

FACULTY LEVEL STRATEGIES IN RESPONSE TO GLOBALISATION

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ABSTRACT

Forces leading to change in universities in the online world include increasing global competition, increasingly powerful consumers and rapid changes in technology. Outcomes are evolving, but include the formation of alliances, outsourcing and re-engineering of university systems and work practices. The communication and information technologies that enabled globalisation also link lecturers, tutors, and teaching resources to create the possibility of networked education. In this paper, the author outlines a “glocal” networked education paradigm that separates out global and local resource development and global and local learning facilitation. By embracing this separation, it is possible to develop ways of working which allow the creation of a flexible model of education delivery that is scaleable and hence globally competitive. In this model, the work of the university academic is changed considerably. The functions traditionally performed by a single university academic are differentiated and are performed by a network of learning facilitators. In this scenario, university academics may find themselves responsible for the learning of hundreds of students, but they may never find themselves face-to-face with a single student.

Key concepts:

Disaggregation; educational partnership; globalisation; higher education; learning/teaching network; online; strategic alliances; vertical disintegration.

INTRODUCTION

As the world moves online, pressure increases on industries and organisations to change the way they do business. These pressures include global competition and consumers who are becoming more demanding. The higher education industry and universities are subject to these same pressures in the online world. For example, in Australia, enrolment of foreign students was the country's eighth largest export earner during 1997/8 earning A\$3.1 billion – the larger ones being: coal (A\$9.5b), tourism (A\$8.0b), transport (A\$6.7b), gold (A\$6.2b), iron (A\$3.7b), wheat (A\$3.6b) and aluminium (A\$3.2) (AVCC, 2000), but because of the Internet, Australian universities must now *compete* with universities from other countries offering online programs to those students in their own countries.

Those institutions that can step up to this process of change will thrive. Those that bury their heads in the sand, that rigidly defend the status quo - or even worse - some idyllic vision of a past that never existed, are at very great risk. The real question is not whether higher education will be transformed but rather how and by whom?

Duderstadt, 1999, p.1

This market-oriented environment means that higher education must be offered at a convenient location, at the time and pace suitable for the student, and take into account previous studies. To understand how universities need to be transformed in order to manage this new environment, it is necessary to look at the impacts of distance education in the online world on higher education institutional structures and work groups including institutional roles, workgroup dynamics, and communication. It is also necessary to examine which structures and processes are needed to allow a university to exist and prosper in an age of globalisation and rapid changes in the information technology underlying remote education and work.

The author then considers, as a case study, Central Queensland University (CQU), which is a regional university in Australia that is responding to the challenge of remote education and operation on a national and international basis. CQU has been a distance education and on-campus education provider since 1974 and is now Australia's fastest growing university. Inherent in all CQU's operations is a model in which the institution, its members and its partners are all constituents of a "glocal" network of learning facilitators. It has taken up the challenge of the online world by offering courses throughout the year (five terms) and providing multiple entry (with credits and exemptions) and exit points.

CHANGING UNIVERSITIES

Universities and the higher educational sector face similar challenges to other industries in the online world.

Universities are due for a radical restructuring. After centuries of evolutionary changes, they are faced with carving out new roles and methods to get there. Today the predominant model is still the combination of traditional teaching and academic

*research as mapped out by Wilhelm von Humboldt in the last century. The guiding principles of Humboldt's vision of the university are *forschung und lehre* (research and teaching) and of professors, *einsamkeit und freiheit* (solitude and freedom). But change is unavoidable and pressure for change is increasing from the public, the media, and political groups. This change is mainly driven by the new technological possibilities and the new learning environments they enable. (Tsichritzis, 1999, p.93)*

Specific implications for universities can be drawn from the conceptual model based on structuration theory (Giddens, 1977; 1984) applied to organisational change by Orlikowski and Robey (1991):

- Organisational change arises from a complex interaction between technology and the people in the organisation. For example, information technology makes possible new learning environments and changed work practices for university staff.
- Information technology can influence changes in organisational structure. The improved communication options offered by advances in information technology support the formation of alliances and the “unbundling” of the functions of the university (content, packaging and presentation). This vertical disintegration, in which functions are differentiated and either outsourced or dealt with by partners in strategic alliances, creates new intermediaries in the learning/teaching network.

