

## Chapter 86

# End User Perspective of E-Learning Using LMS-Like Systems

**Robert Costello**  
Newcastle College, UK

### ABSTRACT

*In literature, e-learning plays an important part in improving the needs of learners and educators, as well as other stakeholders and institutions. However, this research indicates that e-learning is often used as a repository for uploading academic materials, without taking into consideration characteristics of the learner. This investigation examines a variety of techniques adopted from e-learning, adaptive learning and User Modelling to suggest improvements within industry. Throughout the paper, there will be a strong influence on how future PLEs should be designed and tailored to challenge the end users' perception of on-line education to meet the future needs of the learner, the educator and the institution. Focusing on future trends would allow developers to encapsulate learners motivational and learning needs. These aspects would enable designers to improve usability, functionality and reliability. PLEs are not just a collection of applications tailored towards personalisation, they are significantly more important than that. These systems are designed to be a functioned application/platform/management-system that promotes and encourages Personalised Learning. The research found within the case studies have shown that concepts of PLEs have contributed towards the learners' experience.*

### INTRODUCTION

The landscape of learning and teaching has changed in recent years because of web-based technologies. Among the most representative innovations is that of e-Learning as a tool, which uses web-based platform technology to provide training and development in the education industry. Van Raaij and Schepers (2008) agrees with Sampson and Karagiannidis (2002) and Derouin et al. (2005) about e-learning being a powerful tool for the teacher and suggests that a “VLE is a web-based communications platform, that allows students, without limitation of time and place, to access different learning tools” (p. 840). Liaw

DOI: 10.4018/978-1-5225-5643-5.ch086

(2008) suggests that there are other factors that might contribute to the dissatisfaction of e-learning for learners and that is to do with “absence of a learning atmosphere”, “e-learning lacks interpersonal and direct interaction among students and teachers”, and sometimes the design of the educational curriculum is not carefully thought out (Liaw 2008, Sun et al., 2008).

According to Kozaris (2010) e-learning tries to create the direct opposite of what Liaw (2008) and Sun et al. (2008) call an “absence of a learning atmosphere.” Kozaris (2010) indicates that on-line learning is trying to deliver “...many enhancements to the teaching and learning experience; the largest impact occurs when the technology enables social and collaborative interaction where an individual person, students, or parties build actively their understanding...”

As indicated by Sampson and Karagiannidis (2002), Coats et al. (2005), Kozaris (2010) and Conder et al. (2014) e-learning environments are tailored around the Learning Management Systems (LMS) that provide the technology infrastructure for which the educational materials can be delivered. Sclater (2008) suggests that current Learning Management Systems like that of Blackboard, Moodle and Canvas are controlling the educational creativity of the individuals. Personalised learning “...should not be restricted by time, place or any other barriers, and should be tailored to the continuously modified individual’s learner’s requirements, abilities, preferences, background knowledge, interests, skills, etc....” (Sampson and Karagiannidis, 2002, p. 2).

McLoughlin and Lee (2010), Conder et al. (2014) and Rahimi et al. (2015) agrees with Sampson & Karagiannidis (2002) that personalisation within e-learning is important and indicates that there is a growing shift within education that is allowing the learner to take more autonomy in their own learning through the use of social media, and web-based platforms like that of: wikis, Eduwiki, Twitter, Skype, YouTube, GoogleDocs, etc.

This paper looks at what factors and issues are important when evaluating e-learning environments from an end user perspective. Throughout the paper, there will be a strong influence on how future PLEs should be designed and tailored to challenge the end users’ perception of on-line education. There will be a strong focus on future trends to enable developers to consider the use of LMS-like systems to encapsulate learners motivational and learning needs and the limitations of these approaches, as these are only a phase tool. The main research aim of this paper is to look at the future trends of PLEs along with a case study to see what benefits these can bring to an academic institution that integrates these LMS-like systems. PLEs are not just a collection of applications tailored towards personalisation, they are significantly more important than that. These systems are designed to be a functioned application/platform/management-system that promotes and encourages Personalised Learning. It is important to harness social media and incorporate tools like YouTube, LinkedIn, WeChat, ResearchGate, ShareNet and other social media platforms too. It is important for developers to incorporate those tools or aspects from other social media platforms as the learners would have already have mastered skills and concepts via previous experience. Throughout this section, different areas of on-line learning will be examined and the issues associated with them:

- e-Learning environments and issues;
- Adaptive Information Retrieval;
- User Modelling;
- Research in Personal Learning Environments;
- Issues with Personal Learning Environments;
- Incorporating the End-User Perspective into what a future PLE could be.

33 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/chapter/end-user-perspective-of-e-learning-using-lms-like-systems/205866](http://www.igi-global.com/chapter/end-user-perspective-of-e-learning-using-lms-like-systems/205866)

## Related Content

---

### A Study of Vision based Human Motion Recognition and Analysis

Geetanjali Vinayak Kale and Varsha Hemant Patil (2016). *International Journal of Ambient Computing and Intelligence* (pp. 75-92).

[www.irma-international.org/article/a-study-of-vision-based-human-motion-recognition-and-analysis/160126](http://www.irma-international.org/article/a-study-of-vision-based-human-motion-recognition-and-analysis/160126)

### MapReduce Implementation of a Multinomial and Mixed Naive Bayes Classifier

Sikha Bagui, Keerthi Devulapalli and Sharon John (2020). *International Journal of Intelligent Information Technologies* (pp. 1-23).

[www.irma-international.org/article/mapreduce-implementation-of-a-multinomial-and-mixed-naive-bayes-classifier/250278](http://www.irma-international.org/article/mapreduce-implementation-of-a-multinomial-and-mixed-naive-bayes-classifier/250278)

### TS2LBDP: Design of an Improved Task-Side SLA Model for Efficient Task Scheduling via Bioinspired Deadline-Aware Pattern Analysis

Pallavi Shelke and Rekha Shahapurkar (2022). *International Journal of Intelligent Information Technologies* (pp. 1-13).

[www.irma-international.org/article/ts2lbdp/309586](http://www.irma-international.org/article/ts2lbdp/309586)

### Fuzzy Critical Path Method Based on a New Approach of Ranking Fuzzy Numbers Using Centroid of Centroids

N. Ravi Shankar, B. Pardha Saradhi and S. Suresh Babu (2017). *Fuzzy Systems: Concepts, Methodologies, Tools, and Applications* (pp. 1690-1707).

[www.irma-international.org/chapter/fuzzy-critical-path-method-based-on-a-new-approach-of-ranking-fuzzy-numbers-using-centroid-of-centroids/178459](http://www.irma-international.org/chapter/fuzzy-critical-path-method-based-on-a-new-approach-of-ranking-fuzzy-numbers-using-centroid-of-centroids/178459)

### Relationships Between Artificial Intelligence and Emotions in Education: A Literature Review From Latin America

Gabriela Vergara and Solana Salessi (2024). *AI and Emotions in Digital Society* (pp. 23-46).

[www.irma-international.org/chapter/relationships-between-artificial-intelligence-and-emotions-in-education/335331](http://www.irma-international.org/chapter/relationships-between-artificial-intelligence-and-emotions-in-education/335331)