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## OPENING ACCESS TO HIGHER EDUCATION TO ALL? WHAT MOTIVATES ACADEMIC STAFF IN TRADITIONAL UNIVERSITIES TO ADOPT ELEARNING?

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### Introduction

This paper will examine the question of how traditional universities can open their programmes to students who are unable to attend on-campus, focusing in particular on the key role of academic staff in adopting innovative approaches to teaching and learning. The Universal declaration of Human Rights (1948) Art 26 included the right to education and the equal accessibility to higher education to all on the basis of merit. Yet, six decades later, it is clear that this has not happened, with participation in higher education limited in many countries on the basis of class, income and geographical location (Spronk 2008). While a number of countries have adopted strategies to increase participation in higher education among school leavers, there is still a substantial proportion of adults who have not had access to higher education, and who are prevented from doing so by a wide range of factors. Distance education and developments in elearning offer the potential to open access to higher education, yet, despite the many achievements of distance educators, particularly in specialist open universities, it cannot be claimed that distance education has been mainstreamed in traditional universities. The term 'elearning' has come into use since the late 1990s, and is often equated with open distance learning, however, it is important to remember that these two terms are not synonymous. Elearning can serve a spectrum of learners, at one extreme, by enhancing the quality of on-campus lectures with online resources, and at the other extreme, by replacing on-campus attendance with a range of technological resources and supports. To date, the adoption of elearning in higher education institutions has served to enhance the quality of learning for on-campus students, but has not yet translated into a substantial increase in opportunities for part-time and distance learners. The OECD report on elearning strategies adopted in institutions in thirteen countries supports this contention, finding that enhancing on-campus learning was the leading rationale for adopting elearning, whereas distance learning did not feature as a strong rationale in over half of the institutions surveyed (OECD 2005: 88). Another report on elearning strategies in Japan found that while over 70% of institutions had adopted some form of elearning, less than 10% made courses available to off-campus students (Latchem, 2007). The Sloan survey of 2,500 US colleges and universities reported that over 3.5 million students took at least one fully online course during the fall 2006 academic term, however just 35% of institutions said they were providing fully online programmes, 31% were offering online courses but not fully online programmes and 34% had no online offerings (Allen and Seaman 2007: 5).

The Lisbon targets for increasing participation in education on a lifelong basis (CEC 2007) are unlikely to be reached if the only option available to adults is full-time education located in a small number of institutions, concentrated in large cities. Most adults with financial, domestic, social and employment commitments are not in a position to put their lives and commitments on hold for three to four years while they pursue full-time study. Even part-time study, which requires attendance in fixed locations and at fixed times is not an option for many. Instead, they need the flexibility to combine their commitments with studying, and this means increased provision of courses through flexible modes of delivery. For many adults who work full-time or unsocial hours, or who have full-time domestic responsibilities, or who live at a distance from educational institutions, open distance learning is the only option available for access to education. However to extend Meyer's proposition, 'If higher education is a right, and distance education is the answer, then who will pay?', with further questions: why have traditional universities not opened up to distance students; what strategies can they adopt to mainstream distance learning in the traditional faculties; and how can they motivate academic staff to change their teaching practice to ensure that distance learners can access their courses?' (Meyer 2008).

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The adoption of open distance learning in traditional universities raises a number of strategic issues, not least of which involves the future roles, professional identities and contractual arrangements for academic staff. Development of online courses and resources require new competences such as the design of online instructional materials and moderating virtual learning environments, and will therefore have significant implications for staff development. Distance and flexible approaches will require changes in the traditionally individualistic character of academic culture, given the wider use of teams of specialists, and breakdown of roles and responsibilities for course design and development, teaching and assessment. New ways of motivating and rewarding academics will be required, while the transition to team based approaches may also threaten academic freedom and autonomy. The 'always on' nature of open and distance learning, combined with the growing culture of 'students as consumers' is also likely to impact on how academics are contracted and remunerated. The experience of many institutions to date has shown that top down strategies rarely work without bottom up support and buy in, particularly from academic staff (see paper by Fox and Mac Keogh in this conference).

This paper will discuss the outcomes of a strategy led investigation of factors motivating academic staff to participate in online learning in a traditional Irish university. The next section will describe the background to the study. The methodology used to collect the data will then be outlined, before discussing the results and implications.

