

Chapter 2

E-learning strategies and rationales

The chapter set out to give a detailed picture of how, “where” and to what extent e-learning in the broadest sense was a feature of institutional strategy; how strategies came about, what they consist of, and whether and how they have been revised.

The previous chapter has shown that in most campus-based institutions, the growth of e-learning to date has not challenged the centrality of the face-to-face classroom setting. Does this reflect the current under-development of e-learning or correspond to institutional strategies? The OECD/CERI survey set out to gain a detailed understanding of how, “where” and to what extent e-learning in the broadest sense was a feature of institutional strategy (2.1); how any strategy came about, what it consists of, and whether and how it has been revised (2.2-2.3).

2.1. Forms of e-learning strategy (Questions 1.1-1.5)

One way to understand how institutions view e-learning is to look at the documentation that they have developed about their strategy. Development of e-learning strategies is one component of the effort to integrate e-learning more widely in the institution.

It should be noted that the existence or absence of a particular form of e-learning strategy does not necessarily by itself reveal a great deal about the nature, extent and longevity of the e-learning activities at the institution concerned. A strategy may be designed to focus an entirely new development, or may be intended to rationalise and enhance a range of longstanding local developments, or a combination of the two. For example, a number of respondents had considerable experience of flexible/remote delivery, and positioned e-learning as a re-working of this approach. An e-learning strategy may stand on its own, or may be a component of another strategy (*e.g.* teaching and learning, IT, or a broader e-strategy). Some respondents represented units within larger institutions; hence any strategy was local rather than central (in the context of the parent institution as a whole).

Codification

The development of e-learning strategy is taking place in the context of a rapid codification of institutional decision-making in tertiary education more generally. As the scale and complexity of tertiary education in most countries has increased in recent decades, and as external accountability requirements have become more demanding, institutions now utilise documentation to articulate a central “position” in more areas and in more detail than ever before: this is what we call “codification”. For example, in England, all tertiary education institutions must now produce a range of central strategies, including teaching and learning, as a condition of funding. The University of Sao Paulo stated that their e-learning strategy had to comply with a particular resolution from the federal Ministry of Education (see Annex 4).

However, it would be wrong to assume that codification was solely externally-driven. A number of respondents cited benefits from the process of codifying intent and practice in key areas, in terms of clarifying purpose, generating debate, and providing a vehicle whereby the strengths of the institution could be made more “visible” to stakeholders. Responses to the questions on strategy and rationales reflected a debate within institutions about the merits of discrete (clarity, detail) versus integrated (co-ordination, synergy) strategies, and “top down” (consistency, scale, efficiency) versus “bottom up” (ownership, nuanced) approaches. Cornford and Pollock (2003) argue that ICT is accelerating the codification trend. They describe the “virtual university” as the “university made concrete”. By this is meant the effect whereby the challenge posed by increased use of technology across teaching and administration necessitates both the formalisation of previously tacit arrangements, and the standardisation of what was previously diverse. The irony is that in some ways the conventional university was more “virtual” than the “virtual university” as typically understood, and vice versa.

Existence of e-learning strategies (Question 1.1)

Eighteen out of nineteen institutions cited the existence of some form of central strategy for e-learning or were in the process of developing one. The remaining institution (Kyoto University) said no such strategy existed, nor was one under development, and nor were there equivalent local strategies. While the institution acknowledges the growing interests in e-learning from the demand side (students), from the supply side, the faculty has not yet seen the importance of its integration. Of the eighteen institutions, ten had a distinct institution-wide written e-learning strategy; five, the integration of e-learning into other central strategies (typically teaching and learning,

or IT). Two reported no distinct central strategy, but rather the existence of local strategies. In one case, Carnegie Mellon University was said to be solely to support and facilitate local initiatives that met certain criteria. One institution reported the combination of a distinct central strategy, integration into other strategies, and the existence of local strategies. Two institutions that cited an integrated approach and one that reported local strategies indicated work towards a distinct central strategy. Some respondents represented units within larger institutions; hence any strategy was local rather than central (in the context of the parent institution as a whole).

All of the longer documentation followed a broadly similar pattern – putting e-learning in an institutional/national/regional/global context (different documents emphasised different contexts), some assessment of current practice/strengths and weaknesses, a vision statement/key principles or questions, and specific actions assigned. Some documents were presented as “finished” statements of intent, while others were statements of progress towards next-level documentation (*e.g.* listing various options for the institutional community to consider). For example, the Open Polytechnic New Zealand had a “strategic document” described as “not a strategic plan” but as an “artefact created while formalising the discussions around the role e-learning will take” at the institution. Thus some documents were primarily discursive, while others more task-oriented. Again, this did not necessarily match stages of e-learning development, but rather different approaches to documenting and advancing that development.

The “e-learning strategy” documents at institutions such as Monash University and the UK Open University, where e-learning has been documented as a component of existing learning and teaching strategies, conformed to the more established, task-oriented style of the broader document; whereas moves toward discrete e-learning strategies at the University of British Columbia and the Open Polytechnic New Zealand necessitated the development of new documentation structures and styles, and were seen to require what might be called the “pre-strategy” document described by the Open Polytechnic New Zealand above. It was difficult to determine whether similar “pre-strategy” documents existed at the likes of Monash University and the UK Open University, and whether a discrete strategy or sub-strategy might emerge in time.

