and under the *Delegations (Administrative) Policy* has delegation to approve policies. UWS also has the *Policy, Procedure and Guidelines Policy*, which advises that the policy approval authorities are the Board of Trustees, the Academic Senate and the Vice-Chancellor.

The *University of Wollongong Act* (the UOW Act), the *University of Wollongong By-Laws (1991)* and its policy on *Delegations of Authority Policy* provide the authorities for policy approval. Under the UOW Act the University Council can delegate its responsibility. The Administrative Committee is a formal committee of the University Council delegated with particular responsibility for monitoring policies and performance including making recommendations on administrative policies. The Administrative Committee is also able to approve administrative policies. The UOW's *Standard on UOW Policy* advises that the University Council and/or the Administrative Committee is required to approve new policies, except where that responsibility is delegated by the resolution of the University Council.

The definitions of the two institutions' policy document titles were compared to each other to ensure that the analysis was actually comparing "like to like". Table 2 shows that the definitions as outlined in the relevant university's "policy document" policy. The UWS limits its policy documents to policies, procedures and guidelines but the UOW also has codes, standards and rules. Although guidelines are not defined in the UOW's *Standard on UOW Policy*, many guidelines were listed on the central policy website. The UWS's site included plans, which were undefined.

Table 2 – Definitions of the Policy Titles of the Benchmarked Institutions

University of Wollongong*	University of Western Sydney#
<p><u>Code of Practice or Conduct</u> - a statement of rules and expectations which have been approved in some formal way but without the legal force of legislation or regulations. They focus on duties and responsibilities for particular circumstances, often outlining the required standard of behaviour.</p> <p><u>Policy</u> - a statement that outlines non-discretionary governing principles and intentions in order to guide University practice. Policies apply to the University as a whole. They comply with all relevant legislation and rules and shall be approved by the highest delegated authority being the University Council and/or Administrative Committee.</p> <p><u>Procedure</u> - a documented instruction that gives directions to carry out specified actions. For the purposes of procedures that support policy, they are mandated directions.</p> <p><u>Rule</u> - an authoritative, prescribed direction for conduct. Rules are made in accordance with the UOW Act and are approved by the University Council. They have the same force and effect as By-Laws.</p> <p><u>Standards</u> - dictate an action in particular circumstance or the state of affairs on a particular issue. They establish a precept from a recognised authority with no deviation. Standards may be established internally, but also externally and be adopted by the University. Standards which have University wide effect have the same status and requirements as Policy.</p>	<p><u>Guideline</u> - a statement that is advisory or explanatory in nature and provides guidance on how University policies and procedures might best be implemented or applied.</p> <p><u>Policy</u> - a statement that sets out the University's official position in relation to a particular issue and any mandatory requirements.</p> <p><u>Procedure</u> - a statement that sets out the University's standard and required practice for implementation of a University policy.</p>

\* University of Wollongong. (2007)

# University of Western Sydney. (2006a)

## RESULTS

### Analysing the Data

UWS has many more policies than UOW (158 versus 88), however, the documents relating to procedures are much reduced (7 versus 28). Similarly, UWS has fewer guidelines listed – 11



compared to 37. The *UWS Policy Template Structure* explains that the policy template has five sections: purpose and context; definitions; policy statement; procedures and guidelines (University of Western Sydney, 2006a). Accordingly, a UWS policy may also include either or both procedures and guidelines in the relevant sections of the policy. The UWS has no documents defined as a standard, code or rule because there is no scope for these document types within the *UWS Policy, Procedure and Guideline Policy*; only policies, procedures and guidelines are mentioned (University of Western Sydney, 2006b). Although Clause 44 of the *UWS By-Law 2005* does refer to making of rules, a rule is not a defined document type (NSW Legislation, 2005). There are some documents listed on the UWS central policy website that by their title might suggest a standard, code or rule, such as the *UWS Code of Conduct* and the *UWS Doctor of Philosophy Rule* but these are classified as policies (University of Western Sydney, 2010b). For the purpose of this analysis, policies of UWS are treated as equivalent to the codes, policies, rules and standards of UOW.