## Background to the Study

Dublin City University, (DCU) is a small university (9,000 students) in Ireland. It has a long tradition of providing distance education undergraduate and postgraduate programmes to adult students through Oscail – the National Distance Education Centre - which has faculty status within DCU, but which is funded separately by the Higher Education Authority (see MacKeogh 2003). It was the first university in Ireland to adopt the open source VLE, Moodle. Nevertheless, DCU is primarily a traditional university and the adoption of elearning is in its infancy and has, to date, not achieved any significant transformation of teaching and learning for traditional students, or indeed, the extension of access to distance education students to the university's mainstream programmes (Blin and Munro 2008). As with other universities, DCU is facing many challenges, including demands from various national and international stakeholders to widen access, adopt innovative teaching and learning practices, adapt new qualifications frameworks and learning outcomes, expand research programmes, and increase overseas enrolments, at a time of tight funding, changing demographic conditions, and increasing competition.

In November 2007, DCU Executive requested the authors of this paper to investigate and develop the basis for an elearning strategy for the whole university which would involve the mainstreaming of elearning in all programmes, not just those delivered to distance students by Oscail. The authors were asked to investigate a range of areas and to make recommendations based on evidence from its research. The chief areas of investigation centred on the policy drivers for adoption of elearning, including the demands of the Bologna process for transformation of university curricula, identification of best practice with regard to sustainable organisational structures for embedding elearning in the university, and most importantly, the environment within DCU with regard to capacity and openness to adopting elearning. In order to ensure that the needs of lifelong learners as well as those of traditional on-campus learners were kept in focus, elearning was defined as: 'The use of ICTs to improve the quality and flexibility of learning for all students and to extend access to higher education to those who are unable to attend on-campus for whatever reason'.

DCU is currently at the forefront in Irish higher education with regard to eLearning and distance learning. However, further development in this area will depend on the extent to which staff and structures in DCU are ready to engage in the process. In preparing their report, the authors consulted widely with Faculties, Schools, administrative units, and academic and administrative staff; firstly to establish the conditions likely to favour the embedding of eLearning in DCU, and secondly to create an awareness of the potential of eLearning for meeting a range of strategic objectives. Following the consultation stage, a survey of academic staff was carried out in April 2008. The main aims of the study were:

- To develop a baseline 'snapshot' of use of eLearning technologies in DCU
- To establish the factors which are likely to encourage staff to engage in eLearning, including the type of training and support interventions.

- To establish staff views on the types of disciplines and subjects which are most suitable for eLearning
- To establish the types of structures which would support the development of eLearning in DCU
- To use the data provided in the survey to inform DCU's strategy for eLearning

Before discussing the results of the questionnaire, the following section will summarise the main issues which arose during the consultation process.

## Staff Concerns about eLearning and Distance Learning – Qualitative Findings

Over 75 consultation meetings took place over a period of four months in early 2008. These included presentations to seven boards/committees; and a series of unstructured interviews with 35 academics, 23 administrators, and 10 external academics and experts. The interviews generally lasted 60-90 minutes and covered a broad range of issues in an attempt to gauge the general environment for adoption of elearning in the university. Analysis of the qualitative data highlighted the complexity of adopting distance education and elearning in a traditional institution and identified a mix of competing pressures from external forces, together with differing academic and administrative traditions. Some of the key issues to emerge included a wide variation in awareness and acceptance of the legitimacy of elearning; concerns about the negative impact on the teaching function arising from a growing national emphasis on increasing research outputs; frustration that despite government demands that universities widen access, the funding environment is not conducive to developing distance learning programmes; and fears that increasing student numbers without concomitant funding support will serve to diminish the quality of teaching and learning.

**Mixed attitudes and awareness of eLearning.** Some interviews found enthusiasm and strong expertise with a recognition of the need for new approaches, however, other staff presented a strong current of scepticism about eLearning, particularly around issues of quality, workload, and loss of control. Ruth et al (2007) in a survey of 5,000 US institutions found that levels of doubt about the legitimacy of elearning had actually increased between 2003 and 2006. It appears that some scepticism and negative attitudes arose from lack of awareness of the potential of eLearning, or the type of pedagogical philosophy underpinning effective eLearning, indicating a need for training and awareness raising. While most administrative units appeared to be aware of the requirements to support eLearning, there were also concerns on the part of some academic staff that central services would not be responsive to the support needs required by academics adopting eLearning, especially in large eLearning programmes.

