Choosing MOODLE: An Evaluation of Learning Management Systems at Athabasca University

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ABSTRACT

Athabasca University—Canada’s Open University evaluated learning management systems (LMS) for use by the university. Evaluative criteria were developed in order to ensure that different platforms were tested against weighted criteria representing the needs of the university. Three LMSs (WebCT, LotusNotes, and Moodle) were selected for the evaluation. Moodle was chosen with 11 first place ratings and with only one third place rating. Lotus Notes was second with five first place ratings. Moodle garnered 40% of the total weighted score with Lotus Notes getting 32%, and WebCT 29%. The first place preferences within individual criteria show the following: WebCT 6; LotusNotes 7; and Moodle 58.

Keywords: learning management system; WebCT

INTRODUCTION

At Athabasca University (AU), a learning management system (LMS) committee was struck to report to the Academic Council composed of up to 30 faculty and staff members. The LMS committee discussed strategies for making the transition to a single learning management system as was identified in the AU Strategic University Plan (SUP) (Athabasca University, 2002 #1). In the AU SUP developed in 2002, the university community decided that the future development of the university’s learning systems required the adoption of a single learning management system. Three LMSs were proposed for evaluation, WebCT, Lotus Notes, and Moodle. WebCT was being used by faculty in the Centre for Nursing and Health Studies and in the Master of Distance Education programs.
Lotus Notes was being used in two different formats, by the School of Business and the Centre for Innovation and Management. Another LMS, Bazaar, which was developed at AU and was being used by smaller groups in the Master of Arts in Integrated Studies program, was not considered, as it did not garner significant support for continuation among faculty.

The final evaluation of these LMSs was conducted through a rating system. This rating system was based on different criteria, including the university’s mandate as an open distance learning institution, systems administration, initial and ongoing costs, instructional design features, and the teaching and learning tools available.

Mandate
The chosen LMS would need to accommodate the unique nature of AU’s mandate as an open distance education institution. In choosing an LMS, the evaluation committee members considered the need for:

- Flexibility in start and end dates for students enrolling in courses
- Support for paced and individualized study courses
- Affordability for students
- Accessibility for students with disabilities
- Access at different connection speeds (dial-up vs. high speed)

Systems Administration
Systems administration features had to facilitate:

- Integration with current registration procedures
- Single sign on capabilities and compatibility with current authentication systems
- Flexible administration across centres and programs
- Secure access, authorization, and virus protection
- Interoperability using SCORM, IEEE LOM, and CanCore

Cost
The price tag for the system chosen was an important consideration, and included:

- Licensing fees
- Hardware and software costs
- Costs related to integration with the Banner registration system
- Cost of ongoing support (external and in-house)
- Staff training costs

Instructional Design
Most of the criteria listed under this category in the Appendices tables are self-explanatory. Some require further explanation:

- Granularity refers to the LMS’s capacity to separate content from presentation so that the content can be reused or redirected, accommodating content delivery on a variety of devices, including mobile devices and sharing learning objects across courses.
- Templates and modularization refers to the LMS’s capacity for customizing the look and feel of different AU Centres and programs.
- Student Experience refers to the intuitive logical layout in the LMS from the students’ point of view, if it supports standard Web browsing, multiple platforms, systems, low bandwidth, and Java.

Teaching and Learning Tools
Criteria in this table are self-explanatory. For example, researchers evaluated whether or not the LMS had a workable assignment drop box, or whether or not it could accommodate XML and mobile device delivery. The testers also determined if the LMS had course authoring tools to create effective online quizzes or could display correct mathematical notation. Please see the tables in the Appendix for a complete list of criteria.

METHODOLOGY
Fourteen individual survey forms and two written submissions were used in the evalua-
Shifting Perceptions within Online Problem-Based Learning
www.igi-global.com/chapter/shifting-perceptions-within-online-problem/12003?camid=4v1a