

# Concepts, Issues, and Challenges of Virtual Universities

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## INTRODUCTION

Although the phrase “virtual learning environment” (VLE) is commonly used, there are others that point to similar concepts of distance learning (DL), such as telematics learning environments, distributed learning environments, and e-learning; VLEs are online domains allowing both synchronous and asynchronous collaborative interactions among teachers and learners (Barajas, 2002). Briefly, DL and VLE are the mechanism and maintenance of virtual universities (VUs). The Internet-based VLE will gain increasing importance in the future for academic education as well as for lifelong continuing adult education (Hutten, Stiegmaier, & Rauchegger, 2005).

In VLEs students and instructors are separated by time and/or space, and the instructor provides course content through course management applications, multimedia resources, the Internet, and video conferencing; for that reason, the quantity and quality of interaction among students and instructors greatly affects learning (Chung, Severance, & Chung, 2003).

Higher education in contemporary times must be understood to be a globalizing process. Communications in cyberspace constitute a major component for globalization, which is likely to have significant consequences for human development and on the shape and role of social networks (Gjerde & Cardilla, 2005). Education itself is becoming a global commodity, having a definite practical application, such as information technology (IT) as utilized on the Internet.

## BACKGROUND

In 1993, Howard Rheingold, a freelance journalist, published “The virtual community: Homesteading on the electronic frontier,” and with it defined a new form of technologically enabled social life, marking the entry of the term “virtual community” into widespread public use. Since the publication appeared, the Internet and

Web have swung into public view, and Rheingold’s notion of virtual community has become a touchstone for studies of the social implications of computer networking (Turner, 2005): “Virtual community offers a venue in which members of multiple geographically dispersed groups could communicate with one another and in doing so come to see themselves as members of a single social network” (p. 489).

The concept of virtual community, with the increasing use of information and communication technology (ICT), has resulted in a radical change to learning communities; basically, e-learning allows participants in higher education—thus taking Web-based courses including degree programs distributed by VLEs—to collapse *time* and *space* (Keller, 2005b). ICT has been made possible the development of online resource-based packages and forms of VLEs, leading to the creation of virtual learning campuses and hence *virtual education*. Keller further presents three perspectives for implementing VLEs within an organization or a university as follows:

- The perspective of *technology acceptance* provides important insights about the interface between teachers and students, VLEs and the subject matter presented in the VLE
- The perspective of *diffusion of innovations* emphasizes dimensions of the decision process of adapting or rejecting the VLEs as an innovation on an individual or organizational level
- The perspective of *communities of practice* emphasizes the importance of the different groups within the university, that is, the impact on the implementation process and their communication through the VLE (p. 310)

The third perspective is only the perspective of implementation as a learning process considers the different roles of teachers and students with the university. The emergence of the VU classroom and online educational forums has been heralded both as opening possibilities

for new, more powerful learning experiences and as inhibiting the creation of communities of practice in which learning is situated (Anagnostopoulos, Basmadjian, & McCrory, 2005).

In the past, *virtual teaching* was carried out by posting textbooks to the student, who read them and sent back assignments to be marked via correspondence (correspondence teaching and correspondence university); the paradigm of mostly correspondence and print (with perhaps a little TV) lasted many years, but from the early 1990s, under the impact of ICT in general and the Internet and Web specifically, a new paradigm has emerged and increasingly people use the term “e-university” (online university and net-university were also used in the past) for virtual teaching (Bacsich, 2004). Today there is a common global library where people can *all* go to do research, and there is a common global university where people can *all* go to take classes; certainly technology has accelerated globalization so that increasingly people in both developed and undeveloped countries will agree that people now *all* live in one world (Stallings, 2001).

## **CONCEPTS, ISSUES, AND CHALLENGES OF VIRTUAL UNIVERSITIES IN THE AGE OF GLOBALIZATION**

Many efforts and implementations in using the Internet in teaching and learning are currently underway for what used to be called “distance education,” but which in a postsecondary education is often called a “virtual university,” and which is the Internet’s oldest learning community and a pioneer in the Web-based education. VU is generally defined that it has no campus, no lecture halls, and even no faculty buildings; furthermore, VU is considered as one of the latest forms of the 21st century education, and one of the manifestations of globalization is the emergence of VU in its many forms (Keats, Beebe, & Kullenberg, 2003).

### **VUs in the World**

A large number of VUs in the U.S. are projects of state institutions and Michigan Virtual University (MVU) is such example (Keats, Beebe, & Kullenberg, 2003). The state maintained its \$1.75 million subsidy for MVU, a nonprofit corporation that offers K-12 schools online

courses, test preparation, and career guidance (Keller, 2005a). As continued by Keller, the University of Phoenix, Jones International University, and the Global University Alliance fall into the emergence of the mega VUs; in other countries, Canada has established the Canadian Virtual University; the UK established the e-University in 2001 as a collaborative project designed to give UK higher education the capacity to compete globally and as a primarily government-financed organization to develop online courses by working with professors at established British universities; in Germany, the Bavarian Virtual University opened in 2000; and in Africa, the African Virtual University has operated through the use of satellite and broadcast technology. The Open University of Catalunya in Spain is an online university that provides undergraduate, graduate, and lifelong learning programs in a diverse range of fields; in Sweden, there are plans to introduce the net-university (Pont & Sweet, 2003):

*In the U.K., the National Health Service (NHS) has established of its own corporate university that will focus on training and education for the NHS to support its modernization through virtual learning. (p. 10)*

In the world of VUs, the University of Phoenix definitely stands out (it has over 100 campuses in the U.S. and Puerto Rico, with installations in Canada and the Netherlands; that is, a virtual campus in which students/workers of the whole world participate). The University of Phoenix provides undergraduate and graduate degrees in business, technology, and education completely online; then the most outstanding example in Canada is Athabasca University, which focuses on open and DL and offers vocational and postgraduate titles in a large range of disciplines to both Canadian and foreign students (Mendivil, 2002).

### **Concepts of VUs and Globalization**

The technological evolution from an industrial society to one dependent on information and knowledge has forever altered how people learn, and providers of education are harnessing ICT to supplant the traditional classroom (Gladieux & Swail, 1999):

*Almost anything—text, data, images, video, audio—can be delivered electronically, almost anywhere in the world, almost anytime and in real time...technologies*

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