There is evidence of institutional change arising from the interaction of technology and people in some universities. In Australia, online and videoconferencing systems are being developed as alternatives to face-to-face communication where the people are physically dispersed. These methodologies require both staff and students to change existing work practices and to acquire new literacies (Wallace and Yell, 1997). The new technological possibilities (and new learning environments which arise from the interaction between technology and the people) include: the internet (facilitating synchronous and asynchronous interactions between learners); video-conferencing (facilitating tutorials comprising distributed groups of students, and also remote access to live lectures); digital libraries (as knowledge repositories); computer simulation (substitutes for laboratories); etc. Overall, the interaction of these new technologies with the people creates a learning environment in which learners, tutors and learning resources can all be networked.

But these same technological possibilities also permit new working environments for those responsible for the facilitation of learning. Thus lecturers can use the Internet for synchronous and asynchronous communication with colleagues, video-conferencing for meetings, digital libraries for research, etc. The interaction of these new technologies with the people creates a teaching environment in which lecturers, tutors and teaching resources can all be networked.

There is also evidence of changes in institutional structure that have been influenced by information technology. Traditionally, universities have carried out all the functions relating to the provision of higher education: content production; packaging content; credentialing programs; presentation to students; marketing; registration, payment and record keeping; and, assessment. In the online world, these functions can more readily be

“*disaggregated*” and the university can specialise in those functions which it regards as its “core business”, forming alliances for other functions or outsourcing to new intermediaries in the value chain.

The marketing of a university’s programs can be outsourced to a company that specializes in researching the market and promoting the university. Recruitment can be better done close to the student and in the case of international students, perhaps in the student’s mother tongue by agents overseas. Library facilities could be provided by new intermediaries close to the students or provided online by cybermediaries. Fee-payment, especially online payment, can similarly be outsourced to a cybermediary. If an institution is offering on many sites and many countries then outsourcing invigilation and related examination administration is necessary. Sylvan Learning Systems (2001) is an example of an organisation specializing in the function of assessment in the education value chain. Based in the USA, it offers computer based testing services to educational institutions, for example the Graduate Management school entrance test (GMAT) and the Test of English as a Foreign Language (TOEFL).

Research, of course, can be conducted by others outside universities and so there is really no reason why this activity couldn’t be outsourced. But it could be argued that there is a nexus between research and teaching in universities that is essential for higher education.

The functions of course development and materials development are perhaps the ones seen as most likely to remain with universities. But there are those who even suggest the need for outsourcing and alliances for the performance of these functions. Gibbons (1998, p.61) predicts that universities “will learn to make use of intellectual resources that they don’t own fully. This is the only way that they will be able to interact effectively with the distributed knowledge production system”.

In the higher education industry there is an increasing number of instances of institutions delivering the content of others. Unext is an internet-based distance learning ‘university’ which utilises content developed by the London School of Economics, Chicago, Colombia, Stanford and Carnegie Mellon Universities, and delivers Masters of Business Administration (MBAs) to the corporate sector. Unext also handles the global marketing and management of the programs (UNext, 2001)). Western Governors University (WGU) was formed in 1996 by the governors of the western USA to share higher education distance learning resources. It offers online access to over 500 distance education courses from over 40 higher education institutions. It assesses students and awards degrees, but its programs are produced and delivered by the participating institutions (WGU, 2001).

Gibbons (1998, p.61) suggests that a university should be regarded as “a sort of ‘holding institution’ in the field of knowledge production, perhaps limited to accrediting teaching done primarily by others while in research doing their part by forming problem-solving teams that work on fundamental issues”. This view sees the core business of the university as participating in knowledge production and credentialing the teaching programs of others. But if so many functions are outsourced, then an important new function must be added to the work of the university – the function of organizing the learning space – bringing all the

outsourced functions together to facilitate learning by the students. Indeed, one could say that the organisation of the learning space perhaps becomes the central function of the university.

