

Chapter 17

Evaluating E-Learning from an End User Perspective

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ABSTRACT

Evaluating e-learning is an important measure for quality control, which aims to improve the whole e-learning environment through taking into consideration users' perceptions and needs, as well as participants, stakeholders, and institutions. However, literature does indicate that institutions are only using e-learning as a repository for uploading academic materials, instead of taking into consideration of features and the learner. This chapter examines a variety of evaluation techniques adopted from e-learning, personalised learning, and User Modelling to suggest improvements within the industry to challenge the end users' perceptions of on-line education.

INTRODUCTION

According to Stojanovic et al. (2001), Nichols (2003), and Alsultanny (2006), e-learning is an efficient, effective way of providing a just-in-time learning approach by offering a dynamically changing technological environment that aims to replace old-fashioned time-place content learning.

E-learning is part of the biggest change in the way our species conducts training since the invention of the chalkboard or perhaps the alphabet. The development of computers and electronic communications has removed barriers of space and time. We can obtain and deliver knowledge anytime anywhere (Welshe et al. 2003, p. 1).

E-learning is essentially comprised of three main features: Web-based infrastructures/technologies; pedagogical learning theories; and standards, which include SCORM and LOM. By using e-learning within education can provide a variety of benefits not just to the learners but also the university itself by reducing overheads, improved environmental factors as resources are stored and uploaded on-line, and provide learning materials 24 hours a day, 7 days a week.

Many educational institutions across the United Kingdom have focused on bringing e-learning to the individual user, by the use of several different commercial on-line educational mediums, the most pertinent of which to this research are outlined below.

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This chapter looks at what factors and issues are associated when evaluating e-learning environments from an end user perspective. Throughout this section, different areas of on-line learning will be examined and the issues associated with them.

- E-learning environments and issues.
- E-learning 2.0.
- User Modelling.
- Research in Personalised learning – An Overview.
- Issues with Personalised learning Environments.
- Evaluating e-learning from a end user perspective.

E-Learning Environments and Issues

Many e-learning frameworks try to provide mechanisms that encourage the learning experience to be more pleasurable and are designed around the concept of the student as the focus. According to Treviranus et al. (2006), e-learning frameworks are technology applications that are adaptable and accessible to end user requirements. Many educational institutions across the United Kingdom have focused on bringing e-learning to the individual user, by the use of several different commercial on-line educational mediums, the most pertinent of which to this research are outlined below.

In 1997, the company Blackboard was formed as an educational consultancy, and merged with CourseInfo LLC in 1998, producing shortly after their first commercial Learning Management System (LMS). Over a short amount of time Blackboard acquired through merger new organisations and new technologies leading to a merger in 2005 with Web CT a leading MS used in Higher and Further Education at the time. Following this merger Blackboard emerged as the leading LMS in the market.

Just of recently within the current social economic downtime due to over satiation of e-learning market, Blackboard has now purchased several

open sourced companies from Moodle in March 2012. This approach enables Blackboard to share ideas, research, and offer different environments to academic institutions to tailor for personalised learning.

Another prominent e-learning package that is used throughout the United Kingdom is called Modular Object-Oriented Dynamic Learning Environment (Moodle). According to Dougiamas et al. (2001), Moodle is open source software, offering course management for learning resources. It also integrates communication tools, supports timed quizzes, manages assignment submissions etc.

More recent developments have seen the platform SAKAI gain footholds in the learning management sector. SAKAI is a rich functional tool, developed as an open source system, incorporating learning standards based materials using the SCORM standard and offering similar functionality to Blackboard and Moodle (Falmer et al. 2005).

Xu et al. (2003) and Dalsgaard (2006) indicate that not all LMS's are the same; however, they do have similarities and attributes which belong only to them. LMS are used to organise and manage e-learning courses including the management of students' details, discussion forums, file sharing, management of assignments, etc... LMS's use a variety of different tools to run and manage e-learning courses (Xu et al. 2003). In addition to the LMS which are integrated into a large number of educational institutions, individuals have experimented with the use of more semantically oriented system designs.

According to Siemens (2004), traditional LMS focus directly on features, facilities and tools as a centre point instead of a personalised approach that would allow more control to the end-users, instructors, and learners. As indicated by Siemens *while LMS are useful for certain learning functions, advanced thinking skills and activities (i.e. the more learning mimics real life) require a move away from one-tool-does-it-all,*

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