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# Financing tertiary education: Distance education mechanisms for income diversification

**By Professor Stewart Marshall**

## Introduction

This paper outlines an opportunity for income diversification, namely, to provide education to a Caribbean education market hitherto not well-served by traditional tertiary education providers. It argues that in order to capitalize on this opportunity, it is not sufficient to simply offer "more of the same", but instead that tertiary education providers must change their modes of operation and delivery. Central to this change is a paradigm shift to a collaborative development/delivery model with an emphasis on the use of asynchronous teaching/learning modalities and resource-based teaching/learning.

## The alternative education market

As the world witnesses the globalization of the economy, communication and education (Gregor, et al, 2002; Marshall & Gregor, 2002; Tsichritzis, 1999; Duderstadt, 1999), traditional tertiary education providers face major challenges. Daniel (1996, pp.16-17) lists some of the challenges facing the current model of the campus university as: the cost being too high for students in a large part of the world; the shortage of trained academic staff; lifelong learning; part-time students; need for flexible education; difficulties of travelling to campuses; customer attitudes and expectations; and, that the essence of tertiary education is connecting people into learning communities. As Daniel (1999) points out, a paradigm shift is required in tertiary education not only to respond to these challenges, but also to respond to the threats and opportunities presented by globalization and the use of new information and communication technologies (ICT).

> *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)*

With the advent of the knowledge society, the profile of those requiring tertiary education has changed dramatically: many will already be working, require their education by distance and/or part-time, and will require short courses for professional development. Research by Cunningham, et al (2000, p.xv) shows the factors driving the growth of what they term an "alternative education market" in the USA to be:

- *the globalised economy, with a growing demand for standardised products, services and technical infrastructure, and sophisticated communication systems;*
- *the emergence of a post-industrial information age and the explosive growth and distributed nature of new knowledge;*
- *demands for greater access to tertiary education fuelled by rapid changes in the economy, the need to maintain and upgrade skills for employment, and industry's need for 'work-ready' graduates;*
- *growing reluctance on the part of governments to fund increasing demand for higher education;*

- *the increasing costs of higher education, and the growing importance of the 'earner-learner market';*
- *the potential for communication and information technologies to reduce the fixed costs of education;*
- *rapid growth of technology-based distance education in a market traditionally strongly dominated by campus-based education; and*
- *dissatisfaction by industry with the responsiveness of traditional providers.*

The final point made by Cunningham, et al – "dissatisfaction with the responsiveness of traditional providers" – is particularly relevant to the Caribbean. Many external (foreign) providers (Brandon, 2003) are already offering programmes to meet the demands of this growing "alternative education market" in the Caribbean. The programmes are offered flexibly, usually using distance education modalities with some local tutorial and administrative support by local state educational institutions or private, locally-owned institutions. The World Bank considers as favourable

> *"the emergence of new types of tertiary institutions and new forms of competition, inducing traditional institutions to change their modes of operation and delivery and to take advantage of the opportunities offered by the new information and communication technologies (ICT). (World Bank, 2002, Executive Summary, p. xvii)*

Clearly, if traditional tertiary education providers in the Caribbean are to capture some of this "alternative education market", they must "change their modes of operation and delivery". And one crucial change that is required is to utilize distance education modalities to provide the flexibility required.

## Distance education in the Caribbean

Distance education is now a priority for many developing countries (Chandra, 2000; Gomez, 1999; Perez, 1997). It is seen by some "as a means by which developing nations can 'leapfrog' some stages in the development of their educational infrastructure by importing courses (and sometimes adapting them) for use locally" (Evans, 1995a, pp.312-313). The globalisation of knowledge and educational products and services means that all countries can, in principle, be both providers and consumers. However, given the existence of greater production capacity, greater use of ICT, powerful alliances, and high volume markets, it seems more likely that larger developed countries (and to some extent, larger developing countries) rather than small developing countries will become the major producers of distance education products and services. Thus, we find in the Caribbean distance education products and services provided by institutions based in the UK and USA (Brandon, 2003). This can pose an economic, political and cultural threat to small developing countries and small states (UWIDEC, 2000, p.6). Small state economies such as those of the Caribbean find it difficult to respond because their inability to access economies of scale make "the creation and delivery of distance material constitute a substantial investment, which is difficult to quantify and equally difficult to recoup" (Morgan, 2000, p.107). There are those who fear that globalized open and distance education will amount to cultural importation/invasion/imperialism (Evans, 1995a; 1995b).