As the various functions of the higher education process are differentiated, so too the *nature of work* and the workforce change (Coaldrake & Stedman, 1999).

CASE STUDY OF THE FACULTY OF INFORMATICS AND COMMUNICATION, CENTRAL QUEENSLAND UNIVERSITY

Partnerships and the “Glocal” model

Central Queensland University (CQU) is a regional university in Australia that is responding to the challenge of the online world. With 15,000 students, CQU is now Australia’s fastest growing university in terms of international students. Only 25% of its students were in grades 11 and 12 in Australia during the last two years, the remainder are mature-aged or international students. In other words, CQU has a diverse student population quite unlike that of “traditional” universities.

In Central Queensland, CQU’s traditional catchment area, Rockhampton is the location of the main campus, Mackay campus 350 kilometres to the North, Gladstone campus 120 kilometres to the South, Emerald campus 280 kilometres to the West and Bundaberg campus 330 kilometres to the South. A key component of this integrated network of campuses is the Interactive System-Wide Learning (ISL) system – a synchronous video link that facilitates networked learning. Thus, on these campuses, classes are taught using combinations of synchronous video delivery of live lectures, videoconferencing to connect distributed groups of learners, web-delivery, synchronous and asynchronous computer mediated discussions, and face-to-face classes.

CQU has been a distance education provider since 1974. Distance education students are serviced with a combination of printed, CD-ROM and web-delivered material, as well as electronic asynchronous communication for class discussion and mailing lists.

CQU formed an alliance with a commercial partner to establish campuses at Sydney in 1994, Melbourne in 1996 and more recently in Brisbane and the Gold Coast. At these campuses the students are mostly of international origin. In addition, there are campuses operating in Singapore, Malaysia, Hong Kong and Fiji. At all these campuses, the CQU programs are tutored by locally appointed academic staff, specifically employed for teaching rather than research. The mode of delivery is face-to-face for tutorials and lectures, supported by the distance education resource materials produced by the CQU academic staff in Central Queensland.

Inherent in the educational partnership is a model in which the function of content production has been detached from other functions (for example, lecturing) traditionally

carried out by the university. This vertical disintegration, in which functions are differentiated and either outsourced or dealt with by partners in strategic alliances, creates new intermediaries in the value chain.

For both on-campus and distance education modes, CQU has moved to a networked learning paradigm, using communication and information technologies to link learners and learning resources. But it has also moved to a networked teaching paradigm that links lecturers, tutors and teaching resources.

There are fears that the globalisation of higher education could lead to a global western academic homogeneity - yet another wave of cultural imperialism. But the fear that global higher education will destroy indigenous cultures fails to acknowledge that other forms of communication between cultures have existed for hundreds of years, and the fact that cultures survive such transculturation (McQuail, 1994) is evidence of cultural 'resistance' and 'adaption'.

The intensifying of worldwide social relations sets up dialectical ties between the global and local, such that what happens in any particular milieu is an expression of, but also can often stand in contradistinction to, distanced social forms.
(Giddens, 1991, page 210)

So, when becoming more global, it is important to take care to create a system which does not seek to undermine cultural 'resistance' and 'adaption', but which instead is responsive to the knowledge, culture and needs of the local learners. One aspect of this process is the "internationalising" of the curriculum to allow local knowledge and culture to be incorporated and valued.

There are other dangers in globalisation coupled with the facility to network all teachers and learners. Inappropriate structures and processes for this global network have the potential to create stress for the individuals at the CQ campuses. When becoming more global, it is important to take care that the models used for teaching are scaleable – for example, one coordinator in Rockhampton should not be dealing with a mailing list comprising one thousand students from all over the world.

