for my needs 1=totally inadequate for my current needs

Please rate your College's current provision of pedagogic support. 5 = perfect for my needs 1=totally inadequate for my current needs

1   ⬚⬚⬚⬚⬚ 5

I wish my department would help me with my teaching support needs by...(List your three most urgent needs for support and how your department could respond)

I wish Cambridge University would help me with my pedagogic support needs by (List your three most urgent needs for support)

I wish my College would help me with my pedagogic support needs by (List your thre most urgent needs for support and how your College could help you)

There is a culture of pedagogic innovation embedded within Cambridge	⬚ strongly agree
	⬚ agree
	⬚ not sure
	⬚ disagree
	⬚ strongly disagree

Teaching innovation is slowed down by..(please tick the strongest factor)	⬚ The need to pass through statutory regulations in order to change courses
	⬚ No perceived need as Cambridge is recognized internationally as excellent
	⬚ Lack of financial resources
	⬚ Research pressures leave little time fo teaching innovation
	⬚ Lack of reward for teaching innovation

	☐ To succeed in Cambridge, an academic must focus on research
Within my department, senior colleagues such as my Head of Department or Chair of Teaching Committee	☐ Actively foster teaching innovation ☐ ☐ Permit but do not actively encourage teaching innovation ☐ Actively disapprove of teaching innovation ☐ Not applicable, I do not teach in University
Within the last two years, I have introduced into the teaching of my department / faculty College	☐ a high level of innovation ☐ ☐ a moderate model of innovation ☐ very little innovation
The main source of inspiration for my innovation was	Please select an option...
If you introduced innovation, it	☐ was highly successful ☐ ☐ made some positive difference ☐ made no real difference ☐ was actually a waste of resources ☐ I did not innovate
If you did not innovate, what was the main reason?	☐ I do not see the relevance of or need ☐ for such ☐ Lack of funding ☐ Lack of time ☐ Not applicable
Regarding training for supervisors,	☐ I run such courses myself ☐ ☐ I require all new supervisors to attend those run by Staff Development ☐ I make information available and leav it at the discretion of the individual to attend or not ☐ I see no need for any training in how to do supervisions

Does your College provide documentation and resources for supervisors?	☐ Plenty	☐
	☐ Some	
	☐ A little	
	☐ Virtually none	
If Cambridge University were to set up a Pedagogic Support and Innovation Unit suc a Unit should (please tick what you conside as being the three most important criteria	☐ Be self -financing (benefactor or research funded)	
	☐ Provide a Modular and optional Certificate in Higher Education Practice	
	☐ Consult with departments, faculties and Colleges to ensure relevance	
	☐ Provide support for external quality assurance proceedures	
	☐ Help with curriculum design and implementation	
	☐ Be staffed by educationalists which also have an understanding of a broad discipline area	
	☐ Be staffed only by those who have considerable experience of teaching in higher education	
	☐ Be staffed by those who have an Oxbridge undergraduate education	
	☐ Be centrally co-ordinated but accessible to departments and Colleges	
	☐ Provide a focal point for issues of teaching and learning for both University and College teaching staff	
	☐ Dsseminate pedagogic research findings to other institutions	
	☐ Help with bids for external funding fo teaching and learning projects	
Does Cambridge University need a Pedagogic and Innovation Support Unit?	☐ There is a clear need for such a Unit	☐
	☐ There is some need for such a Unit	
	☐ There is little need to change present support provision	

