

Chapter 6

Staff development and organisational change

The chapter first gives an overview of how the case study institutions view the main forms of organisational change and barriers related to e-learning, before focusing on staff development. All sample universities are in the midst of thinking through and negotiating the potential contribution of e-learning in its various forms to organisational futures. The chapter illustrates the diversity of methods for developing institutional human resources. Just as there is no one “best model” or trajectory for e-learning development for institutions, nor is there a “one-size-fits-all” staff development training programme for e-learning.

E-learning is arguably in modern times the first teaching and learning “delivery” medium to challenge all forms of tertiary education. The organisational impact of other types of distance learning (print, radio, and video) was first to generate new kinds of institution (single mode distance learning specialists) and second to encourage dual mode institutions (offering both face-to-face and distance provision). The majority of traditional face-to-face institutions remained largely untouched, offering forms of distance provision at the margins, if at all, and admitting few distance learning innovations to penetrate the face-to-face classroom. Building on decades of development in computer-assisted learning, the e-learning boom, by presenting tools for both the face-to-face and distance setting, could have (and in some cases has had) a much wider impact. What kind of organisational changes are induced by e-learning? What kind of changes do institutions perceive as necessary to advance e-learning, and what are the current barriers to change?

The chapter first gives an overview of how the case study institutions view the main forms of organisational change and barriers related to e-learning (6.1-6.3). It then focuses on staff development (6.4-6.5). Indeed, when asked about major barriers to further online learning development at their institutions, 11 out of the 19 case study institutions cited a lack of human resources as one of the major barriers: lack of technical or specialist manpower, lack of time, awareness and skills on the part of academics. The issue of human resources is one of the most critical for institutions wishing to advance in e-learning. The chapter illustrates the diversity of methods for developing institutional human resources capacities for e-learning.

6.1. Context of organisational change (Question 8.1)

While many aspects of the OECD/CERI survey indirectly concerned organisational change connected with e-learning, the matter was specifically addressed in Question 8.1. Given that many sample institutions were in the relatively early stages of e-learning development, related organisational change and perceptions of change were necessarily iterative. Institutional “consciousness” of change was similarly in an emergent state. Moreover, the sample was organisationally diverse. Some institutions have created special “e-learning units” as the core focus of activity, others are rolling out e-learning across the institution as a whole, some are historically distance learning organisations adapting to e-learning, a number are distinct e-learning institutions in their own right, and some represent consortia. Thus the form and extent of organisational change varied.

Inevitably, change has an unpredictable element. “ICT innovation cannot be viewed as being on a pre-determined, technology-driven path that will produce predictable results ... Outcomes are shaped unpredictably by the negotiations and interplay between actors” (Dutton *et al.*, 2004, p. 133). Of course, e-learning specific organisational change overlaps with organisational change more generally (*e.g.* in response to changes in funding, student demographics, regulation and internationalisation, etc.).

Organisational change concerned with e-learning may be divided into examples and associated mechanisms of change accomplished, and mechanisms conceived/put in place to achieve desired future change. Many respondents described “organisational change” in terms of provision of new equipment/programmes or reaching new clients, rather than reflecting on how the institution might develop to enable such acquisitions/strategies to flourish. Given the early stages of e-learning development in many institutions, this is perhaps inevitable. However, this diverse interpretation of the question may mean that the full extent of forms of, and reflection on, organisational change at some institutions were not fleshed out in responses. Some institutions included or made available background documents, some of which touched on aspects of organisational change. However, many documents were 3-4 years old, making it difficult to assess practice against strategy and policy. This overview is thus necessarily limited.

Respondents used a number of key words to encapsulate aspects of organisational change. These included: integration, mainstreaming, devolution, centralisation, standardisation, flexibility and learner-centred. Some respondents (*e.g.* Monash University) described the drivers of change as urgent and change as increasingly fundamental and rapid, while others described careful, incremental change once assured of student benefit and market acceptance (*e.g.* Open University Catalunya). Not surprisingly, the position of an institution vis-

a-vis e-learning (*e.g.* campus-based versus dedicated virtual university) coloured perceptions of the drivers, nature and speed of change.

