

CENTERIS 2012 - Conference on ENTERprise Information Systems

## The use of Moodle e-learning platform: a study in a Portuguese University

Carolina Costa<sup>a,\*</sup>, Helena Alvelos<sup>a,b</sup>, Leonor Teixeira<sup>a,b,c</sup>

<sup>a</sup>University of Aveiro, Department of Economics, Management and Industrial Engineering, Campus Universitário de Santiago, 3810-193 Aveiro, Portugal

<sup>b</sup>University of Aveiro, Governance, Competitiveness and Public Politics (GOVCOPP), Campus Universitário de Santiago, 3810-193 Aveiro, Portugal

<sup>c</sup>University of Aveiro, Institute of Electronic and Telematics Engineering of Aveiro (IEETA), Campus Universitário de Santiago, 3810-193 Aveiro, Portugal

---

### Abstract

This article describes a study carried out at the University of Aveiro (UA), Portugal that analyses the functionalities and tools of the Moodle platform and their use by the students. The data was collected based on content analysis, one non structured interview with the responsible of the Moodle from UA and a questionnaire applied to 278 students. The results show that despite Moodle has a great potential, it is mainly used as a repository of materials. However, students recognize the importance of the use of other functionalities of this platform in order to promote the success of the teaching/learning process.

© 2012 Published by Elsevier Ltd. Selection and/or peer review under responsibility of CENTERIS/SCIKA - Association for Promotion and Dissemination of Scientific Knowledge

*Keywords:* e-learning; e-learning platforms; Moodle; Higher Education.

---

### 1. Introduction

Nowadays it is not possible to think about the teaching and learning process without associating it with the Information and Communication Technologies (ICTs). Actually, ICTs are present in all processes that involve

---

\* Corresponding author. Tel.: +351 234370361; fax: +351 234370215.  
E-mail address: [carolinacosta@ua.pt](mailto:carolinacosta@ua.pt).

collection of data, processing of information and knowledge creation, being the teaching and learning one of the most typical processes having these characteristics.

ICTs play an important role in education, having a special relevance in the instructional component, supported by Learning Management Systems (LMS), such as Moodle. However, these platforms have many capabilities provided that they are used in their fullness. For example, interaction, feedback, conversation and networking are some of the possible actions using learning platforms. Furthermore, they provide a lot of opportunities to explore new methods of teaching and learning. Particularly, the Moodle platform adopted by the University of Aveiro (UA) integrates several modules which allow creation, organization, delivery, communication, collaboration and assessment activities.

The present paper analyses the main functionalities and tools available in the Moodle platform and their use by the UA. Additionally, it discusses the results of a study carried out in the Department of Economics, Management and Industrial Engineering (DEGEI) through the application of a questionnaire to students with the objective of characterizing the use they make of the Moodle and of its main tools. In this way, the paper intends to contribute to a systematization of the activities and the respective modules provided by Moodle, as well as their importance in the students' perspective, revealed in an exploratory study.

## **2. E-learning platforms**

There are different expressions used to describe educational computer applications, such as e-learning Systems, Learning Management Systems (LMS), Course Management System (CMS) or even Virtual Learning Environment (VLE). In these systems, students can access courses' contents in different formats (text, image, sound), as well as interact with teachers and/or colleagues, via message boards, forums, chats, video-conference or other types of communication tools [1]. These platforms provide a set of configurable features, in order to allow the creation of online courses, pages of subjects, work groups and learning communities [2]. In addition to the pedagogical dimension, these systems have a set of features for registering, monitoring and evaluation activities of students and teachers, enabling the contents' management via Internet. According to the approach of Piotrowski [3], an e-learning platform represents a system, which provides integrated support for six different activities: creation, organization, delivery, communication, collaboration and assessment.

In a technical perspective, there are different types of LMS, some of them representing commercial solutions (such as Blackboard/WebCT) and others open-source solutions (such as Moodle). Regardless the type, several studies revealed the existence of strong advantages on using e-learning platforms [4-6], however, their adoption involves some challenges to the institutions as well as an appropriate choice of the technologic platform.

Concerning open-source solutions, there are some studies that identify the Moodle (Modular Object-Oriented Dynamic Learning Environment) as the most used platform in higher education, as well as the most easy to use [2, 7-14].

### *2.1. Moodle platform*

The Moodle represents one of the most widely used open-source e-learning platforms, that enables the creation of a course website, ensuring their access only to enrolled students [15]. This platform allows the exchange of information among users geographically dispersed, through mechanisms of synchronous (chats) and asynchronous communication (discussion forums). In a functional perspective, it has easily configurable features, allowing the creation of student assessment processes (quizzes, online tests and surveys), as well as managing their tasks with their timetable [4, 16-17], besides offering a wide variety of complementary tools to

متن کامل مقاله

دریافت فوری ←

**ISI**Articles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات