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The use of ICT for Teaching and Learning in South African Higher Education Institutions

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INTRODUCTION

A shift towards new technologies in teaching and learning is considered part of the solution to addressing the changing learning needs of societies. It is also taken to be the answer to the need to do more with less. An example of doing more with less would be the potential to attract more students (Gultig, 1999), and serve these increasing numbers of students through the use of an Learning Management System (LMS) without increasing the number of educators, and without compromising the quality of teaching and learning (Mlitwa, 2005). In this case, e-Learning management system can be used by one educator and accessed by a much greater number of learners than would have been the case in the traditional classroom, simultaneously. Reasons according to Bates (2000: 8) include "the changing learning needs of society", "the need to do more with less" and "the impact of new technologies on teaching and learning".

The flexible capabilities of learning management systems (LMSs) have led to an increasing acceptance of web-enabled e-Learning tools among institutions of higher education globally in the early parts of the 21st century (Czerniewicz, et al, 2007). The University of the Western Cape (UWC) in South Africa, has completely moved to the Knowledge Environment for Web-based Learning (KEWL) as their e-Learning platform (UWC e-Learning, online; Angel, online). KEWL is an Open Source product that is available free to anyone who wishes to use it for educational, commercial or any other purpose (Beebe, 2003). The University of Cape Town (UCT) uses an open-source learning, collaboration and research content management system known as VULA (UCT, online) for similar purposes. Similarly, the Cape Peninsula University of Technology (CPUT) and the University of Stellenbosch (in South Africa) are using a proprietary learning management system known as WebCT and blackboard (CPUT, online; Stellenbosch, online) as an e-Learning platform to support teaching and learning processes, to mention just a few examples.

The reason is that e-Learning covers a wide range of instructional material that can be delivered over a local area network (LAN) or on the Internet to provide the learner with information that can be accessed in a setting free from time and place constraints, at his or her own pace (Light & Light, 2009). The purpose is usually to enhance knowledge and performance, hopefully by offering learners control over content, learning sequence, pace of learning, time, and often media, allowing them to tailor their experiences to meet their personal learning objectives (Caeiro, 2002). So, networked technology, including the Internet, Intranet, extranet, TV, cell phones, and other personal organizers that could offer these learning advantages in varying scales for a student may constitute an