There were few cited examples of use of third party performance measurement tools to assess developments against strategy. One institution cited use (since 2003) of a generic strategic management tool – Balanced Scorecard – to assess form and progress on organisational change. This methodology, developed in the United States, connects institutional strategy, operational data and performance metrics, and is an attempt to develop non-financial (as well as financial) performance indicators. The Open University Catalunya respondent cited external review (*e.g.* at programme level through the European Foundation for Management Development, and at institutional level through the European University Association) as a catalyst for change.

6.2. Forms of organisational change

Table 6.1 lists major forms of organisational change mentioned by sample institutions, and offers an indication of citation frequency. It does not distinguish between achievement, progress and aspiration.

Table 6.1. Form of organisational change

Theme/form of organisational change	Citation frequency
Staff/organisational integration – including systems integration	High
Recruitment of new kinds of staff/staff status	High
Flexible delivery for on- or off-campus students	High
New conception of teaching and learning – active, student-centred, automation, asynchronous, etc.	High
Rationalisation of parallel delivery methods	Medium
Shift to new/standardised materials development processes and media	Medium
Mainstreaming (<i>e.g.</i> removal of special funds, devolved authority)	Medium
External collaboration	Medium
Changing domestic student profile/expectations	Low
Reform of development/approval/evaluation processes; debate between centralised and devolved authority	Low
Reduction of classroom time	Low
Commercialisation	Low
Internationalisation	Low

Note: High = more than 50% of respondents; medium = between one quarter and one half of respondents; low = less than one quarter.

Source: OECD.

New conception of teaching and greater flexibility of delivery

Most institutions pointed to some form of commitment to a “new” conception of teaching and learning (*e.g.* teacher as facilitator, learner centred, some use of automation) and to greater flexibility of delivery. The latter took a number of forms, such as dual mode provision, modularity of content, conversion of print-based to online, remote access for students and improved access for out-of-country students. The UCLA Extension respondent specifically referred to pressure to revise the standard instructor-led, synchronous, limited cohort model in order to expand access and lower costs – but sustain quality. Systems integration was widely referred to. In practice, this meant achieving interoperability between the full range of IT systems (*e.g.* learning management systems [LMS], finance, admissions, library, desktop, etc.). Such integration was widely viewed as crucial administrative support for greater use of e-learning. As noted in Chapter 4, only a handful of respondents might be said to have substantially achieved this level of integration.

Staff roles and development

The other two “high” frequency items related to staff roles and recruitment. E-learning could indeed lead to new staffing requirements and to changes in the development of courses and programmes.

All institutions acknowledged the need to recruit a broader range of staff (*e.g.* instructional designers, cognitive/learning scientists, technologists, and marketing professionals) to move e-learning developments forward and to complement academic employees. For example, the UK Open University appointed a “Media Account Manager” for each faculty, based in the central “Learning and Teaching Solutions Unit” (LTSU), to provide dedicated advice to faculty and ensure consistency across the institution and within the LTSU. This respondent stated that the institution’s traditional team-based approach to course development stood it in good stead in the shift to e-learning.

More generally among respondents, there was also a trend towards enabling academic staff to develop and refine their own e-learning materials, with relatively little input from central specialists. Some institutions pointed to either in-house or third party “wizards”, allowing academics to cut-and-paste materials from standard applications into relatively standardised online templates. The emphasis was on ease-of-use rather than provision of technical skills. One institution indicated that a tradition of standard templates for production of offline distance learning materials facilitated mass transfer online. This devolution has impacted on staff development in some institutions, allowing sessions to focus on pedagogy rather than

technical matters. The Open University Catalunya operated a not dissimilar model. Founded as an inter-disciplinary institution without faculties/departments, this approach was designed to improve sharing between programmes and ensure a broadly common pedagogic as well as student-centred/personalised and technological schema.

At the Open Polytechnic New Zealand, the decision was taken to move away from a very centralised programme development and approval process (rooted in historical distance learning production) to a more devolved structure. This was undertaken to reduce administrative bottlenecks, increase academic staff skills and ownership, and position online development closer to academic departments and individuals. That said, a (reduced) central oversight function has been maintained in the interests of consistency of approach and quality; and a central “innovation” unit offers ad hoc advice and support. Academic input was also encouraged in the form of research into pedagogic good practice and student evaluation, etc. One institution constrained local development by making central support only available for programmes agreed by a department/the centre to be a strategic priority. At one institution, programme approval was expanded (beyond conventional notions of intellectual coherence) to encompass “resources, delivery mechanisms and costs, mechanisms to support student learning, and whether the programme was provided as flexibly as possible”.

