RESEARCH AND DEVELOPMENT SERIES

Departmental Leadership of Teaching in Research-Intensive Environments

Final Report

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Christopher Knapper, Queen's University, Canada
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Leadership Foundation
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CONTENTS

1. EXECUTIVE SUMMARY

This study involved two departments in each of eleven world-class, research-intensive universities in eight countries. The departments were all chosen because they were demonstrably excellent at teaching. Detailed case studies were undertaken to identify the role, if any, of departmental leadership in creating and supporting the excellent teaching. Nineteen case studies were produced, covering a wide range of disciplines and context. Five of these are offered as source material in Appendix four.

Four conceptual frameworks were used to help analyse the case studies, examining whether change was planned or emergent, the form the organisational culture took[1], the conception of leadership of teaching held by the head or chair[2], and the form of dispersed leadership evident[3].

LEADERSHIP ACTIVITIES IDENTIFIED

Nine clusters of leadership activity associated with the support of excellence in teaching were identified, with a number of variants of each:

- Establishing credibility and trust.
- Identifying teaching problems and turning them into opportunities.
- Articulating a convincing rationale for change.
- Devolving leadership.
- Building a community of practice.
- Recognising and rewarding excellent teaching and teaching development.
- Marketing the department as a teaching success.
- Supporting change and innovation.
- Involving students.

Outstandingly good teaching across a whole department was found to be a somewhat elusive phenomenon and was clearly not the norm, even in the participating world class universities. The departments and the leaders studied here are therefore unusual, and the form leadership of teaching took in these departments might be different in important respects from that observed in studies of departmental leadership not based solely within excellent teaching departments.

THE ROLE OF LEADERSHIP

Excellence in teaching took many different forms, and in particular there were marked differences between departments that emphasised fine tuning of largely traditional methods under the autonomous control of individual academics, and departments where a radical innovation had been planned and implemented as a collaborative venture. Effective leadership of teaching was found to take markedly different forms in such different contexts.

In two cases there was little evidence of leadership playing a major role in creating teaching excellence, but in all other cases leadership appeared important and in many it was pivotal.

Leadership associated with excellent teaching was found to be multi-faceted. Several cases displayed examples from almost every 'cluster' of leadership activity. These cases tended to involve a comprehensive planned innovation to address an identified problem. A few cases displayed a form of 'non-leadership' involving maintenance of a culture that valued teaching and students but almost no overt leadership efforts to develop teaching.

Few or perhaps none of these individual 'leadership of teaching' activities can be considered essential for excellent teaching. Rather, effective leadership of teaching was seen to involve different combinations of these characteristics in different contexts.

The heads in the departments studied were unusually likely to have been respected for their outstanding teaching or to be teaching award winners at institutional or even national level. This must be an unusual phenomenon in research-intensive departments but it may be important for the development of teaching in such contexts. Where leaders did not have such personal credibility as excellent teachers they had enlisted the support of others who did have this credibility.

Dispersed leadership was evident in every department. Leaders never created excellent teaching on their own. However despite the common collegial culture, 'cultural' dispersal of leadership in which individuals spontaneously and autonomously take action to develop teaching was rare, while formal allocation of teaching development roles or duties to individuals was very common.

TERMS OF OFFICE

Heads of department in research-intensive universities are usually appointed or elected for a single term of office lasting three to five years. In quite a few of the cases excellence in teaching had been developed progressively over an extended period of time. The examples involving radical innovation had sometimes taken the equivalent of two or three terms of office

1 McNay (1995)
2 Ramsden (1998)
3 McBeath et al (2004)

of a departmental chair. In examples involving emergent change the pattern of leadership of teaching had sometimes been established decades before and the current head had been selected so as to maintain that pattern. There were no examples of a head being responsible for bringing about excellence in teaching within a single term of office. This is an important finding that has implications for the way departmental heads are appointed and their terms of office determined, and also for the timescales of institutional teaching development initiatives that heads are sometimes expected to respond to.

THE IMPORTANCE OF DEPARTMENTAL CONTEXT

Patterns were evident in the relationship between context and leadership. We assumed that large departments would tend to adopt more strategic and managerial approaches to achieving excellence but this was not found to be the case. Emergent change and planned change was just as common in small, medium and large departments. There were also no systematic differences found between departments in universities in the UK and Australia, Europe and North America. Their research-intensiveness was their dominant characteristic, not their national context, although national contexts generated different kinds of educational problems that leadership sought to tackle.

In contrast, the academic discipline was found to have a profound affect on the form of leadership of teaching and the form of educational change associated with excellence in teaching. Change was much more likely to be emergent than planned in Humanities and Social Science. No examples of emergent change were found in Science. An entrepreneurial organisational culture and approach to change was much more common in Professional subjects. Any advice about leadership of teaching should take into account these disciplinary characteristics and cultures or it is likely to risk being not just irrelevant but wrong. Heads should be very wary of generic conclusions about leadership of teaching.

Most departments were identified as having a predominantly collegial culture and this provided a context for the form leadership of teaching took. However a third of these departments also exhibited features of an entrepreneurial culture at the same time. Bureaucratic and corporate cultures were not common.

EXPERIENCE OF A PROBLEM

Experiencing a significant problem or challenge (such as a negative external review or even the threat of removal of professional accreditation) was found to be virtually essential if a process of planned change was to be adopted. Conversely every example of emergent change was associated with no experience of a problem. An entrepreneurial culture was common where there had been a problem and a collegial culture where there had been no problem. In at least two of the universities the 'problem' was university-wide rather than restricted to the department concerned. McNay's characterisation of academic organisational cultures was very helpful in understanding what form of leadership and change was taking place, and the motor that drove cultures and leadership to change in style was the existence of a problem. The role of the leader appeared to be to 'name' the problem, face up to it, and to mobilise colleagues to see addressing the problem as an opportunity. Sometimes the problem had sat unattended to by previous heads for some years. The relatively well resourced university contexts, high research standing and high quality of students in these departments meant that severe problems were less prominent in many cases compared with departments in other kinds of universities. In such contexts the development of teaching could be seen to be value-driven rather than problem-driven.

INVOLVEMENT OF STUDENTS

Conceptions of leadership of teaching of the heads studied here were much more sophisticated than those reported by Ramsden[4] with about 85% of the leaders studied expressing a "focus on teaching emphasising the students' experience of studying in a continually changing and developing curriculum" compared with less than 10% of leaders in previous studies (that have sampled departments of varying degrees of teaching excellence). This finding provides strong support for the notion that such a conception of leadership is associated with teaching excellence.

4 Ramsden (1998)

2. INTRODUCTION

This final report is based on a study[5] of the best teaching departments in a network of world-class research universities[6]. The study was conducted because it had been observed that where very high quality teaching could be seen in these universities it emerged from within departments, rather than being initiated from the centre, and the universities in the network wanted to understand how departments had managed to create such an environment.

This report contains the materials that participants on various seminars and workshops run for heads of department in research-intensive universities found most interesting, and helpful. Included, particularly, is a selection of detailed case studies that, instead of providing rather general advice on leadership of the kind readily available in books on leadership, sets the actions of heads of department in context, and focuses on leadership of teaching rather than on leadership in general.

THE STUDY

Full details about the methodology can be found in Appendix 1.

The focus of attention of this project was on departmental leadership of teaching in research-intensive university environments. By 'leadership of teaching' we mean all those activities undertaken by the chair of department or others that contribute to the teaching environment within which teachers operate, in such a way that teaching and student learning is enhanced. Our starting assumptions were that leadership of teaching is distinct from departmental leadership in general and that leadership of teaching in research-intensive departments is distinct from that in what might be termed 'teaching-intensive' departments.

Two departments in each of eleven universities were studied. The universities were members of an existing network of universities that meets to discuss how to support teaching in intensively research-oriented environments. Only departments which were considered to be quite outstanding at teaching were deemed eligible for inclusion, so that it might be possible to identify leadership that had demonstrably worked. A range of internal and external performance indicators were used to identify departments exhibiting teaching excellence. Visits then took place involving a range of interviews with the head, other key academics including course directors and past heads, teachers and students, with the aim of identifying what role, if any, departmental leadership had played in creating and supporting the excellent teaching. The focus of attention was on what heads and others had actually done rather than on the personal characteristics they displayed. Lengthy case reports were written up and checked for accuracy and completeness with the departments involved. The case studies were then analysed by identifying similar phenomena across different cases and contexts, and a parsimonious list of activities of effective leadership of teaching was produced. Key case report findings were recorded, and are summarised in Section 4, and the leadership activities are elaborated in section 5, illustrated with extracts from the case studies. The abridged case studies can be found in Appendix 4.

One reason for studying departments in research-intensive environments is that they are often characterised by 'traditional' teaching. While 'teaching-intensive' universities in the UK have made significant progress in implementing institutional learning and teaching strategies[7,8], progress has been much less rapid, extensive or securely embedded in research-intensive institutions where the collegial organisational culture mitigates against bureaucratic and corporate approaches to management[9]. Previous case study visits to thirteen research-intensive universities in ten countries[10] found that while there were some examples of institution-wide strategic development of teaching, in many contexts what teaching development could be seen was the result of initiatives within departments, partly or wholly independent of the centre. Furthermore, institution-wide initiatives tended to emerge from successful initiatives from within an individual department, rather than the other way round. Change in teaching was very often 'emergent' rather than centrally-driven and this reflects literature describing 'bottom-up' change in teaching that develops from relatively small-scale local initiatives[11]. In higher education, and especially in collegial, research-intensive universities with highly devolved organisational structures, departments and programmes are the key organisational units when it comes to understanding change[12,13]. If we are to understand the development of teaching in such research-intensive contexts we need to study departmental leadership of teaching.

5 Departmental leadership for quality teaching – an international comparative study of effective practice http://www.lfhe.ac.uk/research/projects/gibbsoxford.html/
6 MIT, Oxford, Stanford, Helsinki, Oslo, Lund, Edinburgh, Utrecht, Sydney and Leuven
7 Gibbs (2003)
8 Gibbs et al (2000)
9 Hefce (2001)
10 Gibbs (2005)
11 Huberman (1993)
12 Trowler & Knight (2001)
13 Trowler et al (2003)

3. IDEAS ABOUT LEADERSHIP OF TEACHING

This section introduces some key ideas from the literature that are useful in making sense of the case studies of departmental leadership of teaching in Appendix 4.

FOCUSSING ON LEADERSHIP ACTIVITY OR TACTICS, RATHER THAN LEADERS' CHARACTERISTICS

Much of the literature on leadership in general and of leadership of academic departments in particular, focuses on the leaders themselves and their characteristics. Lists of these characteristics are long and intimidating. A recent review of these studies came to the "inescapable conclusion that department leaders need to be good at pretty much everything"[14]. This is potentially unhelpful partly because there is little distinction between the relative importance of these many characteristics and partly because they may be difficult to emulate or develop. If you are not already 'charismatic', for example, there is probably little you can do about it. In addition, academics do not share leaders' perceptions of what makes for good leaders[15]. For example, one study found that 'charisma' was rated very highly by department heads but viewed comparatively negatively by those being led[16]. This report focuses therefore not on what leaders are like, but on what they do. It will provide accounts of leadership activity that it may be possible for other heads to emulate.

FOCUSSING ON EFFECTIVE LEADERSHIP

The link between lists of leadership characteristics that can be found in the leadership literature, and departmental effectiveness, is rarely established[17]. Most studies of leadership start by identifying those considered effective leaders rather than by identifying successful departments[18,19]. In our study, departments have been identified that have distinctively excellent teaching and then studied to explore what role, if any, leadership played in creating this excellence. The focus is on the role of leadership in the creation of excellence in teaching, not on the characteristics of leaders.

LEADERSHIP OF RESEARCH AND LEADERSHIP OF TEACHING

It is likely that leaders of research-intensive departments are outstanding researchers and that they know how to develop and support research. Little of the literature on departmental leadership concerns the fostering of excellence in teaching but there are indications that leadership associated with high research productivity is different from that associated with high teaching quality. For example while it has been found that more effective approaches to teaching are found where teachers are involved in decision-making about teaching[20], being in a department in which ones views are taken seriously is associated with low research productivity[21]. Good leadership may be viewed as whatever secures the resources necessary to protect time for research[22] rather than being viewed as paying attention to teaching. The studies which exist about the leadership of teaching usually focus on curriculum renewal or radical curriculum change[23,24,25] as opposed to improvements in teaching.

DEPARTMENTAL LEADERSHIP AND ORGANISATIONAL CULTURE

The organisational culture within which departmental leadership of teaching could be exercised is important given the kinds of universities involved in the study. We have adopted the conceptual framework of McNay[26] who distinguishes four organisational models that vary on two dimensions: the degree of definition of policy and the degree of control of implementation. These dimensions are crucial to understanding the extent of development and implementation of learning and teaching strategies in universities. Traditional collegial organisational structures and cultures that are common in long-established, and sometimes medieval, research-intensive universities exhibit loose definition of policy and loose control over implementation, while enterprise cultures exhibit tight definition of policy and loose definition of implementation (see Figure 1). Much implementation of learning and teaching strategies in the UK has in contrast involved tight control of implementation with or without tight definition of policy.

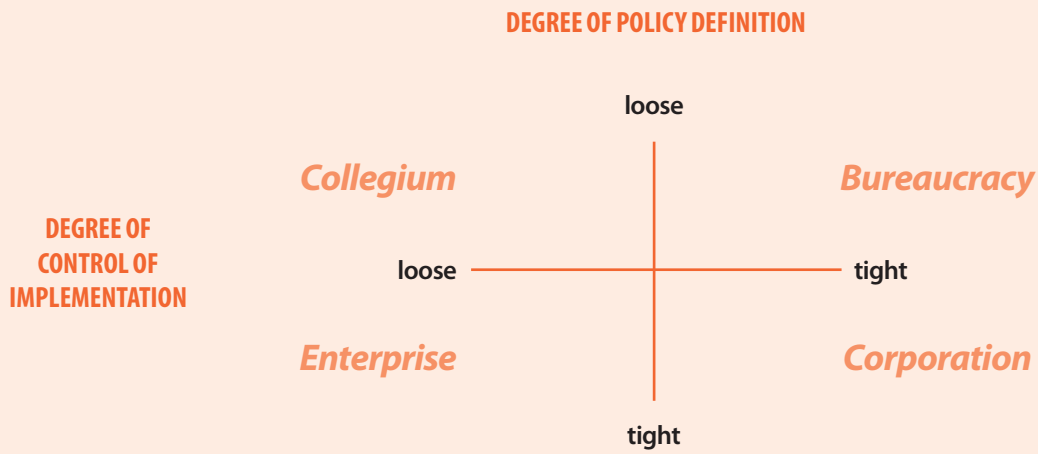
The following summaries of the four models are based on Ramsden's[27] account of McNay:

Collegial cultures are characterised by freedom to pursue university and personal goals unaffected by external control. Standards are set by the international disciplinary scholarly community and evaluation is by peer review. Decision-making is consensual, management style permissive. Students are seen as apprentice academics.

14 Bryman (2006) p8.
15 Moses and Roe (1990)
16 McGrath (2005)
17 Bryman ibid
18 Mitchell (1987)
19 Creswell and Brown (1992)
20 Prosser and Trigwell (1997)
21 Bland et al (2005)
22 Lindholm (2003)
23 Quinn (1988)
24 Stark et al (1997)
25 Stark (2002)
26 McNay (1995)
27 Ramsden (1998)

FIGURE 1

MCNAY'S FOUR UNIVERSITY MODELS



McNay, in Ramsden[27]

Bureaucratic cultures are characterised by regulation, rules, and consistency with standards related to regulatory bodies and external references (such as institutional quality assurance procedures). Evaluation is based on the audit of procedures. Decision making is rule-based. Students are seen as statistics.

Corporate cultures are characterised by an emphasis on loyalty to the department and its management. Management style is commanding and charismatic. There is a crisis-driven, competitive ethos. Decision-making is political and tactical. Evaluation is based on performance indicators and benchmarking. Students are seen as units of resource.

Entrepreneurial cultures are characterised by a focus on competence and an orientation to the outside world, involving continuous learning in a turbulent context. The management style involves devolved and dispersed leadership. Decision-making is flexible and emphasises accountable professional expertise. Its standards are related to market strength. Evaluation is based on achievement. Students are seen as partners.

Studies of perceptions of the shift over time from one organisational culture to another, within universities[28], have identified the same sequence: from collegial to bureaucratic to corporate and finally to enterprise, involving first a tightening up on implementation, then a tightening up on goals and policy definition and finally a loosening up on control of implementation while retaining clear goals. This picture almost certainly oversimplifies the multifaceted nature of organisational cultures at any one time, the different perceptions of these cultures by different individuals within them, and the ability of individuals to hold multiple and conflicting perceptions of the organisational culture at the same time[29]. Nevertheless McNay's model provides a valuable oversimplification in understanding the departmental context for leadership of teaching.

This report assumes that the forms of leadership that department heads and chairs might exert will be framed by the dominant university organisational culture, that departmental organisational cultures also exhibit this kind of variation in culture, and that this departmental culture might also change over time as a consequence of the exercise of leadership, and in the same sequence described above. The organisational context is therefore one of the foci of attention in our case studies of departmental leadership, with a particular focus on whether leadership involved a change in the organisational culture in order to develop teaching.

DEPARTMENTAL LEADERSHIP AND DISCIPLINARY CULTURE

Much of the research literature on leadership in higher education is either discipline-blind because it focuses on senior and central management and not on departments[30] or treats disciplines as background while leadership styles or conceptions are in the foreground[31]. However studies of disciplinary differences[32] do not simply describe cultural differences, they describe differences in activity systems and the way work is organised that have profound implications for the way leadership does, or even could, operate. For example,

28 Ramsden, ibid.
29 Becher and Trowler (2003)
30 Middlehurst (1993)
31 Ramsden (1998)
32 Becher and Trowler (2003)

humanities subjects characteristically involve solitary research based in libraries and an infinite variety of views about what the curriculum should consist of or how it should be structured or sequenced. Teaching is characteristically private and idiosyncratic. In contrast, science subjects characteristically involve collaborative research carried out in shared laboratories and often also have shared social spaces. The more hierarchically structured knowledge allows the possibility of agreement about the content and sequencing of curricula and the social organisation of activity makes reaching consensus more possible. Teaching is often undertaken in teams and can be public with several teachers present at the same time (for example in laboratories). There is common agreement to use the same 'problem sheets' for all parallel problem classes while in the humanities such standardisation between teachers is often unthinkable. It would be surprising if such profound disciplinary differences were not related to leadership styles and to what kinds of leadership it was practicable to attempt and what kind of change or development in teaching was possible. Large scale curriculum and pedagogic innovations, such as shifts to problem-based learning across all courses, almost always take place in professional and applied subjects rather than in the humanities. This is partly because it would be so much more difficult to agree upon any such global change in the humanities where you are much more likely to find that teaching quality is associated with a supportive teaching environment rather than with across-the-board innovation. Disciplines are arguably stronger, better defined and more central to academic endeavours in research-intensive universities. The disciplinary environment forms an important component of our case studies.

DEPARTMENTAL LEADERSHIP AND TEACHING QUALITY

The vast majority of the literature on departmental leadership contains no evidence that the methods or principles they espouse have any consequences for the quality of teaching let alone for the quality of student learning, and so we will not list these sources here. The most convincing evidence we have found of a link between leadership of teaching and both teaching and learning, derives from empirical studies involving a phenomenographic approach[33,34]. To understand the significance of these studies it is necessary to step back and examine what we know about how students approach learning, how teachers approach teaching and how heads of department create 'teaching environments' within which it is likely that teaching and learning take place in an effective way.

The following sequence of relationships from, at one end, student learning outcomes, and at the other, leadership of teaching, has involved a long series of studies going back to the 1970's[35]. These relationships have been demonstrated in a substantial number of empirical studies and the results are consistent across different countries, institutional contexts, disciplines and even methodologies.

- One of the most important aspects of how students study is their approach to learning. Students who take what is termed a 'surface approach' intend to reproduce material while those who take a 'deep approach' intend to understand material.

- Such approaches to learning are not a characteristic of the student. Most students, and especially most of the very able students in research-intensive universities, are perfectly capable of taking a deep approach and take a surface or a deep approach in response to perceived assessment demands and in response to perceived features of their learning environment.

- The approach students take has a close relationship with what they learn and how long they retain what they learn. Students who take a surface approach are likely to be able to recall facts but not to be able to understand or explain what they have memorised. Students who take a deep approach are more likely to have made sense of material and to have integrated materials from different sources. In most studies, including at the University of Oxford[36], those students who take a deep approach gain higher grades.