**Potential detrimental impact on teaching of research focus.** A number of governmental initiatives in recent years have encouraged universities to increase research output and to double the number of PhDs. This has led to a concentration of energies on research rather than on pedagogic innovation, and many staff considered that the focus on research had tended to downgrade the status of the teaching function, with teaching budgets cross-subsidising research projects, while key academics were no longer available to teach.

**Lack of government funding for distance learning programmes.** Current policies mean that universities do not receive core grant funding for distance learning students; while full-time students in Ireland do not pay tuition fees, distance learners are required to pay fees. This is seen as a major disincentive to the development of fully online programmes as all costs have to be recouped from fees, while anomalies arise in blended courses where students may attend on campus, or at a distance. A limited number of programmes may attract sufficient numbers of students with the capacity to pay full cost fees (or their employers), however this acts as a barrier to access, while also limiting the type of programme available to lifelong learners. While the Higher Education Authority has provided funding for innovation in teaching and learning it is clear that sustainable eLearning programmes cannot be funded in the long term through short term project funding. Universities are increasingly under pressure from the decline in government funding, especially since 'free fees' were introduced in 1997. Reduced funding in *real* terms for undergraduate and taught postgraduate programmes is seen as a threat to quality of teaching, assessment, and student support. There is, therefore little financial incentive to adapt programmes for distance learners.

**Impact of Increasing Numbers.** Student staff ratios in Irish universities tend to be higher than international averages. Over 20% who responded to the staff survey reported teaching class sizes over 150. The lack of support with assessment given to lecturers in these courses leads to students receiving minimal (if any)

individualised feedback on their assessments (either continuous or terminal) which is inimical to quality teaching and learning and also incentivises the most basic forms of assessment. Given the pressures of student numbers and lack of support for existing teaching loads, there are few, if any, incentives for individual academic staff to promote greater student numbers through elearning. Indeed, DCU's small scale is regarded by some staff as a positive feature, in that the small scale is seen as a unique aspect of DCU student experience (small high quality programmes; sense of intimacy; contact between staff and students; etc).

While these interviews provided a good indication of the concerns of senior members of staff, it was also decided to seek the views of the wider group of academic staff via a questionnaire survey. The findings of this survey are discussed in the next section.

### **Academic Staff Adoption of eLearning – Motivating and Demotivating Factors**

A wide range of studies have identified staff attitudes as crucial indicators of adoption of elearning technologies. The Technology Acceptance Model (Davis et al 1989) and subsequent developments of the model (Venkatesh and Davis 2000) has been widely used to measure academic staff attitudes to using technology. However, the focus of this study was not on technology adoption per se, rather on the broader factors which would facilitate increased adoption of elearning. A questionnaire survey was developed, comprising a number of likert scales, as well as open-ended questions. The survey incorporated two scales developed by the State University of New York (SUNY) to assess factors which increase or decrease motivation to participate in online learning (Shea 2007). This survey was administered to 400 faculty in 36 university campuses in the US, who were already highly committed to online teaching. It found that flexible work schedules was the top motivating factor, while the greatest demotivating factor was inadequate compensation for the increased workload involved in online learning. The report of this survey indicated a need to replicate the study in other settings in order to validate the generalisability of the factor structures generated in the study. The survey items were made available with permission for the purposes of this study. The questionnaire also collected data on demographic characteristics, use of eLearning technologies, training needs, the type of subjects and qualifications suitable for eLearning, and structures in DCU likely to support the successful implementation of eLearning. For the purpose of the questionnaire, elearning was defined as 'the use of online technologies, including virtual learning environments (e.g. Moodle), discussion forums, chat sessions, podcasting, skype etc'. The questionnaire was piloted by a number of colleagues and a number of items were refined in the light of feedback received and with a view to ensuring local relevance and ease of completion.<sup>2</sup>

