

From Learning Management Systems to a Social Learning Environment: A Comparative Review and the Implications

Suleiman Ali Alsaif, La Trobe University, Melbourne, Australia

Alice S Li, La Trobe University, Melbourne, Australia

Ben Soh, La Trobe University, Melbourne, Australia

Mohammed A. AlZain, Taif University, Ta'if, Saudi Arabia

Mehedi Masud, Taif University, Ta'if, Saudi Arabia

ABSTRACT

Since the advances in information and communication technologies, educational technology has been a priority research topic for academics, technology specialists and educational system developers. The objective of the study in this article is to evaluate the current learning systems and to shed the light on applications of social networking sites in higher education environment. To this end, the authors review the available alternative learning models with a view to achieving the most appropriate comprehensive and integral learning model. This article explores and compares the current advanced web-based educational services. It then demonstrates and discourses on the available Web 2.0 tools and social networking applications that can be used to foster learning activities and informal learning environments.

KEYWORDS

Learning Management System, SNS, Social Learning, Social Networking Sites, Web 2.0

INTRODUCTION

Since the advances in information and communication technologies, educational technology has been a priority research topic for academics, technology specialists and educational system developers. The emergence of the E-learning concept has led many researchers to deeply study these technologies and evaluate its status quo. Thus, a large volume of research has been conducted to develop the current learning management systems (LMSs). Another stream of research focuses on integrating advanced web technologies and social networking applications in the learning environment. The objective of our study in this paper is to evaluate the current learning systems and to shed the light on applications of social networking sites in higher education environment. Our investigation is a part of the body of literature on integrating advanced web tools of social networking sites (SNSs) and ubiquitous computing for knowledge acquisition skills. The scope of our study is focused on

DOI: 10.4018/IJSEUS.2019010101

comparing the advantages and disadvantages of LMSs and advanced web tools of SNSs in higher education instruction.

BACKGROUND

The teaching and learning environment has been influenced by the revolutionary era of ICT. The evolution of instructional methods using computer technologies has developed over several stages. Several terms are used to describe the use of computers as a tool to assist education, for example, computer-assisted instruction (CAI), computer-based instruction (CBI), and computer-assisted learning (CAL). CAL appeared in the USA in the 1950s and 1960s, supported by Stanford University; CBI was introduced in the early 1960s as an instructional tool for tutorials, testing and managing learning programs (Kulik & Kulik, 1991).

E-learning is the broadest stream of learning and teaching conducted by electronic media and web services. It covers all types of learning using different multimedia formats (audio/video) over the Internet, intranet or extranet. All these aforementioned endeavors to implement e-learning in the learning process are ultimately directed toward a complete automated learning and teaching environment which is the concept underpinning LMSs (Govindasamy, 2001).

LMSs are the result of the merging between the computer industry and Internet services. The first LMS appeared in the 1960 with the advent of a learning system named PLATO.com at the University of Illinois. LMSs are platforms designed to facilitate the learning experience, making learning materials remotely available, anytime and anywhere. Ellis (2009) defined an LMS as “a software application that automates the administration, tracking, and reporting of training events”. It is the substructure software that facilitates and controls learning materials, defines and appraises learners and communicates academic institutions’ objectives, manages learning progress and observes learning processes and the learning environment (Pilli, 2014). LMSs are mostly characterized by the following features:

- Provides the central and automatic administration of the whole system;
- Provides integral and swift delivery of content;
- Integrates training practices with Internet services;
- Enables self-directed learning;
- Provides ubiquitous and support standards;
- Customizable for personal needs;
- Allows circulation of knowledge (Ellis, 2009).

LMSs have been broadly used by universities and academic institutions around the world. The most dominant LMSs used at universities are Blackboard.com and Moodle.com, discussed in the following sub-sections.

Blackboard

Blackboard is the most dominant commercial system in the marketplace of LMSs, being the most used LMS in American and European universities. Blackboard was developed to provide learners with an additional learning platform that assists teaching, communication and assessment. It was developed in 1997 by Matthew Pittinsky and Michael Chasen, who were education advisors. The following year, Blackboard merged with another course management software system called CourseInfo LLC. Since then, Blackboard has gone through different development stages, starting with obtaining Richmond-based MadDuck Technologies in 2000 followed by the purchase of learning software companies, CampusWide and Promethius, and in 2004 they merged with another software company, WebCT,

16 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/article/from-learning-management-systems-to-a-social-learning-environment/218222

Related Content

Getting Past Our Assumptions about Web 2.0 and Community Building: How to Design Research-Based Literacy Pedagogy

Kevin Eric DePew, Sarah Spangler and Cheri Lemieux Spiegel (2014). *Emerging Pedagogies in the Networked Knowledge Society: Practices Integrating Social Media and Globalization* (pp. 120-143).

www.irma-international.org/chapter/getting-past-our-assumptions-about-web-20-and-community-building/96057

Double the Trouble or Twice as Nice?: Defining Participation for Practice and Research

Lisa Haskel (2014). *International Journal of Sociotechnology and Knowledge Development* (pp. 18-26).

www.irma-international.org/article/double-the-trouble-or-twice-as-nice/129534

Strengthening and Enriching Audit Practice: The Socio-Technical Relevance of "Decision Leaders"

Peter A. C. Smith (2013). *Knowledge and Technological Development Effects on Organizational and Social Structures* (pp. 97-108).

www.irma-international.org/chapter/strengthening-enriching-audit-practice/70564

Exploring the Need of Social Change Leadership Concerning Health Communication and Health Disparities During the COVID-19 Pandemic

Delores Springs, Darrell Norman Burrell, Anton Shufutinsky, Kristine E. Shipman, Tracie E. McCargo and Kim L. Brown-Jackson (2022). *International Journal of Sociotechnology and Knowledge Development* (pp. 41-54).

www.irma-international.org/article/exploring-need-social-change-leadership/288866

GIS and GPS Applications in Emerging Economies: Observation and Analysis of a Chinese Logistics Firm

Bin Zhou, Jeffrey Hsu and Yawei Wang (2012). *Societal Impacts on Information Systems Development and Applications* (pp. 51-67).

www.irma-international.org/chapter/gis-gps-applications-emerging-economies/65002