- Teachers can be characterised as having a 'teacher-focussed' approach or a 'student-focussed' approach to their teaching. A teacher-focussed approach involves a focus of attention on transmission. A 'student-focussed' approach involves a focus on students developing their own understanding of concepts. This distinction parallels the 'paradigm shift' from a focus on teaching to a focus on learning described by Barr and Tagg[37] in the USA and relates closely to other distinctions made in the literature about teachers' intentions[38].

- Students of teachers who take a teacher-focussed approach are much more likely to take a surface approach to their learning. A student-focussed approach to teaching has been found to be associated with a range

33 Prosser and Trigwell (1997)
34 Martin et al (2003)
35 For a fuller account see Prosser, M. & Trigwell, K. (1999)
36 Trigwell and Ashwin (2004)
37 Barr and Tagg (1995)
38 Kember (1997)

of indicators of high educational quality as experienced by students (such as good teaching, appropriate assessment, appropriate workload and independence), as well as being associated with students taking a deep approach to learning[39].

- Just as students vary in their perceptions of their learning environment, and respond in terms of their approach to learning, so teachers also vary in their perceptions of the 'teaching environment'. Teachers have been found to be much more likely to adopt a student focussed approach to teaching when they experience:

  – *Transformational leadership,* where teachers experience leadership driven by values, and engagement through collaboration, inspiration and spontaneity, trust and exemplary practice. The leader helps teachers to think about teaching problems in new ways.

  – *Clear goals and contingent rewards,* where teachers experience expectations as clear. What is considered good teaching is explicit, effort to teach well is acknowledged and excellent teaching is recognised and rewarded.

  – *Teacher involvement,* where teachers have scope to make their own decisions about their own teaching practice and also contribute to departmental decisions about the curriculum and about how teaching is undertaken.

  – *Collaborative management,* where leadership is characterised by openness and empowerment of teachers to make their own decisions. Responsibilities of various kinds may be delegated, and this delegation is managed fairly.

The concept of *transformational leadership* is prominent in general literature on leadership and is contrasted with *transactional leadership*[40] which embodies characteristics of what is termed above as 'collaborative management'. Teachers are found to be more likely to display a student-focussed approach to teaching when they experience both these forms of leadership. This echoes findings based on the Ohio school of leadership that nearly all effective leaders exhibit both 'consideration' (involving trust and mutual respect between leader and followers) and 'initiating structure' (emphasising goal-oriented behaviour)[41].

DEPARTMENT HEADS' CONCEPTIONS OF LEADERSHIP OF TEACHING

While much literature on leadership focuses on leaders' behavioural characteristics, phenomenographic studies of leadership in higher education focus on how department heads conceive of leadership – on what underlying conceptions drive their behaviour. Martin et al[42] report a study that involved interviews with heads of department about their conceptions of leadership of teaching, and interviews with teachers in the same departments about their perceptions of leadership. The heads were characterised as having one of six categories of conception of leadership:

A A focus on the bureaucratic structure and organisation of the department, imposed by the head.

B A focus on the role, responsibility and practice of the head, who imposes a model of good practice in teaching upon the teachers in the department.

C A focus of the nature and content of subjects and disciplines, which is discussed with the teachers in the department.

D A focus on the roles, responsibilities and practices of the teachers in the department, which are discussed and/or negotiated with the teachers.

E A focus on teaching that emphasises students' experience of studying, which is discussed and/or negotiated with teachers.

F A focus on teaching emphasising the students' experience of studying in a continually changing and developing curriculum. How to change and improve is the subject of systematic discussion and consultation and the head systematically establishes means to enable teachers to develop.

For example a head categorised as having conception A said: *"I've restructured the department. I've glued in place a new administrative structure, and defined better the roles and responsibilities of administrative staff and teaching staff…My role is to monitor and act. I intercede between staff and staff and staff and students, and ensure that what ought to be acted upon is acted upon."*

In contrast a head with conception F said:
"In an academic institution you gather together people of very considerable and unusual ability and the real task is to give them the opportunity to realise their capacity and that's true in teaching and that's true in research, its true in all the areas of involvement of academic staff and students. So I really see the

39 Kember and Gow (1994)
40 Bass (1990)
41 Knight and Holen (1985)
42 Martin et al (2003)

main task of leadership or management in this area as being to make constructive, collaborative decisions which allow people to get on and do great works…I'm involved in the creating of the right climate…"

In the Martin et al study, teachers perceptions of leadership of teaching were categorised as varying from no experience of leadership (because no change was seen as required) through experience of imposition, to negotiation with the leader, negotiation between teachers, and individual autonomy within a previously agreed collaborative framework. Teachers' approaches to teaching were also categorised as 'teacher focused' or 'student-focussed'. There was found to be a large positive relationship between teachers' perceptions of leadership of teaching and their approach to teaching. No teacher who perceived the leadership as transformational adopted a teacher-focussed approach to teaching. This relationship is not causal and the evidence does not mean that transformational leadership eliminated teacher-focussed approaches to teaching. It is possible that if a departmental chair finds that most or all teachers already have a student-focussed approach to teaching then this enables them to take a transformational approach to leadership, or conversely if almost all teachers already have a teacher-focussed approach to teaching this may make transformational leadership extremely difficult to implement.

This finding of a relationship between perceptions of leadership and approaches to teaching mirrors research undertaken in school settings where there are many accounts of associations between perceptions of a supportive style of leadership and higher commitment to good teaching. Effective heads, in schools, encourage discussion of teaching, observation of teaching and exploration of teaching ideas. They emphasise decision making by groups rather than by themselves and develop and communicate a shared vision and help teachers to work collaboratively towards this vision and their own educational goals[43,44,45,46]. Teachers in more effective schools (defined largely in terms of student performance) describe a teaching environment where teachers are encouraged to discuss teaching issues and where management is open and collaborative[47].

The relationship between teachers' approaches to teaching and their perceptions of the 'teaching environment' have also been studied using questionnaires: the Approaches to Teaching Inventory (ATI)[48] and the Perceptions of the Teaching Environment questionnaire (PET)[49]. Teachers are more likely to take a student-focussed approach when they perceive that they have some control over what is being taught, when their department shows support for teaching, when they have an appropriate academic workload and when their class size is not too large. Research on departmental characteristics associated with high quality student learning highlight the same variables[50] and in this sense effective leadership could be seen as whatever helps to create these departmental characteristics.

In summary, there is empirical evidence that if department leaders behave in particular ways such that teachers experience a good teaching environment (as characterised above) then these teachers are more likely to take an appropriate approach to teaching, their students are more likely to take an appropriate approach to learning, and learning outcomes will be measurably enhanced. This report provides accounts of what heads can do to create such teaching environments.

LEADERS AND DISTRIBUTED LEADERSHIP

Much leadership is shared, for example by devolving leadership tasks, dispersing leadership roles, developing the capacity for leadership in 'followers' and creating a climate in which individuals feel confident to assume leadership over some aspects of departmental work, whether or not it is formally allocated. The importance of 'distributed leadership' has long been recognised in studies of leadership of effective schools and six distinct forms of distributed leadership have been identified that may be experienced in a developmental sequence:[51]

- Formal distribution via hierarchical structures – devolving responsibilities to staff to specific roles, identifiable in an organisational diagram.
- Pragmatic distribution – via ad hoc devolution of tasks to meet demands as they emerge.
- Strategic distribution – via planned appointment of individuals to contribute to specific initiatives.
- Incremental distribution – involving giving progressively more responsibility to identified individuals as they demonstrate their growing competence.
- Opportunistic distribution – where individuals willingly take the initiative to extend their roles.

43 Beare et al (1989)
44 Donaldson (1991)
45 Harris et al (1996)
46 Leithwood (1992)
47 Ramsden et al (1989)
48 Trigwell and Prosser (1996)
49 Prosser and Trigwell (1997b)
50 Ramsden and Entwistle (1981)
51 McBeath et al (2004)

- Cultural distribution – where leadership is assumed rather than given and shared in a flexible way enabled by the local culture.

The highly devolved organisations studied here might be expected to be characterised by forms of collegiality involving 'cultural distribution' but where the leader takes little active part in making this distribution happen. In the case studies examples will be identified where different forms of dispersed leadership are described by those in the department. How capability for dispersed leadership is developed is a focus for a parallel Leadership Foundation research project[52].

DEFINITIONS OF QUALITY TEACHING: EXCELLENCE, INNOVATION AND TIMESCALES

This study focuses on two rather different kinds of quality in teaching: first, quality as progressive improvement largely within the framework provided by the existing pattern of teaching, learning and assessment, and second, quality as successful innovation, often involving radical change in curricula, teaching, learning and assessment. Studies of successful innovation in higher education highlight the role played by infrastructure blocks in preventing change (such as the lack of recognition for teaching achievements), and also the role of leadership in removing or overcoming these blocks to innovation[53].

The case studies in Appendix 4 illustrate the difference between these two forms of excellence. The Mathematics case involved progressive improvements introduced by individuals within individual courses with the support of leadership without any agreed overall change in either the curriculum or the pedagogy. There was no coherent direction to these changes. High quality was achieved by progressive tuning of whatever teachers were already doing, with much personal support. In contrast, in the Engineering case a radically new pedagogic approach was introduced, adopted by all teachers for all courses within the department, in one carefully planned large scale change project. High quality was achieved by innovation. It has been a prerequisite for a department to be included in this study for there to be convincing performance indicators of teaching quality, whether the case involved progressive tuning or innovation. Innovation without such evidence was not considered an indication of quality. In sharp contrast, there are examples in the literature of leadership of innovation in teaching leading to worse student learning[54].

52 Bolden et al (2005)
53 Hannan and Silver (2000)
54 Jones and Hassall (1996)

4. KEY FINDINGS FROM THE CASE STUDIES[55]

4.1 OVERALL FINDINGS

Outstandingly good teaching across a whole department was found to be a somewhat elusive phenomenon and was clearly not the norm even in the participating world class universities. Two universities withdrew, one identified only one department and two universities nominated departments that were later rejected on the grounds that the teaching was found not to be excellent. The departments and the leaders studied here are therefore unusual and the form leadership of teaching took in these departments might therefore be different in important respects from that observed in studies of departmental leadership that have not first identified excellent teaching departments.

In two cases there was little evidence of leadership playing a major role in creating teaching excellence, but in all other cases leadership appeared important and in many it was pivotal.

Leadership associated with excellent teaching was therefore found to be multi-facetted. The most common leadership activities involved establishing credibility and involving students. Departments varied enormously in terms of how many of the above activities were evident, from almost all of them to virtually none of them. The cases which displayed almost every sub-category of leadership activity, tended to involve a comprehensive planned innovation to address an identified problem. A few cases displayed a form of 'non-leadership' involving maintenance of a culture that valued teaching and students but almost no overt leadership efforts to develop teaching.

Few or perhaps none of these 'leadership of teaching' activities can therefore be considered essential for excellent teaching. Rather effective leadership of teaching involves different combinations of these characteristics in different contexts and there is clearly no one way to lead a department effectively.

Excellence in teaching took many different forms, and in particular there were marked differences between departments that emphasised fine tuning of largely traditional methods under the autonomous control of individual academics and departments where a radical innovation had been planned and implemented as a collaborative venture. Effective leadership of teaching was found to take markedly different forms in such different contexts.

The heads in the departments examined were unusually likely to have been respected for their outstanding teaching or to be teaching award winners at institutional or even national level. This must be an unusual phenomenon in research-intensive departments but it may be important for the development of teaching in such contexts.

Some of the leaders of teaching in the case studies were not Deans or Heads of Department themselves, but they did have responsibility for the development of teaching. On occasion the head, when contacted, would say "That is nothing to do with me, you will have to talk to Professor X". And not all the leaders of teaching we interviewed did all the leadership themselves. Indeed some form of dispersed leadership was visible in every department. One head said that while he took responsibility for leadership of teaching he was not an excellent or expert teacher himself and so he had co-opted others who were and had set up and supported a group to lead change in teaching. Despite the common collegial culture, 'cultural' dispersal of leadership was rare while formal allocation of teaching development roles or duties to individuals was very common.

4.2 TERMS OF OFFICE

Heads of department in research-intensive universities are usually appointed or elected for a single term of office lasting three to five years, while significant change often takes longer than that in academic contexts. Most of the heads or other leaders of teaching in the departments that were studied had served more than one term of office, and in some cases had been the head for more than a decade. The sheer scale of changes that were brought about in some cases would have been impossible to achieve within the span of a single term of office and most heads expecting to serve only one term would probably not attempt even to initiate such changes as they would be unlikely to be able to see them through. There were no examples of a head being responsible for bringing about excellence in teaching within a single term of office. This is an important finding that has implications for the way departmental heads are appointed and their terms of office determined, and also for the timescales of institutional teaching development initiatives that heads are sometimes expected to respond to.

Some of the heads were clearly atypical in their university, and carried out this role over a long period, sometimes at a considerable cost to their research career, out of a passionate sense of commitment to teaching and to students. In other cases the university had taken steps to make it possible to

55 Section 4 is based in part on Gibbs et al (2007)

carve out a career being a 'leader of teaching' and had changed their promotion criteria and career paths, had developed leadership training to grow future heads, and made a point of rewarding successful leaders of teaching in very public ways, increasing the status associated with achievements in this domain. Sections 7.1 and 7.2 describe two such institutional initiatives that have created an environment that makes it more likely that committed leaders of teaching will emerge.

Where the role of the head was to maintain a positive culture that supported the quality of attention to teaching and to students, or to maintain an environment that was conducive to gradual emergent change, short terms of office of the head were less of an issue.

4.3 DEPARTMENT SIZE AND DISCIPLINARY DIFFERENCES

Patterns were evident in the relationship between the context of the department and the form leadership took. It was assumed that large departments would tend to adopt more strategic and managerial approaches to achieving excellence but this was not found to be the case. Emergent change and planned change were just as common in small, medium and large departments, though even the largest departments in this study were not huge.

There were no systematic differences found between departments in universities in the UK and Australia, Europe and North America. Their research-intensiveness was their dominant characteristic, not their national context, although national contexts generated different kinds of educational problems that leadership sought to tackle.

In contrast, the academic discipline was found to have a profound effect on the form of leadership of teaching and the form of educational change associated with excellence in teaching. Change was much more likely to be emergent than planned in humanities and social science. No examples of emergent change were found in science. An entrepreneurial organisational culture and approach to change was much more common in professional subjects.

It can be argued that disciplines are stronger, more well-defined and more central to academic endeavours, in research-intensive universities. Any advice about leadership of teaching should take into account these disciplinary characteristics or it is likely to risk being not just irrelevant but inappropriate.

4.4 PROBLEMS, CHANGE AND ORGANISATIONAL CULTURE

Literature about academic organisational cultures[56] was helpful in understanding what form of leadership and change was taking place. In our study, most departments were identified as having a predominantly collegial culture and this provided a context for the form leadership of teaching took. A third of these departments also exhibited features of an entrepreneurial culture at the same time, while elements of bureaucratic and corporate cultures were rare. This is important in relation to common assumptions about the need for corporate behaviour to tackle widespread teaching issues.

Experiencing a significant problem or challenge (such as a negative external review, declining resources or the threat of removal of professional accreditation) was found to be virtually essential if a process of planned change was to be adopted. Conversely every example of emergent change was found to be associated with no experience of a problem. An entrepreneurial culture was common where there had been a problem and a collegial culture where there had been no problem. In at least two of the universities the 'problem' was university-wide rather than restricted to the department concerned, but this did not lead to all departments in these universities addressing the problem so successfully – it was departmental leadership that distinguished these successful departments.

What was clear in several of the case studies is that in order to adopt a planned process of change so as to address a problem, the organisational culture had to change (usually from a collegiate to an entrepreneurial culture). In one case the department addressed this issue of a need to change the culture quite explicitly. It listed characteristics of the desired new culture, designed a questionnaire to measure staff and student perceptions and administered the questionnaire every year in order to monitor changes in the culture and identify which aspects required further attention.

The role of the leader appeared to be to 'name' the problem, face up to it, and to mobilise colleagues to see addressing the problem as an opportunity. Sometimes the problem had sat unattended to by previous heads for some years. The relatively well resourced university contexts, research standing and high quality of students in these departments meant that severe problems were less prominent in many cases compared with departments in other kinds of universities. In such contexts the development of teaching could be seen to be value-driven rather than problem-driven.

56 McNay, ibid.

4.5 CONCEPTIONS OF LEADERSHIP

Conceptions of leadership of teaching in the departments we studied were much more sophisticated than reported in previous studies, with about 58% of the leaders expressing the most sophisticated category of conception: a *"focus on teaching emphasising the students' experience of studying in a continually changing and developing curriculum".*

This compares with less than 10% of leaders of teaching being found to hold this conception in previous studies that have sampled departments of varying degrees of teaching excellence. This finding provides strong support for the notion that such a conception of leadership is associated with teaching excellence.

4.6 DIFFERENT ROUTES TO EXCELLENCE

The differences in context highlighted in the above sections were reflected in dramatically different forms of leadership being associated with excellent teaching, in different departments. Table 1 shows how two departments were coded in relation to the list of common leadership activities discussed in Section 5. The head in Department A displayed almost every leadership activity while the head in department B displayed almost none. The third column shows how many heads in the 19 departments studied displayed each tactic: some are common and some are not. It is abundantly clear that there is no simple recipe for successful leadership of teaching and that what is likely to be supportive of excellent teaching is highly context-dependent. It is this complexity and context dependency that makes it helpful to examine the rich diversity of individual cases in Appendix 4. These leadership activities are discussed in more detail in Section 5.

TABLE 1

CONTRASTING FORMS OF DEPARTMENTAL LEADERSHIP OF EXCELLENT TEACHING

CATEGORY OF LEADERSHIP ACTIVITY	DEPT A	DEPT B	NO OF DEPTS*
Establishing personal credibility and trust			
Maintaining credibility as a scholar	✔	✔	15
Establishing credibility as an outstanding teacher	✔		14
Modelling the proposed pedagogy: 'walking the talk'	✔		13
Fostering open communication with all stakeholders	✔	✔	18
Listening carefully to all viewpoints	✔	✔	17
Planning and preparing carefully before taking decisions			12
Being available to staff, and soliciting their ideas	✔		16
Identifying problems, turning them into opportunities			
Eliciting the views of employers and professional bodies	✔		16
Facing up to problems rather than denying them	✔		11
Identifying problems as opportunities	✔		4
Identifying strengths and weaknesses in department	✔		1
Using dissent as a lever for change	✔		4
Opting for more than incremental change	✔		6
Articulating a rationale for change			
Learning about other educational approaches as models	✔		4
Articulating a pedagogic rationale	✔		4
Creating, articulating, and selling a vision of the future	✔		5
Devolving leadership			
Building and supporting a 'change team'	✔		7
Recruiting individuals to carry out leadership functions	✔		13

* Out of the 19 departments included in this study

TABLE 1 (CONTINUED)

CONTRASTING FORMS OF DEPARTMENTAL LEADERSHIP OF EXCELLENT TEACHING

CATEGORY OF LEADERSHIP ACTIVITY	DEPT A	DEPT B	NO OF DEPTS
Allocating different roles for staff to reflect their strengths			8
Encouraging and supporting individual initiative	✔		5
Building an organisational structure to plan teaching	✔		4
Building a community of practice			
Fostering discussion and debate	✔		7
Appointing academics who will fit in and who share values		✔	10
Involving the whole department	✔		14
Making teaching a more public activity	✔		6
Promoting educational development and reflection	✔		11
Rewarding and recognising teaching			
Appointing excellent or committed teachers	✔	✔	9
Retaining and promoting those who contribute to teaching	✔		11
Recognising and rewarding excellence in teaching	✔		9
Assisting individuals to get external recognition for teaching	✔		9
Setting teaching expectations			
Teachers expected to use particular teaching methods	✔		7
Teachers expected to achieve explicit teaching standards	✔		7
Teachers expected to use data and reflection to improve	✔		2
Marketing the department as a success			
Representing the dept. within the university in a good light	✔		10
Representing the dept. externally in a good light	✔		10
Publishing articles, in the public domain, about the changes	✔		15
'Branding' the change or rationale			4
Supporting change and innovation			
Obtaining financial resources to support change	✔		10
Freeing up innovators' time	✔		5
Encouraging small-scale demonstration projects			6
Building a consensus, over time	✔		7
Handling the dissenters to avoid blocking	✔		5
Hiring and drawing on experts	✔		8
Developing new expertise, including leadership training	✔		4
Gathering evidence on effects of changes	✔		3
Embedding sustainability	✔		4
Introducing change first in year one of programmes	✔		4
Persisting over time	✔		5
Involving students			
Eliciting student engagement with change	✔		18
Involving students in decision-making about teaching	✔		15
Involving students in implementing the innovation	✔		8

4.7 CONTRASTING FOCI OF LEADERSHIP OF TEACHING

In the light of such wide differences in leadership activity, all associated with teaching excellence, it became clear that leaders were focussing their efforts on quite different things. Broadly, three rather different foci of leadership were identified:

- **Leadership of programmes**, involving innovation and wide scale change, often involving the whole curriculum and all academics in the department.
- **Leadership of individual teachers, and their teaching**, at course unit or classroom level, without attempting to change everybody, or to move in any particular direction other than increasing quality, out of which broader change sometimes emerged.
- **Stewardship of the disciplinary community and its culture,** creating a supportive environment for teaching and nurturing the values that support student learning, with little or no emphasis on change.