☐ There is absolutely no need to change the current situation

How could a Support Unit help you?

```
┌────────────────────────────────────────┬─┐
│                                        │▲│
│                                        │ │
│                                        │ │
│                                        │▼│
└────────────────────────────────────────┴─┘
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APPENDIX SIX - UTO DISCUSSION GROUPS: TOPICS, DATES AND VENUES

1. Transition to Higher Education – Science Departments
May 15[th] Disability Centre, Seminar Room, Keynes House, 24 Trumpington St
The challenges which lecturers face in adapting the curriculum and developing modes of student thinking, as well as university provision of information and support systems to help teaching officers take students through this critical period while maintaining the highest educational goals will be discussed. Suggestions for improvement of the support in line with the findings of a Nuffield Research Report will be looked at. A summary of this report would be sent to participants in advance.

2. Transition to Higher Education - Arts, Humanities and Social Science Departments
May 16[th] ˉ Old Schools Meeting Room
Same as above but the discussion would look at whether the emphasis in these Schools may be more on developing `ways of thinking` than dealing with `knowledge gaps`.

3. Gaining an understanding of discipline specific and generic learning
May 17[th] – Centre for International Studies – 1[st] Floor, Seminar Room C, 17 Mill Lane
Some teaching officers argue that the only useful information which they need is on how to facilitate learning in their specific discipline, and that any generic information on how university students approach their learning is of little use. What is the relative use of generic educational principles and discipline specific ones?

4. Innovations at curriculum design, delivery and assessment levels
May 18[th] - Old Schools Meeting Room
One of the common understandings of `innovation` focuses on the use of technology assisted learning but innovation can be much broader and deeper than this Therefore, a deconstruction of the expression `pedagogic innovation` would be part of this discussion. Teaching officers could share their attitudes, motivations, attempts, barriers and successes at all three of the above levels.

5. Formal and informal reward systems for excellence in teaching
May 19[th]_Disability Centre, Seminar Room, Keynes House, 24 Trumpington St
Many lecturers are aware of the unequal formal rewards for teaching excellence as opposed to those for research. Some argue that the original idea of creating Senior Lecturer posts has been subverted. The Pilkington Prize may be less sought after than comparable awards in overseas institutions. Informal rewards and other forms of acknowledgment such as that of peer recognition and personal satisfaction would also be discussed.

6. Use of existing resources available within and outside Cambridge
May 22[nd] - Centre for International Studies – 1[st] Floor, Seminar Room C, 17 Mill Lane
Cambridge University offers the possibility of support through Good Practice Lunches, and advice from CARET and Staff Development. Besides, the Higher Education Academy website and those of other cognate institutions such as MIT or Harvard can also be

accessed. The survey revealed the fact that lecturers do not make significant use of the former and hardly ever use the latter. This group would attempt to elucidate the reasons for use or non use of these pedagogic resources.

7. Teaching structures
May 23rd Old Schools Meeting Room
How can our teaching structures (lectures, seminars and supervisions) be used most effectively to develop the necessary academic skills in students?

8. E-learning
May 24th Centre for International Studies – 1st Floor, Seminar Room C, 17 Mill Lane
What should be put on the web: lecture notes, handouts, exercises, links to other websites? How can e-learning best develop the necessary skills of being an independent learner? How can it hinder the learning process? Is there anything in Cambridge learning culture which is antithetical to e-learning?

9. The specific support needs of being a new lecturer
May 25th Old Schools Meeting Room
Only for those who have started the teaching aspect of their academic career in the past 3 years

The first few years of any career are critical to development as many forces work together to form the new professional. Support from peers, a conceptual understanding of the learning process as well as awareness of wider support networks available to new lecturers would be explored.

10. The effect of government policy demands on the quality of teaching
May 26th CRASSH, 17 Mill Lane
Only for those with more than 15 years experience as a lecturer

Government policy has increasingly put an emphasis on the quality of teaching. However, it could be argued that some of the mechanisms put in place to measure this quality result in hindering that very 'quality' they are supposed to be promoting. Lecturers will be able to discuss trends in this quality movement and how they have experienced this. How has Cambridge University adopted government policy or not in this area and what are the consequences?

All discussions will take place from 1 to 2 pm with a buffet lunch being available from 12.30 onwards.

APPENDIX SEVEN - COLLEGE DISCUSSION GROUPS

1. Transition to Higher Education
July 3rd - Centre for International Studies – 1st Floor, Seminar Room C, 17 Mill Lane

The challenges which lecturers face in adapting the curriculum and developing modes of student thinking, as well as university provision of information and support systems to help teaching officers take students through this critical period while maintaining the highest educational goals will be discussed. Suggestions for improvement of the support in line with the findings of a Nuffield Research Report will be looked at. A summary of this report would be sent to participants in advance.

2. Gaining an understanding of discipline specific and generic learning
