



Chapter 14

First-Year Students' Experience With Virtual Learning Environment

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ABSTRACT

The integration of ICT in the education system has led to the continuous development and adoption of technology-enhanced learning (TEL) platforms such as the virtual learning environment (VLE) to facilitate and activate TEL practices in higher education institutions. The use of VLE such as MOODLE and Blackboard is proliferating; however, the experience of users in determining the relevance of VLE in enhancing teaching and learning has been identified to be an important factor in the successful use of VLEs. This chapter employed a quantitative method to examine students' experience in using VLE at the University of KwaZulu-Natal. The chapter also presents the result of the investigation into the influence of students' computer self-efficacy on their perceived ease of use, usefulness, and attitudes towards the use of VLE. The results of this study show that students believe that VLE enhances their learning. Furthermore, the results show that self-efficacy has a weak influence on students' perceived ease of use, perceived usefulness, and attitudes towards the use of VLE.

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INTRODUCTION

The continuous evolution of Information and Communication Technology (ICT) is necessitating organisations to adopt the use of technology and to come up with innovative technology-related ideas. The adoption of ICT by educational institutions has necessitated the restructuring and evolution of teaching and learning approaches (Sumak, Polancic & Heric, 2010; Keller, 2005). According to Ngom, Guillermet & Niang (2012), some of the changes observed in the current teaching and learning approaches, is as a result of the integration of ICT into teaching and learning. Examples of such changes can be seen in modern student assessment methods, which are moving from paper-based to computer-based methods (Piaw, 2012; Jamil, Tariq, Shami & Zakariys, 2012).

The increasing use of ICT in institutions has resulted in many educational activities (such as student registration, student assessment, teacher-student communication, etc.) being facilitated by technological tools (Goyal & Purohit, 2011). The use of technological tools to facilitate teaching and learning has also led to new teaching and learning approaches (Kumar, Gankotiya & Dutta, 2011), such as distance and open learning (Simpson, 2018) and mobile learning (Crompton & Burke 2018).

There are two major types of knowledge sharing systems: the traditional classroom system and the technology-enhanced learning (TEL) system (Kumar *et al.*, 2011). The traditional classroom system is a learning system where the teacher imparts knowledge to students through physical interaction, while with the TEL knowledge sharing system, there may be no physical interaction, and knowledge is mostly communicated to students with the aid of technology (Kumar *et al.*, 2011). The TEL knowledge sharing system has brought about an electronic learning paradigm known as E-learning. According to Pusnik, Sumak & Heric (2010, p. 1), "E-learning is a term for all types of technology-enhanced learning services and processes, including computer-based learning, web-based learning, virtual classroom, etc."

E-learning is used interchangeably with TEL. In this chapter, TEL will be used instead of E-learning, which is a form of learning that makes it possible to communicate knowledge to students irrespective of their location and the time of the day. TEL tools, such as audiovisual systems, instant messengers, and forums are now being integrated to form a learning space known as a virtual learning environment (VLE). A VLE, which is also referred to as a Course Management System (CMS) or Learning Management Systems (LMS) (Chan & Robbins, 2006), can be described as an information system, that could take the form of a web application designed to facilitate teaching and learning (Dillenbourg, Schneider & Synteta, 2002). A VLE is a virtual space where activities such as creation, dissemination, and acquisition of knowledge are accomplished through the use of technological tools.

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