To overcome the dangers mentioned above, it is important to move to a "glocal" meta-model in which the staff in each Faculty of CQU are responsible for the organisation of the global learning environment whilst the educational partners are responsible for the organisation of the local learning environment (see Figure 1). Hence the portmanteau expression "glocal" – it is global and local at the same time.

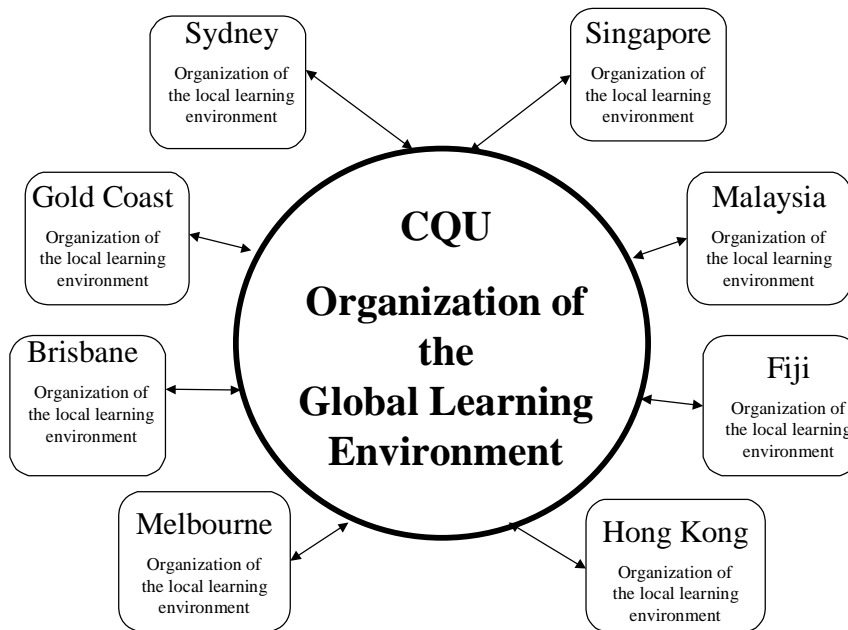


Figure 1: The “Glocal” model of networked learning

The “Glocal” model going online in Singapore

Let us consider the specific example of CQU facilitating learning in Singapore.

CQU was originally offering programs in Singapore using DE materials together with local tutorial support – a sort of “supported DE delivery”. This was the original “glocal” model, viz., global learning resources with local learning support/mediation provided by local tutors employed by our Singaporean partner. The penetration of communication and information technology in Singapore is considerably higher than in most of the other CQU learning locations and so it was natural to make this the first location for CQU to offer its programs online.

The first, and perhaps most important point to make about the Singapore online project is that it was the result of emergent change. In an evolutionary fashion, CQU added online interactivity and support to what it was already offering in Singapore. Thus, the online programs in Singapore are not offered in a pure online mode of delivery – instead they are offered in “supported online mode”, i.e., with some printed DE materials, some face-to-face tutorials and other campus-based support. This “supported online mode”, is simply an example of the flexible learning paradigm embraced by the University, or more specifically, an example of the “glocal networked learning paradigm”.

The communication and information technologies which enable us to create the networked learning environment for the student also enable us to create a networked education system in which lecturers, tutors and teaching resources are all linked. In the CQU/Singapore network, a CQU academic development team is responsible for the collection of the resources, the creation of the materials and the development of the “global core” for the supported online course. The global core is then electronically delivered to the local partner in Singapore.

The local partner in Singapore is responsible for adding the local education interface to the global core (see Figure 2). Thus, the online component of the global core is mirrored on our partner’s server in Singapore and the local partner then creates a website with the required local online “look and feel”. The CQU academic development team works electronically with the local development team to maintain quality control of this locally added component.