Following ethics approval from DCU's Research Ethics Committee, a personal email was sent to 542 academic staff members requesting their cooperation in completing the survey. The survey was administered online using the OscailSurvey programme developed by Eamon Costello (Oscail), and data were analysed using SPSS V.15. Following a number of reminders, a total of 139 usable responses were received. The overall response rate was 25.6% with a higher response rate of 35% for Oscail distance education staff, while response rates for the four traditional faculties ranged from 20.2% (Engineering & Computing) to 24.6% (Humanities and Social Science). Four respondents did not indicate their Faculty affiliation. While the use of internet based surveys has become increasingly common in research, the literature has noted that this has been at the cost of reducing response rates (Nulty 2008). Nulty found a wide range of response rates to surveys in Australian universities, both between universities and modes of delivery, with an average response rate for online surveys of 32.6%. Care must always be taken in interpreting data from surveys with low response rates. While it would be preferable to have achieved a higher response rate, a number of issues militated against a higher response, including the length of the survey which included over 200 items in all. While the response rate must be taken into account, the survey generated a considerable amount of useful information, much of which confirmed the findings from the interviews and consultations. This section will focus on use of elearning technologies, and the factors which serve to motivate or demotivate increased use of elearning, and the structures required to support elearning development.

#### ***Current Use of eLearning Technologies***

The survey found a high penetration rate of virtual learning environments with almost 90% of Faculty staff and 100% of Oscail staff having used Moodle in their teaching either in the current or previous years. Relatively few

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<sup>2</sup> A copy of the questionnaire is available from the authors

respondents reported using simulations and social networking technologies, with almost 90% of faculty staff reporting that they had never used these technologies. Further analysis of the use of Moodle indicates that staff make relatively little use of the more interactive features. The main use is to transmit information, including putting up class notes and lecture slides and making announcements. The next most common use is to add links to additional resources as well as links to readings and library journals. Moodle is used by almost three quarters of faculty staff to post assignment topics, however, just over one third download completed assignments from Moodle. Because of the major use of online interaction in Oscail assignments, over 80% of Oscail staff have assessed online contributions compared with just 20% of Faculty staff. Almost half of Oscail staff use Moodle to post group feedback on assignments, compared with one quarter of Faculty staff. The use of Moodle for online quizzes is relatively limited with just one tenth of Oscail staff and almost one fifth of Faculty staff using this feature. The greater experience of Oscail staff in using the interactive features of Moodle is highlighted in responses to the use of Moodle to answer queries (100% of Oscail staff compared with 38.7% of Faculties). Almost three quarters of Oscail staff set topics for discussion compared with under one third of Faculties. However, respondents from both groups reported relatively limited use of other features of Moodle, with approximately 30% linking in-class activities with online activities; between 15 and 16% replacing lectures with online course materials; and 10% using Moodle for supervising research students, recording lectures or other audio/visual inputs. The use of glossaries and Wikis was very limited (glossaries used by just 3.3% of Oscail and 6.4% of Faculty staff, and wikis by 3.3% Oscail staff and 4.3% Faculty staff). The responses indicate that there is a need to provide further support to staff in creating awareness of the additional capabilities which Moodle offers to create student interaction and develop innovative assessment opportunities.

The use of Moodle is creating its own impetus for incremental and evolutionary change as illustrated by a comment from one respondent: 'I tend to use VLE to a small extent but more each year. I put up lecture notes, tutorial notes on moodle and I use the web a lot in lectures for diagrams clips schematics short movies etc in order to illustrate concepts'. However, respondents indicated a number of reasons for disliking online environments including:

- Time 'Too much work to integrate into courses already overstretched and devoting too much time to teaching'
- lack of student engagement 'I'm somewhat uncertain about the effects of Moodle on student engagement. My concern is that in some instances it may encourage students to step back from ongoing engagement with materials.'
- Preference for face to face contact and distrust of elearning 'There is no replacement for face to face teaching for producing outstanding inspired graduates. e-learning will not produce high-calibre personnel needed for research or high end industry....I believe e-learning should be confined to peripheral/support roles for traditional learning techniques i.e. face to face.

This preference for traditional face to face lectures is obvious in Table 1 which outlines the responses to a series of Likert statements on attitudes to online learning. The highest mean score (2.159 indicating strongest agreement) was to the statement 'I prefer traditional face to face lectures'. Of greater concern is, despite evidence of willingness to teach online, just 40.8% agree with the statement 'Overall, students learn a great deal from online courses.