5. LEADERSHIP ACTIVITIES EVIDENT IN THE CASE STUDIES

The following leadership activities were found within the case studies examined (see Table 1, page 13). Each category of leadership activity in this section is illustrated by extracts from case studies, presented here in 'boxes'.

5.1 ESTABLISHING PERSONAL CREDIBILITY

- Maintaining credibility as a scholar, often through exemplary quality of research output (even if the volume is reduced).
- Establishing and maintaining credibility as an outstanding teacher
- Modelling the proposed pedagogy: 'walking the talk'.
- Being seen to know what is going on and being open to viewpoints, rather than opinionated and out of touch.

Without personal credibility, leadership of teaching can be highly problematic. Heads and departmental chairs across the sector have often previously been very successful researchers or highly competent administrators. This does not give them credibility as someone who knows about, or cares about, teaching. In contrast, an unusually high proportion of the heads in the case studies were themselves outstanding teachers, and had been publicly recognised through university or even national teaching prizes.

The director of studies has received distinction for "Excellent Teaching Practice". The distinction is awarded after careful review of a lecturer's teaching skills and performance. Applicants submit a teaching portfolio, a CV with a special section devoted to pedagogical activities, and the recommendation of the department head. All applicants are also interviewed. The rigorous process is fully described in a document available from the university. Once granted this distinction, the individual becomes a member of a 'Pedagogical Academy' of the University.

Leaders also took steps to acquire leadership expertise, and their staff could see this. Some achieved considerable reputations for their knowledge about leadership and the whole university took the development of leadership skills more seriously as a result.

The department head reported an active interest in leadership and the problem of leadership in academic departments, and in higher education generally. He reported reading extensively in the field and attending leadership programmes and in this sense has made leadership a priority for himself during his mandate. Recently he had written a series of articles on leadership for a university publication, and he had given presentations on the topic to fellow department heads and even to the higher administration of the university. Another university is using his articles and has consulted him about a programme to better prepare heads for their roles. It is now part of the University strategic plan to develop leadership of its members.

Some heads had a track record of leading change in teaching, caring about teaching, and knowing what they were talking about when it came to debates about teaching. They made a point of demonstrating what they were talking about through the design of their own courses and through their own teaching. They had high student ratings and had often published about teaching.

A former head himself took on the large (400-enrolment) Introductory Calculus course for engineers "to set an example". The course had…been evaluated very highly by students and the (head's) work had been acknowledged in citations for several prestigious teaching prizes.

The current head had a long-standing interest in mathematics education, both at the university and school level, had written an important mathematics textbook used in … schools, and served as adviser on the mathematics curriculum for the … government. He had also been an

outspoken critic of much traditional educational practice. In the 1970s he wrote and distributed a monograph that presented a critique of teaching at (the University) and made suggestions for change that are consistent with much current thinking about student-centred education and the importance of alignment between educational goals, teaching methods, and approaches to assessment.

He had always been a popular teacher, and continued to take on more teaching than is usual for a department chair at the university because it was a way of getting to know students and understand their perceptions about learning and mathematics. It also allowed him to introduce new courses where he could try out new educational approaches. Like some of his colleagues, he was involved in a voluntary high school mathematics enrichment programme, working with undergraduate teaching assistants, whom he trained and supervised.

Heads also took steps to retain their credibility as scholars, in cultures where scholarship was valued above all else. But they did this in ways that either gave them time to lead teaching, or which killed two birds with one stone – for example through publishing highly respected textbooks. One head also rewarded academics who published books used on courses within the department.

Some of the heads openly admitted that they were not themselves especially good teachers, and did not themselves know enough to suggest what kinds of changes to teaching might be appropriate. They were not in a position to lead by example. These leaders devolved responsibility to others who were known to be excellent and committed teachers and who did have expertise, they bought in consultants, and took themselves off on courses to learn what they needed to learn to tackle the situation they faced, for example going on a leadership development programme. They gained credibility by this open admission of their lack of existing expertise and by the steps they took to make sure that the department had access to such expertise, one way or another.

Heads also gained credibility from knowing how teaching was conducted in the department and what the pedagogical issues were. They taught courses themselves. They sat in on colleagues' teaching and discussed teaching informally in social contexts. They interviewed departing students about their learning experience in the department, and read course and teacher evaluations carefully. They listened to colleagues' viewpoints and showed appreciation of differences of view. They had open doors and colleagues could easily access them to talk about teaching concerns. When they argued for change in teaching it was understood that this was on the basis of a full and rounded appreciation of current practice.

5.2 IDENTIFYING PROBLEMS AND TURNING THEM INTO OPPORTUNITIES

- Eliciting the views of stakeholders, such as employers and professional bodies.
- Facing up to problems rather than denying them.
- Identifying problems as opportunities.

In the departments studied, if planned or strategic change was to take place, a problem that the change was intended to solve had first to be identified. If no problem was identified then the change, if there was any, was emergent, gradual and unpredictable. In some departments a serious problem, such as the professional body having threatened to withdraw accreditation, or repeated bad quality assurance reports, had sat, unattended, for some while, until a leader emerged who took up the problem and persuaded colleagues that it was indeed a serious problem and that it needed to be addressed. In one case the Dean of the Faculty the department was part of had frozen all academic posts in the department, as they became vacant, until the department came up with a convincing strategic plan to get itself out of the hole it was in. Despite nine posts having been frozen, previous department chairs had still not risen to the challenge. In another, funding had dropped to 50% of previous levels and there was low morale and clear evidence of poor teaching performance. In both cases a key role of the leader who emerged was to face up to the problem and get everybody on board in tackling it.

One aspect of persuading colleagues about the importance of facing up to a problem was identifying ways in which tackling the problem would make things better or more satisfying. This is sometimes described in the leadership literature as involving 'vision' but it often revealed itself in more prosaic ways, simply solving a perceived practical difficulty.

Making it clear what the problem consisted of often involved gathering convincing data, such as from employers, student feedback and past course or departmental reviews, and putting it together to make a convincing case.

Consultations for the (departmental) planning process involved over 100 interviews with stakeholders in government and industry, with a focus on the qualities of graduates from the department. Among the key ideas that resulted from the consultations was that the programme must, in addition to content knowledge, develop the team work and communication skills of students as well as their knowledge of systems. Education should be in a context of practice, and learning should be experiential, active and team-centred. It was felt this would require transformation of the entire programme as well as the teaching practices of faculty.

…changes required a major review of the objectives, structure, courses and teaching methods in all programmes, as well as reconsideration of the utilisation of staff and other resources required to implement any changes. Prior to this there had not been major changes in any programmes for many years. The (professional) programme, which requires very substantial resources, was highly valued both within and outside the university, and provided (professionals) so much needed in society. Thus there was no pressing need perceived for change.

Initially there was significant resistance to change, particularly within the professional programme. However, three internal reviews in 2004, as well as an external review of the professional programme in 2005, determined that, although the programme had significant strengths, there were also a number of areas of programme structure, curriculum and teaching methods where change was seen as desirable. The internal reviews involved obtaining the opinions of staff, students, former students, as well as input from the professional association. The external review was conducted by an expert from another university that included an on-site visit.

Sometimes the problem took the form of an external pressure – such as restructuring courses to meet the requirements of the Bologna process. These successful leaders of teaching re-framed such problems as opportunities and energised colleagues to take the chance to introduce changes that had previously been impossible to implement, using the external pressure as an 'organisational crack' that they kept open for as long as possible.

In several cases there was a sub-group of 'dissenters' – often younger teachers who were critical of traditional teaching practices and who wanted change. Heads harnessed the energy and ideas of these dissenters, listened to their diagnosis of the current situation, and used their existence to 'name the problem' publicly.

5.3 ARTICULATING A RATIONALE FOR CHANGE

- Articulating a pedagogic rationale.
- Publishing articles, in the public domain, about the changes.
- 'Branding' the change or rationale.

Academics are highly trained at spotting weak arguments, and perhaps especially good at spotting weak arguments for doing anything differently. Many educational initiatives are invented by government or by senior management within universities, and are not often perceived as relating well to the nature of specific disciplines or to the current issues facing teaching in a department at that particular moment in time. They are not seen to have a sound rationale. For a head to succeed in persuading colleagues to embark on any kind of significant and time-consuming change, their arguments had to be a great deal more convincing than was normally experienced to be the case.

Successful leaders of change in the case studies went to great lengths to develop convincing rationales and often did this over extended periods of time involving reading of the pedagogic literature, employing outside pedagogic expertise, and the collection of evaluation data. Developing the rationale could involve multiple stages of internal consultation so that colleagues became involved in articulating the rationale they would eventually adopt. The forms of rationale sometimes reflected the nature of the discipline – for example being highly empirical and systematic in some cases but more theoretical in others.

The…strategic plan identified four major thrusts for the department, two in research, two in education. One was termed "Learning-based education" and involved the whole department getting a better understanding of current scholarly work on learning, especially in science and engineering, in order to guide teaching and curriculum planning in the discipline. Two full-time educational experts were employed over several years to help inform the teachers – for example through a series of workshops, peer consultations, and classroom visits.

The underlying rationale for these changes involved an evidence-driven "systems approach" familiar to engineers, but in this instance applied to teaching and learning. Changes were to be informed by instructional approaches that had been shown to be effective in promoting deep learning and cognitive development. Over-arching learning goals were developed and agreed upon for the programme as a whole, while individual teachers

prepared goals for each component course, in the form of measurable learning outcomes that could be linked back to the general programme objectives. An educational researcher and an expert on course design and staff development were hired on three-year contracts to assist with these tasks, as well as with the development of appropriate assessment methods. The many discussions about teaching among instructors and with the consultants were supplemented by weekly faculty meetings that focused on educational and teaching issues.

A common characteristic of credible rationales for change was that they involved formal 'scholarship of teaching'. Equivalent standards of intellectual rigour, and interpretation of evidence in the light of theory, were applied to teaching as to their substantive discipline.

If change was to be sustained, the head needed to continue to use and develop the rationale, and demonstrate its value, for example through thorough evaluation, and this often led to external publication and dissemination of the rationale within the discipline nationally, or even internationally.

5.4 DEVOLVING LEADERSHIP

- Building a 'change team'.
- Supporting the change team.
- Appointing individuals to carry out leadership functions.
- Allocating specific responsibilities to individuals.
- Encouraging individual initiative and supporting individuals who take initiatives.
- Building an organisational structure within which teaching will be developed.

The leaders of teaching in the case studies rarely took sole responsibility – they identified others who could help them and invented new roles to be filled with academics who had expertise and credibility in teaching. They established teaching development groups or took existing groups or committees and revitalised them, giving them responsibilities as well as political support and funding. In effect they would say "I'd like you to review the current teaching situation and come up with credible plans about what we should do differently - and if you convince me then I'll back you and make sure it happens".

The chair…felt that his role was "less of a leader, than to inspire others and to keep the focus on the goal", to keep everyone thinking of possible solutions to the problems identified by the various stakeholders. The chair also noted that he did not particularly like to conduct meetings himself, so that he delegated this role to others as much as possible. He saw his role as continuing to keep his eye on the final goal and nudging or reminding the group of the direction, but only when necessary.

For the chair, the key to a constructive climate for an effective committee or for a productive teaching programme in a department is a collaborative, broadly participative approach which involves input from many; one where there is delegation of responsibility, and where people feel free to do things and to contribute in their own way, according to their own strengths.

In some cases, the dispersed leadership of teaching took place almost independently of the head of department.

...there had been a "Teachers Club" of around a dozen faculty members who met regularly to discuss instructional goals and methods, and in the mid-1990s there was even involvement in a national peer assessment initiative. They organised student focus groups, introduced reflective memos for self-evaluation of teaching, and developed a system of peer assessment and feedback that involved pairing junior faculty members with more senior colleagues. These initiatives were successful in spreading ideas about new teaching practices…

In some cases the head played a key role by setting up a framework within which teaching was developed, but left the leadership of teaching to others.

(The head) considered it important that responsibilities be shared in the department. "I don't invent ideas, I get them from the department". I'm the head, but there are others who also help and lead". There was a director for each of the five specialty areas in the department, as well as someone to coordinate teaching activities in each specialty area. The department head's role was to empower and support those who assumed responsibilities.

To promote change and improvement in teaching a permanent "Development Group on Teaching" composed of academics and students was re-established in the department. Such a group had existed, but was inactive for years. Their mandate was to "find ways to improve the quality of teaching". Their role and recommendations were strongly supported by the head. This group generated considerable discussion on teaching in the department.

Individuals who showed promise in terms of innovation or influencing others were sometimes adopted as ambassadors

and change agents and sometimes promoted into more senior and influential positions.

There were examples of every category of dispersed leadership (described on page 9) and in many departments there were several different forms of dispersed leadership evident. Some of the devolution involved formal roles, titles and responsibilities, and formal organisational structures within the department, such as appointing a chair of a working party reporting to a committee, but often the devolution was informal, involving the support of ad hoc initiatives, with academics being encouraged and backed to take on short term roles as the opportunity arose, with the head acting as champion for good ideas as they emerged. In many cases the leader had taken a key role in initiating the dispersal of leadership, in making sure it worked well and in ensuring that, if successful, it was rewarded.

An important development related to teaching was the establishment by the department of a Teaching Quality Committee which had as a primary goal improving the quality of the curriculum of the department. The committee takes initiatives and coordinates all activities which contribute to the maintenance and improvement of the quality of courses and teaching. The committee organises relevant and timely activities likely to support teachers in their teaching and professional development.

Some heads said that not only was it not possible for them to lead teaching on their own, but it would have been inappropriate to attempt to do so.

Faced with the situation affecting the faculty, the dean felt it was essential for everyone to leave their "silos" and talk to each other, to take responsibility, and work together to resolve the crisis. Leadership in the faculty was seen as a matter of "empowering people and having everyone contribute". The dean did provide direction and even inspiration, but was concerned to develop a culture of "shared leadership", characterised by open communication (among and across academic and non-academic staff), high expectations of all members of the faculty, and a sense of inclusiveness in which everyone shared the responsibility for change in their own areas of responsibility. He ensured that new appointees were aware of the new teaching emphasis and philosophy, and engaged in succession planning for key positions relating to the curriculum initiative. Hence the new culture became embedded, and persisted after he left the position.

Heads also encouraged small scale local initiatives in teaching, helping innovating teachers with resources or public statements of support, so that change emerged from the bottom up, from many small scale acts of local leadership. Heads also put effort into developing the capacity of colleagues to make changes, often through pedagogic training and consultancy, and bringing in outside speakers and experts.

In one case all staff in the department were put through a leadership development programme to help them with initiatives to develop teaching. This department was unique in sending its staff (academic and non-academic) for leadership training in a residential programme developed by consultants especially for the faculty. Early in his tenure the dean had attended a three-week workshop on developing leadership skills, and he encouraged three colleagues to do the same. The faculty executive then developed its own leadership programme, using outside facilitators, and twenty people (academic and non-academic staff) have been participating each year. Despite some initial hesitation by some participants, the programme, called Shared Leadership for our Future, has proved extremely successful and popular, and has been included by the university in a catalogue of "best practices" for other units to emulate. The programme is designed to "mobilise the talents, skills and energy of a wider group of current and potential leaders and to ensure they have the commitment and skills to exercise leadership across the faculty". It stresses the shared responsibility of all staff for developing and achieving the mission and goals of the faculty and for simply "making things happen". The stated outcomes for the programme in effect constitute a list of leadership characteristics, and include the following:

- Being self-aware and working flexibly with others.
- Being part of and leading teams.
- Developing communication and influencing skills.
- Building trust.
- Adapting to and leading change.
- Accepting personal responsibility.
- Anticipating and responding flexibly to problems.
- Contributing actively to new initiatives.

5.5 BUILDING A COMMUNITY OF PRACTICE

- Fostering discussion and debate, e.g. through team teaching, observation, establishing a teaching discussion group.
- Appointing academics who will fit in and who share dominant values.

- Retaining (tenure) and promoting those who have contributed to the department's teaching achievements.
- Involving the whole department.
- Recognising and rewarding excellence in teaching.
- Assisting individuals to get external recognition for teaching excellence.
- Supporting 'fine tuning'.
- Personally observing teaching.
- Adopting an 'open door' culture.

Several heads pointed out that while there was a natural and pre-existing community of researchers who talked to each other all the time about research, there was often a complete lack of an equivalent 'teaching community' where teaching was the focus of attention, even though it would have involved many of the same people. In almost every case, both where there was significant planned change in teaching, and where change was emergent, there was an extraordinary level of simply talking about teaching within the department.

The steps involved…a staff retreat in December 2001 to agree on programme goals, teaching approaches, and curriculum content, and detailed planning of the different course components, done in small staff teams. Throughout this process the staff continued to meet monthly in plenary sessions to discuss overall progress. The external consultant attended almost all these meetings, and played an important role in facilitating discussion and drawing attention to relevant educational developments elsewhere.

The current head typically consulted widely with staff on decisions which needed to be made or on problems that arise. Usually after speaking with staff the head would draft a proposal which would be circulated to all staff for their written comments. Based on feedback the proposal would be adjusted prior to presentation for final discussion and decision by the Board. There is a practice of professors observing Ph.D. students' teaching and providing feedback and vice-versa. Those interviewed said: "We are constantly talking about teaching." "We have a dialogic relationship about teaching matters".

This level of discussion did not happen by accident and the heads, or others, often played a significant role in creating mechanisms and processes through which academics would talk to each other about various aspects of teaching, in different forums, on an ongoing basis, and reflect on their teaching.

The department held an annual "Teaching and Learning Day" to discuss teaching and curricular issues and to offer workshops on relevant themes. This event is attended by almost all staff as well as by about 15 students who participate in the departmental management team and several of the teaching related committees dealing with education.

Annual faculty meetings are held focussed on teaching practices usually with invited speakers, as well as regular meetings every 4-6 weeks specifically on effective practices in teaching.

(Academics) were encouraged to write 'reflective memos' about learning in their classes as a means of self-assessment and to encourage thinking about how learning might be improved. The memos were first introduced for the 1999-2000 academic year to serve as an evaluation of departmental progress towards the implementation of educational reform initiatives targeted in the strategic plan, and as a means of "continuous improvement of the undergraduate programme". Each teacher is asked to prepare a memo at the end of each term, following a template, and to describe key features of his or her course, comment on the effectiveness of teaching and assessment methods, and make suggestions for improved practice. The deputy department head met with each teacher to review the memo, both as a means of discussing individual teaching practice, and thinking about educational directions for the department. A report on the memos is prepared for the undergraduate committee which in turn makes recommendations for programme-level changes, if appropriate.

Underpinning meaningful communities were the shared values placed on teaching and on supporting students. Establishing and maintaining these values was a crucial leadership role, and in collegiate cultures much the most important role. This was achieved through, for example, the way new academics were appointed, making sure that, even though research achievement was the main criterion, no-one would be appointed who would not share, or who might undermine, the teaching values of the departmental community.

As so much of the success of the teaching in this department is due to cultural norms and values rather than to pedagogy or innovation, the way new staff are appointed is seen as vital to maintaining what was described as a "very high sense of corporate well-being". About one third of the time taken to select new academics is allocated to teaching issues. Candidates are also required to give a lecture to a non-specialist audience and asked how they would fulfil their tutorial role. The selection

process is "looking for demonstration of commitment to teaching" and whether candidates would have "empathy with young people". Only two offers have been made in recent times to individuals where there were question marks about their teaching, and neither individual took up the post. There is a strong feeling that continuity of the culture and teaching ethos of the department, and the ability to "fit in", is too important to allow an absolute emphasis on candidates' research.