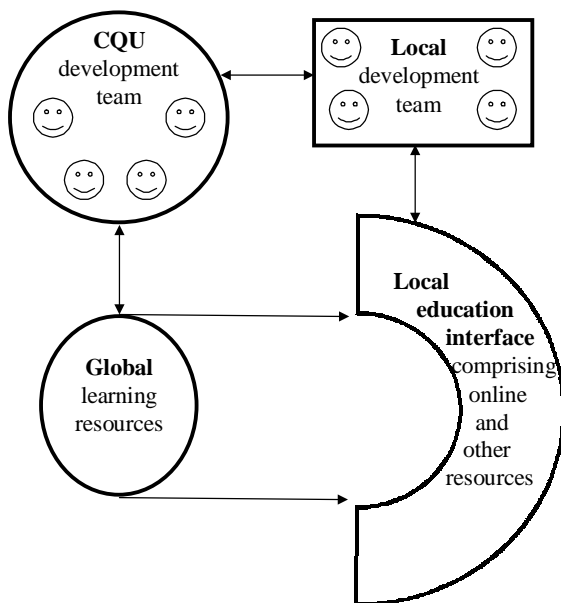


Figure 2: The “Glocal” resource development process

As regards the facilitation of learning during the running of a particular course, a lecturer on one Central Queensland campus is designated as the coordinator of a particular unit (course), and that person, together with the administration multi-campus support team, coordinates the activities of the learning facilitators/tutors on all the other campuses on which that particular course is taught. Thus, rather than dealing directly with a thousand students on campuses all over the world, the CQU coordinator deals with the in-country tutors who in turn facilitate the learning of the students. The local campus/centre acts as a hub – a local network – as shown in Figure 3.

Through the coordinator, CQU is responsible for quality control of the facilitation of the learning process. The usual quality control mechanisms are used, including moderation of assignments, marking of examination scripts, and site management visits.

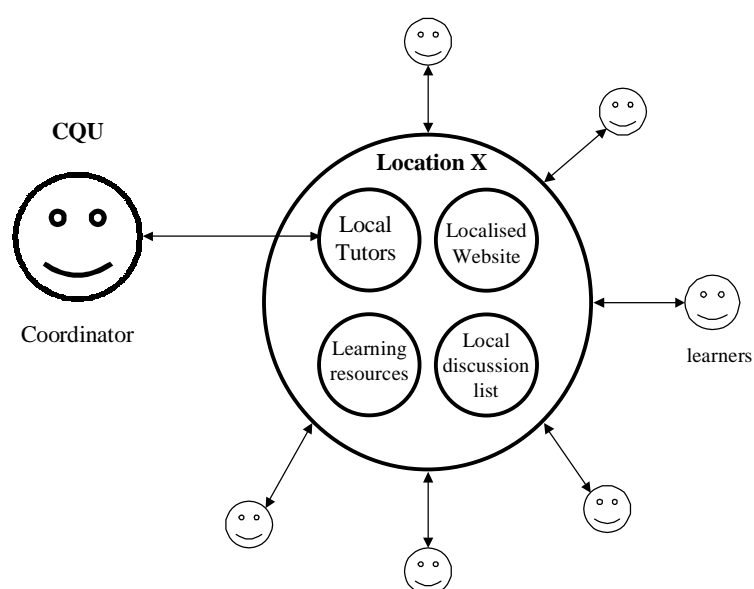


Figure 3: The local learning network linked to CQU

Multiple entry program and calendar in Singapore

Much of the success of the Faculty of Informatics and Communication in Singapore rests on its ability to enable students from diverse backgrounds to enter the program of their choice at a time during the year which suits them and to graduate in as short a time as possible. A cornerstone to this success has been the creation of a matrix of course offerings that satisfies all these requirements.

Students with Singaporean diplomas in IT, Multimedia or other areas get different sets of exemptions for each CQU degree, and so have different programs of study to follow. For example, a student with a Diploma in Multimedia will only have to take ten courses to graduate in the Bachelor of Multimedia, whereas a student with a Diploma in IT will have to take twelve courses, and a student with a Diploma in Engineering will have to take fourteen. The number of permutations of course sequences increases dramatically when you consider that these students from diverse backgrounds might instead opt to take a bachelor of IT, or a Bachelor of E-Commerce or Bachelor of Internet Communication, all with differing sets of exemptions. In addition to this complexity, there is the added dimension

that students can start their program at three different times per year, namely, at the beginning of the Summer, Autumn and Winter terms.