In the next section, we will examine the factors which serve to motivate, or demotivate increased participation in elearning.

Table 1: Attitudes to Online Learning

	% Agree	% Neutral	% Disagree	Mean <sup>1</sup>	StDev	N
I prefer traditional face to face lectures	59.8	28.8	11.4	2.159	1.062	132
Based on my experience, I would choose to teach online again	62.6	26.0	11.5	2.328	0.980	131
Overall I am satisfied with teaching online	64.3	21.7	14.0	2.333	1.056	129
I would recommend online teaching to a colleague	53.0	31.8	15.2	2.530	1.007	132
Overall, students learn a great deal from online courses	40.8	43.1	16.2	2.685	0.981	130
I would like to teach as many of my courses online as possible	31.5	33.8	34.6	3.054	1.196	130

I would not consider teaching online	6.3	9.4	84.4	4.320	0.913	128
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<sup>†</sup> 1 = Strongly agree; 5 = Strongly disagree

### *Factors motivate and demotivate staff adoption of elearning*

Respondents were asked a series of questions aimed at identifying factors which would increase or decrease motivation to adopt eLearning (see Tables 2 and 3 below). A factor analysis on the two scales was conducted to compare the factor structure identified in Shea's study (2007), and to establish the reliability of the scales. The overall reliability (Cronbach's Alpha) of the Motivator scale was .94, which was identical to that achieved in Shea's study (also .94). The reliability of the demotivator scale was .89, somewhat below that achieved in Shea's study (.96), although still indicating a high degree of reliability in both scales. The factor analysis of the Motivator Scale extracted five factors with eigenvalues greater than 1, explaining 69.4% of total variance. This compares well with the five factor structure identified by Shea which identified 64.6% of total variance, although there were differences in some of the items loading onto the different factors. The five factors emerging from this analysis related to Concerns with Learning (Items 5,6,7,8,9); Novelty and Professional Development (Items 10, 11, 12, 13,14 and 15); Employment & Colleagues (Items 19, 20,21, 22, 23, 24); Flexibility (Items 1,2,3,and 4); and Access (Items 16, 17 and 18). The reliability of the Factor scores ranged from .91 to .84, again indicate high internal reliability.

Factor Analysis of the Demotivator Scale extracted 7 factors with eigenvalues greater than 1, explaining 73.2% of the variance. The factors extracted were: Concerns about compensation and recognition (Items 41, 42, 43, 47); Inadequate support (Items 31, 32, 36a); fears about the complexity of online learning (Items 27, 28, 29, 30, and 39); inadequate time (Items 36, 37, 38); reputation and quality (Items 44, 45, 46 and 48); promotion and tenure (Items 25 and 26); and technology (Items 33, 34, 35, and 40). The internal reliability of the factors ranged from .91 to .69. This compares with the five factors extracted in Shea's study explaining 71.5% of the variance, and which identified factors labelled compensation, reputation, complexity, promotion and technology. Generally, the findings indicate the more general applicability of the two scales, although further refinement with perhaps a reduction in the number of items might be required to ensure greater response rates. The length of the scales deterred some respondents from completing the survey, and the labelling of the responses to the items also caused confusion to a number of respondents.

The responses indicate that the potential to reach new students and experiment with new technologies rank highly as motivating factors, whereas factors likely to decrease motivation are more pragmatic, relating to inadequate technical support, time, and recognition of the work involved.

Table 2: Items Increasing Motivation to Teach Online (% agreeing)