In contrast to departments where there was an emphasis on maintaining an existing strong teaching culture, in other departments leadership played a key role in changing the culture so as to be more supportive of change and of teaching, and went about this in an explicit way.

The dean's interest in changing the faculty culture resulted in 2001 in the faculty adopting a "Culture Statement" of agreed principles that embodied:

- *A strong sense of common purpose supported by open and honest communication.*
- *Mutual trust and respect between all staff and students regardless of position.*
- *Fairness for all staff and students with recognition and reward for their achievements.*
- *A willingness and capability to adapt to internal and external change.*
- *Pride in the faculty's heritage and belief in its core values.*
- *Everyone accepting personal responsibility and shared leadership for the faculty's future.*

There is a regular survey of staff and students that measures perceptions of how well these cultural ideals are being met, and the results are discussed at a faculty meeting. Particular attention is paid to weak areas, and ideas are solicited about how to improve. From 2002 to 2004 the average score rose for each ideal, and the combined average increased from 4.59 to 5.17 (on a six point scale).

5.6 REWARDING AND RECOGNISING TEACHING

- Appointing excellent or committed teachers.
- Recognising and rewarding excellence in teaching.
- Retaining and promoting those who contribute to teaching.
- Assisting individuals to get external recognition for teaching.

In the case studies, heads went out of their way to reward, with public statements of gratitude and with salary increases and promotions, those who exemplified teaching values in their efforts. In some departments there was strong support for individuals seeking university or national teaching awards.

Many of the department's teachers have won teaching awards, at the university and national levels. For example, of the six teachers from the University who have won the high prestige national teaching award, three are in the department (including the current chair). There have been six winners from the department of university-wide awards, and ten who have received the Applied Science award for first-year teaching and learning – more than any other department. The head supports individuals thinking of preparing cases for teaching awards, mentoring their applications.

Many staff members have won teaching awards at the university and national levels. Since 2001 this has included five Vice-Chancellor's awards for outstanding teaching, two (national) professional association teaching awards, one (national) College of Educators award, and four staff have been finalists in the national teaching awards. The faculty has also competed very successfully for funding from the university's Teaching Dividend, Scholarship Index, Teaching Innovations Fund, and Strategic Teaching Improvement Fund.

Teaching was also taken very seriously in appointment, tenure and promotion decisions, even in these world-leading research departments.

Almost a third of the faculty hold teaching awards, and teaching is considered seriously in hiring new faculty[57], granting tenure, and making recommendations for promotion.

…more weight than in the past is assigned to teaching in tenure and promotion decisions. All new professors are required to fulfil the junior and senior qualifications for teaching in order to be promoted. Further, the policy now makes it possible to be promoted to associate professor by meeting either the senior research or senior teaching requirements. Promotion to full professor however continues to require the senior qualification in both teaching and research. Recently the rector announced a programme of special bonuses for the best teachers as nominated by their peers, another sign of apparent change in the importance of teaching in the university.

Effective teaching and teaching scholarship are recognised in the faculty rewards process (e.g. promotion), but staff also reported the many intrinsic rewards and satisfaction

57 A candidate would typically be asked to provide sample course outlines or syllabi, summaries of student evaluations, and reference letters from former students.

in knowing – and demonstrating – that student learning was improving.

In one case, teachers' reflective diaries, used to encourage evaluative thinking about the changes being made, were used as evidence in ways that contributed to annual salary decisions.

For those faculty members who helped plan and guide the change process, the head ensured there was recognition and reward, through release time, extra funding, and acknowledgement.

5.7 SETTING TEACHING EXPECTATIONS

- Teachers expected to use particular teaching methods.
- Teachers expected to achieve explicit teaching standards.
- Teachers expected to use data and reflection to improve.

While bureaucratic departmental cultures were largely absent from the case studies, there were a few examples of bureaucratic processes employed by heads to lever change. In several cases where there had been planned change towards the use of a new pedagogy, everyone was expected to use a particular teaching method (such as problem-based seminars). However it was more common for teachers to have autonomy, within an agreed set of general principles, rather than the teaching tactics being specified by the head.

In a few cases standards were set for student feedback ratings, with steps being taken if ratings fell below a certain threshold.

The Teaching and Learning Committee agreed in 2001 that a score of 3 (on a 5-point scale) was the minimum acceptable for the six key performance areas[58] on the unit of study evaluations. The target was raised to 3.5 in 2004, and to 4 for 2006. Units that achieve the targets are evaluated only every three years, while those that do not are assessed annually. In courses that are poorly evaluated, procedures for improvement include peer review of teaching and assessment practices, seeking advice from outside experts and those who teach later units, and soliciting additional feedback from students throughout the semester.

Because a collegiate culture was more likely to be evident than a bureaucratic culture, it was more common for teachers to be expected to evaluate their own teaching in rigorous ways, rather then relying heavily on a standardised student feedback questionnaire.

Staff members were encouraged to engage in research on their own teaching, and a number have had their work published in educational journals...

5.8 MARKETING THE DEPARTMENT AS A SUCCESS, IN WHICH ALL HAVE PLAYED A PART

- Representing the department within the University in a good light.
- Representing the department externally in a good light.
- Publishing and giving presentations about teaching in the department.

Departments operate in a highly political context within elite research universities, competing for funding and arguing for their own priorities and plans. Departments also operate within a national or international market for the best students. Reputation is very important. Academics want a head who will represent their department effectively and build and maintain a very high reputation. This is commonly the case concerning research, but in some of the case studies it was equally the case concerning teaching.

(The leader) considers it important to highlight the teaching excellence in the department by seeing to it that the information is published in National reports (by Elsevier Publications) of teaching evaluations. The department has become known for its quality teaching…The leader sees his major role as one of promoting the awareness of quality teaching…A key objective is to make the programmes a product of everyone, so that it is perceived as "our" programme – a shared approach, philosophy, goals and workload…He tries to reward good teaching by commenting on it openly and by publishing the overall student evaluation results in the faculty magazine.

(The) chair, an excellent teacher…sat on both the Faculty and University committees on teaching, where he served as a spokesperson for the department.

Effective leaders of teaching also built up a sense of élan amongst their colleagues as being well known for being amongst the best teaching departments in the university, so that individuals could feel proud to have contributed to the department and continue to work hard to maintain excellence.

There is considerable satisfaction in the twice won recognition of the department as a National High Quality unit for its teaching and research, an unprecedented achievement, as well as for receiving the 2001 award for community spirit and development. The extra funds from the Quality awards provided extra funding for the development of new courses, additional teaching help, and more funding for students, all of which have been very helpful.

58 The key performance areas are Good teaching, Clear goals and standards, Appropriate assessment, Generic skills, Appropriate workload, and Overall satisfaction.

In one case the educational innovation a department had developed and implemented was 'branded' and an international organisation and annual conference the head set up continues to revolve around this brand name a decade after its foundation.

5.9 MANAGING INNOVATION

- Obtaining resources (cash).
- Freeing up innovators' time, for example by providing teaching assistance or administrative support.
- Allowing and encouraging experimentation on a small scale.
- Creating and selling a vision.
- Building a consensus, over time, to achieve sufficient momentum to start a department-wide process.
- Handling dissenters and the disengaged effectively so as to avoid them blocking the majority.
- Hiring and drawing on experts.
- Developing new expertise.
- Evaluating impact, requiring empirical data of success before extending and building confidence in progress.
- Trouble shooting problems and getting them out in the open to discuss
- 'Rolling out' innovations across a department.
- Capacity building in leading change – including mentoring academics, training programmes, succession planning.
- Embedding sustainability.

The leadership tactics described in this section are those commonly found in accounts of strategic leadership. In several departments almost all of the tactics listed above were evident, but this occurred primarily where comprehensive planned change was evident.

Only a sub-set of these tactics were evident where there was emergent or little change: for example 'allowing or encouraging experimentation on a small scale' was sometimes evident even where there was no intention of moving the whole department towards an agreed goal and no managed process of change.

Though much teaching in engineering is traditional, there is considerable support for innovation. For example, the capstone fourth-year course was developed by a faculty member who became dissatisfied with a divorce between traditional laboratory assignments and the sort of design projects a professional engineer would be expected to tackle. Colleagues and the department head were supportive of the new approach, and substantial resources were made available to design the new course.

Managing innovation across a whole department often involved managing academics with very varied views within a collegiate culture, and in particular managing dissenters, and avoiding them blocking change and supporting those whose views were congruent with the proposed changes. In one case an anonymous survey was conducted to find out the level of support or opposition to planned changes, and it identified that there was only a very small minority who opposed this change, and this helped the head to move forwards.

The 1997 strategic plan, and especially the data on attitudes of graduates and employers, provided a lever for making fundamental changes in the department's approach to teaching. The climate in the department was collegial and many colleagues were sympathetic to such change, while others were neutral and some were hostile. The head recruited most of the first group to help plan the change, co-opted some of the second group, and largely ignored the resisters, although all decisions about the new curriculum were regularly discussed with the department as a whole

Leadership of innovation often involved finding or allocating resources, and particularly academic time.

To support this change (the head) raised substantial external funding, largely over the course of a few months, which was used to bring in outside expertise on teaching and learning, provide physical resources (and space that would support the new teaching methods, including facilities for team work), and allow buy-out of time for faculty members centrally involved with planning and implementing the new curriculum.

A consistent feature of managing innovation related to the issue of credibility. Heads insisted on thorough evaluation, to prove that progress was being made. They only attempted to spread ideas from individual courses to the wider curriculum if innovations could be demonstrated to be successful, and set goals for the innovations, assessing the extent to which the goals were achieved.

…scores on student evaluations (which are in the public domain) have improved substantially – from ranking eighteenth out of 18 nationally before the reforms to ranking second out of 18 afterwards.

The success of the new curriculum was measured by performance indicators that reflected the agreed educational goals, measures of student experience with the programme, and a list of "graduate attributes", developed after consultation with other veterinary

schools. Not only was there regular evaluation of all courses, but coordinators were required to write a reflective statement about the results of the evaluation, using a template provided by the department's Teaching and Learning Committee. Results were provided to students and carefully reviewed by the committee, and appropriate changes were negotiated with course teams.

A key factor of success was the early committee decision to employ, in so far as possible, data, facts, concrete examples and a "logical, scientific approach", and to avoid "lofty theories – educational or psychological – that confuse people and seemed irrelevant".

Where academics lacked the knowledge or expertise to implement innovations, the head made arrangements to increase their capacity to change, through training, buying in expertise, meetings and other forms of support. The focus of such capacity building went beyond teaching itself and included the capacity to change, leadership, communication and co-operation in groups.

Internal and external consultants were also engaged to train groups of faculty members on communication skills, group process skills, team building, discussion strategies and clinical skills, given that these members would be called upon to know and use these skills themselves in teaching medical students. The vice–dean was able to lean on the dean and university administration for funds and resources to make this possible.

5.10 INVOLVING STUDENTS

- Develop effective methods for eliciting students' views (and their commitment to engage).
- Involve students in decision-making about teaching.
- Involve students in implementing the innovation.

The routine collection of student feedback is just that: routine. The departments in the case studies went a great deal further in engaging students actively as partners in the process of evaluating current practice, involving them in discussion of what was working well and what was not, in discussions of what alternatives might work better, and even involving students in implementation, with students acting as peer tutors, for example. The active involvement of students in the process of change and improvement was evident in virtually every department. A characteristic of entrepreneurial academic cultures, as described on page 6, is that students are treated as partners rather than as customers.

Throughout the process of planning and implementing the curriculum there was regular communication with students, who were involved in all key committees. There was continuous assessment of their views through a programme-level questionnaire, unit of study evaluations, and focus group interviews, and care was taken to provide them with feedback on the results of the evaluations and to explain planned changes. One student reported being "amazed" by the amount of concern shown by staff to provide students with a good learning experience. The students interviewed for this study reported that the faculty was very much a "community" or "family", with approachable staff who were interested in students' views…

Students could have quite a high level of formal involvement in decision-making within the department, including in appointment, tenure and promotion decisions.

…the department takes great pains to consult with students…there is a Departmental Student Council (DSC), which has an official status within the Faculty's constitution and is often consulted on decisions affecting undergraduates. The Student Council in turn meets with representatives from each course to discuss issues of teaching and curriculum. Students are represented on all key committees in mathematics, and also serve on appointments and promotion committees. (One student) … interviewed for this case was in the final year of an honours degree, and was chair of the Student Council. He had served on the department's curriculum committee and on the tenure, renewal and promotion committee (one of three student representatives).

Students were also involved in implementing student-centred teaching methods. In the following case, undergraduates were formally employed to contribute to teaching, and ran a help centre.

…there is a large component of group problem-solving led by six undergraduate teaching assistants in well-received weekly seminars. In fact nearly all the senior undergraduate honours students are involved in some form of teaching, which is seen to be invaluable both for the TAs and those they are helping. They are paid for this work at a current rate of $18 an hour. Students (postgraduate and undergraduate) also run a mathematics drop-in help centre, which offers help to anyone having problems.

6. DEVELOPING LEADERSHIP OF TEACHING: RESOURCES FOR USE WITHIN INSTITUTIONS

This section is intended to support discussions among those who have leadership responsibility of teaching in a subject area. In several cases they refer back to ideas discussed in earlier sections, and might also be supported by copies of the original sources from which they are drawn. Sections 6.1 – 6.4 provide summaries of some of the key findings and some questions which we hope individuals will consider in relation to their own context.

6.1 IDENTIFYING THE DEPARTMENT'S ORGANISATIONAL CULTURE AS A CONTEXT FOR LEADERSHIP OF TEACHING

The typology of university's organisational culture listed below, and the discussion questions that follow, are based on the work of McNay[59], introduced in Section 3.

The following summaries of McNay's four types of university organisational culture are based on Ramsden[60]:

Collegial cultures are characterised by freedom to pursue university and personal goals unaffected by external control. Standards are set by the international disciplinary scholarly community and evaluation is by peer review. Decision-making is consensual, management style permissive. Students are seen as apprentice academics.

Bureaucratic cultures are characterised by regulation, rules, and consistency with standards related to regulatory bodies and external references (such as institutional quality assurance procedures). Evaluation is based on the audit of procedures. Decision making is rule-based. Students are seen as statistics.

Corporate cultures are characterised by an emphasis on loyalty to the department and its management. Management style is commanding and charismatic. There is a crisis-driven, competitive ethos. Decision-making is political and tactical. Evaluation is based on performance indicators and benchmarking. Students are seen as units of resource.

Entrepreneurial cultures are characterised by a focus on competence and an orientation to the outside world, involving continuous learning in a turbulent context. The management style involves devolved and dispersed leadership. Decision-making is flexible and emphasises accountable, professional expertise. Its standards are related to market strength. Evaluation is based on achievement. Students are seen as partners.

KEY QUESTIONS

1. To what extent does your department exhibit each of the four types of organisational culture?
2. To what extent does your university exhibit each of the four types of organisational culture, as a context in which the department operates?
3. Has there been a change, over past years, in the type of organisational culture that is dominant in your department? Is this change expected to continue in the future, and in what direction?
4. In what ways has leadership of the department reflected, or helped to create, the department's organisational culture?
5. What are the implications for the leadership of teaching, the quality of teaching and the development of teaching in the department, of the dominant organisational culture?
6. What would be an 'ideal' organisational culture to support teaching, in your department, and how could it be achieved?

6.2 IDENTIFYING CONCEPTIONS OF LEADERSHIP OF TEACHING

The impact of the head of department's conceptions of leadership of teaching on teachers, and on student learning, was briefly discussed in Section 3. Departments with heads who have conceptions E and F below are more likely to have teachers with 'student focussed' conceptions of teaching (rather than 'teacher-focussed' conceptions), whose students are more likely to take a 'deep approach' to learning (rather than a 'surface approach'). Conceptions E and F were evident in the majority of excellent teaching departments examined in the study.

Conceptions of leadership of teaching[61]

A **A focus on the bureaucratic structure and organisation of the department, imposed by the head.**
For example monitoring student performance and feedback through chairing a course committee.

B **A focus on the role, responsibility and practice of the head, who imposes a model of good practice in teaching upon the teachers in the department.**
For example establishing teaching norms such as requiring all lectures to be supported by PowerPoint handouts on the department web site.

59 McNay, I. (1995) From the collegial academy to the corporate enterprise: the changing culture of universities. In T. Schuller Ed.) The changing University? Buckingham: SRHE & Open University Press

60 Ramsden, P. (1998) Learning to lead in higher education p31-34. London: Routledge.

61 Martin, E., Trigwell, K., Prosser, M. & Ramsden, P. (2003) Variation in the experience of leadership of teaching in higher education. Studies in higher Education, 28,3. pp 247-259

C **A focus of the nature and content of subjects and disciplines, which are discussed with the teachers in the department.**
For example, initiating a discussion of possible new course units.

D **A focus on the roles, responsibilities and practices of the teachers in the department, which are discussed and/or negotiated with the teachers.**
For example drawing up a set of guidelines for course leaders, discussed at course committee, and having individual 'de-brief' meetings with course leaders about performance indicators on their courses.

E **A focus on teaching that emphasises students' experience of studying, which is discussed and/or negotiated with teachers.**
For example discussing National Student Survey data and student feedback, and what it means, with the involvement of students in the discussions.

F **A focus on teaching emphasising the students' experience of studying in a continually changing and developing curriculum. How to change and improve is the subject of systematic discussion and consultation, and the head systematically establishes means to enable teachers to develop.**
For example discussing what should be done to improve student experience and then allocating teachers' the time, administrative support and funding necessary to enable them to introduce new approaches to teaching, and collaboratively planning an evaluation of their impact on student experience and learning.

KEY QUESTIONS

1 What is your (or your head of department's) conception of leadership of teaching?
2 How does this reveal itself in leadership activity in your department?
3 What are the consequences for teaching quality, and for efforts to develop teaching, of this conception and of these leadership actions?
4 What would be an ideal conception of leadership of teaching in your department and how could this be achieved?

6.3 IDENTIFYING FORMS OF DISPERSED OR DISTRIBUTED LEADERSHIP IN THE DEPARTMENT

Where teaching is of high quality, leadership of teaching is commonly dispersed in one or more ways. Rather than the head taking all the responsibility, a number of people or groups play key roles in either planned or ad hoc ways. The following types of distribution of leadership have been identified in various educational settings[62]. The type of distribution of leadership may be linked to both the organisational culture (see 6.1) and the head's conception of leadership (see 6.2).

Formal distribution via hierarchical structures – devolving responsibilities to staff to specific roles, identifiable in an organisational diagram.

Pragmatic distribution via ad hoc devolution of tasks to meet demands as they emerge.

Strategic distribution via planned appointment of individuals to contribute to specific initiatives

Incremental distribution involving giving progressively more responsibility to identified individuals as they demonstrate their growing competence.

Opportunistic distribution where individuals willingly take the initiative to extend their roles.

Cultural distribution where leadership is assumed rather than given and shared in a flexible way enabled by the local culture.

KEY QUESTIONS

1 How is leadership of teaching distributed in your department? Who takes what kinds of role in relation to developing teaching and how are these roles allocated or adopted?
2 What impact does this form of distribution of leadership have on teaching and on the improvement of teaching?
3 What would be an ideal way of distributing leadership so as to improve teaching in your department, and how could this be achieved?

62 McBeath, J., Oduro, G.K.T. & Waterhouse, J. (2004) Distributed leadership in action: a study of current practice in schools. Nottingham: National College for School Leadership.

6.4 IDENTIFYING LEADERSHIP ACTIVITIES IN THE DEPARTMENT

The grid below lists all the main categories of leadership activity evident in the excellent teaching departments that were studied.

6.5 USING THE CASE STUDIES IN APPENDIX 4

The 5 case studies presented in appendix 4, were selected and edited not as part of a research report but as resources for workshops for heads of department. Reading one of the case studies and discussing it with others who have read a different case study should help to give the theory and data contained within the report additional meaning.

