Chapter 6
Challenges and Opportunities for Virtual Universities in the 21st Century

Luisa Margarida Cagica Carvalho
Universidade Aberta, Portugal & CEFAGE, University of Évora, Portugal

ABSTRACT
This chapter aims to provide a theoretical approach concerning challenges and opportunities to virtual universities in 21st century. Virtual universities have an important role in capturing different audiences to the e-learning programs, such as long life learning, executive programs, etc. Additionally, the virtual model allows a more efficient internationalization of the education and improves the attraction of the students from several countries. Nevertheless, the virtual universities front some problems and challenges on the global education market and could be important to identify and present some good practices followed by virtual universities around the world. This chapter presents some remarks about virtual universities, the advantages and challenges fronted, and the case of the Portuguese virtual university, Open University of Lisbon, as a complement to the theoretical approach.

INTRODUCTION
The democratization of higher education and the emergence of the Information and Communication Technologies (ICT) represent a central argument for this change on boundaries (Guri-Rosenblit, 2001). ICT are implanted in economic and social structures of the several countries. ICT comes also as an important tool in education. Furthermore, ICT have encouraged higher education institutions to enter in the “distance education business” at various levels of experimentation and application (Bates, 1995, 1999; Evans & Nation, 2000; Khan, 1997; Littleton & Light, 1999; Rumble, 1996; Selinger & Pearson, 1999; Trow, 1999). ICT contributed to change the status of distance education within the academic world. Traditionally distance teaching was regarded as operating on the margins of higher education systems (Guri-Rosenblit, 1999). See Table 1 with the concept of distance education.

Currently, millions of people, traditional students and working adults students, are studying
Challenges and Opportunities for Virtual Universities in the 21st Century

Table 1. Distance learning

<table>
<thead>
<tr>
<th>Distance learning or distance education is a mode of delivering education and instruction on conditions which occur due to the limited traditional teaching-learning methods in a classroom where it is not possible to carry out in class activities and therefore the interaction and communication between the planners of educational activities and the practitioners and the students are provided from a specific centre via specially prepared teaching units and various means (Alkan, 1987: cited by Gurbuz, 2014). Distance learning is the most modern education system, which is independent of time, and distance, enables individualized education opportunities, and is implemented via information technologies and especially via Internet (Baturay &amp; Bay, 2009: cited by Gurbuz, 2014).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source: Gurbuz, 2014, p.240</td>
</tr>
</tbody>
</table>

through distance teaching methods for a plethora of reasons and purposes (Guri-Rosenblit, 2001).

Nevertheless, are yet in development new and more efficient ways to operate and to carry out pedagogical and organizational innovation (Ossiannilsson, 2011). In the last decade, digital world becomes popular in all learning and educational activities and push the boundaries in daily life, in a global sustainable environment (Bates, 2010; Bonk, 2009; Conole, 2010; Ehlers & Pawlowski, 2006).

Other authors (Ehlers & Svhneckenberg, 2010; Johnson et al, 2011; O’Reilly & Batelle, 2009) argue that there is no longer a need for definition for e-learning due their role and implications on a huge number of fields.

Bonk (2009) provide a new inside to this topic with the concept of ubiquitous learning (u-learning). This perspective focused on the personalisation and in learners’ rights and responsibilities.

Nowadays, several institutions offering distance teaching or using ICT, though there are differences influenced by different academic cultures dominant in various higher education systems (Rothblatt, 1997). These cultural differences influence the adoption of new traditions and teaching innovations (Guri-Rosenblit, 2001). Its possible to note important differences among different higher education systems in their attitudes towards distance education.

Furthermore, other studies suggest that more rigorous research is required in the field of state-level virtual universities (Xu & Morris, 2009). Some conclusions about this topic are based on opinions and in the individual case reports and not on rigorous research methods, and reveal limitations to understanding the concept of virtual university (Epper & Garn, 2003; Smith, 1998; Wolf & Johnstone, 1999) or the organizational models of virtual universities (Dutton & Loader, 2002; Farrell, 1999; Hanna, 2000), and created various frameworks to analyze policies and structures of virtual universities (Berge, 1998; Gellman-Danley & Fetzer, 1998; Rosevear, 1999).

This chapter are organized in the following sections; virtual universities (provide some remarks about the models of virtual universities); dimensions of e-learning (explore the e-learning methodologies, attending to the student behaviour and attitudes); technology and e-learning (consider the impact and relation of the technology with e-learning); instructional strategies (explain some instructional strategies to achieve learning objectives); virtual universities (virtual universities front some problems and challenges on the global education market in XXI century); quality challenge (quality is a challenge and a key factor fronted by virtual universities); the case of Open University – Portugal and some remarks and good practices.

VIRTUAL UNIVERSITIES:
SOME KEY REMARKS

Accompanying global technological changes education changed tremendously over the last years. Technology, mainly Information Technology (IT)
Related Content

User Interface Design Pedagogy: A Constructionist Approach
[www.igi-global.com/article/user-interface-design-pedagogy/38987?camid=4v1a](www.igi-global.com/article/user-interface-design-pedagogy/38987?camid=4v1a)

Bridging the Gap with MAID: A Method for Adaptive Instructional Design
[www.igi-global.com/chapter/bridging-gap-maid/27437?camid=4v1a](www.igi-global.com/chapter/bridging-gap-maid/27437?camid=4v1a)

E-Learning in Taiwan’s Higher Education: Policies, Practices, and Problems
[www.igi-global.com/article/learning-taiwan-higher-education/2279?camid=4v1a](www.igi-global.com/article/learning-taiwan-higher-education/2279?camid=4v1a)

The Effects of Online Interactive Games on High School Students’ Achievement and Motivation in History Learning
Kuan-Cheng Lin, Yu Che Wei and Jason C. Hung (2012). *International Journal of Distance Education Technologies* (pp. 98-105).
[www.igi-global.com/article/effects-online-interactive-games-high/73937?camid=4v1a](www.igi-global.com/article/effects-online-interactive-games-high/73937?camid=4v1a)