The Faculty had to engage in an extensive optimisation exercise in order to cope with this degree of complexity, allow students to complete their degrees in the minimum time regardless of when they started, and also minimise the number of times it was necessary to run each course.

CONCLUDING REMARKS

In the higher education industry, pressures for change include global competition and technology facilitated learning. Outcomes are evolving, but include the formation of alliances, outsourcing and re-engineering of systems and work practices. In particular, the communication and information technologies that facilitate networked learning, also link lecturers, tutors, and teaching resources to create the possibility of networked education.

The particular “glocal” networked education paradigm that the author has outlined separates out four functions:

- 1) Development of the global core of learning resources;
- 2) Development of the local education interface;
- 3) Coordination of the learning facilitation on a specific occasion;
- 4) Local learning facilitation.

An important distinction here for CQU is the separation of the development and the teaching functions. By embracing this separation, CQU has been able to develop ways of working which allow the creation of a scaleable and flexible model. In this model, however, the work of the university academic is changed considerably.

The author has shown how the online world tends to lead to vertical disintegration in universities and results in the differentiated functions being performed by alliance partners or being outsourced. In the same way, the functions traditionally performed by a single university academic are differentiated in the CQU “glocal” networked education paradigm and are performed by a network of learning facilitators. The distinction between academic and non-academic university staff blurs as both take on more “learning management” roles, for example, management of learning facilitators and management of learning resources. In this scenario, university academics may find themselves responsible for the learning of hundreds of students. They may never, however, find themselves face-to-face with a single student.

REFERENCES

- AVCC. (2000). Australian Vice Chancellors Committee: Key Statistics Internationalisation. July 2000. AVCC: Canberra.
<http://www.avcc.edu.au/australias_unis/statistics/internationalisation/>
- Coaldrake, P. and Stedman, L. (1999) Academic Work in the Twenty-first Century: Changing roles and policies. Department of Education, Training and Youth Affairs (DETYA), Commonwealth of Australia: Canberra.
<<http://www.detya.gov.au/highered/occpaper.htm>>
- Duderstadt, J.J. (1999). Can colleges and universities survive in the information age? In Katz, R.N & Associates, *Dancing with the devil - information technology and the new competition in higher education*. San Francisco: Jossey-Bass.
- Gibbons, M. (1998). Higher education relevance in the 21st century, UNESCO World Conference on Higher Education, Paris, October 5-9.
- Giddens, A. (1977). *Studies in Social and Political Theory*. London: Hutchinson.
- Giddens, A. (1984). *The Constitution of Society*. Cambridge, Polity Press.
- Giddens, A. (1991). "Structuration theory: past, present and future." Chapter 8 in Christopher Bryant and David Jary (eds.), *Giddens' Theory of Structuration: A critical appreciation*. London: Routledge.
- McQuail, D. (1994) *Mass Communication Theory: An Introduction*. 3rd edition, London: Sage.
- Orlikowski, W.J. and Robey, D. (1991). Information technology and the structuring of organisations, *Information Systems Research*, 2:2, 143-169.
- Sylvan Learning Systems. (2001). Sylvan Learning Systems website.
<<http://sylvanlearning.com/home.html>>
- Tsichritzis, D. (1999). Reengineering the university, *Communications of the ACM*, 42:6, 93-100.
- Unext. (2001). Unext.com website. <<http://www.unext.com/>>
- Wallace, A and Yell, S. (1997) New literacies in the virtual classroom. *Southern Review*, 30:3, <http://www.infocom.cqu.edu.au/Staff/Susan_Yell/Teaching/fmct/liter.htm>
- WGU. (2001). Western Governors University website.
<<http://www.wgu.edu/wgu/index.html>>