The outward face of strategic documentation, even as supplied to a survey such as this one, may not necessarily be a complete account of the actual strategic process that led to that documentation or of the strategic development of e-learning more generally. Strategy documents reveal as much about how an institution wishes to present itself and its deliberations, as about the “real” strategic processes, developments and activities concerned. Equally, a short “e-learning strategy” may interact with other

documentation (e.g. a teaching and learning, or IT strategy) not mentioned by respondents, achieving the same “sense” of integration and detail as the longer documents provided by some other institutions. A comment from the Open Polytechnic New Zealand makes clear that work towards a discrete e-learning strategy does not necessarily mean that the institution has paid little central strategic attention to e-learning to date: “... the e-learning effort at the Open Polytechnic had started as a project with strategic implications, but not supported by a strategic mandate that included e-learning. E-learning is now a well-integrated and pervasive component of the Open Polytechnic’s strategic documents and has been included in the operational and functional plans throughout the institution”.

Most documentation had an internal character, consisting of often quite detailed descriptions of current practice with statements of ambition and vision, and how this would or might be achieved. The audience appeared to be senior management within the institution, specialist staff and general faculty. Most documents consisted of text only (or text, plus boxes and tables) and monotone presentation. Only two documents (“overview” of Monash University’s learning and teaching plan and the University Of British Columbia’s Trek document) had an unmistakably “public” face. The former combined outline achievements/principles/plans with colour photographs, glossy presentation and a signed foreword by the Vice-Chancellor.

Approaches to e-learning

In terms of the documentation provided, without exception institutions positioned e-learning (and IT more broadly) as central to their development, and as something of concern across the institution. Of course, for some institutions (e.g. Open University Catalunya), e-learning was fundamental to the very creation of the institution in the first place. While most strategies invoked consultation and diversity to some extent, the dominant approach was top-down implementation of a broadly common strategy across the institution. E-learning was viewed as a general agent of transformation, something to be integrated into almost all aspects of institutional activity.

Almost all institutions made reference to high quality, student-centred pedagogy, flexibility of delivery/access, faculty and student IT literacy, service/application integration, infrastructure enhancement/availability, consistency of application/service, quality assurance/evaluation, cost-effectiveness and procedures to ensure strategic awareness of future technology. The University of British Columbia’s e-strategy website was a rare example of policy co-ordination and presentation across institution, subsuming e-learning as part of a broader and comprehensive ICT strategy

covering all aspects of institutional activity (see Box 2.1). The overarching theme for campus-based institutions was an articulation of “blended learning” (*i.e.* creative combinations of face-to-face and electronic delivery) as the way forward. Many institutions cited a specialist e-learning/IT/teaching and learning unit or units as central to its development. The distance education and teaching and learning units were merged at the University of South Australia to create an integrated “Flexible Learning Centre”, precisely to facilitate the combination of high quality pedagogy and non-traditional delivery. The University of Maryland University College was the only example of a partially campus-based institution that has made an explicit commitment to providing all programmes and services online (alongside an ongoing commitment to forms of offline delivery). This reflects its mission to be responsive to the demands of “non-traditional students (working adults)”.

Exceptions to this institution-wide, integrated approach to e-learning were rare. An example comes from Aoyama Gaukin University concerning the Graduate School of International Management within the university. The main focus of the e-learning strategy was a teleconferencing facility, established in 1992, to allow real-time collaboration with overseas universities. In this case, the e-learning strategy was as much a marketing as a learning strategy. This approach positions e-learning as a specialist function appended to conventional structures and processes, rather than a transformative agent across the institution (faculty) as a whole.

A partial exception was the response from Carnegie Mellon University, which put forward a central e-learning strategy that consisted only of criteria under which the centre would support faculty efforts. The criteria were that a proposal must be “informed by well-confirmed teaching and learning theories” and either “designed to gather data relevant to hypotheses about improving teaching and learning” or “provide productivity increases freeing faculty and/or student time for other activities that improve teaching and learning”. All proposals must also be committed to rigorous evaluation. While positioned as “not a central strategy”, one might argue that the implicit central strategy is that e-learning should be pedagogically sound, provide empirical data to inform pedagogic theory and generate productivity increases. However, the Carnegie Mellon University line was distinct from the bulk of respondents insofar as it constituted a bottom-up rather than top-down approach. There was little sense in which Carnegie Mellon University was planning for the development of e-learning institution-wide, but rather allowing faculties/individuals to make their own strategic choices, and setting out the circumstances in which the centre would offer support. Nonetheless, it would be a mistake to assume that this approach signalled lack of central attention to IT infrastructure. Carnegie Mellon University is

one of the most IT-enabled universities in the world, achieved in large part due to a number of centrally-co-ordinated initiatives. Carnegie Mellon University's new Carnegie Mellon West campus in California, is taking more of a top-down approach, experimenting with e-learning as a central plank of its mission (see Box 3.1).

Box 2.1. E-strategy at the University of British Columbia

The University of British Columbia, Canada, has an all-encompassing “e-strategy”. A dedicated website provides public access to the components of the strategy, the over-arching conception and progress to date. The e-strategy is positioned as a guiding framework to align technology initiatives with the University’s mission. “The University of British Columbia’s e-Strategy enables students, faculty and staff to excel in one of the world’s leading universities by enhancing learning, research and community through leading-edge technology initiatives.” The aim is to avoid a silo approach and to maximise the value of synergies between people and initiatives. Founded in 2001, the e-strategy initially focused on e-business activities. The e-strategy now has five key components: e-learning, e-research, e-community, e-business and connectivity. The website links to the latest on-campus developments in each.

The website attempts to be more than a collection of strategy documents, and is akin to a portal where users can find out about the latest developments, including visiting speakers, student projects and research breakthroughs. The site also serves as a user feedback mechanism. There is an annual “e-Strategy Town Hall”, offering a chance for users across the university to learn more about particular initiatives, make connections and raise questions. The e-strategy is led by an Executive Steering Committee, consisting of the University of British Columbia’s five vice-presidents and other senior administrators, and works with an Advisory Council representing faculty and departments.