The particular social, cultural and political context may also make it difficult for small state economies to introduce distance education. Morgan (2000, p.107) points out that although distance delivery is ideally suited to the island chain of the Caribbean, "there is still the propensity to treat this mode as the despised poor relation of face-to-face teaching". Organizational culture can also affect the success or failure of a distance education project. Morgan (2000, p.108) describes the introduction of distance education at the University of the West Indies as "fraught with difficulties, ranging from lack of conviction as to the viability of the distance mode, to the

disparity between the responsibility placed on the Distance Education Centre and its funding and positioning within the university structure".

## Changing the modes of operation and delivery with ICT

As Morgan (2000, p.107) points out, distance delivery of education is ideally suited to the island chain of the Caribbean because of the difficulty people have in attending on-campus education. In particular, the use of new ICTs in distance education can facilitate alternative learning/teaching modalities, including: 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); use of digital libraries (as knowledge repositories); computer simulation (substitutes for laboratories); and many others (Asensio, et al, 2000; Devi, 2001; Discenza, et al, 2002; Jegede, 2000; McAlpine, 2000; Ruth, 2002). Overall, these new technologies create a learning environment in which learners, tutors and learning resources can all be networked.

These same ICT 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., to create a teaching environment in which lecturers, tutors and teaching resources can all be networked.

> *"While much of the rhetoric (and rationale) for using ICTs to benefit education has focused on ICTs' potential for bringing about changes in the teaching-learning paradigm, in practice, ICTs are most often used in education in LDCs to support existing teaching and learning practices with new (and, it should be noted, often quite expensive!) tools. While impact on student achievement is still a matter of reasonable debate, a consensus seems to argue that the introduction and use of ICTs in education can be a useful tool to help promote and enable educational reform, and that ICTs are both important motivational tools for learning and can promote greater efficiencies in education systems and practices."* (infoDev, 2005, Executive Summary - Key Findings, p.vi)

To achieve maximum advantage from the use of ICT, it is necessary to re-engineer work practices. The 'mega-universities' (Daniel, 1996) use division of labour (some people developing learning materials, others supporting students, others providing logistic support, etc.) and the specialization that this permits, to develop a model of supported distance learning which can operate flexibly at large scale, with low costs and high quality (Daniel, 1999). For the Caribbean tertiary education providers this means a shift from the teacher-dependent, discipline-focused, and institutionally-driven model we see in Figure 1, to a resource-based, problem-based, and learner-driven model as shown in Figure 2.

