Chapter II
Linking Self-Directed Lifelong Learning and E-Learning: Priorities for Institutions of Higher Education

Yukiko Inoue
University of Guam, Guam

ABSTRACT
An important task of higher education is to assist students in participating in an increasingly global economy. This global economy is transforming into a knowledge economy. Individuals need to develop the necessary competencies to be able to participate in a working life that is mainly based on knowledge productivity. The competencies include self-directed lifelong learning, in particular, through e-learning. E-learning refers to using electronic applications and processes to learn. Such applications and processes include Internet-based learning, virtual classrooms, and digital collaboration. The traditional classroom-based approaches to education will not provide the learning environment that is required for student-directed learning. The digital revolution makes new approaches to higher education—approaches which do foster lifelong learning—practical. The current chapter therefore examines the importance of linking e-learning to current knowledge in general, and to self-directed lifelong learning specifically. Higher education today must commit to new roles: providing educational communities such as virtual campuses; and increasing capacities to produce knowledge available to all.

INTRODUCTION
The advent of the personal computer, the Internet and the electronic delivery of information have transformed the world from a manufacturing, physically-based economy to an electronic, knowledge-based economy. Whereas the resources of the physically-based economy are coal, oil and steel, the resources of the new, the knowledge-based economy is brainpower and the ability to acquire, deliver, and process information effectively. (“The knowledge age”, 2005, p. 5)
Lifelong learning will be necessary to compete in the new economy. Learning is shifting from teacher-directed learning to student-directed learning (Mason, 2006), whereby learning is undertaken anytime and anywhere, from classrooms to homes and offices. The increasingly important role of information and communication technology or ICT (basically global networks of computers and other associated digital devices) is creating profound changes in institutions of higher education around the world. In the Government’s White Paper of the United Kingdom, titled 21st century skills, realising our potential, ICT-based literacy was acknowledged as a “skill for life,” along with good reading and mathematics skills (NIACE, n. d.). ICT makes new approaches to higher learning — approaches which do foster lifelong learning — practical.

Traditional classroom-based settings are inadequate for lifelong learning. Evolving ICT has made it possible to earn a degree from a major university without the need for a traditional classroom setting. ICT is making possible the development of virtual learning environments (VLEs), resulting in an emphasis on learning how to learn, and lifelong learning. E-learning — connecting learners without limitations of time or space — is more appropriate than traditional methods to fostering student-directed learning. E-learning is becoming a major vehicle for getting knowledge throughout life.

3. **An important role for higher education in applying ICT to lifelong learning:** The increased importance of ICT is transforming colleges and universities. Institutions of higher education have a new, unique, and valuable role in educating the populace to participate in an increasingly global economy. Higher education must commit to additional roles: making knowledge available to all; and applying ICT to self-directed lifelong learning.

4. **Increasing importance of VLE and virtual campuses:** Higher education can facilitate self-directed lifelong learning with massively extended university outreach, educational technologies, virtual libraries, virtual campuses, and distance education. The Internet-based (or the Web-based) VLE will particularly gain increasing importance for academic education as well as for lifelong continuing adult education.

A paradigm shift is taking hold in higher education particularly, which includes the shift from institutions of instruction to institutions of learning, creating powerful learning environments, improving the quality of the exiting students, and viewing faculty as primarily designers of learning methods and environments (Goetz, 2004).

The current chapter is not specifically intended to generate practical advice for government policymakers, administrators or even for teachers, trainers or educators. Instead, it is hoped that the insights gained will be useful and practical to those grappling with the question of how best to incorporate ICT into educational plans and programmes undertaken by self-directed learners.