LEADERSHIP ACTIVITY
ESTABLISHING PERSONAL CREDIBILITY AND TRUST
Maintaining credibility as a scholar
Establishing credibility as an outstanding teacher
Modelling the proposed pedagogy: 'walking the talk'
Fostering open communication with all stakeholders
Listening carefully to all viewpoints
Planning and preparing carefully before taking decisions
Being available to staff, and soliciting their ideas
IDENTIFYING PROBLEMS, TURNING THEM INTO OPPORTUNITIES
Eliciting the views of employers and professional bodies
Facing up to problems rather than denying them
Identifying problems as opportunities
Identifying strengths and weaknesses in department
Using dissent as a lever for change
Opting for more than incremental change
ARTICULATING A RATIONALE FOR CHANGE
Learning about other educational approaches as models
Articulating a pedagogic rationale
Creating, articulating, and selling a vision of the future
DEVOLVING LEADERSHIP
Building and supporting a 'change team'
Recruiting individuals to carry out leadership functions
Allocating different roles for staff to reflect their strengths
Encouraging and supporting individual initiative
Building an organisational structure to plan teaching
BUILDING A COMMUNITY OF PRACTICE
Fostering discussion and debate
Appointing academics who will fit in and who share values
Involving the whole department
Making teaching a more public activity
Promoting educational development and reflection
REWARDING AND RECOGNISING TEACHING
Appointing excellent or committed teachers
Retaining and promoting those who contribute to teaching
Recognising and rewarding excellence in teaching
Assisting individuals to get external recognition for teaching
SETTING TEACHING EXPECTATIONS
Teachers expected to use particular teaching methods
Teachers expected to achieve explicit teaching standards
Teachers expected to use data and reflection to improve
MARKETING THE DEPARTMENT AS A SUCCESS
Representing the department within the university in a good light
Representing the department externally in a good light
Publishing articles, in the public domain, about the changes
'Branding' the change or rationale
SUPPORTING CHANGE AND INNOVATION
Obtaining financial resources to support change
Freeing up innovators' time
Encouraging small-scale demonstration projects
Building a consensus, over time
Handling the dissenters to avoid blocking
Hiring and drawing on experts
Developing new expertise, including leadership training
Gathering evidence on effects of changes
Embedding sustainability
Introducing change first in year one of programmes
Persisting over time
INVOLVING STUDENTS
Eliciting student engagement with change
Involving students in decision-making about teaching
Involving students in implementing the innovation

KEY QUESTIONS

1. Which of these leadership activities is evident in your own department, and what impact have they had?
2. Which of these leadership activities, in addition to what already happens, might have the most positive impact on teaching in your department?
3. Which of these leadership activities might be inappropriate in your own department, and could have a negative impact?

7. DEVELOPING EXCELLENCE IN TEACHING: TWO EXAMPLES FROM PRACTICE

This section presents two different university-wide schemes that were considered successfully to foster the development of leadership of teaching.

7.1 A LEADERSHIP DEVELOPMENT PROGRAMME: THE UNIVERSITY OF UTRECHT

The University of Utrecht, an ancient research-intensive university, has moved from mid-table to top of the national teaching rankings in the Netherlands within a decade, through the strategic implementation of a range of initiatives designed to improve teaching[63]. One of the most influential initiatives has been a leadership development programme entitled 'Excellence in University Teaching'. Each year the Rector invites nominations, from Deans and Heads of Department, of individuals with potential to become the leaders of teaching of the future. Individuals do not apply, and indeed may be surprised to have been nominated. About 15 a year are chosen. The programme consists of:

- A fifteen month programme of seminars and workshops, involving 1.5 days per month, with individual and collaborative group tasks.
- Coaching in relation to individual concerns and development projects in participants' own departments.
- Group study visits to universities in Europe and North America, to see how they develop teaching[64].

The programme is not a course with assessment that can be passed or failed, but a development opportunity, though there is a certificate of course completion awarded by the Rector at a special ceremony. On completion of the programme the academics return to their previous position, but are often then fast-tracked to positions of more influence. The leadership programme started in 2000, and by 2006 a third of all programme director posts in the university were filled by individuals who had been through the leadership programme, while other alumni had gone on to perform alternative leadership roles such as chairing quality assurance committees and leading discipline-wide teaching and curriculum innovation initiatives. The programme is not seen as preparation for being a head of department (though some have indeed progressed to such roles). Rather, in a research-intensive collegiate environment, the individuals have been able to exert leadership from a range of roles and positions.

"The results can be seen in the positions these trainees now have in the development of new educational programmes, their leadership in existing programmes and in the elaboration of large scale innovations. In most departments these teachers are seen as the key persons in educational leadership".[65]

A high prestige teaching prize is awarded each year in the Dom, the cathedral in Utrecht, immediately after the annual award of four honorary doctorates, and this prize has on several occasions been awarded to individuals who have been through the leadership programme and have then gone on to make significant contributions to the development of teaching at Utrecht.

7.2 REWARDING LEADERSHIP OF TEACHING: THE UNIVERSITY OF OSLO

Background

The University of Oslo is a large, ancient, traditional research-intensive university: the largest and strongest in Norway. It makes three annual awards: one for research, one for dissemination and one for 'excellent learning environments'. By 'learning environments' Oslo mean whole programmes and the departments in which they operate, not classrooms or individual course units, and so this is an award for leadership of programmes and all the teachers involved in delivering those programmes. The awards were established in order to "encourage efforts and serve as an inspiration to award winners' departments". It is an important feature of the learning environment award that it is alongside, and equivalent to, the award for research excellence. There is no award for individual teachers and the emphasis is strongly on collaboration between teachers, and collaborations between teachers and students, within programmes. There is a public, annual event at which the three awards are made and much publicity about what the awards were made for. There is a single Norwegian national prize for an outstanding learning environment, with similar criteria, and Oslo have won this prize twice.

The award is substantial, about £25,000, and the size of the award and its status encourages thorough and high quality applications. Faculties, institutes, centres and museums may submit one or more nominations.

Criteria for the award for excellent learning environments

Three main criteria have been defined. It is not necessary to meet all the criteria but special strengths in one area are not sufficient without some evidence of strengths in the other areas. It is notable the extent to which these criteria, and especially the emphasis on 'social conditions' and on the involvement of students, reflect those conceptions of

63 Pilot and Keesen (2006)
64 Ramaekers (2002)
65 Pilot and Keesen, ibid. p6.

leadership of teaching, reported in Section 3, that have been found to be associated with excellent teaching and learning, and also reflect leadership activities identified in the present study and also a collegiate culture.

Academic and pedagogical conditions

- **Clarity:** Goals, study plans and teaching plans are not only clearly expressed; they are realistic and used actively in the teaching-learning programme.
- **Commitment:** Teachers commit themselves to their students. Teachers are accessible to students and there are activities that involve mutual commitment.
- **Engagement of students:** Teaching and learning is based on the principle that the student should, to a large degree, take on responsibility for their own studies and take an active role in the teaching-learning process.
- **Student focus:** Students, both as individuals and as a group, are considered significant cooperating partners in teaching and learning.
- **Research base:** Teaching decisions are based on the scholarship of teaching. Students are exposed to – and may contribute to - research activities and research communities.
- **Learning outcomes:** There are high standards of student achievement and performance, whether documented by portfolios, examinations or reports from examiners.

Social conditions

- **Wellbeing:** The learning environment is experienced as supportive and inclusive, as an exiting encounter with dedicated scholars.
- **Cooperation:** The environment is characterised by collaboration, community and solidarity.
- **Physical environment:** The best possible use is made out of the physical conditions through creativity and good management.
- **Identity:** The environment is characterised by belonging and identity affiliated to a nucleus, for the teachers and also for the students.

Change

- **Ability and determination to develop:** Substantial emphasis is placed on progressive improvement by measures in the following areas:
  - *Development:* The environment exhibits little signs of stagnation and increasing rigidity but instead active efforts are evident to develop, and to collectively build up, competence – academically and pedagogically and socially.
  - *Evaluation:* There is systematic evaluation of study programmes, involving students and research activities. Both the evaluations and the results are discussed with the students. And results are used actively for development purposes.
  - *Development of teachers:* the competence of teachers is developed, not only in research and academic activities, but also by having the staff gaining, maintaining and developing teaching qualifications.

Characteristics of applications

Strong applications in 2008 included documentation concerning the following kinds of efforts and evidence of success:

- Close contact between teachers and students, including regular public events involving both staff and students; teachers discussing student feedback with each other; alignment of the overall study programme across courses; the best rates of retention and progression and the best student feedback of all programmes in a Faculty with an otherwise weaker profile.
- Many social activities, including inviting students to teachers' homes; interdisciplinary courses and projects; teaching including student presentations, problem-based learning and generally interactive and student-centred methods; strong emphasis on developing students' applied research skills, such as reviewing literature; 96% of entering students complete the programme, of whom 80% produce published peer-reviewed journal articles based on their final project; there are over 20 student applications per place on the programme.
- Active involvement of students in staff research and development work; considerable student choice and specialisation of study; collaboration between teachers and students from other universities who run the same kind of programme.

While student feedback in these applications might be very good, there is generally little focus in the applications on students' views of individual teachers or on the excellence of individual teachers at all, but rather on students' overall experience of the programme and their progression and performance in the programme as a whole, and on the recent history of collaborative efforts to make the programme successful for all students.

APPENDIX 1
METHODOLOGY

Selecting departments

It is a crucial feature of this study that it examined leadership only where there was outstanding teaching. We see high quality teaching as whatever leads to high quality learning (rather than being defined by characteristics of the teaching itself). Good quality learning is defined by the approach students take to their learning. So we are concerned with: teachers' conceptions of learning that relate closely to students' approach to teaching; course design features that are known to foster a deep approach to learning, and the features of a teaching environment that make such teaching possible. The most appropriate measures of such quality would be the Approaches to Studying Inventory[66](ASI), the Course Experience Questionnaire[67] (CEQ) and the Approaches to Teaching Inventory[68] (ATI). Versions of the CEQ are used across all courses at two of the universities in the study[69], but only partially or not at all at other universities, who have their own student feedback systems of various kinds with various rationales and foci of attention. Within the resources of this study it has not been possible to administer the ASI, CEQ or ATI. Even student performance data is difficult to interpret as most institutions in the study do not have external examiner systems or other mechanisms to moderate standards, which vary between disciplines, and different countries use different conventions to describe student performance, including making only pass/fail decisions. As a consequence we have had to rely on whatever performance indicators the department or university already had to hand. These included:

- Student recruitment data, in terms of both quantity and quality of applicants.
- Student grades, progression and retention.
- Student feedback on teaching, on individual courses and on programmes as a whole, including CEQ data where it existed.
- Peer recognition in the form of institutional or national teaching awards for Individual teachers or for the department as a whole.
- The adoption of the departments' teaching methods by other universities.
- Research and development funding acquired to support the development and evaluation of teaching, as an indicator of the credibility of the efforts put in.

In some cases a marked improvement from previous levels on particular indicators was accepted as evidence of excellence.

The performance indicators used for each department studied were therefore highly idiosyncratic in nature and did not allow much comparison between departments, even within the same institution, and there was no possibility of adopting a consistent conceptual model from which to appraise educational quality.

Two departments were eliminated from the analysis after the case studies had been undertaken as oral evidence from the head, from teachers and from students undermined the PI data examined in advance and we then had insufficient confidence that the departments were indeed excellent at teaching.

Case studies

Case studies involved extensive examination of documentation about the department, its teaching and any recent reviews of teaching quality or teaching development activities, in advance. Where necessary some essential documents were translated into English. Three different researchers undertook case study visits. Eight of the twenty one departments in the study were visited by two consultants, including the first two, in order to develop equivalent approaches to interviews. Visits varied a little in nature for organisational reasons but usually consisted of:

- An interview with the head or chair.
- An interview with the previous head or other senior member of academic staff.
- An interview with several teachers together.
- An interview with a small group of students representing different years and programmes, and where appropriate, Bachelors, Masters and PhD students.
- A final interview with the head.

Interview schedules were developed for heads, teachers and students, but these were used as a framework rather than followed in strict sequence. Interviews were audio-taped and detailed notes were taken and written up immediately afterwards with the help of the audio recordings, but full transcripts were not produced. After the first two visits a two day meeting was held between the three researchers to analyse the conduct of the cases. This led to adjustments in the focus of attention and approach to interviewing in subsequent case study visits. The changes consisted largely of a clearer conceptual focus based around the theoretical ideas outlined above.

66 Entwistle et al (1979)
67 Ramsden (1991)
68 Trigwell and Prosser (2004)
69 For example see Trigwell, K. and Ashwin, P. (2003)

Draft case study reports were written up, six to twelve pages in length. Their format varied within a template where the case demanded a focus on context-specific features rather than on 'standard' issues. At this stage the focus was on accurate and inclusive description without analysis. The draft case reports were submitted to the heads for correction of inaccuracies. There were very few corrections requested but Heads often came back with additional information that filled out some of the observations made. In one case this involved a succession of ever more detailed communications with the head until the ever growing length of the case demanded a halt to the process. In every case the head found the report a fascinating mirror held up to their own practice and achievements, and this led to departmental discussions in some cases and a few follow-up visits to discuss the points the case made.

Analysis

All three researchers read and made notes on all the cases. A two day meeting was held to discuss and articulate those characteristics that were repeatedly evident in the cases so as to be able to produce categories for coding them. The categories were repeatedly revised, combined, disaggregated and clustered until the most parsimonious set of clear categories emerged that did justice to the rich diversity of practice and contexts that the cases illuminated. At this stage there was no attempt to relate these categories to theoretical conceptions of leadership in the literature, though awareness of these conceptions will inevitably have influenced both interview questions and the write-up of the cases and the generation and revision of categories.

The coding of the cases against the categories can be seen in Appendix 3.

APPENDIX 2
LEADERSHIP ACTIVITY IDENTIFIED IN EACH OF 19 DEPARTMENTS

	1. ESTABLISHING CREDIBILITY							2. IDENTIFYING PROBLEMS						3. RATIONALE			4. DEVOLVING LEADERSHIP				
	As a scholar	As a teacher	By modelling	By communication	By listening	By planning	By being available	Asking stakeholders	Facing problems	Problems seen as opportunities	Reviewing culture	Using dissent	Opting for change	Learning from others	Articulating rationale	Articulating vision	Building a team	Co-opting others	Supporting initiative	Building structure	Building capacity
A	✘	✘	✘	✘	✘		✘	✘											✘		
B		✘	✘	✘	✘	✘	✘	✘	✘	✘			✘	✘	✘		✘	✘	✘		
C	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘			✘	✘	✘	✘	✘	✘			
D	✘	✘	✘	✘	✘		✘		✘												
E	✘	✘		✘	✘	✘	✘	✘	✘			✘	✘				✘	✘			
F		✘	✘	✘	✘	✘	✘	✘	✘	✘		✘	✘	✘	✘	✘	✘	✘			✘
G	✘	✘	✘	✘	✘	✘	✘	✘										✘	✘		✘
H	✘	✘	✘	✘	✘	✘	✘	✘	✘								✘	✘	✘		
I	✘			✘	✘	✘	✘	✘	✘							✘		✘		✘	
J		✘	✘	✘	✘	✘	✘	✘								✘			✘		✘
K	✘			✘	✘	✘		✘													
L	✘		✘	✘	✘	✘	✘	✘	✘			✘	✘				✘	✘		✘	
M	✘			✘	✘	✘	✘	✘	✘									✘		✘	
N		✘																	✘		
O	✘	✘	✘	✘	✘		✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘		✘	✘
P	✘	✘	✘	✘			✘	✘										✘	✘		
Q	✘	✘	✘	✘	✘		✘	✘										✘			
R	✘	✘	✘	✘	✘	✘	✘	✘	✘									✘			
S	✘			✘	✘															✘	
	15	14	13	18	17	12	16	16	11	4	1	4	6	4	4	5	7	13	8	5	4

	5. BUILDING COMMUNITY					6. REWARD				7. NORMS			8. MARKETING			
	Fostering discussion	Appointing allies	Involving the whole department	Making teach public	Promoting educational development	Appointing teachers	Promoting teachers	Recognising teaching	External recognition	Expected methods	Expected standards	Expected use data	Internal representation	External representation	Publishing	Branding innovation
A	✘	✘	✘	✘	✘	✘	✘	✘	✘		✘		✘	✘	✘	
B	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘			✘	✘	
C	✘	✘	✘	✘	✘		✘	✘	✘	✘	✘	✘	✘	✘	✘	✘
D										✘						
E	✘	✘			✘					✘					✘	✘
F	✘	✘	✘		✘		✘	✘	✘	✘	✘				✘	✘
G	✘	✘	✘	✘	✘		✘	✘	✘		✘		✘	✘	✘	
H		✘	✘	✘	✘	✘	✘						✘	✘	✘	
I		✘	✘			✘	✘	✘	✘				✘	✘		
J			✘		✘		✘	✘	✘				✘	✘	✘	
K			✘										✘	✘	✘	
L		✘	✘												✘	
M			✘		✘	✘										
N					✘											
O	✘		✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	
P						✘	✘	✘	✘						✘	
Q			✘			✘	✘						✘		✘	
R			✘							✘	✘		✘	✘	✘	✘
S		✘				✘										
	7	10	14	6	11	9	11	9	9	7	7	2	10	10	15	4

	9. SUPPORTING CHANGE AND INNOVATION											10. STUDENTS		
	Obtaining funds	Freeing up time	Encouraging innovation	Gathering evidence	Building consensus	Handling dissenters	Hiring experts	Developing expertise	Embedding sustainability	Early change	Persisting over time	Eliciting student views	Decisions involve students	Students implement innovation
A			✘		✘						✘	✘	✘	✘
B	✘				✘	✘	✘			✘		✘	✘	✘
C	✘	✘		✘	✘	✘	✘	✘	✘	✘				
D												✘	✘	
E	✘	✘			✘		✘				✘	✘	✘	
F	✘	✘			✘	✘	✘	✘	✘	✘	✘	✘	✘	
G			✘					✘	✘			✘	✘	
H	✘		✘				✘					✘	✘	
I	✘		✘									✘	✘	
J			✘									✘	✘	✘
K												✘	✘	✘
L	✘	✘			✘	✘	✘				✘	✘	✘	
M							✘					✘	✘	✘
N												✘		✘
O	✘	✘		✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘
P	✘		✘									✘	✘	✘
Q	✘											✘	✘	
R				✘								✘		
S												✘		
	10	5	6	3	7	5	8	4	4	4	5	18	15	8

APPENDIX 3
THEORETICAL AND CONTEXT CODING OF CASES

CATEGORIES OF LEADERSHIP BEHAVIOUR IDENTIFIED THROUGH THE CASE STUDIES

University	Form of change	Leader's conception teaching	Organisational culture	Form of dispersed leadership	Size	Discipline	National context	Significant problem
A	C	F	A	CE	L	S	N	No
B	A	F	AD	EF	S	P	N	Yes
C	A	F	CD	C	L	S	N	Yes
D	B	E	AB	A	L	H	E	No
E	A	D	AD	E	L	P	E	Yes
F	A	F	D	C	L	P	E	Yes
G	C	F	A	CD	L	H	E	No
H	C	E	A	CD	L	H	E	No
I	B	F	AD	C	L	P	E	Yes
J	A	F	AD	C	S	S	E	No
K	C	D	A	C	S	S	E	No
L	A	F	AD	ACD	L	H	E	Yes
M	B	D	AD	AB	L	H	UK	No
N	C	F	A	E	M	H	UK	No
O	A	F	D	CD	L	P	UK	Yes
P	B	E	A	BC	L	S	N	No
Q	C	E	A	BE	L	H	N	No
R	B	F	?	C	M	P	UK	No
S	C	C	A	F	M	S	UK	No

CODING CASES AGAINST THEORETICAL FRAMEWORKS

Form of change: how teaching excellence was achieved

A Planned comprehensive innovation in the curriculum and the pedagogy involving all teachers in the department

B Mixture of planned innovation and emergent change

C Emergent change, based on small scale improvements in quality implemented largely autonomously by individual teachers

Conception of teaching[70]

A A focus on the bureaucratic structure and organisation of the department, imposed by the head

B A focus on the role, responsibility and practice of the head, who imposes a model of good practice in teaching upon the teachers in the department

C A focus of the nature and content of subjects and disciplines, which is discussed with the teachers in the department

D A focus on the roles, responsibilities and practices of the teachers in the department, which are discussed and/or negotiated with the teachers

E A focus on teaching that emphasises students' experience of studying, which is discussed and/or negotiated with teachers

F A focus on teaching emphasising the students' experience of studying in a continually changing and developing curriculum. How to change and improve is the subject of systematic discussion and consultation and the head systematically establishes means to enable teachers to develop

Organisational culture[71]

A Collegial cultures are characterised by:
Freedom to pursue university and personal goals unaffected by external control. Standards are set by the international disciplinary scholarly community and evaluation is by peer review. Decision-making is consensual, management style permissive. Students are seen as apprentice academics.

