Chapter 4.13
A Collaborative Learning Environment to Support Distance Students in Developing Nations

Michelle Dottore
San Diego State University, USA

Steve Spencer
San Diego State University, USA

ABSTRACT
In developing nations, information and communications technologies (ICT) offer dramatic opportunities for economic and social transformation. Such nations hope to jump-start economies and actualize human potential by providing ICT-based education and training to individuals in remote areas. Educational institutions seeking to outsource programs internationally face complex cultural, political and technological considerations not found within traditional student populations. Virtual learning environments (VLEs) are tools that provide electronic access to campus services. However, distance educators are challenged to develop VLEs that also support critical social elements of student life. The San Diego State University Interwork Institute is partnering with community colleges in the Western Pacific to offer degrees using a unique educational model. Through partnership and technology, this model blends virtual technologies with site-based facilitators and services, enabling Pacific Islanders to access advanced degrees without having to travel abroad.

INTRODUCTION
At the threshold of the 21st century, the transition from the Industrial to the Information Age is well underway. The explosion of new and sophisticated information and communications technologies (ICT) is causing a gradual, yet fundamental shift in social and economic systems worldwide (ILO, 2001; Knight, 2002). The possibility of margin-
alization and scarcity is real for those who lack the equipment or skills to participate in this new electronic frontier. Not wishing to be excluded, technologically underdeveloped nations are identifying resources to build infrastructure and equip residents with the skills needed to access ICT’s vast potential. Many have drafted national plans to implement widespread education and training at the secondary and tertiary levels (Palau MOE, 1999; UNESCO, 2001). Conversely, governments and universities are responding by ramping up the delivery of educational programs internationally. Yet, many educational organizations lack systems and strategies to support international students, who present complex cultural, political and technological issues not typically found within traditional student populations.

Reputable distance education organizations must think beyond mere delivery of quality content. An exemplary online degree program not only offers comprehensive and targeted student support services, but also provides students with opportunities for social connectedness through access to a rich academic community. VLEs are tools that provide electronic access to some or all aspects of campus life, including libraries, program advisement and financial aid. However, distance educators are challenged to develop VLEs that also foster critical social elements of student life.

Educational organizations are applying emerging technologies to deliver high-quality instructional programs to developing nations. In this chapter, we will describe trends and critical factors affecting these efforts and present a model being implemented by the Interwork Institute at San Diego State University, in partnership with community colleges in the Western Pacific. Through partnership and technology, this model blends virtual technologies with site-based support and services, enabling Pacific Islanders to access advanced degrees without having to travel abroad. At the same time, it allows regional 2-year colleges to build capacity to meet critical educational challenges that will position their citizens with the skills and aptitudes needed in the 21st century.

**NEW EDUCATIONAL OPPORTUNITIES FOR DEVELOPING NATIONS**

ICT has impacted societies worldwide, touching all but the furthest reaches of civilization. With the worlds of work and education converging, life-long learning will become a fundamental aspect of job security and employability in the digital age. Meanwhile, access to current and sophisticated education and training resources will provide a competitive advantage to employees, businesses and governments (ILO, 2001; Quibria, Ahmed, Tschang, & Reyes-Macasaquit, 2002). With the half-life of the latest technical innovations currently at 1 to 2 years, and quickly shrinking to just a few months (Kurzweil, 2005), technological fluency is a constantly moving target. Critical skill sets will be characterized by the ability to transform existing knowledge into new knowledge. In remote and developing nations, ICT offers dramatic opportunities for economic and social transformation. These nations hope to jump-start economies and actualize human potential by leveraging ICT to increase workforce skills and knowledge (Bloom, 2001; Quibria et al., 2002; Singh 2001; Tellei, 2004). Global policymakers concur that investment in education for third-world and developing nations is key to achieving economic growth and access to the global market. “Investment in basic and higher education is the most critical policy tool available to governments [who wish] to reap the benefits of ICT” (ILO, 2001, p. 323). Consequently, these nations are taking action to establish a solid education platform by seeking to import ICT-based degrees and programs. To access secondary and tertiary educational programs, they are exploring partnerships with foreign universities who offer...