Item Likely to Increase Motivation	DCU Survey				SUNY Survey			
	N	Mean <sup>1</sup>	StDev	Rank	N	Mean <sup>1</sup>	StDev	Rank
16...reach students in different geographical locations	128	3.89	1.00	1	347	5.69	1.68	7
18...reach students at different stages of their learning lives (e.g. more mature/experienced, older, younger etc.)	127	3.85	1.00	2	343	5.68	1.75	8
24...Students may want online courses	126	3.82	0.97	3	347	5.76	1.54	3
6...an opportunity to experiment with new pedagogical approaches	125	3.74	0.97	4	348	5.70	1.33	6
17...reach students with different cultural backgrounds	122	3.68	1.06	5	337	5.55	1.79	9
8...an opportunity to experiment with alternative means of assessment	128	3.66	0.98	6	344	5.42	1.59	11
7...an opportunity to gain new knowledge, skills and insights about my teaching	130	3.60	1.03	7	350	5.72	1.41	5
11...learn new technology	127	3.55	1.17	8	349	5.74	1.51	4
22...Other material incentives for online course development are available (e.g. release time)	128	3.53	1.00	9	266	4.08	2.24	23
5...an opportunity to reflect and rethink classroom teaching	132	3.48	1.09	10	341	5.51	1.56	10
4...reduce commuting time or hassle.	130	3.45	1.28	11	326	5.30	2.10	13
10..."stretch", take on a new challenge	129	3.43	1.11	12	351	5.87	1.36	2
2...accommodate other life needs (childcare, transportation, other family needs)	131	3.43	1.25	13	330	5.41	1.930	12
1...provide a more flexible work schedule	133	3.41	1.16	14	346	6.08	1.44	1
3...provide more free time for other professional activities (e.g. conferences, consulting, research etc)	131	3.33	1.24	15	334	4.72	2.18	17
12...renew interest in teaching (overcome staleness, apathy etc)	129	3.31	1.10	16	331	5.01	1.90	14
14...participate in a collaborative professional development activity (e.g. training) which enhances relationships with peers	124	3.25	1.09	17	335	4.44	1.93	20
20...allow DCU to maintain or increase enrolment/revenue and therefore promote job security for staff.	127	3.24	1.22	18	320	4.80	2.02	16
23...Colleagues may refer to online teaching in a positive way	125	3.23	1.01	19	336	4.63	1.76	18
19...demonstrate competencies important for tenure and promotion	126	3.13	1.24	20	297	4.25	2.15	22
13...teach a new subject area	125	3.09	1.10	21	301	4.41	2.24	21
21...Teaching online may be a condition of employment	128	3.00	1.28	22	240	3.68	2.37	24
9...a higher level of interaction with my students	124	2.99	1.25	23	344	4.82	1.96	15
15...become a mentor to assist others to learning about online learning	127	2.97	1.13	24	332	4.63	1.91	18

<sup>1</sup> 5 = likely to increase motivation; 1 = unlikely to increase motivation. Note that the SUNY survey used a 7 point Likert scale

Table 3. Items Likely to Decrease Motivation to Teach Online

Item Likely to Increase Motivation	DCU Survey				SUNY Survey			
	N	Mean <sup>2</sup>	StDev	Rank	N	Mean	StDev	Rank
31. Inadequate technical support for online course development	127	4.142	0.940	1	276	3.37	2.24	12
36a. Inadequate administrative support for online teaching/assessment	126	4.071	1.089					NA <sup>1</sup>
32... Inadequate technical support for online course teaching/assessment	126	4.063	1.018	2	284	3.42	2.21	11
37...Inadequate time to develop a new online course	126	4.056	0.958	3	288	3.64	2.13	7
47...DCU administration may not recognise the effort required to teach online	124	4.008	1.071	4	289	3.82	2.3	5
29...The absence of face to face contact with students can be a disadvantage	127	3.906	1.050	5	319	3.53	2.09	10
38...Inadequate time to revise & update online courses	125	3.880	1.036	6	297	3.59	2.1	9
39...Online teaching may take more time than class room teaching	125	3.872	1.150	7	319	3.71	2.24	6
36...Inadequate time to learn about online teaching	127	3.827	0.993	8	291	3.24	1.99	16
33. Students may lack adequate access to participate effectively in online courses	125	3.768	1.041	9	314	3.84	2	4
42...Inadequate compensation for online teaching	127	3.661	1.100	10	296	4.15	2.29	1
41...Inadequate compensation for online course development	125	3.616	1.091	11	300	4.07	2.31	3
43...Inadequate compensation for online course revision	126	3.571	1.106	12	307	4.14	2.26	2
25...a lack of recognition of online teaching in regard to tenure/permanency	127	3.504	1.181	13	239	3.35	2.09	13
35...There may be little or no opportunity to experiment with the technology for teaching online prior to committing to teach online	124	3.500	1.130	14	307	3.33	2.01	14
26...a lack of recognition of online teaching in regard to promotion and/or salary increase	124	3.500	1.233	15	260	3.61	2.13	8
46...DCU administration may not value online teaching	123	3.496	1.183	16	281	3.06	2.06	19
49...Students may not want DCU to offer online courses	119	3.403	1.145					NA
30...Effective pedagogy for online teaching may be unfamiliar	127	3.370	1.037	17	314	2.86	1.71	21
28...the technology involved in online teaching can be confusing	128	3.359	1.189	18	321	2.85	1.83	22
27...developing an online course can be complicated	128	3.352	1.161	19	319	3.27	2.01	15
34... There may be little or no opportunity to observe other faculty using technology for online teaching prior to committing to teach online	127	3.307	1.050	20	303	3.17	1.91	18
40...Concerns about ownership of intellectual property and teaching online	127	3.283	1.188	21	310	3.2	2.08	17
48...Some people say that online courses are of inferior quality compared with classroom based courses	123	3.268	1.195					NA
44...Concerns that online courses may reduce the quality of DCU's reputation	124	2.992	1.259	22	302	2.87	1.94	20
45...Colleagues may talk negatively about online teaching online	123	2.854	1.226	23	300	2.58	1.87	23