July 4th – Centre for International Studies – 1st Floor, Seminar Room C, 17 Mill Lane

Some teaching officers argue that the only useful information which they need is on how to facilitate learning in their specific discipline, and that any generic information on how university students approach their learning is of little use. What is the relative use of generic educational principles and discipline specific ones?

3. Innovations at curriculum design, delivery and assessment levels
July 5th - Centre for International Studies – 1st Floor, Seminar Room C, 17 Mill Lane

One of the common understandings of 'innovation' focuses on the use of technology assisted learning but innovation can be much broader and deeper than this Therefore, a deconstruction of the expression 'pedagogic innovation' would be part of this discussion. Teaching officers could share their attitudes, motivations, attempts, barriers and successes at all three of the above levels.

4. Formal and informal reward systems for investment in College teaching
July 6th Centre for International Studies – 1st Floor, Seminar Room C, 17 Mill Lane

Most lecturers are aware of the unequal formal rewards for teaching excellence as opposed to those for research. There may be an increasing reluctance on the part of departments to invest resources in College teaching. Informal rewards and other forms of acknowledgment such as that of peer recognition and personal satisfaction would also be discussed.

5. Use of existing resources available within and outside Cambridge
July 7th - Centre for International Studies – 1st Floor, Seminar Room C, 17 Mill Lane

Cambridge University offers the possibility of support through Good Practice Lunches, and advice from CARET and Staff Development. Besides, the Higher Education Academy website and those of other cognate institutions such as MIT or Harvard can also be accessed. The survey revealed the fact that lecturers do not make significant use of the

former and hardly ever use the latter. This group would attempt to elucidate the reasons for use or non use of these pedagogic resources.

6. Teaching structures
July 11[th]- Centre for International Studies – 1[st] Floor, Seminar Room C, 17 Mill Lane

How can our teaching structures (lectures, seminars and supervisions) be used most effectively to develop the necessary academic skills in students?

7. E-learning
July 12[th] Centre for International Studies – 1[st] Floor, Seminar Room C, 17 Mill Lane

What should be put on the web: lecture notes, handouts, exercises, links to other websites? How can e-learning best develop the necessary skills of being an independent learner? How can it hinder the learning process? Is there anything in Cambridge learning culture which is antithetical to e-learning?

8. The specific support needs of being a new supervisor
July13[th] – Centre for International Studies 1[st] Floor, Seminar Room C, 17 Mill Lane

A disproportionate numbers of academics have had an Oxbridge background. Their first teaching experience may well be giving supervisions. The beginning of any career is critical to development as many forces work together to form the new professional. Support from peers, a conceptual understanding of the learning process as well as awareness of wider support networks available to new supervisors would be explored.

9. The effect of government policy demands on the quality of teaching
July 14[th] - Centre for International Studies – 1[st] Floor, Seminar Room C,
        17 Mill Lane
Only for those with more than 15 years experience of teaching in Higher Education

Government policy has increasingly put an emphasis on the quality of teaching. However, it could be argued that some of the mechanisms put in place to measure this quality result in hindering that very 'quality' they are supposed to be promoting. Lecturers will be able to discuss trends in this quality movement and how they have experienced this. How has Cambridge University adopted government policy or not in this area and what are the consequences, particularly on College teaching?
All discussions will take place from 1 to 2 pm with a buffet lunch being available from 12.30 onwards.

APPENDIX EIGHT - PROVENANCE OF COLLEGE SURVEY RESPONDENTS

Colleges (for survey only)

College	
Gonville and Caius	5
Churchill	5
Corpus Christi	4
St Catharines	4
Downing	3
Emmanuel	1
Fitzwilliam	3
Jesus	7
King's	1
Lucy Cavendish	1
Magdalene	3
New Hall	6
Newnham	3
Pembroke	4
Queens'	4
Robinson	3
Sidney Sussex	1
St Edmunds	1
St John's	4
Trinity Hall	2
None	1
Blank	3
Total	67

APPENDIX 9 – A CULTURALLY SENSITIVE RESPONSE TO PEDAGOGIC SUPPORT NEEDS IN THE UNIVERSITY OF CAMBRIDGE

Introduction

The Familiarisation Phase and Formal Phase of the scoping project revealed a wealth of opinion and information concerning the support needs of teachers, both in Colleges and in University Faculties and Departments. This information has been discussed in detail in Chapters 4 and 5.

Building on this basis of information the next task is to explore a culturally-sensitive set of solutions which might meet the declared needs of Teaching Officers. Arguably, the primary pedagogic resource of Cambridge University is the body of Teaching Officers. In line with other world-ranking research intensive universities, a strong teaching culture already exists and there is considerable commitment on the part of academics to their educational role. In order to honour this commitment, and to maintain the best aspects of the existing culture, ways to provide appropriate support and the maintenance and reward of this commitment must be explored.