At each institution the documents were classified as per the type of document listed in Table 2; the number of documents in each type are listed in Table 3 for both universities.

Table 3 - Type of Policy Documents at the Benchmarked Institutions

	University of Wollongong	University of Western Sydney
Guidelines	37	11
Legislation	2	3
Plans	0	3
Policies	88	158
Procedures	28	7
Rules	5	0
Standards	4	0
Codes	9	0
Total	173	182

Each university classified the documents listed on their central policy website by a category, generally relating to a broad component of the University's business, as a "quick link" or search option. UWS has one additional category (Community Relations) containing five documents and there were 16 documents on the UOW website that were not categorised. However, the nine other categories are reasonably similar in both name and number of documents. The exception is the UOW category "Facilities and Services" and UWS category "University Premises". The UWS category "Behaviour and Standards" does cover equity-based policies and therefore is considered similar to the UOW category "Equity and Diversity". The documents are classified by each University into a category and these are listed in Table 4.

Table 4 - Categories of Policy Documents at the Benchmarked Institutions

University of Wollongong		University of Western Sydney	
Equity and Diversity	10	Behaviour and Standards	15
Facilities and Services	2	University Premises	13
Finance and Internal Audit	16	Financial Management	16
Governance	12	Governance and Management	14
Information Technology	17	Information Technology	10
Learning and Teaching	46	Learning at UWS	37
Occupational Health and Safety	5	Health and Safety	10
Research	16	Research	22
Staff	33	Working at UWS	40
Not Categorised	16	Community Relations	5

Of the 173 documents on UOW central policy website, UWS had at least one document covering the same or similar issues of 136 of those policy records. This meant that there were 37 UOW documents not covered by a similar UWS policy document. The categories of those documents are listed in Table 5. UOW has four codes that are not covered by any UWS document. These were the *Code of Practice – Casual Academic Teaching*, *Code of Practice – Students*, *Library Code of Conduct* and the *Code of practice – Student Professional Experience*. These might reasonably be considered to be the sort of document covered by the UWS category “Behaviours and Standards”. UWS had 59 documents that did not cover issues at UOW. These were predominantly in the categories of “Working at UWS” and “Learning at UWS”. An analysis of these documents has not been included as this was not part of the brief for this project but could be the basis for further investigation.

Table 5 – UOW Policy Documents Not Covered by a UWS Policy Document

Category		Type of Documents	Code and Policy Document Titles
Finance and Internal Audit	2	2 Policies	Business Continuity Policy Project Management Policy
Governance	2	2 Policies	Production of Marketing Material and Use of UOW Brand Policy Quality Assurance Policy – UOW Administration
Information Technology	5	2 Policies, 2 Procedures, 1 Guideline	IT Server Security Policy IT User Account Management Policy
Learning and Teaching	9	3 Codes, 3 Policies, 3 Guidelines	Code of Practice – Casual Academic Teaching Code of Practice – Students Library Code of Conduct Ethical Objection by Students to the Use of Animals and Animal Products in Coursework Subjects Fees Policy Information Literacy Integration Policy
Occupational Health and Safety	1	1 policy	Smoke Free Policy
Staff	7	1 policy, 3 procedures, 3 guidelines	Development Program Assistance Policy
Not categorised	9	1 code, 6 procedures, 1 guideline	Code of Practice – Student Professional Experience

In analysing the policy approval pathways for both institutions, only the “policies” were considered. For UWS, the approval process for policies was reviewed; for UOW, the approval process of codes, standards, rules and policies was examined. Procedures and guidelines were not included in the assessment of the approval pathways. The UWS Board of Trustees approved 12 of the 158 policies at UWS; the policies were in the categories Behaviours and Standards, Financial Management, Governance and Management, and Working at UWS. The Academic Senate approved 40 policies in two main categories – Teaching and Learning, and Research –, both of which are in their portfolio. The Vice-Chancellor approved the remaining policies, 106 over all categories. If the Academic Senate approvals are included in the Board of Trustee’s tally, the Board has approved approximately 40 per cent of University policies.