For further information, see www.e-strategy.ubc.ca/about.html

Toward institution-wide online strategies

The Observatory survey asked whether respondents had an “institution-wide online learning strategy or equivalent”. The main finding, in line with the OECD/CERI data (see Table 2.1), is that it appears to be increasingly common for universities to employ an institution-wide strategy for online or e-learning. (The data on returning respondents broadly matched that for 2004 respondents as a whole, supporting a general comparison between 2002 and 2004 returns.)

Among respondents that participated in both the 2002 and 2004 surveys, the proportion reporting some form of institutional online learning strategy

“discrete”, “related” or “integrated”) rose from 65% in 2002 to 71% in 2004. The proportion of all respondents that indicated neither any form of institution-wide strategy for online learning, nor any initiative under development declined from 18% to 9% between 2002 and 2004. Another striking trend is the growing preference for institution-wide online learning strategy through its integration into a range of existing institutional strategies (on teaching and learning, and human resources, for example), rather than as a discrete document. That said, because the “integrated into other strategies” option was not given in the 2002 survey, the 2004 results may simply more accurately reflect institutional practice now and then, rather than a shift in approach. Nonetheless, the “integration” option was checked by 28% of institutions, compared to 18% for “discrete” strategy.

There is a tendency towards an integrated approach; however, “integration” is not necessarily superior to “discrete”. For example, one Asia-Pacific respondent reported a number of related strategies on aspects of online learning, but indicated that a single policy was under development. Aside from only 9% of institutions reporting no central strategy at all, nor one under development, only 3% of respondents cited the existence of faculty/department-led strategies as the sum of their approach to date. In general, Canadian institutions appeared to be less strategically developed in this territory (proportion with “discrete”, “related” and “integrated” strategies – 31%) compared to 68% for Asia-Pacific, 64% for the UK, 63% for Australia and 60% for South Africa. However, with a 50% “under development” return for Canada, the disparity may not last long. The low-income figure (*i.e.* low-income/low-middle-income minus South Africa) was only 20%.

It is possible to contrast these figures with US data. The 2003 Campus Computing Survey (a detailed quantitative survey of IT use across higher education institutions in the United States) asked respondents to indicate the existence of a “strategic plan for instructional technology/instruction integration”. This produced a positive response from only 38% of respondents, with a further 26% saying that such a plan was under development. Similar questions concerning a “plan for integrating IT into the curriculum” and a “plan for using Internet resources in instruction” produced positive responses from only around 40% of respondents (Green, 2003, p. 16). These rates of positive response are considerably lower than positive responses across the four main countries to the Observatory survey (Australia, Canada, United Kingdom, South Africa). The US figure for “strategic plan for instructional technology/instruction integration” was actually down from 40% in 2002 (the question was not posed in 2001). The rate of positive responses to the other two questions also declined slightly between 2001 and 2003.

Table 2.1. Institutions with an institution-wide “online learning strategy” or equivalent

	Yes	No	Under development	Faculties/ departments own strategies	Related strategies	Integrated into other strategies	No response	Total
2004								
UK	9 (19%)	2 (4%)	15 (32%)	0	4 (9%)	17 (36%)	0	47
Canada	2 (7%)	4 (13%)	15 (50%)	2 (7%)	2 (7%)	5 (17%)	0	30
Australia	6 (32%)	1	6 (32%)	0	1	5 (26%)	0	19
South Africa	3 (30%)	0	2 (20%)	2 (20%)	1	2 (20%)	0	10
Asia-Pacific	8 (32%)	2 (8%)	6 (24%)	0	3 (12%)	6 (24%)	0	6 (25)
Low-income/low-middle income countries	3 (15%)	3 (15%)	4 (20%)	2 (10%)	1	5 (25%)	2	10 (20)
Returning	11 (28%)	2 (5%)	10 (25%)	0	3 (8%)	14 (35%)	0	(40)
TOTAL	22 (18%)	11 (9%)	40 (33%)	4 (3%)	9 (7%)	34 (28%)	2	122 (100%)
2002								
Developing	6 (27%)	9 (41%)	6 (27%)	-	0	-	1	22
Other developed	18 (49%)	3 (20%)	10 (27%)	-	6 (16%)	-	0	37
UK	16 (38%)	6 (14%)	10 (24%)	-	10 (24%)	-	0	42
Returning	18 (45%)	4 (10%)	10 (25%)	-	8 (20%)	-	0	(40)
TOTAL	40 (40%)	18 (18%)	26 (26%)	-	16 (16%)	-	1	101 (100%)

Note: South Africa is also included in the low-middle income countries’ row and Australia, in the Asia-Pacific. The “Total” row is thus not equal to the rows above.

Source: OBHE.

The low positive response rate and decline in positive responses in the US may reflect the achievement of strategic aims, and thus a reduced need for an integration plan. However, commentary on institutional experience of “strategic integration of instructional technology” suggests an ongoing need for strategy revision, as technologies, conceptions and applications develop (Albrecht *et al.*, 2004). In fact, two US institutions in our case studies which reported having an institution-wide strategy (University of Maryland University College and UCLA Extension) noted that forming an e-learning strategy is an ongoing process and that their e-learning strategy had been revised along the evolution of e-learning at their institutions. The lower positive response from US institutions (striking given that it is widely assumed the US leads the world in terms of development of online learning in higher education) may be due to the high number of respondents. Over 550 institutions responded to the 2003 Campus Computing survey, out of 884 institutions contacted – a 63% response rate. Akin to the Canadian response to the Observatory survey, the US returns may better reflect the full spread of practice in higher education. This may reinforce the possibility that the Australia and UK returns disproportionately represent the more active institutions in this territory in those countries.