Any solutions must be set in the context of the University's ethos and culture. Adopting an appropriate culture can be critical for the survival of an organisation. In the case of the University of Cambridge survival is not simply about maintaining bare existence, but rather about the University surviving at its current national and international level of excellence. The already high standards in both research and education must be maintained and enhanced. Not only does the University meet its own internal standards, as attested to by alumni and current students, but also, in response to external audits and reviews of learning and teaching quality, it has been awarded the highest judgements. Even with RAE pressures for funding and individual research reputation, education is still considered a core part of the University's mission. However, providing excellent teaching in a research-intensive context produces significant pressures with which each School, Faculty, Department and individual academic may engage quite differently.

The increasing bureaucratisation of Higher Education, from which the University is not immune, has increased administrative loads considerably. On top of this, RAE pressures, students who lack certain traditional skills, and a certain un-stated pressure to introduce innovative pedagogy all mean that Teaching Officers must juggle their various commitments. The considerable time investment needed for effective teaching, the high expectations on the part of the students and the University, the resource intensity of some innovations, the need for time for professional development are reflected in the top five pedagogic support needs described earlier. Some pedagogic support resources do exist in the University to help meet these needs, but nevertheless there appears to be a mismatch between supply and demand/needs. Coupled with a lack of pro-activity hitherto on the part of the University in identifying pedagogic needs and allocating recurrent resources, this leads to supply attempting to drive demand, sometimes resulting in projects that must prioritise their own self-sustaining activities in order to continue to exist. In this way, opportunities for access to pedagogic research and funding are denied to academics, or made available in inappropriate ways.

The following model (Table 1), based on Mc Nay (1995) may help the reader to conceptualise the situation.

TABLE 1: A classification of University cultures

Culture	Characteristics	Organizational unit	Management style	Standards	Evaluation	Vision of the student
Collegial	Stewardship of discipline – e.g programmes for maths teachers. Can have a learning organisation ethos Research performance is dealt with separately Teaching is seen as transformative Discussion of teaching informally with peers Can be isolating and unsupportive May not foster either quality or effectiveness	Academic department	Permissive Loose definition of policy – loose control of implementation Freedom to pursue individual and personal goals Minimum external control Consensual decision making	Set by the disciplinary community	Peer review	An apprentice academic
Bureaucracy	Managerialism Regulation , rules and consistency with standards Senior administrators have considerable power.		Formal and rational Decision making is rule based	Set by regulatory external bodies QA audit	Audit of procedures	Students are statistics
Corporate	Loyalty to department Competitive ethos	Decision making is political and tactical Tight control over policy and implementation	Commanding and charismatic	Organisational plans and goals	Evaluation based on performance indicators and benchmarking	Units of resource and customers

Culture	Characteristics	Organizational unit	Management style	Standards	Evaluation	Vision of the student
Entrepreneurial	Uses disciplinary discourse leading to empirical evidence of effectiveness against objectives	Small project team	Dispersed, developed and devolved leadership	Market strength	Achievement	Partners in the search for understanding Much emphasis on student feedback
	Focus on competence and constant learning in relation to a changing outside world		Decision making flexible and involves accountable professional expertise			
	Orientation is to the outside world		Clear goals and associated rewards			
	No pre-ordained pedagogy – prepared to see what is most effective		Tight definition of policy and loose definition of implementation			
	Socially cohesive academics and std together					
	Role models as professional teachers					
	Demand for effectiveness, efficiency and accountability					

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Cambridge Cultures

In terms of the model illustrated in Table 1 it would appear that two main cultures exist in the University of Cambridge: the Collegial, in which the organizational unit is the Department and students are treated as apprentice academics; coupled with the Entrepreneurial where the small project team is the functional unit and students are seen as partners in the search for understanding. The Corporate and Bureaucratic cultures as described in this model have much less visibility in Cambridge, although it can be argued that both are increasing rapidly within the HE sector generally, and in Cambridge to some extent. Cambridge as a collegial/entrepreneurial organization is increasingly having to function in a bureaucratic/corporate sector. Likewise, within the University, while teaching activities might comfortably find a home in a collegial/entrepreneurial culture, they are increasingly having to contend for resources in a bureaucratic/corporate culture. Such a situation may point to a culture clash with its attendant stresses and pressures, leading to the support needs already identified by the current study.

Each of the University cultures in the model embodies a notion of excellence in relation to the educational role. In the collegial model, the focus on knowledge content more than on acquisition processes means there is less demand for sources of central educational expertise. There are few 'communities of practice' and little history of explicit expertise. Since the ability of the students being taught is high there is no pressing problem here and advanced teaching skills are not highly developed. There is little recognition of a lack of teaching expertise as supervisions are considered as providing excellent learning opportunities due to the high level of human contact. Whereas review may exist as to the 'what' (or content of the Tripos), there is less attention paid to review of the 'how' of pedagogic processes. There is a conservatism which seeks to protect academics from external policies which are not in keeping with strong pedagogic traditions. Any innovation must be congruent with values and beliefs. However, it can be argued that conservativism can lead to 'good' teaching, whereas 'excellence' needs experimentation.