Delivery methods

As noted elsewhere in this book, some institutions portrayed organisational change in terms of gradually eliminating parallel delivery methods in favour of a broadly common e-learning model (*e.g.* UK Open University), while others saw ongoing competitive advantage in offering parallel modalities (*e.g.* University of Maryland University College). There was thus no common vision of organisational change towards a unique mode of delivery. In line with the relatively low level of current and predicted activity under “mixed mode” online presence (see Chapter 1), few institutions made specific reference to reduction of classroom-based provision in favour of online. Indeed, some respondents (*e.g.* Multimedia Kontor Hamburg) firmly stated that wholly online provision was not contemplated. Some respondents were keen to avoid the reductionist realisation of the “virtual university”, reducing the university to information flows, and ignoring the roles of place and social interaction (Cornford and Pollock, 2003). Among distance learning institutions, the replacement of non-online modalities seemed less sensitive. The Carnegie Mellon University respondent questioned whether faculty/students at a traditionally campus-based, high tuition university will in the long-term accept delivery substantially by means of mixed mode/fully online programmes. The “Open

Learning Initiative” (and the faculty-based initiatives at Carnegie Mellon University on which it builds) was positioned as an attempt to generate top quality e-learning provision commensurate with Carnegie Mellon University’s status and price tag.

An example of a perceived new market accessible through e-learning was the large number of high school graduates who apply to the University (University of Sao Paulo) but cannot be admitted. The University of Sao Paulo aims to develop fully online programmes to accommodate demand. The “Open Learning Initiative” (see Box 3.2) is an attempt to refine course production to the point where high quality provision is available free or at low cost to interested individuals worldwide.

Mainstreaming

Monash University portrayed a distinctive mainstreaming strategy. This involved likely removal of special development funds, a shift in relative IT funding from equipment to pedagogic support, and offering permanent contracts to LMS support staff. Others referred to the continuing existence of special funds.

Other aspects of mainstreaming included the adoption of an overarching teaching and learning strategy (with e-learning as a key component), rather than a distinct e-learning strategy. One respondent pointed to a management tradition of experimentation and risk-taking, plus a demanding student population and a mandate to offer flexible delivery, as critical to its relatively “effortless” transition of e-learning from experiment to mainstream. The respondent commented that “for better or worse, this does not bode well for converting traditional institutions”. The University of British Columbia appeared to be the only campus-based institution subject to external (provincial government) targets for recruitment to online programmes.

External collaboration

Despite the plethora of alliances outlined in Chapter 5, inter-institutional collaboration was not widely described as a major feature of organisational change associated with e-learning. One exception was UCLA Extension, where closer co-operation with the parent institution (UCLA) was predicted. This institution was said to be developing a role in improving the experience of resident students, using e-learning. At UCLA, funding pressures, ways to teach more students with fewer resources and the need to raise additional income were seen as catalysts of growing interest in e-learning, and resort to UCLA Extension in terms of expertise. Some institutions looked elsewhere for supporting technologies and content, while many (positioned as leaders

in the field) lauded the virtues of significant in-house development and self-sufficiency.

Commercialisation and internationalisation

Other less common features included commercialisation and internationalisation. Few institutions mentioned specific strategies to commercialise online provision/materials or associated technologies, or to market online provision abroad. Exceptions included the Open University Catalunya and the Virtual University of Tec de Monterrey which both saw the international Hispanic market as attractive; and the Virtual University of Tec de Monterrey and UCLA Extension predicted interest in low-cost, high quality e-learning from the private sector. The University of Maryland University College respondent cited the challenge of integrating the institutions' US, Europe and Asia operations. In some cases, semi-commercialisation is envisaged whereby a specialist arm of an institution plans to make its expertise available more systematically to the parent body. As above, the UCLA Extension respondent described an arrangement whereby the bulk of online development was contracted out to a private firm (partly to minimise institutional risk). Some years later, the institution began to gradually pull all major functions in-house, and aims to be completely independent by mid-2004. One institution (Asian Institute of Technology) envisaged enhanced contact and expansion of remote sites in other countries.