In response to the 2004 Observatory survey, a third of institutions indicated that an institution-wide strategy in some form (discrete, related or integrated) was under development, up from 26% in 2002. The rise is partly explained by the greater number of responses from Canada (which in general, as above, displayed a less developed, institution-wide strategic approach to online learning than, say, responses from the UK or Asia-Pacific), but may also suggest the strategic development of online learning is not a straightforward linear process. The proportion of respondents ticking “under development” also rose for the UK between 2002 and 2004. Out of 10 returning respondents stating that they were developing an institution-wide online learning strategy in 2002, by 2004 five had such a strategy in place, whether as a single overarching document or in the form of online learning integrated into other key documents. The remaining five were reported to be still in the development stage. Of the five returning respondents who indicated that an institution-wide online learning strategy was “under development” in 2004, but gave a different response in 2002, four had ticked the “related” strategies option in 2002, and one had cited the existence of an over-arching strategy. As new technologies appear or are introduced, and as new thinking, applications and problems emerge, institutions will need to revise strategies accordingly, and may opt for an entirely new direction or formulation.

To sum up, almost all OECD/CERI sample institutions cited the existence of some form of central strategy for e-learning. Without exception,

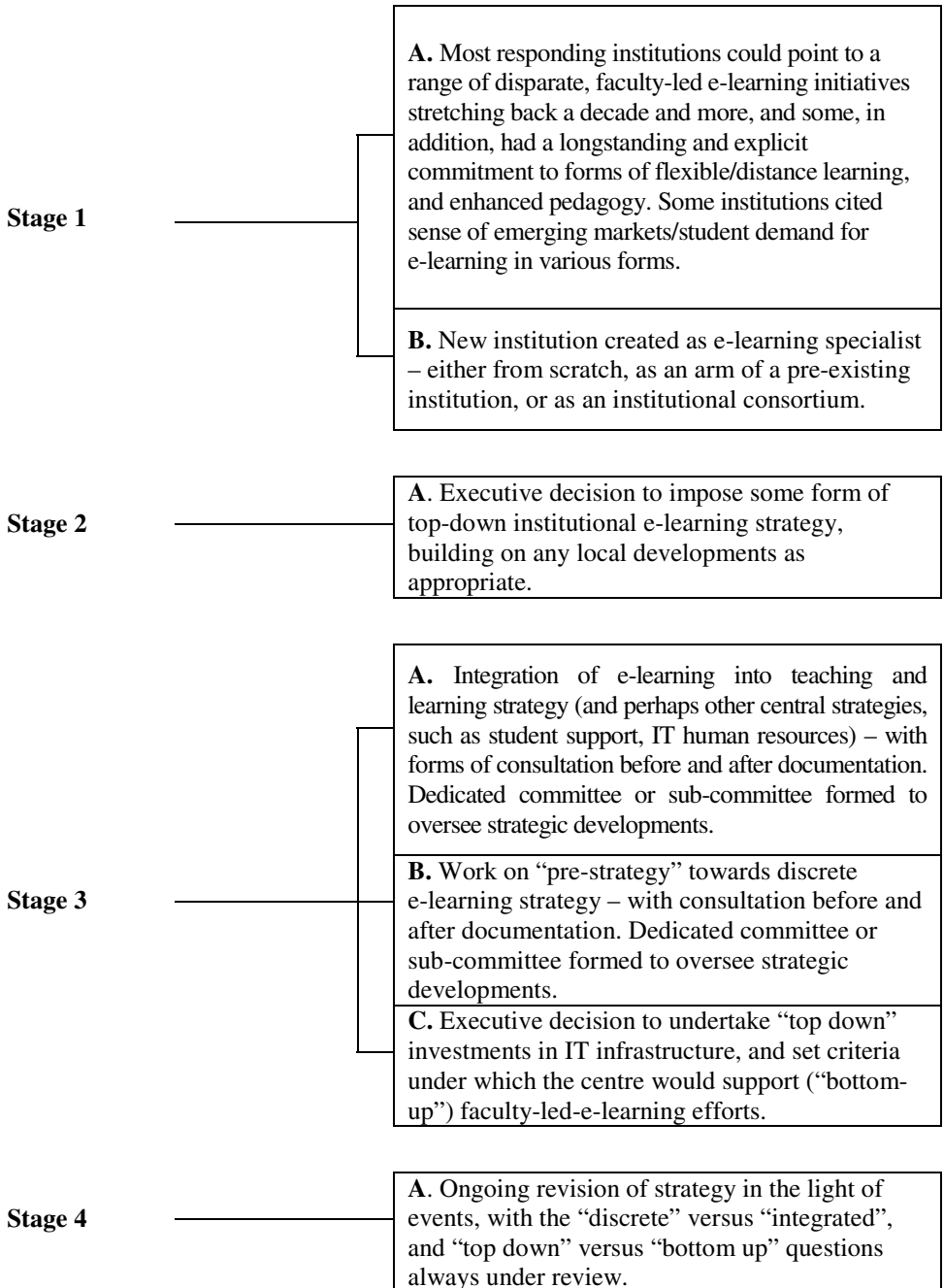
the documentation that was provided on these strategies positioned e-learning (and IT more generally) as central to the institutions' development. Although consultation and diversity were invoked in most strategies, the dominant approach was top-down implementation of a broadly common strategy across the institution. This trend was in line with the Observatory finding that institution-wide e-learning strategies were increasingly common in the Commonwealth. However, it should be noted that integrated strategies are not necessarily better than discrete strategies, nor do they reflect the actual nature, extent and longevity of e-learning at an institution.