Within the overall University culture subcultures may exist. It can be argued that a culture of pedagogic conservatism may predominate in the Social Sciences, Arts and Humanities. In such disciplines, the legitimacy of a liberal education is increasingly being called into question. Research income generation may be less important than in the sciences where expensive equipment is essential, and this may have implications for time and resources available to be devoted to teaching.

Technology and the Sciences seem to possess more of the characteristics of the entrepreneurial culture. Here, the seeking of effectiveness is valued above tradition. There is more standardisation in Sciences than in the Humanities if it fits in with effectiveness. Often, such a notion of effectiveness is embedded within a disciplinary discourse. Such a culture takes risks with teaching and is, therefore, happy to learn through mistakes, adheres less to a pre-defined pedagogy and has a central role for the student voice. It is more socially cohesive, with academic and students working together. However, in Cambridge, those closer to the entrepreneurial culture are nevertheless still embedded within the strong collegial culture. Often innovation, and within that category, e-learning, may be seen to have time saving effects but possessing inferior educational value. Insufficient

understanding of the learning process – how independent learning can be equal or even better than face-to-face learning – is present.

The top down government-driven Bureaucratic culture is one that is feared. This culture has great conflicts with the Collegial. This bureaucratic culture may set Administration against Faculty. The former, which is aware of external pressures, wants Faculty to be concerned with cost-containment and understand demands for accountability. Quality Assurance procedures may not be taken very seriously within the Collegial culture where values of autonomy, professional trustworthiness and academic change agency predominate. In this culture, leadership brings about change whereas management is more concerned with the efficient operation of existing systems. Devolved departmental cultures may mean that there may be departmental strategies independent of the centre. Change may emerge as a local and bottom up operation rather than imposed. However, management may underpin effective leadership in terms of allocation of resources.

Innovation and the Collegial culture

The high commitment to the educational role is often accompanied by a conception of good teaching as involving high contact time and where leading edge discipline knowledge is seen to guarantee excellent teaching. Within University teaching, strong disciplinary affiliation is linked to knowledge transmission whereas within Colleges, supervisions may be more focused on the learning process than on the knowledge itself. Dealing with individual or small groups of students entails a 'duty of care' as part of the 'teacher pledge' in the support for individual student development. Some forms of innovation, particularly e-learning, remove this sense of directing, responding to and being responsible for the student. Therefore, there is a need for pedagogic specialists to explain and reassure academics of the soundness or otherwise of any innovative move. Academics do not have time to access original research literature or to disentangle the terminology of innovation and pedagogy. They want useful and trustworthy information in accessible form. Whereas discussions with peers can be generative, research related by Jackson (HEA seminar) showed consultations with educational designers to be twice as effective as those with peers.

Cambridge University does not provide access to such professionals. The provision of advice and support for innovation, which is not at the expense of educational goals, where the advisor is more an educationalist than merely a technician, where the human contact potential can be surpassed and where 'the bibliophile academic is not dethroned' (Land 2004), is essential. Academics need to learn how to entertain and care for students in an asynchronous situation thus enhancing the use of time for both the academic and the learner. One factor which could prevent them from maximizing this use of academic time is the necessary financial wherewithal, and structures which help academics find funding.

Innovation Funding - Bidding for Teaching and Learning Funds

No university funding is made available for innovation in general, or individual e-learning projects in particular. Whereas in the past, a small amount of TQEF funding was allocated for three e-learning projects, this has now stopped. The Research Services Division does not provide proactive help with teaching bids. Bids for funding for innovative teaching

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projects would require competence in pedagogy to understand the benefits of the innovation and also to articulate it, as well as the financial knowledge to draw up a Business Plan, to calculate the development and also the maintenance costs, and in the case of e-learning, technical expertise to inform the financial issues. Whereas expertise in this area does exist within the University, such expertise is not freely available to an academic who wishes to establish his/her own project and who may wish to retain autonomy of their development for reasons of intellectual property and individual achievement

Reward for investment in teaching

