TRAINING FOR THE USE OF MOODLE IN UNIVERSITY

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Abstract

1 INTRODUCTION

The Universitat Politècnica de Catalunya (UPC) [1] is a public institution dedicated to higher education and research with 8,887 Graduate and undergraduate students, 1,858 Master's degree students and 2,912 Doctoral students in 2008-09.

During the first semester of 2005-2006 UPC had conducted a pilot test of Moodle and the participation was as follows: 132 Subjects, 320 Moodle Courses, 216 Teachers, 2 908 Students. At the beginning of the academic year 2006-2007, Moodle has been implemented as technology-based of virtual campus Atenea. Nowadays Atenea is used by more than 70 000 UPC members and 21 948 Moodle courses are set. It can be pointed that Spain is the second country in Moodle registered sites [2].

In 2009, some professors and associate professors of the ESAB (School of Agricultural Engineering of Barcelona) [3] formed a group to promote the use of the Moodle platform among their colleagues. This group GIUM-A (Group Interest in the Use of Moodle) and other groups related to innovation and research in education (RIMA-ICE-UPC) are open to members of other universities [4].

The main objective of this group was to establish some common criteria in the design and implementation of the tools of the virtual learning environment Moodle at the School of Agricultural Engineering of Barcelona. As secondary objectives:

(1) To obtain synergies between different subjects, so they could share modules (glossaries,) (2) To establish some evaluation strategies that include self-assessment and fast feedback of test.(3) To increase the use of the Moodle platform as lectures support.

In this work, we include subjects in the new degree courses adapted to the EHEA (European higher education area), which began in the 2009-10 academic year (Table 1)

Table.1 Subjects involved in the experience.

Subjects	Curriculum	Year course
General biology	Degrees in Bio-systems Engineering	1st
Environmental Sciences	Degrees in Bio-systems Engineering	1st
Crop protection I & II	Agricultural Engineering	2nd
Agricultural machinery	Agricultural Engineering	2nd
Hydraulic	Agricultural Engineering	2nd
Packaging	Agricultural Engineering	2nd
Meat Industry	Agricultural Engineering	2nd

2 WORK SPACE

The meeting point for all students, teachers and responsible for the operation of the space Athena is the gateway that can be seen in Figure 1.

Figure 1 Atenea front page

Atenea began with 1.4.4 Moodle version and since July 2009 is running 1.9.4 Moodle version [5].

3 ACTIVITIES

During 2008-09 academic year, GIUM-A group has prepared some activities to achieve their objectives. All of them were supported by Institut de Ciències de l'Educació of Universitat Politècnica de Catalunya [6], mainly with the organization of some courses, but also with funding projects.

The main activity was:

Members of the group from the ESAB [3] prepared some courses for others members of ESAB staff to use Moodle:

1) A general course of using Moodle

2) Specific course about the module of questionnaires in Moodle

These courses were done during the first half of the course of 2008-09 academic year and were repeated two times. The total attendance was more than 50% of the total professors of the institution.

As a parameter to measure the courses impact in the use of Moodle, we got the Moodle Stats of the use of modules from Athena, and we made surveys to teachers and students.

4 RESULTS

The results to date in the first development phase of the study show that after the completion of the courses from and for ESAB professors some significant increases were obtained in the use of these tools in Moodle, as well as a greater involvement in the design of virtual material. Table 2 presents usage Stats of modules, during the 1st ½ course, 2nd ½ course of 2008-09 academic year, and the increase in percentage statistics for the various Moodle tools.

Table 2. Moodle Stats of modules use during 1st ½ course, 2nd ½ course of 2008-09 academic year and increase in use after the delivery of courses.

Module	1st ½ course 2008-09	1st ½ course 2009-10	INCREASE
Labels	225	250	11,1%
Forum	14277	16802	17,7%
Glossaries	20	847	4135,0%
Quiz	4333	10980	153,4%
Resource	76206	89721	17,7%
Assignment	3046	5282	73,4%
TOTAL	98107	123882	26,3 %

A highlight of these results is the increased use of all modules, specifically those related to specific courses (Glossary and Questionnaires).

The results of surveys show that students of the different subjects viewed positively the use of Moodle quiz for self-assessment. Teachers who use this tool pointed out that some queries that were repeated in other courses in sessions had decreased. Using Moodle questionnaires for examinations or evaluable assignments was also appreciated by the students. It highlighted the rapid attainment of the outcome, allowing them to reflect on the time on learning content. Although some students pointed out that they felt more comfortable in a traditional exam, writing in paper. For teachers, in addition to the rapid self-correction of the system, the ability to view real-time failures and successes of the tests made them rethink some sessions.

The group GIUM-A will continue developing its goals in the next academic year:

Objectives aimed at teachers:

- To establish common criteria when designing and implementing e-learning tools in Moodle
- To disseminate guidelines for appropriate use Moodle between teachers (to facilitate access to the student)
- To improve the use of Moodle as support to the teaching activity

Objectives aimed at students:

- To assess their impact on active learning for students throughout the education
- To develop educational material different from traditional, more innovative
- To promote a more effective learning, dynamic and autonomous using Moodle

5 REFERENCES

[1] Universitat Politecnica de Catalunya Barcelona Tech http://www.upc.edu/

[2] Stats Moodle org http://moodle.org/stats/

[3] ESAB School of Agricultural Engineering of Barcelona http://www.esab.upc.edu/studies

[4] Grups Rima http://www.upc.edu/rima

[5] Description page of Atenea http://www.upc.edu/atenea/un-poco-de-historia/un-poco-de-historia-1?set_language=es

[6] Institut de Ciències de l'Educació http://www.upc.edu/ice/