2.2. Process of developing and revising e-learning strategies (Questions 1.2 and 1.4)

The OECD/CERI survey asked how the e-learning strategy came about (*e.g.* when it was written, who was involved and who was consulted) as well as whether the e-learning strategy had been revised and if so, why and how (Questions 1.2 and 1.4).

It was difficult to compare timelines across respondents. There was little correlation between extent of online presence (see Chapter 1) and form or stage of e-learning strategy. E-learning strategies are not an indication of actual e-learning advancement. The key point was that some institutions appeared to have undertaken more extensive consultation and document development processes than others. In some cases, desire for a discrete e-learning strategy (typically demanding considerable effort to produce in any detail) only emerged some time after a practical commitment was made to advancing e-learning across the institution. For example, the University of South Australia emerged as one of the respondents with the greatest online presence in terms of programmes of study, but a “draft online strategy discussion paper” was prepared as recently as 2003, and a major consultation was planned for 2004. It reported that it had made “significant progress in meeting its goals for the use of online technologies for teaching and learning as well as e-business”, and regarded many key processes as well-established and “bedded-down”. The e-learning strategy development process was a means to draw out “reflection and evaluation of where we have been and where we should now be heading”. Similarly, UCLA Extension was an example of an institution that formulated its first e-learning strategy in the early 1990s, but revised the documentation over time in the light of experience. The University of Paris Nanterre was unusual in stating that their e-learning strategy had to be signed off by the national Minister of Education.

In terms of strategic development, it was possible to discern a broadly common pattern of development with institutions at different stages. Figure 2.1 presents this pattern.

Figure 2.1. Patterns of development of e-learning strategies

The University of British Columbia provided a detailed account of a consultation process undertaken to inform the work of its ad hoc committee created for proposing an institution wide strategy – called “Academic Committee for the Creative Use of Learning Technologies”. It included the following: workshops on learning technology – organised by the University of British Columbia’s Distance Education and Technology Centre – in all twelve faculties, including faculty, staff and students; three university-wide public meetings; discussions with faculty-based educational technology support staff; in-house creation of a video presentation on the consultation process and the issues at hand; production of a preliminary discussion paper; presentations to the University of British Columbia Senate and Board of Governors; focus groups with students; review of relevant documentation from peer institutions; finally, visits to peer institutions, and presentations from external experts.

2.3. Rationales for producing institution’s e-learning strategy (Question 1.3)

The OECD/CERI survey investigated the main rationales for producing the institution’s e-learning strategy when the e-learning strategy was first written, why it invested in certain forms of e-learning (Question 1.3, and to a lesser extent 1.2 and 1.4)

Specific rationales for central e-learning strategies

All institutions that cited some form of central e-learning strategy were concerned with using e-learning to enhance flexibility of access for learners in general or a particular sub-section, and enhance pedagogy in some way. The specific rationales were identified under the following subheadings.

Creation of a dedicated virtual institution

- To replicate the physical university online, encompassing teaching, administration/services and social spaces (Open University Catalunya).

Reputation

- To build a “truly distinctive” online capability (University of South Australia); to build a reputation for quality in this area, consistent with the standards of the parent institution, and where the branch has flexible learning remit for the whole (UCLA Extension); to build a reputation in distance learning for the wider University of California, Irvine; to build on current leadership – *e.g.* development of webCT (University of

British Columbia); to address deficiencies of “traditional” forms of distance learning (FernUniversität Hagan).

- To develop e-learning in line with status of institution – in terms of being as good as or better than campus-based experience, and addressing pedagogic theory and practice (seen as part of institution’s key strengths) (Carnegie Mellon University).
- As a top-tier university, the perceived need to be in or near the lead in terms of learning technology (University of British Columbia).
- To build on longstanding legacy of local/national leadership in distance learning/accessible learning (UCLA Extension, University of Maryland University College, University of Paris Nanterre).
- To gain regional visibility as a leading research university (Zurich University).

Pedagogy – specific

- To cope better in pedagogic terms with the phenomenon in several subject areas of increasing numbers of students and too few faculty (Monash University, Zurich University).
- Specific “story-centred” approach to pedagogy with ICT at its heart (Carnegie Mellon University West).
- Personalisation of learning (Open Polytechnic New Zealand, Open University Catalunya).

Respond to market demand/reach new markets

- To respond to student demand for online provision (University of British Columbia, University of Maryland University College, Virtual University of Tec de Monterrey).
- To expand market share/enter new markets (domestic) (UCLA Extension), (domestic and international) (Open University Catalunya, Virtual University of Tec De Monterrey); to produce first rate low cost/free e-learning programmes for access worldwide (Carnegie Mellon University).

Cost reduction

- Reduce costs/risks associated with certain experiments in the medical/other sciences, in a context of rising student numbers and declining public funding per student (Monash University).
- Achieve economies of scale relative to current multi-format delivery model, where increased costs are aligned with increased enrolments (Open Polytechnic New Zealand).

Other

- To bring e-learning up to the level of investment in electronic enhancement of research and administrative functions; and synergise all three (University of British Columbia).
- To build on existing role in dissemination of ICT in the region – *e.g.* through providing access to online materials to partner institutions and more generally building e-learning capacity in the region (Asian Institute of Technology).
- External requirement (funding body) to produce a strategy on teaching and learning (UK Open University); external requirement (Bologna Process) to engage with e-learning (Zurich University).
- Reposition the institution in the wake of rapid uptake on e-learning in mainstream institutions; decline in interest from traditional markets (UK Open University).
- Collaboration with other tertiary education institutions in same country (Multimedia Kontor Hamburg, Open Polytechnic New Zealand).
- Collaboration with tertiary education institutions in other countries (Asian Institute Technology – to advance regional capacity building; Aoyama Gakuin University – to benefit from status and expertise of partner institutions).
- Reduce duplication of effort among members of a consortium (Multimedia Kontor Hamburg).

