METHODS AND MODELS FOR THE DEVELOPMENT OF EDUCATION MANAGEMENT SYSTEMS (LMS) IN THE CONTEXT OF DISTANCE EDUCATION

Kabirjonova Muslimakhon Ulugbek kizi

1 - course Master of Tashkent University of Information Technologies

Abstract:

At present, supporting e-learning with interactive virtual campuses is a future goal in education. Models that measure the levels of acceptance, performance, and academic efficiency have been recently developed. In light of the above, we carried out a study to evaluate a model for which architecture design, configuration, metadata, and statistical coefficients were obtained using four Learning Management Systems (LMSs). That allowed us to determine reliability, accuracy, and correlation. The following explores the ways to manage the virtual classroom.

Key words:

Distance learning, Moodle platform, learning management system, course content, learner support.

Nowadays, Information and Communication Technologies (ICTs) have become a strategy for universities to contribute to overall student performance . The development of these innovative teaching–learning processes have generated in students what it is currently known as Personal Learning Environments (PLEs) . Through the use of ICTs, students now have the opportunity to study off-campus, without the need for an actual teacher–student encounter, using just an e-learning model , which also serves as a way to expedite the learning process . ICTs have excellent advantages for academic applications that can be offered through a Learning Management System (LMS), since they facilitate the administration of courses in universities and training centers of organizations, even despite the controversy over how online content is evaluated, as described in . In this context, several studies have been carried out to identify the ability to create a dynamic Virtual Learning Environment (VLE) compatible with the diversities of learners' interactions . These advances have been implemented and tested in what is called the third generation of LMSs, which refers to "[t]he strategy of using technological resources through Web 2.0, which plays an important role for the use of resources through ICT, external to the LMS, and [affords] students greater interaction with the e-learning model" and "[t]hrough the use of technology the generation of new learning environments has been allowed, which facilitate the performance of [academic] activities and improve performance", taking into account how the design choices impact the efficiency and legal compliance of personal data protection means . At the University of Chile, a study measured the level of educational and technological use of Moodle and its implications for teaching using a quantitative approach, applying a questionnaire to a sample of 640 teachers of higher education.

Course content

The content for an online course has been identified by Siekmann (2001, p. 596) as comprising any materials created by the instructor that are to be made available to student, including reading passages, PowerPoint presentations, multimedia files, etc. In a constructive learning environment however, the total content that a learner is exposed to does not have to be generated by the instructor. Collaborative processes, such as through small group work, problem solving, debates, and response to student-posed questions generate very good content enrichment. Oliver (1999, p. 243) suggests that what is required is for learners to be exposed to content that provides them with perspectives from a multitude of sources. Authentic examples and contexts are very valuable elements. The context in which content has been considered for effective online learning is therefore one in which it serves as a resource for learning rather than the focus of learning.

Learning (instructional) activities

Learning activities determine how the learners will engage with the course materials and the forms of knowledge construction that will take place. Specific instructional activities should be directed toward providing learners with the necessary skills, knowledge, and experience required to meet the goals and objectives of the course (Bohannon, 2001, p. 3). A reading exercise, with material either created by the teacher or recommended, or listening to a lecture delivery in real-time or asynchronously constitute different learning .

However, in order to ensure knowledge construction in an online environment, one critical factor is the sustenance of motivation in the learner to continue to act independently. Appropriately selected learning activities can ensure the retention of the motivation of the learner to continue to collaborate in the learning process in order to yield the expected learning outcomes. The collaborative processes mentioned above,including small group work, problem solving, and debates are all types of learning activities. One way to provide the motivation for learners to participate in these content enrichment and knowledge construction activities is for the instructor to include assessment credits. For example, awarding assessment credit for every problem solved and for a predetermined quantity of relevant materials posted for sharing with others.

A learning management system (LMS) is a software application for the administration, documentation, tracking, reporting, automation and delivery of educational courses, training programs, or learning and development programs.[1] The learning management system concept emerged directly from e-Learning. Although the first LMS appeared in the higher education sector, the majority of the LMSs today focus on the corporate market. Learning Management Systems make up the largest segment of the learning system market. The first introduction of the LMS was in the late 1990s.

Learning management systems were designed to identify training and learning gaps, utilizing analytical data and reporting. LMSs are focused on online learning delivery but support a range of uses, acting as a platform for online content, including courses, both asynchronous based and synchronous based. An LMS may offer classroom management for instructor-led training or a flipped classroom, used in higher education, but not in the corporate space. Modern LMSs include intelligent algorithms to make automated recommendations for courses based on a user's skill profile as well as extract meta-data from learning materials in order to make such recommendations even more accurate.

Reference:

1. Oliver, R. (1999). Exploring strategies for online teaching and learning. Distance Education, 20 (2), 240-254.
2. Bohannon, H. G. (2001). Principles of online design. Retrieved July 27, 2001 from the World Wide Web: http://www.fgcu.edu/onlinedesign/interact.html
3. Siekmann, S. (2001). CALISCO software report: Which Web course management system is right for me? A comparison of WebCT 3.1 and Blackboard 5.0. CALICO Journal, 18, 590-617.
4. Davis, B., Carmean, C., & Wagner, E. (2009). "The Evolution of the LMS : From Management to Learning". The ELearning Guild Research. 24.
5. "A Brief History of Online Education". bear.warrington.ufl.edu.
6. "History of Distance Learning". www.godistancelearning.com.