6.3. Barriers to development of e-learning (Question 8.3)

Case study institutions were asked to identify major barriers to development of e-learning. Overall, many of the cited barriers were unsurprising, and many apply to innovation and development in higher education more generally. Commonly perceived barriers are listed below.

Absence of good practice and protocols

- *The absence of widely agreed and disseminated “good practice” in terms of different forms/options concerning online pedagogy.* The University of British Columbia respondent specifically mentioned “lack of understanding of the changes needed in methods of working to reap the benefits of e-learning” (e.g. replacing some classroom time with time online, working in teams with other professionals such as instructional designers and Web programmers).
- *The absence of widely agreed and disseminated “good practice” on financial planning and sustainability relating to e-learning.* This applied

between institutions, and within institutions. The Multimedia Kontor Hamburg respondent complained of project-based funding for e-learning too often resulting in “white elephants” – *i.e.* notable in themselves but of little practical value to the wider institution.

- *The absence of widely agreed and internationally adopted e-learning technical protocols and infrastructure*, seen as prerequisites for the development and sharing of e-learning materials.

Staff issues

- *Faculty/staff resistance to change* – particularly in terms of conceptual ties to “an older paradigm of teaching and learning that is classroom based and content-centred”, or traditional distance learning course production. Related to this was concern about faculty (and to a lesser extent student) ICT literacy (and general pedagogical literacy), and shortage of appropriate staff development opportunities.
- *Lack of senior management engagement*. In highly decentralised institutions, there was seen to be a need for improved understanding at Head of Faculty and senior administrator level of the nature and success factors of e-learning. These “levels” were seen as critical to resource allocation and human resource management (University of British Columbia). Failure to utilise e-learning strategically – “too often efforts are piecemeal and scattered, dependent upon the initiatives of individual faculty”. This was seen to increase costs and reduce impact (University of British Columbia).
- *Sustained perception that research brings high status and greater reward than teaching*, and that poor teaching was not necessarily treated very seriously. These factors were seen to undermine efforts to advance high quality e-learning, particularly in research-intensive institutions (University of British Columbia).
- *Lack of faculty/staff time*.
- *Difficulty recruiting adequate numbers of appropriately skilled specialist staff* (e.g. Web designers, instructional designers).

Lack of materials/resources

- *Lack of appropriate, efficient processes* to develop high quality e-learning materials.
- *Lack of funding/resources*. Some respondents cited the perceived high cost of developing high quality e-learning as a barrier.

Other issues specific to individual institutions

- *Lack of a regional e-learning development framework and of an adequate regional ICT infrastructure* (Asian Institute of Technology).
- *Absence of tuition fees*, and thus the absence of a mature market for higher education, and marketing capacity in institutions. Related to this, a concern was the perceived lack of business development experience to make “academic e-learning profitable” (Multimedia Kontor Hamburg). A recent decision by the German Constitutional Court, over-turning a 2002 federal ban on tuition fees, suggests movement here.
- *Lack of “inter-campus competence”* (Virtual University of Tec de Monterrey) – *i.e.* lack of consistency of interest and experience of e-learning from various campuses of the parent university.
- *A desire to ensure that e-learning is as good as (in pedagogic terms) the “very best of traditional learning done at the university”*. This was seen as a barrier in the sense that it meant slow, incremental progress, and often required significant investment. This approach required a long-term view of the value proposition of e-learning (Carnegie Mellon University).
- *Lack of authorisation from parent institutions to offer degrees in its own right* (UCLA Extension). Degrees were seen by the respondent as a significant market for online education, alongside the short course, adult market in which UCLA Extension currently has competitive advantage.
- *The need to better define institutional performance measures related to e-learning development; and student learning*. The shortcomings of current online student support, seen as partly responsible for unacceptably high failure rates (University of Maryland University College).
- *Distance learning still not widely accepted by society* as a valid means of education (University of Sao Paulo).
- *Stakeholder scepticism* concerning the long-term impact of ICT in higher education and the economy more generally (Zurich University).