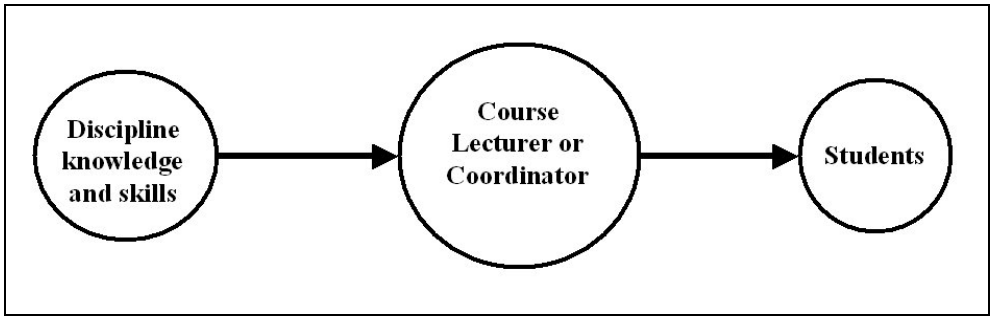

***Figure 1:*** *Traditional teaching model*

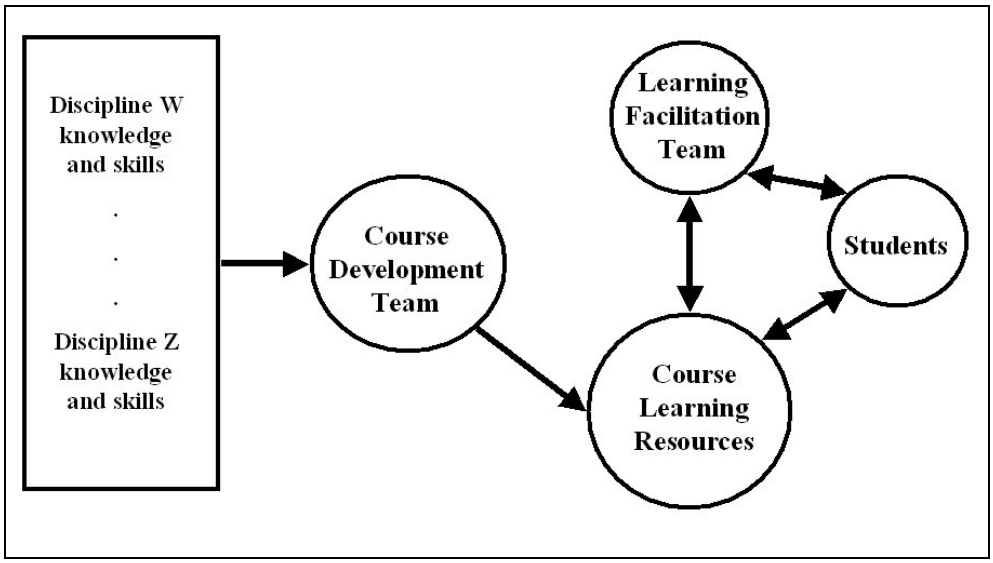


***Figure 2:*** *Resource-based learning paradigm for teaching*

To achieve maximum advantage from the use of ICT, it is also necessary to re-engineer educational institutions and their inter-relationships in the education industry. For example, 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, assessment. In the online world, these functions can more readily be disaggregated (also termed "vertical disintegration") and the university can specialize in those functions that it regards as its 'core business', forming alliances for other functions or outsourcing to new intermediaries in the value chain. The communication options offered by advances in ICT facilitate the required changes in inter-organizational relationships. The advantage to the universities of these alliances is the opportunity to improve the quality of the educational experience through the aggregation of expertise from different sources. Thus, library facilities can 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; and, tutorial assistance in the form of learning facilitation can be provided by local tertiary level institutions or other local providers.

Much of the success of ICT-based education in the Caribbean will rest on the separation of educational functions, and collaborations with others to fulfill these functions, for example:

- Creation of content (e.g., collaboration with VUSSC, CKLN and CUPIDE for access to open resources);
- Developing the technological infrastructure required by the educational providers (e.g., collaboration with organizations such as CKLN and e-Link Americas to provide the technological infrastructure for reasonably priced access to the bandwidth required);
- Facilitating the learning of the content (e.g., collaboration in the forms of: franchising, outsourcing, partnering between TLIs);

- Developing the technological infrastructure required by the students (e.g., collaboration with CKLN for cheap bandwidth, with UNESCO Multimedia Community Centres and with funding bodies such as UNDP, COL, European Union, InfoDev for access points);
- Creation of socio-cultural learning environments for the students (e.g., collaboration with NGOs, government departments and local communities to create cross-sectoral "knowledge centres" for communities of practice and learning, or with e-tutors to create virtual communities).

## Concluding remarks

By changing the modes of operation and delivery with ICT, as just described, it is possible to provide education that is:

- ***Economically designed*** – which means doing more with the same resources and working "smarter";
- ***Relevant*** - to the needs of students, employers and society;
- ***Flexible***, in respect of:
  - *Time* - students can enrol and study at anytime;
  - *Place* - students can enrol and study anywhere;
  - *Mode* - study can be anywhere on the continuum from face-to-face to totally online;
  - *Product* - programmes "tailor-made" and created quickly;
- ***Scaleable***, i.e., enable us to move from offering a course to 30 people to offering it to 3000 people;
- ***Collaboratively created and delivered*** - forging strategic partnerships and collaborations with others, both within and outside UWI, to maximise our teaching outputs and scaleability;
- ***Quality assured*** - products and processes based on best practice and research.

Only when this is achieved will we be able to seize the opportunity for income diversification provided by the "alternative education market".

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