

## Chapter 1.12

# The E–Learning Phenomenon: A New University Paradigm?

**Lalita Rajasingham**

*Victoria University of Wellington, New Zealand*

### **ABSTRACT**

This chapter contributes to the ongoing discussion on current best practice and trends in e-learning and virtual classes in higher education. With the increasing importance of knowledge as competitive advantage and engine of economic growth in an increasingly interconnected, multicultural and multilingual world, modern universities based on building and transport technologies are assuming virtual dimensions to address the pressures of rising enrolments, increasing fiscal constraints and rapid technological advancements. The Internet and globalisation are changing how we bank, shop, play, and learn. Can universities adapt, or is e-learning going to be an educational fad like

educational television of the 1970s? Based on international research, this chapter examines some signposts using pilot projects as a key pedagogical method in the journey from idea to execution and the factors leading to success or failure of e-learning initiatives. Will the e-learning phenomenon represent a new and sustainable university paradigm for the emerging knowledge society?

### **INTRODUCTION**

The concept of e-learning as a new university paradigm provides the structure for this chapter and takes a historical perspective on the nature of universities in terms of major paradigm shifts from the classic Aristotelian model of the Greeks, to the medieval European university to the national

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institution with its ties to the modern state. It then examines the impact of globalisation, neoliberal economics, information technology and the demands of the knowledge society on universities, and the rise of the e-learning as a new paradigm.

Thomas Kuhn (1962) defines a paradigm as ‘what members of a scientific community, and they alone, share’ (Kuhn, 1977, p. 294) and ‘when paradigms change, the world itself changes with them’ (1962, p. 110).

Another important related concept as we examine changes in society is worldview- *zeitgeist*- which Michel Foucault calls an episteme, and he concludes that it is not possible for people in one episteme to comprehend the way people in another episteme think (Foucault, 1970).

Historically, higher education has seen many global paradigm shifts, with varying degrees of turmoil. The medieval university taught the word of God, and began in monasteries in Europe, and in temples, madrassas and churches in other parts of the world. Essentially elitist and male, it served princes and priests.

The emergence of communications technologies especially the printing press and the railways gave birth to industrialisation and nation states. The medieval university moved from explaining the world in terms of God’s word to become part of the structure of the industrial age explaining reality in terms of scientific rationalism catering for a nation’s managerial and professional elite, and gradually included women. This is the paradigm of national higher education that we know today. However, with the developments of the Internet, the World Wide Web, broadband, digitalisation, wireless, satellite, mobile telephony and new applications of virtual reality, HyperReality and artificial intelligence to build collaborative, immersive simulated e-learning environments, higher education is once again undergoing a paradigm shift. As technologies add new global perspectives, universities worldwide face new challenges at a time of unprecedented demand for higher education.

The prefix ‘e’ or ‘E’ to most human transactions such as e-commerce, e-shopping, e-medicine and e-learning is a phenomenon of the 1990s as these activities go online as the Internet expands in depth and reach. Shannon and Weaver’s communications model (1949) depicts a transaction, where the sender of the information/message and the destination/recipient are separated by physical distance or time, and information, and communications technologies (ICTs) provide the link and in e-commerce for example, between seller and buyer. A Google search in February 2008 on the term ‘e-learning’ reveals no precise definition for this term and covers online learning, computer-based training and web-based learning. In the context of this chapter e-learning, based on distance education concepts is defined as Internet based learning available to anyone, anytime, anywhere in text, audio, video and animation both synchronously and asynchronously where teacher and learner in virtual classes are not co-located.

A Virtual Roundtable in 2000 involving four experts in the field including Jaron Lanier concluded that the e-learning revolution is not about computers but it’s about communication for intergenerational discourse. Education is a kind of communication and shares some characteristics. Both are information intensive activities, and both rely on ICTs to link teachers and learners, where teachers help learners to apply knowledge to real-life problems. In the conventional modern universities, this process takes place as teachers and learners came together in classrooms using transport technologies. In e-learning in virtual universities, the Internet, virtual reality, Hyper-Reality, Croquet and other emerging immersive technologies such as SecondLife bring teachers, learners, knowledge and problems/subject of enquiry together and so effect the process of education (Tiffin & Rajasingham, 1995; 2003). It is suggested that this constitutes a new paradigm from which higher education might be constructed in a knowledge society.

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