6.4. Developing human resource capacities (Questions 6.1-6.4)

The OECD/CERI survey focused specifically on the changes implied by e-learning for staff. Questions inquired about staff development provisions. Two major strategies have been identified for developing human resource capacities. One is to provide staff development and the other is to change the

organisational/human infrastructure, both of which were briefly discussed above. The two are related and, in fact, may develop hand in hand. The development of e-learning may change the human infrastructure; the lack of staff development provision may necessitate changes in staffing roles/appointments, etc. A new division of labour may determine what kinds of staff development are needed. Conversely, with the provision of the staff development, human resource capacities may evolve in a new direction where restructuring of staffing or redefining of staffing roles may be made possible.

Few respondents reported a clear institutional position (most encouraging both faculty up-skilling and provision of specialist support). The University of South Australia respondent was unusual in advancing a faculty development target – that all faculty should be able to “convert their teaching approach to incorporate online techniques and be able to “publish” learning materials to a course home-page”.

Staff involved

Institutions were asked how the adoption of e-learning has affected the staffing complement (question 6.3). The majority of institutions (15 out of 19) answered that either they were in the process of changing or had already changed the staffing complement. The most cited change was the creation of new posts such as LMS managers, course managers, Web designers, instructional/pedagogic designers, cognitive scientists, assessment specialists, technological assistants, media/Web specialists, student support specialists, etc. (many hired as full-time or part-time consultants, not permanent staff). The UK Open University respondent reported a shift from recruitment of media specialists (*e.g.* designers, editors, video producers) to a desire for individuals able to work across a range of media and to take an integrated approach. There were also cases of additional requirements for newly recruited faculty (*e.g.* to have certain media competence and experience). There were references to greater use of graduate teaching assistants (*e.g.* to moderate online discussions and take on other relatively routine/administrative aspects of e-learning); and to giving faculty administrative assistants overall responsibility for LMS posting/administration. Those respondents reporting no change were either non-significant adopters of e-learning to date, dedicated virtual institutions, or subject to specific national staffing regulations that did not lend themselves to the appointment of non-traditional staff (*e.g.* University of Paris Nanterre).

Almost all cited that staff development was geared towards faculty, and did not encompass administrative support or technical staff. Three exceptions were reported. The Virtual University of Tec de Monterey, the

University of Maryland University College, and Carnegie Mellon University regard success as “achieving an integral development of the whole community” and “integration of all aspects of e-learning development” and providing training to administrative support staff and technical staff. For instance, Carnegie Mellon University provided introductory LMS training to faculty administrative assistants with an aim of turning course management administration over to them. At the University of Maryland University College, senior administrators were required to take the LMS course, and faculty were “encouraged” to take the student library course (to aid their role as student counsellors).

Skills developed

The content of reported staff development ranged from general technological know-how (*e.g.* the use of software such as Dreamweaver, FrontPage, XHTML, e-Portfolio, etc., and the use of an LMS), to pedagogical skills (*e.g.* “best pedagogical practices”, “facilitating online discussion”, “didactic design of content for the Internet”, “evaluation”, etc.) There was a trend to shift focus from content to process. In other words, once faculty acquired basic technological skills, staff development concentrated more on the pedagogical aspects than on the use of specific technologies. Carnegie Mellon University reported that it had stopped offering a workshop on the use of a specific LMS and instead concentrated on pedagogical practice using the LMS.

Types of staff development

The responses also showed a great variety of staff development types, including mandatory and voluntary participation, and support by request. In addition, staff development may be faculty-led or specialised centre/special project-led. Of those institutions that did not cite formal staff development connected to e-learning, three mentioned the provision of informal “support” at the faculty level, and the remaining institution commented that faculty development itself was not yet offered, nor was support provided specifically for the use of e-learning (see Table 6.2).