Table 2.2 offers a rough outline of relative institutional priorities and foci, across eight main headings. Kyoto University's lack of a central e-learning strategy or plans to develop one, meant it was excluded from this table. The higher the score (0-3) the more significant the rationale.

It is clear from Table 2.2 and above bulleted points that different sample institutions prioritised different rationales in terms of e-learning strategy. A few institutions (*e.g.* Carnegie Mellon University, University of British Columbia, University of Maryland University College, UCLA Extension) aspire to become or remain leaders in this territory (whether in terms of enhancement of on-campus delivery or distance learning, or both). All distance/mixed institutions saw e-learning as a natural development, and a way of both remaining current and carving out an enhanced/re-positioned brand. For example, one distance institution noted that the recent rise of e-learning, and its adoption to varying extents at campus-based institutions had eroded the distinctiveness and market certainties of distance learning specialists. Only a minority of institutions specifically mentioned student demand, new market potential or cost reduction as central to their strategic thinking. The particular missions of certain institutions gave a distinctive twist to rationales. For instance, the Asian Institute

of Technology is participating in the Greater Mekong Sub-region Virtual University (GMS-VU) with an aim to build capacity for regional sustainable development (see Box 2.2). The attempt to indicate the rough priority given to each rationale in different institutions was partly to emphasise that in most cases all the rationales used in Figure 2.2 were accorded at least some priority in almost all institutions.

Table 2.2. Rationales for e-learning development

Institution	Type	Reputation	Pedagogic enhancement	Cost reduction	Meet student demand	Enter new markets	Collaboration	External demands	Regional development
Aoyama Gakuin University	C	1	1	1	1	0	3	1	0
Asian Institute of Technology	C	2	2	1	1	1	3	1	3
Carnegie Mellon University	C	3	3	1	2	2	1	0	0
Monash University	C	2	2	1	2	1	1	1	1
Multimedia Kontor Hamburg	C	2	2	2	2	2	3	2	3
University of British Columbia	C	3	3	1	2	1	1	1	1
University of California, Irvine	C	2	2	1	2	2	2	1	1
University of Paris Nanterre	C	3	3	1	2	1	2	1	1
University of Sao Paulo	C	2	2	1	2	2	1	2	1
Zurich University	C	2	3	2	2	1	3	2	2
FernUniversität Hagen	D	2	3	1	2	2	1	1	2
Open Polytechnic New Zealand	D	2	3	3	2	1	2	1	2
UK Open University	D	3	3	1	2	2	1	2	1
Open University Catalunya	D	2	3	2	2	2	3	2	3
Virtual University of Tec de Monterrey	D	2	2	1	2	2	1	1	2
UCLA Extension	D	3	3	2	2	2	2	1	1
University of South Australia	M	3	3	2	3	2	1	1	1
University of Maryland University College	M	3	3	2	3	2	1	1	2

Note: C = Campus; D = Distance; M = Mixed.

Source: OECD.

Box 2.2. The Greater Mekong Sub-region Virtual University (GMS-VU)

Capacity Building for Regional Sustainable Development. In 2001 the UNESCO Pacific Regional Bureau of Education began an initiative to shape concrete and substantive cooperation in the area of higher education in order to encourage capacity building for sustainable development of the six counties including China (Yunnan Province), Cambodia, Lao PDR, Myanmar, Thailand and Vietnam (Known as Greater Mekong Subregion [GMS]). The role of ICT in higher education, and especially within distance education, was identified as critical and the GMS-VU was launched as a pilot project. The primary purpose of the project is to narrow the digital and knowledge divides among and within the countries through e-learning and e-teaching. E-learning in particular is expected to grow at a fast rate, “leap-frogging” current technological advances and encouraging the generation of new approaches. The project also aims to create International learning platforms beyond the Asian region, gradually developing links and establishing strong networks with Europe.

Developments and progress were identified within many related sectors, but three particularly salient areas received special attention for the pilot project: *i.e.* IT, GMS tourism and GMS studies. They are recognised as the areas which make a fundamental impact on bridging the digital and knowledge divides, maintain economic and environmental sustainable development, and preserve cultural diversity.

The first pre-pilot phase was completed in November 2004, and new steps were discussed for the next phase. The challenges and issues that were identified included lack of human resources, curriculum and courseware discrepancies, infrastructural problems, language issues, as well as problems surrounding mutual recognition of credit and qualifications. In addition, what is unique about the project is the funding structure: it has attracted many donor agencies. In moving forward the project aims to increase communication, co-ordination and information sharing within and between donor agencies. Other challenges include the generation of guiding principles for a digital library and groupware services.

