Advantages of using LMS as a System for Monitoring, Evaluating and Monitoring Learning Outcomes

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Annotation: This article discusses remote control systems to monitor learning outcomes in education and during the learning process. In particular, the advantages of using LMS as a system of evaluation and monitoring, as well as the current problems of existing technological processes and modern solutions are presented.

Keywords: LMS Moodle, HEI, E-learning, The New Media Consortium, MOOC, Forums, Materials, Messenger, Chat, Exercises, Group work, Student tracking, IMS, SCORM, MySQL or PostgreSQL, Apache or IIS, GNU Public License, Windows, Linux, Mac OS X, Netware

The process of informatization of modern society is characterized by the improvement of modern information and communication technologies. In the information society of the XXI century, the acquisition of new knowledge independently is becoming a core value.

The 21st century is the age of high technologies. Today, a new generation is emerging that can deftly manage digital media. Another important factor influencing a successful learning process is that students are not ready to learn independently and improve their knowledge. Of course, in this case, the biggest role is assigned to the educator. Its mission is not only to "impart" knowledge, but also to teach students to "find and receive" independently. The Learning Management System (LMS) concept plays an important role in fulfilling this mission.

In particular, the organization of the educational process using e-learning resources based on the concept of LMS in higher education plays an important role in ensuring the quality of education.

It consists of developing a scientific and practical basis for improving the model of using information and communication technologies in the control, evaluation and monitoring of learning outcomes, as well as providing conclusions and recommendations on this topic.

For this purpose, the following tasks are to be performed:

➢ To study the legal basis for monitoring the quality of education in recent years by reforming higher education, providing the system with normative and regulatory documents, studying the tasks set out in the national training program in this regard;

➢ Study the directions, objects and mechanisms of control, evaluation and monitoring of learning outcomes;

➢ To study the current state of control, evaluation and monitoring of learning outcomes, to assess and identify opportunities for the use of information and communication technologies;

➤ Study of foreign experience in the use of information and communication technologies in the control, evaluation and monitoring of learning outcomes;

➤ Identify ways and prospects for the use of information and communication technologies in monitoring the quality of education;

➤ Develop suggestions and recommendations for the use of information and communication technologies in the monitoring, evaluation and monitoring of learning outcomes.

The introduction of e-learning in the education system depends primarily on the intellectual potential of society, including the informatization of education, the development of information educational resources. In developed and developing countries of the world, special attention is paid to the informatization of education, including the introduction of e-learning. Ways are being sought to develop e-learning and increase its effectiveness, and the introduction of new information technologies in education is at the heart of education reform.

Development of basic mechanisms for the integration of education with science and industry, its implementation in practice, individualization of reading, independent learning, development and mastering of technologies and tools of distance education, electronic on the basis of new pedagogical and information technologies Accelerating student learning through the use of education is one of such urgent tasks. Certain changes will need to be made to the organization of the learning process on the basis of e-learning, including the principles of improving the presentation of educational materials. The most effective way to achieve this goal is the introduction and use of modern information technologies in the educational process.

The main tasks in the introduction of electronic information educational technologies in the education system, critical assessment and improvement of the material and technical base of educational institutions are:

➤ Creating the necessary material and technical base for the implementation of e-learning in the educational process;

➤ Development and application of educational technologies for e-learning for the educational process;

➤ formation of students' knowledge and skills in the field of modern e-learning technologies;

➤ Improving the efficiency of the educational process through the introduction of e-learning.

Electronic information resources are a set of methods and tools for collecting, storing, transmitting, and processing educational information, depending on the internal and external factors that determine the creation of various educational information:

➤ Internal factors - these are the creation of information, types, properties, performance of various operations with information, their collection, transmission, storage, etc.

➤ External factors - this means the implementation of various tasks with information through the technical means of e-learning.

The use of e-learning depends on the skills and abilities of users to communicate with them. Therefore, it is important to first know what modern telecommunications is.