Whereas teaching is seen as fulfilling one of the core aspects of the institutional mission, any reward is currently mostly in terms of personal satisfaction. Senior Lectureships are perceived by some respondents as having now been diverted, in response to RAE pressures, from the purpose for which they were originally established by the University, following widespread consultation and debate. In career terms, existing criteria for promotion to Reader or Professor make progress beyond the level of Senior Lecturer impossible on the basis primarily of excellent teaching.

In terms of teaching prizes, award of the University's own Pilkington Prizes (£600) rotates between Faculties and Departments and is not criterion- referenced. Support with applications for the National Teaching Fellowship is provided by Academic Staff Development. 50 prizes of £10,000 are awarded annually and some frustration exists that inadequate feedback is given about the selection of the top three candidates.

In terms of status, in some areas of the University teaching loads can decrease as one goes up the hierarchy, to some extent producing an association of status with low teaching load. Engaging in research productivity brings status, not least because it brings in funding. Consequently, a teaching-development culture, with a constant development of the understanding of the learning process and the message that teaching is important by appropriate reflection on it, is not fostered in all Faculties and Departments. This would need growth support from both the hierarchy and peers (informal recognition), pedagogic support team (formal and research-informed support) and growth support in terms of time, money and reward (formal support).

Whereas the supervision system is highly valued for the individual attention it affords to the learner, many University Teaching Officers under research pressures are now increasingly reluctant to engage in College teaching. Much of the provision is delivered by College Teaching Officers, postdoctoral researchers, and graduate students, in different ratios across Schools (probably more in the Sciences, less in Social Sciences and Arts and Humanities). Women UTOs appear to undertake more supervision work than their male counterparts, although they constitute a smaller percentage of the population than in Russell Group institutions generally (Russell Group figures for gender breakdown of Teaching Officer equivalent ranks approach 50%, whereas for Cambridge UTOs the figures are approximately 22% female and 78% male). College Teaching Officers carry heavy teaching loads, seen to hinder career advancement for both genders, as a matter of contractual obligation (more women than men among respondents fell in this category).

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Current resource allocation

Whereas the university mission emphasizes educational goals, this does not translate into equivalent resources for pedagogic support. CARET is allocated £400,000 annually and expected to raise the rest of its operating costs. This £400,000 is only for generic tools - for example, CamTOOLS - accessible to the whole university. Any other funding is from TQEF, JISC or similar sources. Almost a million pounds comes from CMI. As the name implies, some research is carried out into the evaluation of technological development. CARET staff provide support to academics in the use of the tools generated. There are no dedicated staff such as instructional designers for developing/supporting the e-learning projects of academics or helping to bid for funding.

The Education Section is centrally funded with 5 Officers and two support staff. As well as Quality Assurance, Learning and Teaching support with Good Practice dissemination is based here. All posts are centrally funded. Academic Staff Development is funded through a central allocation and through TQEF. The Graduate training programme receives mostly Roberts funding.

Lack of co-ordination on funding

Those central providers who depend on short-term funding to carry out essential activities necessarily must devote some of their time and effort to finding that funding, This dilutes their activities and means that those activities may be driven by external preoccupations rather than internal values and priorities. The distributed nature of the central providers may also mean that co-ordination of use of external funding in the most effective way is difficult to achieve. The University may not have sensitive enough internal intelligence mechanisms to ensure that spend is on central University priorities, rather than on useful but more peripheral activities.

Conclusion

In conclusion, the implications of the points raised in this discussion for pedagogic support provision are several. For a support system to flourish in the University's culture various factors must be borne in mind.

First, a support system that would capitalise on the best of all four cultures while avoiding the excesses of any of them is necessary. While the internal wealth of strong commitment to individual student development within the traditional Cambridge 'collegial' setting should be emphasised, it must be remembered that those who adhere to the collegial culture may not engage with innovative pedagogy, particularly e-learning, nor see any value in training courses or individual consultations. On the other hand those who adhere more to the Entrepreneurial culture may wish to have pedagogic support expertise and the financial support in order to innovate.

Second, reward for teaching as a core value consistent with the University's mission statement must be taken seriously. Obviously, individual academics would differ in their degree of direct involvement in the teaching role but investment in fulfilling a core part of the University's mission should be reflected in the reward system.

Third, an increasingly bureaucratic culture often involves imposed change but in an academic setting academics must always remain the agents of change. Academic leadership needs to direct the management of structure, administration and communication in order for change to be owned and productive. In terms of external bureaucracy, reactive response is not sufficient: the University should proactively engage with national agendas which lead to additional funding possibilities.