B Bureaucratic cultures are characterised by:
Regulation, rules, and consistency with standards related to regulatory bodies and external references (such as institutional quality assurance procedures). Evaluation is based on the audit of procedures. Decision making is rule-based. Students are seen as statistics.

C Corporate cultures are characterised by:
An emphasis on loyalty to the department and its management. Management style is commanding and charismatic. There is a crisis-driven, competitive ethos. Decision-making is political and tactical. Evaluation is based on performance indicators and benchmarking. Students are seen as units of resource.

D Entrepreneurial cultures are characterised by:
A focus on competence and an orientation to the outside world, involving continuous learning in a turbulent context. The management style involves devolved and dispersed leadership. Decision-making is flexible and emphasises accountable professional expertise. Its standards are related to market strength. Evaluation is based on achievement. Students are seen as partners.

Form of distributed leadership[72]

A Formal distribution via hierarchical structures – devolving responsibilities to staff to specific roles, identifiable in an organisational diagram;

B Pragmatic distribution – via ad hoc devolution of tasks to meet demands as they emerge;

C Strategic distribution – via planned appointment of individuals to contribute to specific initiatives

D Incremental distribution – involving giving progressively more responsibility to identified individuals as they demonstrate their growing competence;

E Opportunistic distribution – where individuals willingly take the initiative to extend their roles;

F Cultural distribution – where leadership is assumed rather than given and shared in a flexible way enabled by the local culture.

Coding of contextual features

National context

N North America
UK UK and Australasia
E Mainland Europe

Size

S	Small	<15 academics
M	Medium	15 – 30 academics
L	Large	31+ academics

Discipline

H Humanities and Social Science
S Science and Technology
P Professional

Significant problem faced

Yes
No

70 Ramsden (1998)
71 McNay (1995)
72 McBeath et al (2004)

APPENDIX 4
EDITED CASE STUDIES

1 ENGINEERING

Context

The university is a small institution with an international research reputation in the first rank, especially in science and technology. There are almost 1,000 academic staff members, and current student enrolment is about 10,000, of which just over 4,000 are undergraduates. The university has stressed undergraduate teaching, and created a culture where teaching is regarded as an important staff responsibility. The high level of tuition fees charged mean that there is an expectation that classes will be small and that students will have access to their teachers. Many undergraduates will go on to work in government and industry and so learning often focuses on real-world problems, for example through student projects and the department has strong links with employers. The institution has an entrepreneurial culture and innovates in both research and teaching, often supported by substantial external grants. Teaching is regularly evaluated by a variety of measures, including exit polls and student ratings of individual courses and teachers, and such ratings can affect academics' pay and promotion prospects. The university has a small educational development centre and offers well-regarded awards and funds for the development of undergraduate education.

The department is in a specialised field, in competition with the few other departments in its field, and its academic staff are in high demand as researchers and consultants. There are about 60 students in each year of the undergraduate programme which is the focus of this case study, and has around 40 academic staff. Student/staff ratios are very low by international standards. Graduates often enter key positions in government and industry, and the department has strong links with employers. The department has traditionally been cohesive and collaborative, is receptive to new ideas, and has always been strongly committed to teaching. At the start of the change process it was confronted with substantial challenges involving a change in the external environment and reduced academic staff numbers.

Indicators of teaching effectiveness

Results from student course ratings and annual exit interviews with graduating students indicate high levels of approval of the teaching programme. Data from the 2004 survey show that overall student satisfaction was substantially higher than for other departments, with especially high ratings for quality of teaching (94% satisfied or very satisfied), intellectual excitement (94%), availability of staff (94%), opportunities for independent study (93%), and opportunities for class discussion (91%). The department has recently had four staff members who have been recipients of the university's major teaching award, one won a university award for academic advising, and a number of staff have published accounts of their research on teaching and learning. The approach to engineering education developed within the department is now widely imitated world wide.

Levers for change

Just prior to this study eight staff members had taken early retirement. The Dean of the faculty required the department to come up with a strategic plan before these posts would be allowed to be filled. The department head led a lengthy strategic planning exercise that involved extensive consultations with alumni and over 100 interviews with graduate employers. Among the key ideas resulting from the consultations was that the undergraduate programme must, in addition to providing content knowledge, develop inquiry and communication skills of students. Education should be in a context of practice, and learning should be experiential, active and team-centred. It was recognised that this would require transformation of the entire curriculum and the approach to teaching.

The process of change

The strategic plan identified major educational priorities framed in ways that were congruent with the professional engineering culture. One involved drawing on specialist expertise and involved the whole department getting a better understanding of current scholarly work on learning, especially in science and engineering, in order to guide teaching and curriculum reform. Educational experts were brought in to help inform the teachers. This included a series of workshops, peer consultations, and classroom visits. Second, curriculum changes were to be 'evidence-driven' and informed by instructional approaches that evidence in published literature had shown to be effective in promoting deep learning and cognitive development. Third, commitment was built to adopt a 'systems approach' to learning that allows students to take a concept through design, fabrication and testing, with students working in small teams. Further experts on course design and assessment were hired on three-year contracts to assist with

implementation on all courses within a new coherent curriculum. The many discussions about teaching among teachers and with the consultants were supplemented by weekly staff meetings that focused on educational and teaching issues. The head said: *"As academics we develop 'communities of research'; there is no tradition of doing this in teaching….There is a need for broad forums to discuss and try out educational ideas, as would be true for research."*

Organisation

Allies within the department who were widely respected and influential were recruited and a sub-committee was appointed to explore the research literature on learner-centred education and they briefed colleagues on their findings. With support from the sub-committee, colleagues who were teaching the second-year programme began to experiment with active learning methods, which in turn put some pressure on teachers in the upper years. Although there was some resistance to change, evidence that was gathered about the effectiveness of the new methods led to changes in the departmental culture. Classroom assessment techniques were used to measure student perceptions of instructional materials. Teachers were encouraged to write reflective memos about learning in their classes, as a means of self-assessment, and to think about how learning might be improved. Reflective memos were reviewed by the deputy head, and an annual report on the memos was prepared for the undergraduate committee, which could make recommendations for programme-level changes, if appropriate.

Leadership and decision-making

The head who steered this process took office in the early 1990's, and was instrumental in introducing, guiding, and implementing the strategic plan until he left the university a decade later. To support the change he raised substantial external funding, which was used to bring in outside expertise, provide physical resources (including space that would support the new teaching methods and team work), and allow buy-out of time for staff members centrally involved with planning and implementing the new curriculum. The comprehensiveness of the strategy for change convinced the Faculty Academic Committee and convinced the Dean to release previously frozen academic posts. The head saw, and sought to persuade his colleagues, that the whole endeavour to improve teaching and learning should be a scholarly activity.

The head was a long-standing, well-respected senior member of the department. The climate in Systems Engineering was collegial and many colleagues were sympathetic to change, while others were neutral and a few were hostile. The head recruited most of the first group to help plan the change (*"courting opinion leaders within the department to serve as early adopters"*), co-opted some of the second group and gained their support for general principles before the practical implications were yet clear, and largely ignored the resisters. All decisions about the new curriculum were regularly discussed with the department as a whole but the head argued that it was sufficient for a majority to support a proposal for it to be implemented. For those staff members who helped plan and guide the change process the head ensured there was recognition and rewards, through release time, extra funding, and acknowledgement.

Form of leadership

Leadership in this department can be seen as transformational. As a result of the strategic planning process motivation, energy, and morale increased significantly. The head was able to create and articulate a vision that all could buy into, and to defend it vigorously at all levels of the university and in the wider community. He served as a powerful role model, and was seen as highly trustworthy because he listened intently to, and showed respect for, the views of everyone in the department, including some views he strongly questioned. He was also able to obtain – almost single-handedly – the resources necessary to achieve the objectives agreed upon by the department, for consultant support, for academic staff time and rewards, and for a new building suited to the new educational approach.

A key factor was the leader's insistence on consulting widely (internally and externally) as a first step in the planning process. On the basis of these inputs a set of goals and a plan were developed communally. Throughout the process, discussion and decision making was kept open and transparent, though there was clear leadership from the head, his planning sub-committee, and the teachers involved in second year teaching. In the end, however, all staff participated in all significant decisions. The head did not expect to get everybody on board before starting the next stage of the initiative: "An important role for a leader is to ensure that when a reasonable majority is in agreement, then we move forward". He also argued that while *"curricular and teaching change has to be owned by the entire department…an educational reform project has to be led from the top"*.

The insistence of the head about basing decisions on data, on best practice, and on the very latest research also appealed to a scientific and professional staff. A very ambitious programme of staff development enabled staff to learn about new teaching approaches and to develop the skills required by the new curriculum. When this proved successful the result was enhanced staff motivation, morale, and team building. Steps were taken to enhance the importance of teaching in hiring, tenure, merit and promotion decisions, so that significant rewards were contingently related to good teaching practice.

The approach to change described here was almost entirely a department initiative and seems to have had little impact on teaching practices elsewhere in the institution. In the words of one staff member, although there are other examples of good teaching in the university *"this is the only department to have institutionalised teaching innovation".*

Impact and sustainability

The process of change was not achieved without some opposition. For example there were some complaints about the time involved in adopting new methods and writing course goals, concerns that content coverage would suffer, and insecurities about staff understanding and competence with the new methods. The head argued that the only way to deal with such attitudes was to ensure that enough resources and commitment were put into the new approaches to make them effective and have students recognise this. Meanwhile there was considerable public commitment to the new approach by the group who were team-teaching the second year programme in 1999-2000, and student evaluations at the end of the year were largely positive, as were the comments made by the staff in reflective memos. Students not only liked the active learning methods but also commented on the enhanced sense of collegiality in the department. This served as a model for extension to other parts of the curriculum, and for the 2000-2001 year the staff agreed to adopt a *"more intensive and uniform approach to active learning".* The approach to engineering education has been 'branded' and consultancy support has been provided to other universities world-wide to adopt the approach.

There has been some slippage since the former head left, with not everyone currently completing the reflective memos, much less external funding for educational development, and hence no more external consultants. Although the department continues to look at the curriculum, the discussion is now *"value-driven rather than evidence-driven".* And across the institution as a whole, the idea that teaching approaches should be guided by relevant educational research and effectiveness judged in terms of tangible learning outcomes has not taken hold widely.

Commentary

The key features in this case appear to be:

- A charismatic, energetic and inspirational leader.
- The recognition of a significant challenge to the future of the department.
- Extensive information gathering from stakeholders about perceptions of the problem and possible ways forward.
- Comprehensive strategic planning of principles and then of practices in line with these principles.
- Extensive use of external expertise at every stage.
- Obtaining significant funding.
- Recruitment of allies and support of early adopters.
- Extensive discussion with the department at every stage.
- Extensive reflection on emerging practices and their effectiveness.
- Recognition and reward for successful engagement with the new educational approach.
- Not being blocked by the minority not wishing to change.
- Use of approaches congruent with the disciplinary and professional culture (e.g. evidence-based).

2 MATHEMATICS

Context

The University is an older, elite, medium-sized (about 17,000 students), and traditional North American university that offers a wide range of programmes in Arts and Science and through several professional schools. It is also highly selective, and has high (over 90%) retention rates. Annual research income from outside sources is relatively high by national standards.

There is no formal system in place of quality assurance for teaching, but there are regular student evaluations and an annual exit poll of graduating students that focuses on the quality of their learning experience. Students are represented on many university committees, including staff appointment committees.

An educational development office was established in 1992, this offers a range of courses and programmes for faculty and graduate students and help with curriculum planning. There are three university-wide teaching awards, and a great many awards offered by individual faculties, schools, and departments.

The Department of Mathematics has an academic staff of 30, and accepts about 30 mathematics students a year into the honours programme, and a further 30 into Engineering Mathematics, taught jointly with the Faculty of Applied Science. The department is also the largest university provider of service courses for students who have to meet mathematics requirements in other programmes.

The department head is appointed for a term of three years by the Dean of Arts and Sciences, after consultation with the Mathematics staff. Most heads serve for one or two terms, and the current head was appointed in 2004.

Indicators of teaching effectiveness.

The department has a long-standing reputation for consistently good teaching across a wide range of courses. Mathematics teachers are rated highly in the annual student course evaluations, and results from the exit poll also show high levels of satisfaction with the learning experience. Many Mathematics teachers have won teaching awards, at the university and national levels.

Teaching roles and rewards

In the 1970s, the head at the time saw Mathematics as primarily a teaching department, and people were hired largely for their teaching ability. In the early 1990s the university moved to place much greater emphasis on research, and some staff had to take on more teaching than others who were heavily engaged in research. Greater emphasis was also placed on course planning, teaching methods, and providing support materials for students, although a good deal of teaching was quite traditional, and based on lectures, problem-solving tutorials, and formal examinations. This division of labour was largely accepted, and heads over the years tried to ensure that both good teaching and distinguished research were recognised in the annual review process and through nominating the best teachers for external awards.

At the same time there were concerns about creating a 'two-tier' department in which some staff do more teaching than others, with a few of the best teachers handling the large labour-intensive introductory courses. There was a core group that were very keen on teaching, who loved interacting with students, and who volunteered to take on more their fair share. For example, several of this group put on extra seminars for students on special topics, some offered reading courses for individual students, others were deeply involved in training and mentoring teaching assistants, including the undergraduate teaching assistants that are a unique feature of the department and have proved very popular and successful.

Despite the university-wide emphasis on research, teaching is still taken very seriously when recruiting new staff. Individuals are asked to submit teaching portfolios with their application, and referees are asked to comment as fully as possible on candidates' teaching experience and strengths. Applicants who are invited for interview are usually asked to teach an undergraduate class, and student feedback is solicited by the appointments committee.

The goal of good teaching, in the words of one teaching award winner, is to *"extend students' imagination"* and allow students the time to really *"meditate about"* a mathematical problem, even at the expense of 'coverage'. To do this, *"establishing rapport and trust is a huge issue"*.

Curriculum issues and educational development

The department is involved with educational development in a number of ways. For example, some staff have worked with (and for) the educational development centre, running

workshops and co-teaching short courses. For some time there have been training programmes for teaching assistants (graduate and undergraduate), and for many years a staff member (and teaching award winner) ran a weekly seminar on teaching and learning in mathematics.

The department has not undertaken a major curriculum change for many years, although there is continuous attention to course offerings in the light of evolving high school curricula and accreditation standards (e.g. for professional engineers).

The role and experience of students

The department takes great pains to consult with students, and staff members are perceived as very approachable and helpful. Students are represented on all key committees in mathematics, and also serve on appointments and promotion committees. The student leader interviewed for this case described the teaching approach in Mathematics as emphasising problem-solving and critical thinking, setting challenging assignments that encouraged creativity. Although the core introductory calculus course is lecture-based, there is a large component of group problem-solving led by six undergraduate teaching assistants in well-received weekly seminars. In fact, nearly all the senior undergraduate honours students are involved in some form of teaching, which is seen to be invaluable both for the TAs and those they are helping. Students (postgraduate and undergraduate) also run the "remarkable" mathematics drop-in help centre, which offers help to anyone having problems.

The current head was seen as "passionate about teaching, and someone who is always seeking to explore new learning approaches, with the aim of making mathematics "central to a wider understanding of the world". He had been strongly supportive of the use of undergraduates as teachers and mentors. He was perceived as striving for a *"cohesive feeling"* in the department and was characterised as *"involved, caring, creative"*.

Leadership and the role of the head

The present head is a popular, award-winning teacher, and has a long-standing interest in mathematics education, both at the university and school level, has written an important mathematics textbook, and served as adviser on the mathematics curriculum for the school system. He has also been an outspoken critic of much traditional educational practice. His views have sometimes provoked some controversy, although it would be fair to say his opinions on teaching issues are widely respected even by those who disagree with him. He is convinced that *"students have to construct their own understanding"*, but feels many colleagues are nervous about *"letting go"* and allowing students full freedom to do this.

He took on the role of head with an interest in changing teaching, though fully realising this would be not be easy and that his views about needed changes might be seen as too radical or even, in the words of one staff member, as *"evangelical"*. He believes in *"strong leadership"*, which he sees as involving careful consultation with colleagues and students but then making up his own mind. Primarily the job entails *"making key decisions about the life of the department"*, on matters as diverse and potentially contentious as space, workload, and academic merit. A head should listen, support and praise, representing the department to outside agencies, and *"gaining the confidence of the larger university community"*. To do this a head must have a good understanding of the issues and only speak when he has something important to say. His greatest satisfaction as head is to help provide an environment in which people (students and colleagues) can develop and grow.

There is a long tradition in the department of heads interested in teaching, even though over the past decade there have been increasing pressures to engage in more research, publish, and seek outside funding for scholarly activities. Previous heads had realised that the viability of the department depends to a large extent on students' satisfaction with their learning experience, especially in the large service courses, and hence a good deal of resources had been put into these courses and the best teachers planned and run them. Heads had also tried to ensure that these key instructors were rewarded for their efforts, in part through the annual review process, and where possible by recommending good teachers for tenure or promotion, even though there was no doubt that currently *"research dominates"* and it would no longer be possible to get promoted to Full Professor without an international research reputation, no matter how good a person's teaching. This stance by the various recent heads had broad acceptance in the department. At the same time, in the words of the current head, *"Research is easy to support – with money. It's much harder to find resources to support good teaching."*

Commentary

This case does not involve substantive change (e.g. a major curriculum reform), but rather a long-standing commitment to teaching and a process of incremental change to respond to new needs and demands from stakeholders (students, the teaching profession, other university faculties that require mathematics courses for their students).

In a university culture that increasingly stresses – and rewards – research and publications, the department has to strike an uneasy balance between encouraging productive scholars (with time and resources) and ensuring that undergraduate teaching does not suffer, especially in the large service courses that constitute a core part of the Mathematics curriculum.

Heads over the recent past have had to deal with this tension, and have consistently tried to encourage, protect, and recognise the group of committed teachers on whose efforts the department's reputation for good teaching largely rests. They have done this in different ways. For example, while the present head acts as a role model by his own extensive involvement in teaching initiatives, predecessors had used other strategies, including wide consultation, an emphasis on equity and respect for different teaching approaches, even sheer persistence in the face of criticism. The following list of contextual factors and leadership strategies reflects characteristics and strategies not just from the current head, but from colleagues who also served in that role over the past decade.

Contextual variables

- A core of staff who place a strong value on the importance of teaching and who are themselves effective teachers.
- Perceived/implied pressure from client faculties (especially Applied Science) for good teaching in the large, key required service courses.
- Some competition for students (especially to recruit honours students).

Leadership tactics

- Good and regular communication with colleagues and students, and willingness to act on feedback received.
- Fostering differential roles for staff to reflect their strengths.
- Ensuring rewards and recognition for special efforts and successes in teaching through the annual review process and by nominating staff for external teaching awards.
- Requiring evidence of good teaching in the appointments process.
- Arranging that the best teachers take on the most crucial and challenging courses, especially large service courses.
- Modelling good teaching and teaching innovation.
- Keeping in close touch with key stakeholders who have an interest in student success in mathematics – especially the home Faculties of students taking required service courses.
- Outreach activities with local high schools, both to influence teaching practice and to encourage quality student applications.
- Generating interest among potential student applicants to the department.
- Encouraging educational development through attending in-house activities and facilitating staff involvement in university-wide initiatives.
- Involving students as teachers and mentors.
- Supporting new teaching initiatives with recognition and resources.
- Representing the department effectively to outside agencies through mastery of relevant issues and careful selection of matters on which to lobby or intervene.
- Persistence with vital issues even in the face of criticism.

3 SCIENCE

The department

The department is one of the smallest of a number of departments in a very large science faculty. In every national external review of its research the department received the highest research ranking in the country, alongside two others in the same subject. The ratio of doctoral to undergraduate students is higher than average for the university and the ratio of research staff to academics is also higher than average. It provides an intensely research-oriented environment for its teaching. The department has three educational programmes: a three year undergraduate BA, an additional fourth year (involving a one-year research project) that converts the qualification into a Masters, and a doctoral programme. There are 30-35 new undergraduates each year, most of whom go on to the Masters, and 10-15 new doctoral students each year, a total of about 170 students in all. This small size is crucial to its culture and mode of operation.

The department building is the centre of gravity for its students and academic staff to a greater extent than in many other disciplines in this university. The building is designed around central social areas where students, research students, postdocs and senior academics mix informally. There are daily coffee and tea gatherings and a weekly 'beer' social, introduced by the current Head. The department has its own library within its building and the librarian is important to student support and knows all students individually. The social ambience is considered very important and "everyone is nice in this department". There has been successful implementation of a "subject family" approach to vertical social integration between undergraduates, Masters students, doctoral students, postdocs and academics. Relationships were described as "cohesive" with "a good flow of information between all levels".