Four out of 15 institutions reported that faculty must take mandatory sessions before starting a course. It should be noted that such sessions focused on LMS use only, e-learning/distance learning pedagogy only, or both. Institutions with mandatory arrangement were all either distance-based or mixed mode institutions, some with a majority of adjunct faculty without tenure and hired first and foremost to teach. Of the remaining 11 institutions with primarily voluntary models, five reported low attendance rates (*i.e.* proportion of faculty that have participated to date): 1%, 5%, 10-15%, 20%, and 33%. This reflected the general observation that many “traditional” academic staff in campus-based

institutions lack the time for and/or interest in attending voluntary development. One institution remarked that some faculty view e-learning as “an additional and unwelcome task that they approach with a lack of enthusiasm and commitment”. The institution with the attendance rate of 20% for voluntary participation, allowed faculty-led initiatives in addition to its central initiative. As a result, one faculty at Monash University started to run its own training (on use of webCT) and made it mandatory for faculty before opening a webCT account. By contrast, at the University of British Columbia only 10% of faculty who use the software were said to have participated in introductory/advanced development sessions offered by the University’s “webCT Institute” and the “Office of Learning Technology”. The University of Maryland University College respondent stated that the intention was to require faculty to undergo regular pedagogic development, as well as the mandatory LMS training. An exception to the “lack of faculty enthusiasm” position was the University of Paris Nanterre, where the respondent cited lack of sufficient resource to provide dedicated staff development for e-learning; and said that for the most part faculty had no option but to experiment in their own time.

Table 6.2. Typology of staff development for e-learning

	Voluntary support	Voluntary staff development	Mandatory staff development
Faculty-led initiatives	Aoyama Gakuin University University of Paris-Nanterre University of Sao Paulo	University of British Columbia	Monash University (Business and Economics Faculty)
Specialised centre-led initiatives and Project-led initiatives		Asian Institute of Technology Carnegie Mellon University FernUniversität Hagen Monash University Multimedia Kontor Hamburg Open Polytechnic New Zealand University of British Columbia University of California, Irvine University of South Australia Virtual University of Tec de Monterrey Zurich University	Open University Catalunya UK Open University UCLA Extension University of Maryland University College

Source: OECD.

Some institutions shared the lessons learnt in promoting voluntary attendance by faculty:

- Increase alignment of the development between rationales/provision and strategic planning at the institutional or faculty level, and tie it in with the overall goals of the institution.
- Encourage a paradigm shift in the way academics think of university teaching, *e.g.* a shift away from “scepticism about the use of technologies in education” and “teacher-centred culture” towards a “role as a facilitator of [the] learning process”, “team-worker”, and “learner-centred” culture. Without this shift, there is often a “conceptual gap” between mainstream faculty and e-learning development.
- Better align development with academic schedules and workloads as well as with pressing practical needs, *e.g.* what faculty learn through development provision should be of immediate use to their teaching.
- Increase inter-faculty communication (*e.g.* sharing innovative/successful examples of e-learning), to avoid the perception of non-faculty imposing themselves on faculty. This was seen as key to getting across the pedagogic/administrative potential of e-learning.
- Increase opportunities to practice what is learnt, ideally replicating a “real world” situation and scenario. One computer per participant is critical.
- Ensure that the technical presentation/resources can be used flawlessly – to avoid any charge that provision is second-rate or a “waste of time”.
- Provide staggered welcome emails 7-10 and 3-4 days before an event, to encourage participation and to offer an opportunity to clarify any issues/misunderstandings/concerns.
- The Carnegie Mellon University respondent reported greater faculty interest (in development tied to the “Open Learning Initiative”) due to a sense of belonging to a larger, research-led project.

More generally, many respondents found it critical to reengineer faculty reward structures to give them more incentives to engage in e-learning. If institutional/career advancement and peer respect stem first and foremost from research, then it is not surprising that many faculty feel unable or unwilling to commit significant time to e-learning and related staff development. For example, senior management within a faculty or across an entire institution might attempt to publicly set out career paths for faculty dedicating significant time to e-learning development and innovation, and how time thus spent was equivalent in value to time spent on research.

Ultimately, senior management must come to a view on the rationale for engagement in e-learning at their institution, and thus whether and how the complex task of reward realignment (actual and perceived) might be attempted.

In contrast to the challenges of voluntary participation cited thus far, Multimedia Kontor Hamburg pointed to a growing interest in training among faculty members and reported that there were more applicants than seats available. The institution reported that it outsourced its training to the Interdisciplinary Centre for Higher Education (IZHD), an external institution that specialises in ICT in education and offers courses leading to a master's degree. This may have raised both the perceived quality and credibility of development provision.