The project website can be found at: www.stou.ac.th/Thai/GMSVU/index.asp

Change over time in specific rationales for e-learning strategies

The observatory study asked those institutions with an institution-wide online strategy (whether discrete, related or integrated) to indicate their key rationales in a list of thirteen (see Figure 2.2). Although the question was slightly modified between 2002 and 2004, responses gave an overview of the significance of these rationales and of its evolution over time.¹ The

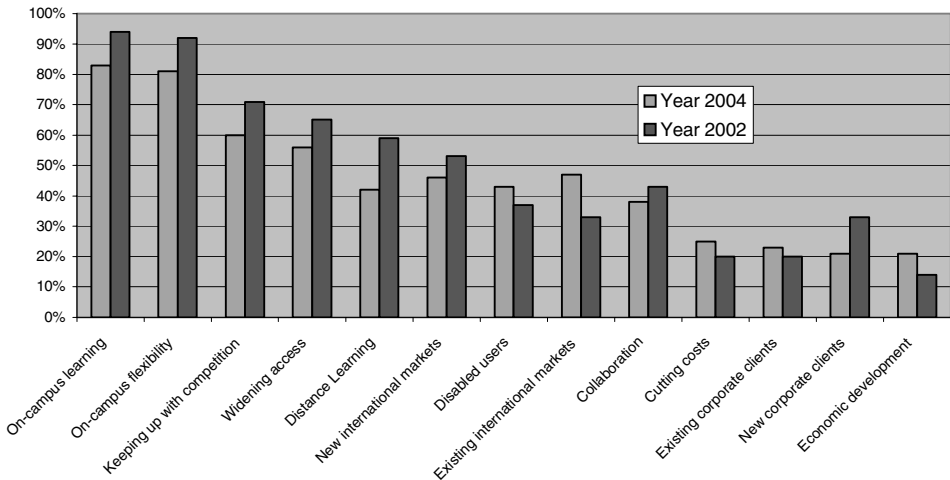
1. The Observatory survey asked: “If your institution has an institution-wide online learning strategy, which of the following are given as key rationales for undertaking online learning in the current version of the strategy?”. The survey listed the thirteen rationales appearing in Figure 2.2, plus an “other” option. This question was slightly modified from the original 2002 document. In the 2002 survey, respondents were asked to tick as many key rationales as appropriate. The 2004 survey asked

overall comparison between 2002 and 2004 is shown in Figure 2.2. The main findings are presented below.

On-campus enhancement

As in 2002, on-campus enhancement continued to be the dominant focus of almost all university online learning strategies (distance learning institutions aside), followed by a correlative desire to improve flexibility of delivery for students (Figure 2.2). Across all categories, enhancement of distance learning ranked considerably lower than enhancement of on-campus learning. Only nine institutions (10%), almost all campus-based, cited “enhancement of distance learning” as a more important rationale than “enhancement of learning on-campus”. The slight decline in the proportion of respondents that cited on-campus learning enhancement/flexibility as a “key rationale” (*i.e.* 4.0 or 5.0) can largely be explained by a small number of campus-based institutions allocating 3.0 for these rationales, indicating “medium” rather than “high” priority.

Figure 2.2. Comparison of “key rationales” in institutional online learning strategies in 2004 and 2002



Source: OBHE.

respondents to quantify the priority given to key rationales on a scale of 1 to 5, 1 being “very low priority” and 5 “very high priority”. Given the different format of the question, divergent distribution of countries within each “country” category, and the reduced number of valid returning respondents, comparison between 2002 and 2004 should be made with caution.

Distance learning

As a cited rationale, distance learning exhibited a significant decline between 2002 and 2004. Returning respondents expressed less interest in distance learning in 2004 compared to 2002. Among the 19 returning respondents (*i.e.* the 19 that responded to this question in 2002 and 2004, out of the total of 40 returning respondents), 42% considered distance learning as a rationale of high to very high importance, versus 53% (who identified it as a key rationale in 2002). Yet in a related survey question (Question 1a in the survey document – see Annex 3), 54% of all 2004 respondents agreed or strongly agreed that off-campus online learning will play a major role at their institution over the next five years, up from 36% in 2002.

How might this disparity be explained? This may be an example where overall comparison between the 2002 and 2004 surveys was not justified. Canadian respondents expressed a particular interest in online learning at a distance, with 86% (6 out of 7) and 70% (21 out of 30) ranking it of high to very high importance in the 2002 and 2004 surveys respectively. The high Canadian response rate in the 2004 survey appears to be the main reason behind the rise in the proportion of 2004 institutions predicting a major role for online distance learning in the future (6 out of 30 2004 Canadian respondents specialise in off-campus online learning). Another explanation may be that respondents continue to view online distance learning as a potentially valuable activity, but do not currently devote strategic attention to it. Perhaps now that the hype of the dot-com boom has faded and the predicted scale of the market has not emerged, the activity has lost its centrality and urgency, and does not feature strongly as a rationale in current strategies.

Cutting costs

Whereas “cutting teaching costs long-term” was the second lowest-ranking rationale among responding institutions in 2002, the follow-up survey results indicate a shift in institutional priorities. The proportion of respondents that identified cost-effectiveness as a key rationale rose in the higher income country categories between 2002 and 2004: from 10% of “Other Developed” to 21% in the combined Asia Pacific and Canada country categories; and from 19% to 27% in the United Kingdom. The figures from returning respondents pointed to a similar trend. In 2004, 37% of relevant returning respondents classified “cutting teaching costs long-term” as a rationale of high to very high importance—compared to 21% in 2002. The cost implications of online learning are further discussed under Chapter 7. Citation of “cutting teaching costs” fell in the lower income country category, dropping from 57% of “Developing countries” in 2002 to

27% of low middle/low-middle income respondents in 2004. While the overall trend of greater attention to online delivery as a way of reducing teaching costs is clear, comparisons between 2002 and 2004 data should not be over-emphasised given the modified format of the question and divergent distribution of respondents within each category.