Indicators of teaching effectiveness

The national external review of the department rated the quality of education as "excellent". The assessors were impressed by the scholarly nature of the programme, by the depth and breadth of the curriculum and by the widely-read and high quality student body. They noted the atmosphere of enthusiastic scholarship that pervaded the teaching, learning and research environment, the excellent library, museum and study space facilities and a well-chosen and well-structured programme of fieldwork.

Following the most recent internal review of the department the report notes the way the programmes are informed by the department's strong research base and how it brings students into contact with leading scientists in a close-knit community with ample opportunity for students to meet them in an informal context and for students to be exposed to wide ranging discussions and exchanges of ideas.

Students have exceptionally high school grades in Maths, Chemistry and Physics.

The department has amongst the highest student ratings in the university on a number of scales of its undergraduate questionnaire administered to all students towards the end of their final year. In particular the department is rated as intellectually stimulating, as stimulating interest in the field of study and as motivating. Students believe that they benefit from being in contact with active researchers and both their overall satisfaction and satisfaction with the quality of support from the department is very high, especially compared with other science departments. The workload is, however, experienced as inappropriately high. Ratings on the university's questionnaire administered to completing doctoral students are above the university average on every single scale, with exceptionally high scores for the quality of students' research experience, for their supervision and for the quality of services and facilities. It is unusual at this university for a department to receive such high ratings for both undergraduate and graduate education.

Change

The departmental culture is one of management by consensus and slow, incremental change, with an emphasis on maintaining its ethos and values and on what was described as "convention and continuity". One of those interviewed who had been in the department for almost thirty years described the abiding characteristics of the department as friendly and an ideal environment in which to work – which everyone works hard to maintain, rather than to change. There is no history of radical change and none of strategic initiatives. No significant change is planned. There is much discussion of the content of the curriculum – what the subject consists of and how courses should develop – but less about the process of teaching.

Leadership

The role of Head rotates every five years from amongst the department's senior academics, by appointment. It is very

rare for anyone to serve two terms of office. The current Head of Department has been in the department for 20 years, after being at Harvard, and was made a Professor five years ago. The Head of Department role is avoided rather than competed for, but a Professor is not, by convention, expected to turn down the position if invited to take it up. The Head said "no-one wants to do this job, I felt obliged to do it". The Dean of Science "took soundings" amongst the department's academics about the most appropriate person for the position. The Head was perceived as likely to bring about changes, not all of them welcome. He reported that he had been in post for "two years and five months" and was clearly looking forward to stepping down.

Teaching

Teaching is outwardly conventional (with lectures, laboratory sessions, small group discussions and tutorials) but is characterised by especially close contact between students and their teachers, all of whom are leading research programmes. Relationships are informal (on first name terms), dress is very casual and doors are open. Students drop in on their teachers to discuss feedback on assignments or confusions from their studying. Additional individual tuition is available to students on request. Regular fieldwork is undertaken in small groups in which "everybody mucks in" and this establishes the integrity of social relationships with academic staff. Practical work and very small group teaching and tutorials are almost all undertaken by academics rather than by doctoral students, and this maintains and strengthens these relationships. The small cohort of students ensures that everyone knows everyone else as a person. Undergraduate, Masters and Doctoral students, who were interviewed in a group, were all on first name terms with each other.

Students engage with cutting edge primary literature from very early on. For example second year small group work can consist of reading and discussing the most significant papers in Science and Nature in the previous year (as many as possible written by colleagues in the department) with the intention that students understand the current nature of the discipline. There is a blurred boundary between research and teaching with undergraduates helping out with research studies in the lab or in the field during vacations and teachers frequently talking about their own research. The central social space is surrounded by recent conference poster presentations that are replaced regularly so that undergraduates could not fail to be aware of the kind of research going on in the department and the volume and pace of that research, or fail to know who was doing which research. The social space is the forum for almost constant informal discussion of research, with everyone joining in. There are close (informal) links with industry and students also take up summer jobs with the main employers on an ad hoc basis.

Teaching development

There are no visible teaching development processes. There is no training or mentoring for new academics and no observation of teaching (though this happens informally on field trips and in labs). There is no annual performance appraisal and salary is not linked in any way to teaching performance. There are no seminars about teaching, no teaching development projects and no teaching awards. No individual is allocated a teaching development role. There is no pedagogic research and evaluation of teaching is rudimentary.

While there has been innovation in terms of the curriculum (introducing the fourth year to extend the BA to a Masters programme, and introducing more modern themes and technologies into courses) there has not been any innovation in terms of teaching or assessment methods. It is the style and manner of teaching and the social milieu within a research environment which is seen to make it work, not the methods.

The 'Faculty' which is the official democratic decision making body of the department, is large and unwieldy, meets infrequently and makes few decisions. An 'Academic Committee' was established a decade previously to manage the bureaucracy associated with an external quality review of teaching. Ideas for development of the curriculum now emerge from the Academic Committee and proposals for change are thrashed out before coming to the Faculty for ratification.

Student feedback and evaluation

The head sees the Academic Committee as crucial and stated that "it is essential to manage evaluation of the course in structured ways". There is a standard student feedback questionnaire administered for each lecture programme (once a term) and on each field trip. Ratings are mainly high though there are exceptions. The Academic Committee examines ratings for all courses and lecturers but there is seldom felt to be a need to take any action. There has been no attention paid to data from the university-wide questionnaires completed by departing undergraduates and graduates. A Staff-Student Consultative Committee meets to hear student views. Examples of issues raised that have been acted on

include an excessive workload in the second year of the course and arrangement for examinations. Some of the issues raised are perceived as impossible or undesirable to respond to. The close relationships between students and academics, and the low student numbers, mean that student views are in any case largely known. Students confirmed this impression and they were sceptical about the value of questionnaires, given that they had more direct means to express their views, such as at an end-of-year 'review' at which their teachers were gently lampooned. There is a formal consultation process involving a committee which is a route for any complaints but students perceived there to be a sense of inertia and examples were given of teachers not responding to very pointed feedback. Younger teachers were perceived as both better and more responsive to students.

The head has initiated a 'market research' study of employers' views but was dismissive of the views of employers' personnel departments that the programme should be more applied ("to keep company training budgets down"), as it was known that Chief Executives wanted the department to produce students who could think. The head would like to bring in external expertise to help thinking about developing the programme but this might not be appreciated by colleagues and the head could not take such a decision unilaterally.

When interviewed, students entirely supported the view of teaching and its strengths, as described in external reviews and by the head and academics. They described engagement with cutting edge research from their first year, close personal contact with leading researchers, easy access to their teachers after and outside of formal classes and an exciting and lively scholarly environment. All could cite examples of involvement in informal research-oriented discussions in the social area. They reported their teachers being responsive to their expressed needs on a day to day basis, providing additional tuition after lectures or practicals, on request. They were impressed with the content and level of lectures but not with the technical quality of lecturing skills or with the heavy volume of lectures, but considered that this didn't really matter as they would study the subject independently anyway. They said "The teaching is actually not that good but these are people at the top of their field and you want to be part of it and you want to put the hours in". The students were hugely enthusiastic about becoming members of the disciplinary community (and described boring their friends telling them about the subject). They reported a great deal of interaction between students, between as well as within years, teaching each other informally. There is little formal assessment and learning was described as being about interest rather than grades. They described the admission process as making sure that all students were motivated to cope with the pressured and committed environment.

Appointment of new academic staff

As so much of the success of the teaching is due to cultural norms and values rather than to pedagogy or innovation, the way new staff are appointed is seen as vital to maintaining what was described as a "very high sense of corporate well-being". About one third of the time taken to select new academics is allocated to teaching issues. Candidates are also required to give a lecture to a non-specialist audience and asked how they would fulfil their teaching role. The selection process is "looking for demonstration of commitment to teaching" and whether candidates would have "empathy with young people". Only two offers have been made in recent times to individuals where there were question marks about their teaching, and neither individual took up the post. There is a strong feeling that continuity of the culture and teaching ethos of the department, and the ability to "fit in", is too important to allow an absolute emphasis on candidates' research. Applicants are also expected to be versatile in their research focus in a way that would be likely to lead to collaboration across research groups within the department.

Tenure, after five years, is almost automatic. Teaching is not considered in applications for readerships and professorships.

There has been no innovation in teaching processes and there is little discussion of teaching in the department. There has been some increased discussion in recent years, because the role of the Academic Committee has been strengthened and it has become the place where thinking about educational changes takes place before ideas are presented to the Faculty. The focus of these discussions tends to be on modernising the curriculum rather than on modernising teaching methods.

The curriculum has gradually been changed to focus more on contemporary concerns in the subject. These curriculum changes have sometimes been controversial but have not been accompanied by changes in teaching methods.

The role of the Head has been limited to one initiative, in response to a perception that the collegial culture had previously been too laissez-faire, allowing individuals to get on with their teaching on their own without consideration of the

overall impact. He tackled the long-standing and wide discrepancies in teaching workload. This was achieved largely through publishing detailed information about comparative loads, which resulted in spontaneous offers to balance duties, rather than requiring coercion. There is now a transparent accounting of teaching duties.

Commentary

The departmental culture is highly collegial with a considerable degree of individual autonomy about teaching although this autonomy does not result in much variation from an accepted pattern and style of teaching. The collegiality involves giving equal weight to all individuals' views and the head *"wouldn't be allowed to be powerful"*.

There is less demarcation between undergraduate and graduate teaching, and between teaching and research, than is usual in such a research-intensive department. The department includes all levels of students in a close-knit, non-hierarchical and mutually supportive community of practice that students are highly motivated to become members of. Studying is perceived as 'becoming a scientist'. Teaching can be characterised as conventional and not always excellent but the educational environment supports student learning exceptionally well and ratings for features of the programme as a whole are higher than ratings for some individual teachers.

The role of leadership of teaching seems largely to concern maintenance of the well established culture through the careful selection of students and careful appointment of new academics, and through informal means (such as arranging social gatherings) as well as formal means (such as reforming the teaching duty allocation system so that it was seen to be fair). In contrast there is support for almost constant innovation in the curriculum through discussion and negotiation and through strengthening the role of a group that has responsibility for curricula. There is however little discussion of the way individuals would teach new curricula.

There is a shared sense of responsibility for the success and well-being of the department to an extent that many individuals naturally assume responsibilities without formal allocation of tasks by the head. One interviewee commented: *"people will pick things up and just do it – there is a sense of corporate responsibility",* but with no semblance of corporate management.

4 ENGLISH

Context

The University is a medium-sized prestigious and wealthy institution with an international research reputation, especially in the sciences. There are almost 1,800 academic staff members and the total student body is around 15,000, more than half of them postgraduates. Student/staff ratios are exceptionally low at around 7:1 and the calibre of entering students in all programmes is high. The university has always considered teaching to be a major priority, in part because of close links with alumni, many of whom place high value on the quality of the learning experience. An important recent initiative to expose undergraduates to the research culture of the university has involved undergraduate research seminars led by leading scholars.

The Department of English has an academic staff complement of 33 and offers a major in British and American literature, a small honours programme, and postgraduate study up to the doctorate. The current head, appointed by the Dean after wide consultation, is a long-serving member of the university, and has previously served in several senior administrative positions.

Indicators of teaching effectiveness

The department receives excellent student teaching evaluations – in 2005 an average of 4.5 on a 5-point scale, currently has nine teaching award winners, and a recent review of the department by the school's curriculum committee commented especially favourably on the quality of their teaching programmes.

Teaching and Learning

Learning in English is *"concentrated, intense, and demanding"*. Although there are some lectures, much teaching involves seminars and considerable in-class interaction, supplemented by subsequent on-line discussions. Assessment tends to rely more on in-class essays and other assignments than on formal examinations. There is a special programme of seminars and workshops for honours students, who also write a thesis.

Almost all graduate students serve as teaching assistants, and their work is taken very seriously. All TAs must take an initial 10-week training course on teaching methods, followed by a period of mentorship with an experienced TA, and they continue to be supported and monitored by a mentor once they have begun their own teaching.

Teaching values

Since the undergraduates are highly selected and very talented, teaching is seen as *"an incredibly rewarding experience"* for most staff members. According to the head, there is a *"long-standing tradition and pride in being one of the best teaching departments in the university"*, with many faculty members who have *"taken the lead on teaching and learning issues across the university"*. Almost a third of the staff hold teaching awards, and teaching is considered seriously in hiring new faculty, granting tenure, and making recommendations for promotion. All new staff members are assigned a mentor, who offers advice on both research and teaching issues. They sit on classes and offer *"constructive guidance"*, provide a report to the head, which in turn has an impact on future career decisions

There has recently been considerable discussion in the department of the value of taking an English degree and what skills are learned in the process. At the same time there is no formal provision for pedagogical training or educational development and no attempt to enforce a common teaching approach. Efforts to improve teaching have not been driven by demands from the departmental leadership or any systematic review of educational research, but rather have been stimulated more by the experience of colleagues. The departmental climate encourages *"adventurous teaching"* – developing new courses and using new methods – and there are lots of resources in the university to facilitate such initiatives. The introduction of information technology (especially web-based resources and on-line discussion forums) has also provided a lever for change.

Students reported that there were many committed teachers in English, and plentiful opportunities to interact with teachers. The head was well known and well liked and had made a point, for example, of meeting with graduate students to get their input on the future of the department. He had also expressed the desire to make the workings of the department *"more transparent"*.

Leadership and the role of the head

The present head is new to that position but has been at the university for 14 years. He recently served as a senior administrator charged with coordinating undergraduate programmes across the different departments and schools and with changing the general requirements for obtaining an undergraduate degree.

One important initiative of this period was the introduction of the undergraduate research seminars, mentioned above, which have had major implications not just for the learning experience of undergraduates, but also for teaching. The university used considerable leverage to encourage development of the seminars, including the promise of funding and new positions. According to the head of English, this scheme had an *"immense impact"* on undergraduate education and generated considerable interest in different teaching approaches and student learning experiences.

The English department has been an active participant in this programme, and discussions about the seminars caused a detailed examination of requirements for the major, and the introduction of new, smaller, and much more interactive courses that emphasised *"learning through research"*. The intention is not to produce professional researchers (fewer than half the undergraduates go on to postgraduate studies), but rather to have students understand *"how and why new knowledge is created"*, and how people can best use knowledge. A new committee was created to think broadly about the nature of literary studies and what the field will look like in ten years. The group considered both philosophical and practical issues, and attempted to trace out implications both for curriculum and staffing.

According to the present head, he has not explicitly "led" these changes, nor does he believe his predecessors did so. They "simply evolved" as a tradition of interest in teaching over the past 30 years. At the same time, at the university level there was a major push for change that stemmed from the senior administration. They articulated their ideas clearly, consulted widely, and backed up their ideas with substantial resources.

The main leadership challenge at present, according to one faculty member, is to *"make the case that English is a subject worth studying"*, and convince students that English *"has the potential to change their lives"*, especially when the discipline is such a "wide constituency" with many different needs and expectations to be served. The present head was seen as a good person to take on this challenge, someone who had a *"profound engagement with undergraduate studies"* and a clear vision of the department as a *"liberal arts college within a research university"*, and was *"honest and optimistic"*. He is a respected scholar and good teacher who has also been involved in promoting effective learning through example: for example, he is currently teaching the required pedagogical course for teaching assistants.

Commentary

This is an example of a department that does do teaching well, based not on 'directive leadership', but at least in part on the credibility and example of the head of department as an individual. The present head is a highly regarded and well-liked individual, with extensive experience of administration and leadership at a senior level of the university. All the faculty informants, including the head, referred to a climate and traditions that value teaching. The mechanisms to support good teaching (e.g. student evaluations, mentoring of new staff members, support for innovation, stress on teaching effectiveness in appointment decisions and tenure hearings) have been in place for several years and appear to be accepted as part of the departmental culture.

Unlike the situation in some cases, there is no obvious external pressure to change teaching and curriculum. The only obvious lever for development and change appears to be a slight concern about the future viability of the department caused by a drop in high quality students seeking to become English majors, and about justifying the purpose of English study in a university that is best known for its accomplishments in science.

The head is clearly a committed teacher and scholar and a respected figure in the department. His approach to leadership is diplomatic and collegial. He has given active support to the committee charged with developing a vision for the department, but has not attempted to influence its work unduly. Interestingly, the major curriculum changes in the department – the introduction of the research seminars – appear to have been stimulated by an initiative of the senior administration, in which the current head was formerly an important player.

5 VETERINARY SCIENCE

The university

The University is the oldest in the country and is a large, research-intensive institution offering a wide range of professional and general programmes at all levels. It has an enrolment of about 40,000 students, of which about 10,000 are postgraduates, and there are around 2,500 academic staff.

Development of teaching at department level is supported by a range of institutional policies and initiatives, including:

- Faculty teaching and learning plans that focussed on improving the quality of the student learning experience and regular faculty reviews of teaching and of the student learning experience.
- A performance-based funding model for teaching and learning, with the equivalent of £3m available per year.
- A teaching improvement fund to support new teaching and learning initiatives at the department and faculty level.
- A "scholarship of teaching index" that financially rewards evidence of good teaching practice based on a range of indicators, ranging from student evaluations to faculty teaching awards and publications on educational initiatives.
- Promotion requires the demonstration of "superior" teaching (in which case the research record must be "outstanding") or "outstanding" teaching (in which case the research record need only be "superior"). Candidates are sometimes turned down on the grounds of insufficient evidence of superior teaching and sometimes promoted substantially on teaching grounds.
- Annual teaching awards at the university, faculty and departmental level for excellence in teaching, for supervision, and for the support of the student learning.
- Professional development programmes for teachers, including a mandatory three-day "Principles and practices" course for new teachers, a mandatory short course for supervisors of doctoral students, and a voluntary graduate certificate course for staff who wish to take a more scholarly approach to teaching.

The faculty

The department was founded in 1910, and is the "longest established continuing veterinary school in the Southern hemisphere", operating on two campuses, each with a teaching hospital, and one with a working farm. The Faculty offers a BVSc degree, several Master's degrees, a Ph.D., and a number of postgraduate diplomas. The BVSc is a five-year programme, which admits about 130 students a year. The faculty also offers a Bachelor of Veterinary and Animal Science, taught jointly with the Faculties of Agriculture and Science, and with an annual student intake of 60. About 40 students are enrolled in Master's programmes, and about 60 in doctoral studies. A small number of students (16 in 2004) are enrolled in various certificate programmes. The number of academic staff is currently about 80 (up from about 50 five years ago).

The Dean of the Faculty is appointed by the senior university management for a fixed term, usually five years. The present dean was recruited after an international search, but his predecessor, who oversaw many of the curriculum changes described below, was an internal appointment.

The case visit took place in March 2006, and involved meeting with the present and former dean, the associate dean for teaching and learning, 11 other members of staff, many of whom held key administrative positions in the faculty, several members of relevant supporting agencies (including the university library and the ITL), two external consultants to the faculty, and a group of 11 students. The faculty also made available extensive print materials about its teaching programmes and curriculum planning process, including material prepared for external reviews by the university's Academic Board and two external accrediting agencies.

Indicators of teaching effectiveness

Student numbers have increased substantially over the past few years, with a larger proportion of Australian and international fee-paying undergraduates, which has brought a substantial enhancement in income to the faculty and enabled recruitment of additional academic staff. Competition for places is high, and in 2005 there were over 1500 applications for 130 places. Retention rates in all programmes is the highest in the university (around 95%). Over 70% of BVSc graduates go into professional practice, and they have very high employment rates compared to other graduates, as well as high rates of progression to postgraduate study.

The faculty conducts regular evaluations of the student learning experience, including focus group interviews with selected students, unit of study evaluations[73], and annual surveys with the Course Experience Questionnaire[74] that allow comparisons with other academic programmes in the

73 Roughly equivalent to North American course evaluations, though each unit of study typically involve several teachers.

74 In fact the University uses its own adaptation of this instrument called the SCEQ, but the generic term is used here.

university, and with other Australian veterinary schools. Survey results are made available to both staff and students via the faculty's intranet. A recent analysis of CEQ data for the years 2000 to 2003 showed a recurring trend for improvement in the key scales of "Learning community", "Clear goals and standards", "Good teaching", and "Overall satisfaction". In the case of the latter two scales the faculty's average was the second highest in the university. The university's 2003 review by the Academic Board commended the faculty for its "open and shared culture", "sense of community", and high standard of teaching that was "motivating, stimulating and challenging".