The possibilities of modern telecommunications are very wide, and in addition to the well-known concepts of computers, multimedia, computer networks, the Internet, there are a number of new concepts. Examples include information systems, information systems management, data

transmission systems, data warehouses, database management systems, and knowledge warehouses. Introduction of e-learning in the field of education in the "XXI century - the information age" in every educational institution:

➢ teaching and learning process;

➢ management of the educational institution;

➢ departments of the educational institution;

➢ Requires information about the environment of the educational institution.

The introduction of e-learning is considered in the broadest sense as a methodology, providing the practice of effective use and processing of new information technology tools aimed at the psychological and pedagogical implementation of teaching objectives. In addition, e-learning serves as a basis for the development of distance learning. In the process of e-learning, a wide range of new information technology tools will be used in the education system.

Improving the quality of education is one of the most important issues in the higher education system.

The New Media Consortium is a non-profit organization that annually studies, analyzes, reports and makes recommendations on innovative technologies in the education system with the involvement of leading experts in the field of education and information and communication technologies. This organization's 2015 report for the Higher Education System outlined key education trends over the next 5 years. These are:

Teaching using personal mobile devices - In this type of teaching, students perform tasks related to the subject during the lesson using their personal mobile devices.

Adaptive learning technologies are a type of education in which the learning trajectory is shaped based on an individual approach to each student based on the concept of person-centered learning.

Public Open Online Courses - Since 2001, all university courses have been open to the public free of charge. As a result, any listener who wants to learn from anywhere in the world has the opportunity to study the courses of the world's leading universities and colleges via the Internet.

Blended learning is a type of education that involves reading part of the traditional audience reading and the rest online.

Among the innovative types of education mentioned above, we would like to focus on public online open courses.

Massive open online courses are derived from English and are called Massive open online courses, MOOC.

Moodle is a powerful pedagogical software package for web-based teaching and online learning. There are training modules available in the system: Forums, Materials, Messenger, Chat, Exercises, Group work, Student tracking and many more. Like other LMSs, it supports IMS, SCORM and other standards. The analysis shows that the software package that has the most additional plug-ins and modules than other LMS systems is the Moodle software package.

At present, the distance learning process in educational institutions of many countries of the world is organized using the Moodle software package.

The opensource Moodle software suite is a dedicated Web-based system that manages the learning process and is intended for use on the Internet. The system was created using opensource software. To use it, you need a server with a database management program (MySQL or PostgreSQL), a PHP processor, a Web service application (Apache or IIS). One of the most common systems can be used as an operating system (Windows, Linux, Mac OS X, Netware).

Moodle is a project that has been used successfully and is constantly evolving. Its founder and author who is Martin. D from Western Australia. For more than 23 years, he has dealt with the problems of using information technology in education and defended his dissertation on the creation of an opensource software system that allows the creation of distance courses on the Internet. Martin. D began creating the Moodle system in 1999. The first version of the system was launched in August 2002. Since then, the project has expanded and developed.

Moodle is distributed as opensource software under the GNU Public License. Moodle belongs to the class of Learning Management Systems and is used to develop, manage and distribute online learning materials that can be shared by many people. These learning materials are created in a visual learning environment while maintaining the learning sequence. Moodle-based distance learning is currently available at leading universities in 193 countries

The program has been translated into 75 languages, including Russian and Uzbek. There are more than 250 Russian-language websites of educational institutions running Moodle.

The Moodle Distance Learning System (MLT) is designed according to the pedagogy of social constructivism, which combines teamwork and an active learning environment.

Moodle Features: The teacher has the opportunity to create his / her own course using Moodle, filling it with text, help files, presentations, surveys and other forms of material. An intermediate control test can be taken after each module of the course. Based on the results of the students' assignments, the teacher can make assessments and comment on the answers. In other words, Moodle is a hub for creating learning material and providing interactive communication between participants in the learning process. Moodle provides the teacher with tools not only to effectively organize feedback with students and assess their knowledge, but also to easily change the structure of lecture materials and hands-on activities.

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