New International markets

In 2004, overall respondents expressed less interest in new international student markets than their 2002 counterparts. “Entry into new international student markets” maintained its sixth ranking in 2004 (out of a possible fourteen), but the proportion of “high” citations fell (46% of respondents categorised it as an institutional priority in 2004 versus 53% in 2002). “Safeguarding existing international student markets” was identified as a high priority by 33% of respondents in 2002, rising to 47% of 2004. In both cases, interest from the UK was particularly strong. One might speculate whether the development of the UK eUniversity (a national initiative to market UK tertiary education online internationally) boosted interest in this area in the UK, and whether its recent demise (announced just after most of the UK returns to the Observatory survey were received) might dampen enthusiasm. The increased interest in safeguarding existing international markets might suggest more modest ambitions for online delivery, and may indeed refer to strategies to attract international students to study in the UK (e.g. using leading-edge IT infrastructure as a marketing tool) as much as development of online distance learning aimed at the international market. Similarly, the proportion of institutions that cited “Pursuit of new corporate clients” as a key rationale fell from 33% in 2002 to 21% in 2004, while “Safeguarding existing corporate clients” rose slightly to 23%. However, these trends were not uniformly adhered to. Among returning respondents, proportionate interest in “new international student markets” as a “key rationale” rose between 2002 and 2004, and interest in “safeguarding existing corporate clients” fell.

Keeping up with the competition

“Keeping up with the competition” maintained its 2002 status as the third highest-ranking priority among responding institutions, even as the novelty or “hype” of online learning continues to wane. Yet 2004 survey respondents may no longer be investing in ICT infrastructure simply to “keep up” with emerging trends. Instead, this may indicate competition in terms of more clearly defined conceptions of online delivery as value-added (for a range of users), rather than inchoate responses to hype.

Overall, the average number of strategic foci cited was broadly stable – 6.5 (standard deviation 2.6) in 2002 and 5.8 (standard deviation 2.9) in 2004. In both years, a handful of institutions cited ten or more rationales as central to their online learning strategy. There was no clear pattern of increased or decreased foci among returning respondents, nor any pattern of average number of key rationales between different categories in 2004.

In conclusion, it is clear that campus-based enhancement/flexibility remain the most commonly cited rationales for online learning, and there is some evidence that institutional ambitions are (on average) becoming more modest and localised. For example, there would appear to be increased interest in disabled users, local economic development and cutting teaching costs, and decreased interest in pursuit of new international markets and corporate clients. A large minority (43%) of respondents identified “widening access to local under-represented groups” as a more important rationale than “entry into new international student markets”. However, it is fair to say that international markets remain a major priority for many institutions. Thirty-three per cent of respondents cited “new international markets” as more important than “widening access”. There remains significant breadth of rationale for online learning among respondents, but equally significant diversity in terms of the weight given to particular rationales.

Lack of central strategy

Institutions that reported (on the Observatory survey) no central online learning strategy were asked to explain their current position against a list of six options,² plus “other”. Not a single respondent considered online learning to be “unproven” as a learning medium, and only a small minority (2 of 27 respondents, or 4%) cited lack of disciplinary relevance. A slightly higher percentage of respondents (26%, or 7 out of 27) considered there to be little demand for online learning among staff and students, down from 42% of comparable respondents in 2002. Canadian responses account for nearly half of this figure. As in 2002, the majority of universities without a central strategy (59%, or 16 out of 27) cited a “bottom-up” or “department-driven” approach as the most common reason for not having an institution-wide strategy. Overall, in line with 2002 results, responses to this question suggest that virtually no universities are avoiding online learning due to a

2. These were: 1) little perceived demand from staff/students; 2) lack of disciplinary relevance; 3) preference for a “bottom up” or department-driven approach; 4) inadequate infrastructure; 5) view of online delivery as “unproven” as a technology and learning medium; 6) other issues currently more pressing.

perceived lack of demand, poor disciplinary relevance or unproven effectiveness.

2.4. Conclusion

Almost all institutions in the OECD/CERI sample cited the existence or development of some form of “online learning strategy”. The documentation submitted by each institution offered only a partial account of the institutional thinking and development. Although consultation and diversity were invoked in most strategies, the dominant approach was top-down implementation of a broadly common strategy across the institution. This trend was in line with the Observatory finding that institution-wide e-learning strategies were increasingly common. One should bear in mind that implementation of an institution-wide online learning strategy does not necessarily imply institution-wide adoption of e-learning (*e.g.* institution-wide use of substantive online elements in the majority of academic programmes). Furthermore, integrated strategies are not necessarily better than discrete strategies, and the absence of a strategy does not imply an absence of interest for e-learning as whole: in some cases, this might on the contrary indicate that strategic goals have already been achieved.

Within the case study institutions, the cited rationales for e-learning included increasing delivery flexibility, enhancing pedagogy and in all cases these strategies were concentrated on existing student populations. Both the OECD and Observatory surveys found relatively little interest in international markets and cost reduction. On-campus enhancement through “blended learning” was the dominant focus of most campus-based universities.

References

Albrecht, B., B. Bender, R. Katz, J. Pirani, G. Slaway, T. Sitko and J. Voloudakis (2004), “Information Technology Alignment in Higher Education”, Research Study from the EDUCAUSE Centre for Applied Research, Boulder, Colorado.

Cornford, J. and N. Pollock (2003), “Putting the University Online: Information Technology and Organisational Change”, Society for Research into Higher Education/Open University Press.

Green, K. (2003), “Campus Computing 2003: the 14th National Survey of Computing and Information Technology in American Higher Education, Encino”, CA, The Campus Computing Project.

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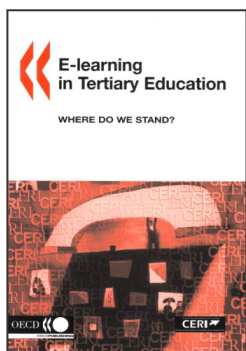
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