Eighteen policies on the UOW central policy website were not available for viewing without a password and therefore some of the details of the documents could not be discerned. This included the approving authority, and therefore these were excluded from the investigation. This left a balance of 106 documents. The UOW University Council approved all nine codes, all five rules and two of the four standards and 36 of the policies. These documents were in all categories. The Academic Senate approved three policies and one standard in the Learning and Teaching category. The Administrative Committee approved one standard and 18 policies in a range of categories but not in Learning and Teaching. The Vice-Chancellor approved 11 policies, almost all in Information Technology and the Pro Vice-Chancellor (Information Technology) approved one policy, also in the category of Information Technology. Including the Administrative Committee as a standing committee of the University Council, the University Council approved 67 per cent of all codes, policies, rules and standards at UOW.

## **DISCUSSION**

The project scope was to ensure appropriate levels of coverage, compliance and approval pathways, and to identify and action outstanding policies. The results highlighted two important points in relation to the list of policy and related documents located in the UOW's policy directory. The first was that the UOW had established a number of codes of practice that were based on enhancing the student experience and maximising students' potential. In addition, the UOW has codes of conduct for students which the UWS does not as yet have. Such codes are important in establishing the University's expectation of both students staff. The second was that UOW has a number of policies related to risk management such as the *Business Continuity Policy* (business risk), the *Production of Marketing Material and Use of UOW Brand Policy* (brand risk) and the *IT Server Security Policy* (information risk) that UWS does not. Additionally, the UWS *Risk Management Policy* has not been reviewed since 2007 (University of Western Sydney, 2010b). These areas represent gaps in the UWS policy suite that should be further explored.

In terms of the policy approval pathways, the highest approving body at the UOW, the University Council approved about two thirds of all codes, policies, rules and standards, whilst at UWS approximately the same amount of policies are approved by the Vice-Chancellor. The UWS Board of Trustees only approved two fifths of all policies. Whilst the Vice-Chancellor does have responsibility for developing policies in administrative and financial areas, the policies approved by the Vice-Chancellor have extended to all categories of policies. Given the difference between UOW and UWS, the policy approval pathways at UWS require further investigation to determine whether the policies currently approved with authority by the Vice-Chancellor should be submitted to the Board of Trustees for approval. This may include exploring whether policy approval responsibilities could be delegated to standing committees of the Board of Trustees, or a particular standing committee established and charged with policy development and approval responsibility, similar to the Administrative Committee at the UOW. Those policies, in particular, where the Vice-Chancellor has a specific role identified within the policy, should be considered in this process to ensure segregation of duties.

## **CONCLUSIONS**

A benchmarking project comparing the policy documents listed on the central policy websites of UWS and UOW identified disparities between the UOW and the UWS policy suites. Primarily, UOW has a number of codes of conduct or practice relating to expectations of students and their experience, whereas UWS does not. Also, UOW had three policies addressing areas in which the university might be exposed to risk that were not covered in the UWS suite of policy documents. Furthermore, the defined approval trail at the UOW resulted in the majority of policy type documents being approved by the University Council or one of its standing committees. However, at UWS the majority of policies are approved by the Vice-Chancellor. Based on these outcomes, the specific differences in policy coverage should be more closely examined with a view to actioning any outstanding policies. The differentiation in policy approval also requires a closer investigation of the policy content to determine whether an alternative approval authority, such as the Board of Trustees, or a standing committee, is warranted. There is the opportunity to undertake further examination of appropriate policy coverage by expanding the review to consider policies within each category, and to benchmark with a wider number of institutions, including overseas.

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Mrs Lyn Alderman is the Manager of the Curriculum Review and Improvement Team within the Office of Teaching Quality at Queensland University of Technology. This role involves two main areas: the course quality assurance cycle and working with course teams where their course is identified as ‘underperforming’. Previous employment has included curriculum development within the discipline of architecture at the University of Newcastle and project management for assessment at Swinburne University of Technology.

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