Current Trends in Higher Education:
Expanding access in Asia Pacific through technology

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The past two decades have seen dramatic increases in postsecondary enrollments in Asia and Oceania (*Almanac of Higher Education* 2009). This growth has caused the need for new solutions to satisfy the demand for tertiary education. Many countries of Asia where traditional higher education institutions are being filled to capacity are embracing distance learning as an alternative approach. India, China, Turkey, Cambodia and New Zealand, among others, have also supported distance education as a means of promoting greater educational access to underserved students.

Information and Communication Technology (ICT) has had a profound effect on higher education. ICT has enabled increased collaboration across international borders, has increased access to education for individuals who do not live near a brick and mortar tertiary institution or a library, and has created new ways to teach, both within the classroom and without. However, even as new modes of providing education proliferate, the digital divide still continues to grow, making distance learning as a solution for expanding access a continuing issue of debate. This essay will look at trends in distance learning in the tertiary sector in Asia and some of the challenges, and opportunities, that this mode of learning provides.

Currently Asia has the largest number of adult online and distance learners in the world, with 70 open universities (Latchem and Jung 2010). In China, more than 10 percent of university students are engaged in online learning, and in India, 20 percent of all tertiary students are enrolled in Indira Gandhi Open University (Kang and Song 2007; Latchem and Jung 2010).

Many campus-based universities have also started to offer online programs. For example, 68 research universities in China now have affiliated online learning institutes (Kang and Song 2007). In addition, China's government gives grants worth about $10,000 to professors at dozens of universities to help them improve their undergraduate teaching materials and then put them online. The purpose is for less prestigious institutions to benefit from the countries' best instructors and improve their own courses. More than 10,000 courses from Chinese universities are now available online as a result (Ajula and Terris 2009).

The growth in online learning has coincided with the increase in technology use by the general public. As of 2010, Asia accounted for 43 percent of the total world Internet usage (Internet World Stats 2010). In addition, four Asian countries (China, Japan, India, and Korea) are among the top 10 countries in the world with the highest number of Internet users (Jung 2009).

These trends, as well as pedagogical and technological innovations, have increased the potential for interaction and collaborative work in distance learning. International interactions can now be fostered more easily, including accessing global resources, publishing to a world audience, taking virtual field trips, communicating with a wider range of people and collaborating across borders. Through videoconferencing it is also now possible to easily and inexpensively host virtual live lectures, symposia, and conferences with scholars and professionals throughout the world, without any participant leaving their own home. This opens up a new professional network to individuals, and provides limitless guest lecturers for course participation. In Saudi Arabia videoconferencing has enabled female students on segregated college campuses to interact with male lecturers without being seen by them (Latchem and Jung 2010).

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Research also shows that online education can be beneficial among socially diverse groups. Neither gender nor racial differences, nor even disabilities will likely be evident in an online course unless they are explicitly stated.

However, even the best technology is useless if the infrastructure is poor or if the users have not been adequately trained. According to the World Bank, developing countries have just 5 percent of the world's Internet hosts, but have 80 percent of the world's population. In contrast, North America has 65 percent of the world's Internet hosts but only 5 percent of the population (Bjarnason 2007). In many places, the digital divide is also prevalent within countries, where rural areas commonly have poorer ICT infrastructure than urban areas. China, for example, had the world's second largest Internet population in 2005, with 103 million users. However, rural users accounted for a mere 1.2 percent of that total (McQuaide 2009).

In Asia, Internet penetration ranges widely. In east, south and central Asia, the overall Internet penetration rate is still at only 15 percent, compared with 30 percent in the rest of the world, and in specific countries usage is even less. Bhutan, which did not have television until 1999, still has Internet access available to only 4.5 percent of the population, and in Nepal only 1 percent of the population has Internet access. Other factors such as government regulations and conflict may also impact the infrastructure. In Myanmar, public Internet access is officially restricted to all but a few individuals and armed conflict has severely hindered Internet development in Afghanistan, Iraq, and East Timor (Latchem and Jung 2010).

There are a number of international agencies that support the development of ICT infrastructure as well as promote online learning as a means to facilitate development goals. The World Bank's Global Development Learning Network and UNESCO's Higher Education Open and Distance Learning Knowledge Base are two examples.

The Global Development Learning Network (GDLN) was initiated by the World Bank in 2000 as "a global partnership of more than 100 learning centers (GDLN Affiliates) that offer the use of advanced information and communication technologies to people working in development around the world" (GDLN 2010). The GDLN is based at the World Bank Institute in Beijing, China.

UNESCO's Open and Distance Learning (ODL) Knowledge Base project was similarly "set up to support decision makers and practitioners with ready access to information and tools that will assist them in more effective policy planning, development and management" of Online and Distance Learning (ODL) in higher education programs. UNESCO's ODL Knowledge Base also has an Asia-Pacific arm which aims to "enhance educational training and development through the use of learning technologies" (Open University Malaysia 2010). It is managed, maintained and hosted by the Open University Malaysia in Kuala Lumpur.

Despite these various efforts, there are other issues related to access that even better technology infrastructure and training resources cannot address. The most challenging are related to language and culture. One third of all web content is in English, yet only 5 percent of Asians can read any western language (Latchem and Jung 2010). Asian languages comprise a small proportion of total web content. The most common to the web include Chinese, which comprises 15.7 percent of all web content; Japanese, which is 7.4 percent; Korean, which is 2.9 percent; and Arabic, which is 2.5 percent (Latchem and Jung 2010).

However, there are 6,000 languages across the world, most of which do not appear on the Internet at all. In Southeast Asia there are 15-20 different scripts; in China there are an estimated 80-100 languages, many of which use different scripts or do not have written scripts at all. In any case, many of the major software packages are currently incapable of producing letters or characters for some local languages, meaning that providing a culturally relevant curriculum online for a linguistic minority student population may present an impossible challenge to overcome.

On a positive note, the fact that technology is constantly changing means that there continues to be new possibilities. An interesting recent technology development that has some potential for educational purposes is the use of Wi-Fi for mobile learning (or "M–learning"), where course-related materials are made accessible through smart phones and/or cell phones. Although Asia has relatively low Internet penetration overall, it has 1 billion of the world's 2.7 billion mobile users, and

the world's fastest growth in number of subscribers. Cambodia, which is one of the world's least developed nations, has the lowest Internet penetration rate in Southeast Asia and few landlines, but it also has the highest call rates. Cambodia also has the world's highest ratio of telephone users using wireless (Latchem and Jung 2010).

Clearly, M-Learning has the potential to provide education through a device that is already commonly in use, even in remote and developing areas. M-learning also might require less training than web-based courses because of the familiarity most users already have with cell phones, the medium of delivery. There are already universities in Asia that are experimenting with mobile learning. Some of these include City University of Hong Kong, Shanghai Jiaotong University, and the University of the Philippines Open University.

There is no question that technology has tremendous potential for higher education, and the fact that technology is constantly changing means that what we lack today, we will be unable to live without tomorrow. This provides hope that some of the challenges we are currently facing with making education equally accessible through technology will be overcome in the future. Finding ways to maximize the potential to benefit all users will remain a challenge for universities in the 21st century.

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