

**ADVANTAGES AND PRACTICAL SIGNIFICANCE OF DISTANCE
LEARNING PROGRAMS IN THE HIGHER EDUCATION SYSTEM
(EXAMPLE MOODLE, SCORM, TUTOR PROGRAMS)
(EXAMPLE MOODLE, SCORM)**

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Abstract. The article discusses the importance, opportunities and practical advantages of distance learning programs in the education system. The goal of the programs is to provide a large part of the learning material to the student and to assess the mainpart of the interaction with the teacher through modern information technologies. In addition, information is provided on the shortcomings of the program and suggestions for its future potential.

Keywords: program, distance learning, student, program, teacher, pedagogical education, computer technology.

INTRODUCTION. Distance education (DE) is the provision of a significant part of the educational material to the student, and the main part of the interaction with the teacher is modern information technologies: the Internet, computer telecommunications, national and cable television, multimedia, education systems. A distinctive feature of distance education is providing students with the opportunity to independently acquire the necessary knowledge using developed information resources provided by modern information technologies. Information resources: databases and knowledge, computer, including multimedia, educational and monitoring systems, video and audio recordings, electronic libraries in combination with traditional textbooks and teaching aids are unique and open to a wide audience. Conversations and forums, video and teleconferences, the possibility of frequent, daily consultations with teachers via computer communications make the interaction of students with teachers more intense than in the traditional form of education. Distance education is a special, perfect form that combines elements of full-time, part-time and distance learning based on new information technologies and multimedia systems. Modern means of telecommunications and electronic publications make it possible to eliminate

their shortcomings, while maintaining all the advantages of traditional forms of education. They include the following: printed publications; electronic publications on external storage media (floppy, magnetic, laser or hard disks, etc.); computer training systems in traditional and multimedia versions; audio educational and information materials; video educational and information materials; laboratory distance seminars; educational programs; knowledge of databases and remote access; electronic libraries with remote access; didactic materials based on expert teaching systems; computer network; TV show.

Below we will talk about such distance education programs. Including SCORM – distance education standard. A set of specifications and standards developed for distance education systems. It includes educational material and requirements for the organization of the entire distance education system. SCORM allows for the compatibility of components and the possibility of their reuse: educational material is presented in separate small blocks that can be included in different training courses and used by the distance education system, regardless of who it is. SCORM (Shared Content Object Reference Model) is a set of specifications and standards developed for distance learning systems. It includes educational material and requirements for the organization of the entire distance education system. SCORM allows for the compatibility of components and the possibility of their reuse: educational material can be included in different training courses and used by the distance education system, regardless of who, where and what, presented in separate small blocks, where possible. SCORM is based on the XML standard. ILIAS (Integriertes Lern-, Informations – und Arbeitskooperations – System [German for “Integrated System for Learning, Information and Work Collaboration”]) is an open source, web-based learning management system (LMS). It supports learning content management (including SCORM 2004 compliance), as well as collaboration, communication, assessment and evaluation tools. The program is published under the GNU General Public License and can be used on any server that supports PHP and MySQL.

Next up is RemoteApp, a program that provides remote desktop access limited to a single application. However, notwithstanding the above, a user can run multiple applications or multiple copies of the same application in the same session. Another program is BigBlueButton, an open source web conferencing program. The system is mainly intended for distance education. The name BigBlueButton comes from the original concept that starting a web conference should be as easy as pressing the metaphorical big blue button.

Supports multiple audio tracks and video sharing, presentations, the ability to display Microsoft Office and LibreOffice documents, images, PDF documents.

Supports advanced whiteboard features such as pointing, zooming, and drawing, as well as desktop access. Public and private chats are available for feedback from the

web conference audience. The user can enter the conference as a viewer or moderator. As a viewer, the user can join a voice conference, use a webcam, raise their hand (ask to speak), and chat with other people. As a moderator, the user has the ability to mute/unmute the microphone of any viewer, remove any viewer from the Web conference, and also give the floor to any viewer (make any user a speaker). The presenter can upload presentations, documents, and use the board.

Finally, Zoom is a proprietary video conferencing software developed by Video Communications. It offers a video calling service that allows you to connect up to 100 devices simultaneously for free, with a 40-minute limit for free accounts. Users have the opportunity to increase the level of service without time restrictions, using one of the tariff plans with a maximum number of simultaneous connections of up to 500 people.

DISCUSSION AND RESULTS. Indeed, at the new stage of development of the education system of our country, the MOODLE distance education program is of great importance and has many practical advantages.

By the way, Moodle is free software with a GPL license, which allows you to use the system for free, as well as easily modify it to suit the needs of the educational institution and integrate it with other products. This is the most important program for teachers and students. Moodle (Modular Object-Oriented Dynamic Learning Environment) is a web-based system for organizing and managing distance learning, launched in 2001. It is freely available: you can download it from the official website and install it on your computer. The system supports more than 120 languages, including Russian. The Moodle installation package consists of three elements:

- Internet – Moodle code uploaded to the server.
- Database managed by MySQL, PostgreSQL, Microsoft SQL Server, MariaDB or Oracle.
- Storage for downloaded and created files.