6.5. Models of staff development

Various methods of training were reported: *e.g.* short training programmes, one-on-one sessions, seminars, workshops, presentations by peers, online self-training/resources, and refresher sessions. Of the 15 institutions that provide staff development, 14 mentioned that a key focus was a specialist in staff development/support centre (*e.g.* the E-learning Center at Zurich University, the Office of Technology for Education at Carnegie Mellon University, the Centre for Learning and Teaching Support at Monash University, etc.).

Interestingly, what was noted as good practice by some institutions was viewed as problematic by others. For instance, one institution cited one-on-one meetings as the most productive form of training, said to take into account the diverse skills and interests of individuals. Another questioned the productivity of this method, said to be time consuming and to have a limited outreach effect. One institution said that “faculty talking to faculty about their experiences draws more audience than staff talking to faculty about best practices” and another confirmed that academics had more “credibility” with their peers. However, the Open Polytechnic New Zealand institution faced the challenge of a failing “peer-trainer” model. Only by targeting specific individuals (e-learning enthusiasts) did the “trickle down” staff development model begin to work. It is critical to keep in mind that what works for one institution may not always work for another; and that “how” an approach is implemented is critical to success.

Some institutions highlighted the importance of the sustainability of staff development, as opposed to offering training on a once only basis. The experience of some institutions pointed to the following as necessary conditions for sustainable staff development:

- Providing ongoing and recurring workshops and/or “at-elbow” help support.
- Building a community for e-learning “adopters” within and across institutions.
- Doing research on how best to engage faculty members in training, and refining provision over time.
- Making clear to the individuals what central/local support is available to consolidate their development.

The Open Polytechnic New Zealand respondent mentioned that staff development training started at first as a project (“Open Mind Online project”), without a dedicated centre. The project aimed to facilitate peer-training among faculty members, but the lack of ownership of the project was a challenge. The idea was to the “train-the-trainer”, whereby one individual from an academic unit would undertake staff development, and then train others in the unit. In practice, this model was not successful. Insufficient numbers of faculty received training, and of those, many did not pass on their knowledge in the desired manner. This resulted in confusion as to where individuals should turn for development assistance. Responsibility was then taken over by the IT helpdesk, then by the E-learning office and then by the general staff development unit, none of which experienced much success.

A successful example of a strategic model was reported at the University of British Columbia. Training provision was both top-down and faculty-led. There are several centres offering staff development at the institution: *e.g.* the Center for Teaching and Academic Growth giving face-to-face seminars on the use of technologies, the webCT Institute and the Office of Learning Technology giving face-to-face seminars on webCT related topic, the Faculty Alliance for Technology in Education and Committee for Information Technology offering courses focusing on innovative use of technologies, faculty-led University of British Columbia Learning Centres offering face-to-face seminars on the use of various technologies, the Office of Distance Education and Technology providing face-to-face workshops on online teaching. Such a variety of initiatives may seem redundant. Yet, the respondent reported that this multi-player situation is not chaotic. The key factor was cited as collaboration (among all the players) coordinated through a centrally positioned facilitation office, keeping in mind the overall organisational capacities for e-learning for the entire institution.

Question 6.4 asked about particular strategies to facilitate collaboration between faculty and other staff (technical, instructional designers, library

staff) in the development of e-learning. As noted above, the numbers of such staff are increasing significantly in many institutions. At the University of British Columbia, the projection is 100 such staff by 2008 (from 35 in 2003). At Zurich University in 1999, fifty full-time jobs were created to provide selected faculty with dedicated e-learning support (*e.g.* instructional design, Web development etc). This model was designed to kick-start a number of projects, and has since been revised whereby specialists are now housed within central units and are available to all faculty. To enhance collaboration, some institutions cited regular feedback meetings (both within and across work function) where different actors were able to share experiences to try to improve processes; and others faculty-linked deployment of media specialists. For example, the UK Open University has appointed “Media Account Managers” for each faculty, based in the central “Learning and Teaching Solutions” unit. This both provides dedicated faculty links, and ensures central consistency of broad approach. This respondent noted that the Open University had pioneered course production using multi-disciplinary teams, and argued that this approach was well-suited to e-learning: “Other institutions where course delivery was very much down to individual lecturers have found it harder to adapt”. This team approach was apparent at dedicated virtual institutions (*e.g.* Open University Catalunya, Virtual University of Tec de Monterrey), where such a model was necessarily in place from the outset. Early involvement of key services (*e.g.* library) was reported as key to successful long-term collaboration.

