An analysis of utilizing Learning Management System in a university of science and technology

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This study focuses on information systems that are utilized in higher educational institutions. The learning environment in universities has been changing because educational activities in universities target various students of any position and age. The learning environments have become more diverse and practical with information and communication technologies.

Many information systems are developed and introduced in universities to provide efficient and better educational services for both students and teachers. The systems have specific features designed to support activities such as distribution of course materials, collecting reports, online tests, and discussion. Learning Management Systems (LMS) play an important and a major role in many educational institutions.

We chose Moodle, an open source of LMS, for our educational infrastructure in a university consisting of departments of science and technology. The website has been made accessible to all faculties since 2006. To encourage teachers to fully use LMS, a cooperative system with a course registration system is implemented. With the development of systems along with the distribution of manuals including the usage of the system in a class and repeated seminars, the number of lectures increased to 90 in 2008, 140 in 2010, and 270 in 2012. In 2011, approximately 30%–40% of teachers in each department used LMS.

A survey was conducted about the utilization conditions and weak points of LMS. For this purpose, 66 teachers and staff were asked to participate, and we received responses to the above questions via questionnaires. The results revealed that approximately 70% of teachers regularly use distribution of course materials; however, less than 20% of teachers use discussion (forums) and online tests. In addition, 40% of the teachers indicated that the weak point of LMS is its complicated work processes. We will discuss and attempt to suggest suitable solutions for teachers in each situation.