<sup>1</sup> Scores for Items 36A, 48 and 49 not available for comparison

<sup>2</sup> 5 = highly likely to decrease motivation; 1 = unlikely to decrease motivation (note Shea used a 1-7 Likert scale)



### *Support Structures Required to Implement eLearning*

The survey also asked staff to indicate which support structures should be put in place to support the development of eLearning in DCU. There was strong support for the establishment of a university strategy (86.9% of Faculties; 81.8% Oscail) and institutional quality standards for online courses (85.7% Faculties; 87.8% Oscail). Most respondents also agreed with the establishment of a central unit to support eLearning (Faculties 83.5%; Oscail 81.8%), but Oscail and Faculty staff differed on whether the Central unit should provide programmes directly to students (two thirds of Oscail staff who are used to the concept of Oscail providing programmes are in favour, compared with just over one third of Faculty staff). Respondents were more favourably disposed to retaining control of course delivery within faculties, with approximately two thirds of both groups agreeing with the development of an eLearning unit in each faculty to provide online courses. The appointment of individual eLearning 'champions' in each school/faculty was favoured by over two thirds of Faculty and four fifths of Oscail staff. There was also support for the concept of secondment of central unit staff to the faculties to support preparation of online courses (Faculties 62.7%; Oscail 78.1%), with somewhat less support for the secondment of academics to a central unit to prepare online courses (Faculties 54.1%; Oscail 70.9%). While collaboration with other higher education institutions is favoured by both groups (Faculties 76.7%; Oscail 87.8%), less than one third of either Oscail or Faculty staff favour outsourcing elements of eLearning support to external organisations (although the latter is a feature of some traditional universities which engage in fully online programmes).

### **Conclusion and Implications**

While elearning has been hailed as a solution to extending access to higher education to distance students, surveys of the adoption of elearning in traditional universities indicates that the uptake has largely benefited on campus students, while opportunities for students to complete degrees at a distance remain limited. As this paper has shown, the reasons why traditional universities have not engaged in distance learning to the extent required to offer ubiquitous access to higher education are complex, and relate to wider strategic, funding, and policy environments. Within institutions, traditional academic cultures adopt innovations which improve or make easier what is already taking place, for example, elearning is now widely used to make class notes and handouts available. However, there is still widespread scepticism about fully online learning and a reluctance to move from the traditional face-to-face model. This case study of a traditional university seeking to respond to external pressures for modernisation and change through the embedding of elearning throughout the university illustrates the challenges involved in this transition. There is a need for strong leadership and vision at the top; there is, however, a need to attain buy in from those charged with implementing change. The legitimate concerns of academics with regard to quality must be addressed; there is a need to increase capacity and awareness. While interest in new pedagogical approaches and the potential to reach new student groups may motivate academic staff, the absence of structural supports in the form of training, technical and administrative support, reward and recognition of the time involved, will serve as formidable barriers to any real change, and therefore any movement on access to higher education for all.

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