All three parts can run on a single server or on multiple servers for load balancing. You can get acquainted with the capabilities of Moodle using the cloud demo version of the system. Here you just need to register and select a role (teacher, student, administrator). After a while, you will have a control panel with basic functions: create and conduct courses, view progress and activity, communicate with other users. How the system of interaction between teachers and students Moodle solves the following problems:

- creation and management of a distance course;
- managing users within the course;
- differentiated access for participants of the educational portal;
- monitoring the implementation of educational elements - both by the teacher and students;
- publication of educational materials in various formats: graphics, texts, audio, video. Moodle has a flexible content scheme. You can upload simple layouts such as

files and folders, or more complex layouts: Wiki topics, glossaries (can be completed by students), assignments, various forms of tests.

The biggest benefit that potential users will immediately notice is that Moodle is free to use. The system operates according to the open source scheme. Therefore, a large team of developers regularly creates useful extensions and modules in the Moodle environment – at the moment there are about 1500 of them. For example:

- video conferencing modules;
- audio and video conversations;
- Plugin for adding questions, comments and annotations to educational materials in a PDF document;
- motivational modules;
- reports on interactive educational programs;
- mass mailing of messages;
- electronic portfolio.

Thanks to the free version and flexible settings, Moodle is actively used in universities and colleges, as well as by teachers to create personal courses and distance learning courses.

WHAT CAN YOU DO WITH Moodle?

As an administrator in Moodle, you can perform the following functions:

- course creation and management;
- add students;
- evaluation of educational activities;
- monitor student progress;
- limit access to educational materials and lesson blocks. Let's take a closer look at the main features of Moodle.
- creation and management of courses.
- A Moodle curriculum created using the built-in editor can consist of several elements.

For example, the simplest and most common are lectures, assignments and tests. Educational content is loaded into the system and lectures are created based on it. These can be text files in PDF, XLS format, as well as videos, photographs, presentations and audio.

Courses are created in the system in editing mode. Depending on the tasks, they are filled with different elements, each of which has its own settings. In addition to lectures, these can be webinars, seminars, and trainings. For example, during a seminar you can organize tests or assign assignments to students. Disadvantages of Moodle:

Despite all its versatility, Moodle has a number of significant disadvantages. It is necessary to create a system for organizing training and creating complete courses. This requires a server or hosting, a domain name, etc. If you do not have the necessary knowledge and experience, you will have to hire an IT specialist. As a result, setting up the service becomes an expensive task.

Moodle requires a server. Free hosting allows you to install only older versions of the system. In addition, the service consumes a lot of resources, which increases financial costs. Despite frequent updates, Moodle has a rather outdated interface that is not user friendly. If you want to make course management more convenient, you will need to configure the entire system separately.

Moodle is a large system with many features, some of which are simply not used. And they can only be removed with the help of developers. And that is not all. Unless you have minimal experience managing an LMS, Moodle requires a long and extensive learning curve. You won't be able to quickly determine the number of sections, attachments, and forms here. "Let's run it and figure it out later" doesn't work. The system is more focused on universities, colleges and other educational institutions. Most plugins are created specifically for education. Moodle for the commercial sector lacks flexibility and extensibility. Integrating the system with the solutions needed by the business requires a lot of effort and requires the participation of experienced specialists.

Analytical tools exist, but they do not provide much depth or coverage of business problems. Moodle does not issue course completion certificates. Works on the Moodle platform and through the official mobile application. With this:

- course content can be viewed even offline
- receive notifications about course events (news, passed tests, etc.);
- quick contact with course participants;
- download content;
- Track your progress, view lesson plans and assessments. The built-in analysis system creates reports that show the level of activity of platform users: how many people viewed the courses, who left comments.

Survey and testing. Surveys and questionnaires can be used to conduct assessments, collect feedback on training, or find out the majority opinion on a particular decision in the system. Both elements are built into the system - questionnaires are collected with ready-made questions, and questionnaires are compiled by the administrator.

CONCLUSION. The central link of the distance learning system (DLS) is telecommunications and their transport base. They provide educational processes with the necessary educational and methodological materials, use the exchange of ideas between teachers and students, the exchange of management information within the educational system, access to international information networks, as well as the connection of foreign users to the LMS. Video is a unique distance learning environment for almost any subject. Duplication does not require large expenses; VCRs are widely used in all countries. Videos are often used as components of training packages to replace traditional lectures. Email is a more cost-effective and technologically efficient technology that can be used to deliver courses and provide

feedback from learners to instructors. As long as students have constant access to a personal computer with a modem and telephone line, e-mail allows for a flexible and intensive advising process. Video conferencing using computer networks makes it possible to organize video communication at minimal cost. This type of video conference can be used for conducting seminars and individual consultations in communication groups. In addition to transmitting audio and video, computer conferencing makes it possible to jointly manage images on a computer: remotely create drawings and drawings, transfer photos and handwritten documents. Advantages of distance education: despite the large distance between tutors (teachers) and students, communication between them is carried out in an interactive, understandable and interesting form; learning becomes mobile. The learning process will be interesting to the laziest students; the attractive power of the computer makes them forget about the complexity of questions; they try to actively and quickly cope with tasks in order to receive new ones as soon as possible; this is an opportunity to be.

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