

Using ICT to Enable Emancipatory Learning

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INTRODUCTION: ICT AND THE NON-TRADITIONAL STUDENT

The use of information and communication technology (ICT) has had an important role in enhancing the nature and quality of student learning experiences through open learning (OL) and distance education (DE). It has also enabled providers to introduce support and delivery, and administrative systems to improve efficiency and effectiveness of all these aspects. The issues, problems and potential benefits of the use of OL and DE have been the themes of recent conferences and other national forums, and is well documented in the research literature that abound. From the foregoing information sources, an aspect that still is not well addressed is appropriate models that take in account the specific needs and demands of the students at the local level, as well as using ICT.

Today's post-secondary students are a combination of the traditional school leavers and the non-traditional student seeking access to learning generally not available through the traditional classroom and study schedules. In this context, the following trend was advocated by Farrell (1994) regarding the nature of our future students:

- Part-time learning will be the norm.
- More will be over 25 years of age, working full time, married and with families.
- More will already have post-secondary experience.
- Many will be looking for updating and "partial credit," rather than standard degree diploma or research courses.
- They will demand courses that are up to date, current and relevant to their needs.

- They will require access to information and experience globally and they will have the skills – and expect to use those skills – for accessing and managing information rather than receiving direct instruction as they did the first time around.
- These mature learners will want to "network" rather than be "instructed."
- Most will already have experience in using interactive technologies, and they will expect to use that technology in their post-secondary education.

This trend has gathered momentum in an information age in which the demand for manual skills is declining. Reform in education and training has been called for to explore and implement ways of educating and training the 21st century workforce and ways to provide life skills for citizens in an information society (e.g., Microsoft, 2003).

The demand for learning by adults has been demonstrated by data from the National Centre for Education Statistics (NCES), which indicated that 1999–2001, 73% of all undergraduates were in some way "non-traditional" (NCES, 2002).

ICT IN HIGHER EDUCATION

In seeking to respond to increased need and demand for education and training opportunities for people, industry, commerce and organizations, education providers have in the past decade extensively explored alternatives to face-to-face instruction for formal and non-formal education and training. These alternatives need to be more cost effective and able to

reach audiences not readily able to access education/training opportunities (Daniel, 1996; 1999). The latter aspect particularly applies to persons living in locations remote to education/training institutions or who are unable to attend an institution due to work or family commitments. In the context of the above, the provision of open and distance learning opportunities using ICT is an important strategy (Marshall & Gregor, 2002).

The alternative learning/teaching approaches using ICT 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); and many others (Evans & Nation, 1993; Evans & Newell, 1993; Asensio, Foster, Hodgson, & McConnell, 2000; Jegede, 2000; McAlpine, 2000; Williams, Watkins, Daley, Courtenay, Davis, & Dymock, 2001; Discenza, Howard, & Schenk, 2002; Ruth, 2002). Overall, these new technologies create a learning environment in which learners, tutors and learning resources can all be networked. But these methodologies require both staff and students to cross new socio-cultural borders (Jegede, 2000), change existing work practices and acquire new literacies and learning skills. However, up to this time, the culture of ICT remains young, middle-class, male and western-based (e.g., Holderness, 1998). The challenge of educators, policy makers, governments, industry and society in general is to develop models for access to education and training that will reach all in both developed and developing countries. The following section presents a case study of how this is being addressed by Central Queensland University (CQU) through online education.

USING ICT TO PROVIDE NETWORKED EDUCATION

With nearly 23,000 students in 2002, CQU is Australia's fastest growing university in terms of international students. CQU has the largest percentage of international students (41%, or 9,389 students) of any

university in Australia. By comparison, in 1996, international fee paying students comprised only 7.3% of the total number of students (DETYA, 1997).

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. On these campuses, classes are taught using combinations of synchronous video delivery of live lectures, videoconferencing to connect distributed groups of learners, Web delivery, e-mail discussion lists, chat rooms, bulletin boards and face-to-face classes. 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. Thus, for both on-campus and distance education modes, CQU has moved to a networked education model that uses ICT to link learners, teaching/learning resources, lecturers and tutors.

CQU formed an alliance with a commercial partner to establish campuses at Sydney in 1994, Melbourne in 1996, Brisbane in 1999 and the Gold Coast in 2001, specifically to provide educational services for international students. In addition, alliances have been formed with partners to create educational delivery centres in Singapore, Malaysia, China and Hong Kong, and a full campus in Fiji (Gregor, Wassenaar, & Marshall, 2002). At all these locations, the flexible learning resource materials produced by the CQU academic staff in Central Queensland provide the global content for the teaching, which is conducted by locally appointed academic staff. The model is a 'glocal' networked education system – an education system that uses a global approach to the delivery of higher education in which global learning resources and networks are used, but local academic and administrative support is provided for student learning. Hence, the portmanteau expression "glocal" – it is global and local at the same time.

By using this globally created and validated, but locally mediated and supported, system of open and distance learning, CQU is able to cater for the needs of its diverse student body.

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