Another trend in the provision of staff development is that expertise is exchanged or bought/sold across institutions. UCLA Extension and Carnegie Mellon University reported that some of their staff development activities were extended to other institutions. UCLA Extension’s Instructor Development Programme has assisted “more than 100 North American universities” to develop similar in-house functionality. Within the framework of the Open Learning Initiative (OLI) Project (see Box 3.2), Carnegie Mellon University offers training support to the faculty at its partner institutions to enable the effective use of the OLI courses. For instance, the Open Learning Initiative project offered 2-3 day summer workshops to faculty at over thirty institutions to show them “the underlying theory of the content area, how to use the online materials, how to participate in the ongoing research into effective web-based learning environments, etc.” Both the University of British Columbia and Zurich University pointed to the exchange of staff developers within and outside the university.

Private foundations can also play a role in taking initiatives beyond the institutional level. For example, the Bertelsmann Foundation in Germany has created an “e-teaching” portal (www.e-teaching.org) for staff

development, geared towards a heterogeneous audience, offering access to a range of resources, and seeking to create faculty dialogue, and dialogue with senior managers and policy makers. In the UK, in an attempt to enhance professional status and career structure, pilot work has been done with a view towards “certified member” status (of the UK Association of Learning Technology) for learning technologists.

6.6. Conclusion

All sample universities are in the midst of thinking through and negotiating the potential contribution of e-learning in its various forms to organisational futures. For some institutions, and in some countries, key barriers remain, such as stakeholder scepticism about pedagogic value, funding and infrastructure. More commonly, institutions are grappling with mainstreaming adoption, mainstreaming funding and beginning to contemplate restructuring in terms of staffing, staff development, instructional design, student support, etc. In contrast to dot-com rhetoric, commercialisation and internationalisation were infrequently cited as aspects of organisational change. Dedicated virtual institutions aside, reported organisational change in sample institutions is best characterised as iterative. The general concept of “staff development” is widely cited as key to mainstreamed and sustainable e-learning in tertiary education. Institutions are grappling with the balance between faculty and “new” staff roles, and the division of labour between the two. At this juncture it is unclear which aspects of e-learning development and delivery will become routine and which will remain specialist.

Distance/mixed institutions in the sample tended to operate part-mandatory development (concerning platform use and/or pedagogy), while campus-based institutions exhibited a primarily voluntary approach. Campus-based institutions favoured faculty-led development on the grounds that it better engaged faculty. At distance/mixed institutions, division of labour/team development was stronger, and “traditional”/tenured/permanent faculty were less common, circumscribing faculty roles and strengthening central administration. In most cases, voluntary development was said to be characterised by low take-up. Reported means to address this included devolving responsibility to faculties, enhancing the role of faculty in development and trying to better align development with pressing faculty needs. There was a general trend away from technical “how to use this platform” development, and towards pedagogy-led development; and testing of the right balance between central and faculty-located development/assistance.

The provision of staff development shows great diversity. Just as there is no one “best model” or trajectory for e-learning development for institutions, nor is there a “one-size-fits-all” staff development training programme for e-learning. To advance e-learning in staff development, institutions must undertake critical needs assessment, strategic planning tied with the overall institutional mission, careful planning of implementation, and assessment and research to fit their own institution and evaluate impact. It is also important to avoid formal “staff development” where day-to-day practice-based development would be more efficient and effective. To ensure faculty respond to staff development drives, it is critical to re-engineer career reward structures.

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Cost efficiency and funding

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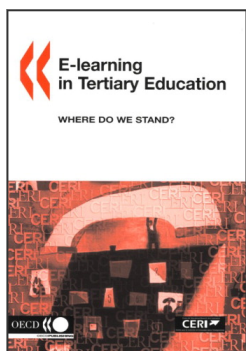
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