Many Veterinary Science staff members have won teaching awards at the university and national levels. Since 2001 this has included five Vice-Chancellor's awards for outstanding teaching, two Australian Veterinary Association teaching awards, one Australian College of Educators award, and four staff have been finalists in the Australian national teaching awards. The faculty has also competed very successfully for funding from the university's "Teaching Dividend", Scholarship Index, Teaching Innovations Fund, and Strategic Teaching Improvement Fund.

The faculty has accreditation from the Australasian Veterinary Boards Council, the Royal College of Veterinary Surgeons, and the American Veterinary Medicine Association, all of which commented favourably in recent reviews on the faculty's commitment to teaching and success in introducing its new student-centred curriculum.

Levers for change

In the late 1990s the faculty was facing a financial crisis caused in part by declining government funding for what was one of the university's most expensive programmes to operate, and this "had undermined teaching, research, and clinical practice". There were poor ratings from final year students on the quality of their learning experience, and expressed dissatisfaction from practitioners about the quality of the faculty's teaching as a preparation for a rapidly changing profession. As one staff member commented, there was a "decline in morale, a lack of leadership, and teaching was given low priority". The university was in fact considering amalgamating Veterinary Science with two other faculties. Around the same time, accreditation agencies, especially in the USA, began to change their procedures and criteria to place much greater emphasis on learning outcomes, which in turn entailed a much greater scrutiny of teaching and learning processes in addition to staff qualifications and course content. This coincided with the university's renewed emphasis on teaching and learning (see above) and provision of funds to effect change and improvement.

Restructuring the faculty

Following a strategic planning exercise carried out in 1999, Veterinary Science decided to take advantage of this opportunity, and embarked upon a radical restructuring of the faculty and the undergraduate curriculum. A long-time staff member was appointed as dean in 1998 and was given resources to lead the process of change, which emphasised "the resurgence of teaching", based on sound evidence for effective practice, while at the same time trying to ensure that research was not neglected. He thought that there were many excellent teachers and researchers in the faculty, but that this did not in itself "make for exciting learning". Indeed in some ways the faculty was dysfunctional: "Despite a 50% budget cut we continued to try and function the way we always had". He was convinced that the faculty culture would have to change so as to "take responsibility for ourselves", and set about establishing and empowering a "critical mass" of staff committed to creating an "ethos of teaching", some recruited from outside, some brought in as short-term consultants. One staff member described the dean's approach as "essentially a business model" in which he posed the question: "What is our core business?" The answer was "teaching and learning". For example, more fee-paying and international students would generate more income for the faculty, but to attract them the quality of teaching would need to be significantly improved.

An important preliminary – and difficult – step was to disband the seven constituent departments that had existed in Veterinary Science and instead to create a single unified faculty. This had the advantage of "demolishing the silos" and promoting conversations across all staff that would allow for the development of a unified mission and goals for teaching and learning. The aim was to develop outstanding veterinary practitioners equipped with leadership and lifelong learning skills.

Changing teaching and the curriculum

A major influence and "architect of change" was the Associate Dean for Learning and Teaching and the Teaching and Learning Committee that she chaired. The committee played a key role in preparing for the upcoming accreditation reviews (seen as an important lever for action), and developed the faculty's teaching and learning plan. There was to be a professional and scholarly approach to education, with teaching practices grounded in relevant research on effective

learning and pedagogy. Teaching was to be a more systematic and public activity, with ownership by the faculty as a whole rather than by individuals. It was also to be learning-centred and student-centred rather than subject- or teacher-centred, and with an emphasis on deep learning, inquiry, reflection, and self-direction. The committee was especially concerned with the importance of alignment between learning goals, teaching approaches, and assessment methods.

Students should be engaged and challenged in order to acquire a wide range of skills – interpersonal communication, problem-solving, self-awareness, and critical reflection –and all grounded in sound scientific principles underlying veterinary practice. This would require a much broader range of teaching approaches than had been used traditionally in the faculty. In particular, learning – especially clinical learning – was seen as both an active and interactive process, among students (e.g. in team work) and between students and staff. Students were encouraged to develop a spirit of inquiry (learning to ask good questions), both in relation to the subject-matter and about themselves. For example, in the ongoing professional practice units they were required to keep reflective journals and, although at first they found this a difficult task, staff reported they quickly learned to do it well.

Important elements in the new curriculum were:

- A well-defined set of outcomes or attributes for veterinary graduates[75] as a basis for all assessable coursework.
- Presentation of pre-clinical material in a much more integrated manner (and by elimination of some externally taught basic science units).
- A shift from discipline-based didactic teaching towards problem- and case-based learning.
- Better alignment of learning goals, graduate attributes, instructional methods, and approaches to assessment, with greater emphasis on formative and self-assessment, and on tying summative assessment tasks to attainment of deep learning.
- Opportunities for students to develop their leadership skills.
- A professional practice component, with short visits to partner clinics, vertically integrated across the first four years, and a lecture-free final year involving rotating supervised internships in a variety of clinical practice settings; students are required to document and reflect on their professional practice experiences with a learning portfolio and to discuss their progress with peers.
- Introduction of partner practices, with appropriate training for partners in methods of supervision and assessment (there are now over 300 partner practices across the country).
- Ongoing quality assurance and bench-marking through regular evaluation of all aspects of the programme.

Throughout the process the Institute for Teaching and Learning provided considerable help and advice, and there was active support from the senior administration of the university, especially the Pro-Vice-Chancellor for Teaching and Learning. The dean was able to obtain extra funding to support the change, some from the university and some external, such as the $300,000 grant from the Thyne Reid Trust for a unit to support teaching innovation and help staff develop resources for inquiry learning and on-line teaching. The faculty also hired its own consultants to help develop teaching practice – for example by offering in-house workshops (which still continue) on various student-centred learning methods such as small-group learning, case learning, and problem-based learning. Other workshops focussed on new assessment methods as alternatives to traditional end-of-course examinations, and on development of information technologies to support independent on-line learning (e.g. a system for including a wide range of learning objects in WebCT and a specialised image bank for veterinary science, developed in partnership with the university library). Initially the emphasis was on changing teaching in the third and final (fifth year) of the BVSc programme, later attention turned to the first and second years, and finally to the fourth year. The consultants also developed a training programme for the large pool of practitioners who serve as supervisors for the fifth year clinical placements.

The culture statement

The dean's interest in changing the faculty culture resulted in 2001 in the faculty adopting a "Culture statement" of agreed principles that embodied:

- A strong sense of common purpose supported by open and honest communication.
- Mutual trust and respect between all staff and students regardless of position;
- Fairness for all staff and students with recognition and reward for their achievements.
- A willingness and capability to adapt to internal and external change;

75 The list of graduate attributes was developed in collaboration with a number of other Australian veterinary schools.

- Pride in the faculty's heritage and belief in its core values.
- Everyone accepting personal responsibility and shared leadership for the faculty's future.

There is a regular survey of staff and students that measures perceptions of how well these cultural ideals are being met, and the results are discussed at a faculty meeting. Particular attention is paid to weak areas, and ideas are solicited about how to improve. From 2002 to 2004 the average score rose for each ideal, and the combined average increased from 4.59 to 5.17.

Outcomes and effectiveness

Moving to a new curriculum was not easy, and caused a "shaking out" of long-time staff members, who either embraced the new ideas or who resisted, both actively or passively. For example, in 2001 several key basic science staff members were denying the value of problem-based learning. And there was some strident opposition to the notion of moving to learner-centred education, especially for clinical teaching.

Some resisters eventually left the faculty and the new approach gradually gained wide acceptance. In November 2001 the Academic Board reported on its visit to review teaching and learning in the faculty that "in general, students and staff alike embraced the changes" and "It was clear that there was a new culture emerging within the faculty." They "were appreciative of the leadership role of the dean during the process": he was seen as "moving the faculty forward", had "injected vigour" and a "sense of community". Meanwhile, many staff members were becoming knowledgeable about teaching, for example by taking the Graduate Certificate programme offered by ITL – something that was strongly encouraged by the dean and is now required of all new staff members. This also had the advantage of bringing in extra revenue for the faculty, because staff holding the certificate attract extra funding through the university's scholarship of teaching index. These staff members in turn passed on their expertise to colleagues, often informally through mentoring, team teaching, and classroom visits, but also by offering workshops on new teaching and assessment processes.

Staff members were encouraged to engage in research on their own teaching, and a number have had their work published in educational journals (which also earns revenue from the teaching scholarship index). Effective teaching and teaching scholarship are recognised in the faculty rewards process (e.g. promotion), but staff also reported the many intrinsic rewards and satisfaction in knowing – and demonstrating – that student learning was improving. There was pride that the faculty had achieved accreditation by agencies in both Australia and the USA and the fact that scores on student evaluations (which are in the public domain) have improved substantially – from ranking eighteenth out of 18 on the Course Experience Questionnaire before the reforms to ranking second out of 18 afterwards.

The success of the new curriculum was measured by performance indicators that reflected the agreed educational goals, measures of student experience with the programme, and a list of "graduate attributes", developed after consultation with other veterinary schools. Not only was there regular evaluation of all courses, but coordinators were required to write a reflective statement about the results of the evaluation, using a template provided by the Teaching and Learning Committee. Results were provided to students and carefully reviewed by the committee, and appropriate changes were negotiated with course teams. The Teaching and Learning Committee agreed in 2001 that a score of 3 (on a 5-point scale) was the minimum acceptable for the six key performance areas[76] on the unit of study evaluations. The target was raised to 3.5 in 204, and to 4 for 2006. Units that achieve the targets are evaluated only every three years, while those that do not are assessed annually. In courses that are poorly evaluated, procedures for improvement include peer review of teaching and assessment practices, seeking advice from outside experts and those who teach later units, and soliciting additional feedback from students throughout the semester.

The Australasian Veterinary Boards Council, although impressed with the success of the new curriculum, still has some lingering concerns about the lack of a traditional final examination and the sustainability of the final year "outsourcing" of training in clinical practice. Since students are no longer "drilled in technical skills", these have to be learned in the course of the clinical placements. At the same time, Veterinary Science is now seen as a role model for other units in the university wishing to enhance learning. The reviews by the Academic Board and the different accreditation agencies provided important validation for the curriculum changes and this case study too served as a "catalyst to keep the process moving forward". Despite the emphasis on teaching, research income has tripled over the past five years, even though it initially dipped because of the intensive efforts being devoted to curriculum development.

76 The key performance areas are Good teaching, Clear goals and standards, Appropriate assessment, Generic skills, Appropriate workload, and Overall satisfaction.

The role and experience of students

Throughout the process of planning and implementing the curriculum there was regular communication with students, who were involved in all key committees. There was continuous assessment of their views through CEQ, the unit of study evaluations, and focus group interviews, and care was taken to provide them with feedback on the results of the evaluations and to explain planned changes. One student reported being "amazed" by the amount of concern shown by staff to provide students with a good learning experience.

The students interviewed for this study reported that the faculty was very much a "community" or "family", with approachable staff who were interested in students' views and offered support for anyone experiencing problems. And because students moved through the programme in a cohort, they also got considerable support and "pastoral care" from their peers. Staff pushed students to really think and reflect, and made every effort to motivate them to see the relevance of all their learning to professional practice. Students valued the variety of teaching and learning strategies they encountered in their courses, but especially valued the practical component (e.g. on farms) where material learned in class could be applied to real examples of disease and treatment. The case method and small-group discussions (particularly emphasised in the third year and beyond[77]) worked well for this purpose: cases drawn from real life were intrinsically more interesting, and encouraged integration of skills and information from different sources. Postgraduate students were employed to help develop such cases.

At the same time, not all teaching was seen as equally effective, and the workload in veterinary science was thought to be heavy so that students often felt "rushed" (something that continues to concern the staff too). There is still considerable emphasis on providing a solid scientific pre-clinical grounding in the first two years, and a danger of trying to cover too much material. There has also been some resistance from teachers of traditional subjects (such as anatomy) that case-based teaching runs a risk of leaving gaps in students' knowledge.

Leadership

Faced with the situation affecting the faculty in 1998, the dean felt it was essential for everyone to leave their "silos" and talk to each other, to take responsibility, and work together to resolve the crisis. Leadership in the faculty was seen as a matter of "empowering people and having everyone contribute". The dean did provide direction and even inspiration, but was concerned to develop a culture of "shared leadership", characterised by open communication (among and across academic and non-academic staff), high expectations of all members of the faculty, and a sense of inclusiveness in which everyone shared the responsibility for change in their own areas of responsibility.[78] He ensured that new appointees were aware of the new teaching emphasis and philosophy, and engaged in succession planning for key positions relating to the curriculum initiative. Hence the new culture became embedded, and persisted after he left the position.

Despite this successful effort to share leadership, there is no doubt that the dean himself played a greater role than he claims. The 2001 Academic Board report commends the faculty for achieving collaboration and collegiality, transparency and openness, and wide participation, and it sees the dean as "at the core of the transformation". The report describes staff members as appreciating the interest the dean takes in what they are doing and the way he listens to their concerns. As a consequence there is "an open and shared culture where participation is spoken and practised".

Another particularly important influence in leading change was the chair of the Teaching and Learning Committee, who was picked out by the dean as someone knowledgeable about educational and pedagogical issues (she was one of the first staff members to take the Graduate Certificate programme), eager to try out new ideas in her own teaching and to share her enthusiasm (or "passionate commitment", as it was described by one staff member) with colleagues.

Although the dean and faculty executive made the final decisions, committees such as the Teaching and Learning Committee had considerable influence and autonomy (described by one staff member as a "powerhouse for leading teaching"). There was wide consultation, and everyone was encouraged to contribute, for example through faculty-wide meetings and seminars. The new curriculum in fact was not approved by everyone, but all opinion was carefully listened to before a vote was taken at the Faculty Board.

Once the teaching approaches took hold, and were shown to be effective (e.g. from the results of student evaluations), it was a case of "success breeding success", and the faculty took pride in its achievements, and the recognition of its worth by other sectors of the university and veterinary schools elsewhere. The dean saw change as an ongoing process, requiring constant

77 As the new curriculum is fully implemented there will be increased use of case discussions in the first two years.

78 During the AVMA accreditation visits the dean had a family crisis which forced him to be absent, but colleagues stepped in and took over.

scrutiny of programme effectiveness and monitoring the views of major stakeholders, especially students and employers. The culture of change and reflection has been maintained, and there continues to be an ongoing pressure to develop and make adjustments in response to evolving needs and external demands – from students, from partners, and from employers.

The 'Shared Leadership for our Future' initiative

Veterinary Science is unique in sending its staff (academic and non-academic) for leadership training in a residential programme developed by consultants especially for the faculty. Early in his tenure the dean had attended a three-week workshop on developing leadership skills, and he encouraged three colleagues to do the same. The faculty executive then developed its own leadership programme, using outside facilitators, and 20 people (academic and non-academic staff) have been participating each year.

Despite some initial hesitation by some participants, the programme, called *Shared Leadership for our Future* (SLF), has proved extremely successful and popular, and has been included by the university in a catalogue of "best practices" for other units to emulate. The programme is designed to "mobilise the talents, skills and energy of a wider group of current and potential leaders and to ensure they have the commitment and skills to exercise leadership across the faculty". It stresses the shared responsibility of all staff for developing and achieving the mission and goals of the faculty and for simply "making things happen". The stated outcomes for the programme in effect constitute a list of leadership characteristics, and include the following:

- Being self-aware and working flexibly with others.
- Being part of and leading teams.
- Developing communication and influencing skills.
- Building trust.
- Adapting to and leading change.
- Accepting personal responsibility.
- Anticipating and responding flexibly to problems.
- Contributing actively to new initiatives.

Originally the programme was of two weeks duration, but funding pressures have recently caused a reduction to one week. As a way of transferring what has been learned back to the workplace, small teams of participants undertake a self-selected action learning project that focuses on a specific area of need or opportunity. The programme is "expensive, but worth it", and evidence from the survey of faculty culture shows that it does seem to be changing values and attitudes. The intention is to have all members of staff participate in the programme, and there is currently consideration of developing a similar programme for students and/or involving students in the staff programme.

Commentary

This is one of the most dramatic examples of major change in teaching in any of the cases studied. The extent of the change and the amount of documentation describing the process were rather overwhelming. In just a few years the faculty abandoned its traditional didactic teaching and traditional assessment methods to embrace a new set of learning outcomes and graduate attributes, teaching largely through problem-based inquiry and case learning, close integration of academic courses with professional practice, and assessment that stresses feedback, reflection, and self-improvement. The whole process was underpinned by ongoing programme and course evaluation, and a major emphasis on changing the culture of the faculty and sharing leadership and decision-making. There is considerable evidence that the changes were successful and indeed they are ongoing. Data from the various evaluation instruments show that teaching did indeed improve. The faculty has been accredited by two different agencies, and the university's Academic Board has provided positive reviews of the faculty's accomplishments. There is empirical evidence of high satisfaction and morale among both staff and students.

The precipitating factor in changing teaching and introducing the new curriculum was undoubtedly a crisis of declining funding and dissatisfaction on the part of the veterinary profession. A new dean was appointed who recognised the situation, briefed himself on possible ways to remedy the situation, and articulated a way forward. He set out deliberately to change the culture of the faculty, make teaching its core mission, and recruited a team of colleagues, most from inside the faculty, some from outside (the faculty and the university) to help guide this process. He skilfully used data to drive the change process, provided inspiration through strength of personality, and encouraged reflection about what was happening. This is very much an example of distributed leadership – distributed first to this team, and then to the department as a whole. The process was deliberate – even to the extent of designing and implementing leadership training for all staff and for many students. It is perhaps not surprising that the changed culture is embedded and survived the move of the dean to another position.

Leader characteristics (of the head and other key individuals)

- Self-image as an educator and a *passion for teaching* and learning.
- A *vision* for teaching and learning in the department, and the ability to *articulate* this vision.
- *Honesty, credibility* and the ability to engender *trust* from staff and students.
- *Personal involvement* in teaching, in planning, and in implementing the new approach, and hence an effective *role model*.
- *Commitment, credibility, energy,* and the ability to generate excitement ("charisma").
- But at the same time, *listening* to everyone's ideas, engendering *trust*, being .open to reasoned argument, and able to diffuse tension.
- *Political influence* and effectiveness.

Leadership strategies

These characteristics in turn translate into a number of strategies that were used successfully to plan, implement, and embed changes in teaching and learning. They include:

- Careful *planning*, with specified goals, and *evidence systematically collected* to demonstrate outcomes achieved over a manageable time frame (3-4 years).
- Ensuring there were *rewards* (promotion, merit pay, recognition) for teaching accomplishments that were documented in a scholarly way.
- Emphasis on teaching competence and values in *recruiting new faculty*.
- Provision of resources to support change in teaching, in particular, money and outside expertise.
- *Involvement of the whole community* (faculty) in strategic planning, and group ownership of the process, partly in the name of professionalism, in order to work towards an agreed set of goals.
- Establishing ground rules for the process of interaction, discussion, and decision-making.
- *Co-opting* people to help with the change and supporting their initiatives rather than arguing with the few (four or five) resisters.
- *Acting as a buffer* between staff committed to change and those who resisted: gaining consensus without forcing people to do things against their will unless it was absolutely essential (such as accepting changes in methods of assessment).
- Stress on "*data-driven*" change, with ongoing monitoring of new approaches and their effectiveness (e.g. through student opinion, reflective exercises).
- *Open communication* (e.g. through regular meetings and retreats to discuss progress on the new curriculum).
- Providing *training* for all in *leadership skills*.
- *External input and benchmarks* for success.
- *Consultative decision-making*, but with votes taken when necessary.
- *Involving and informing students* about key decisions.
- *Succession planning* for key positions to ensure sustainability.

Quotations

"Leadership in the faculty means empowerment for people to do what they can".

"The basis of leadership is influence, and this entails personal involvement, understanding others, and getting them to work together towards a shared goal. Hence a leader needs to have a strategy, but even more important is to establish a team and communicate well."

"A leader recognises and understands difference."

"Deeply developing staff is the key to leadership".

"To make change effective everything has to be aligned . . . all the factors have to be in place."

"The goal is to transform the culture so that ongoing change is the accepted norm, supported by ongoing staff development, empowerment, and rewards to back this up."

"It therefore seems important, even imperative, that you 'know yourself', as well as knowing how to influence others or exercising leadership. In this sense leadership is an expression of who we are." (Shared Leadership of our Future programme, 2002)

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