

APPLICATION OF MOODLE ELECTRONIC E-LEARNING PORTAL DURING COVID-19 QUARANTINE

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The article highlights the experience of practical use in the educational process of the Moodle online distance learning system during quarantine, which occupies one of the leading places at the Department of Biostatistics, Bioinformatics and Information Technologies

Relevance. To date, the question of the methodologically justified use of the Moodle distance learning system (LLS) in the process of studying such disciplines as biostatistics, information and communication technologies, information systems by students, as well as the disciplining and motivating influence of LLS on the quality of knowledge and their application in professional activities of future medical specialists.

Introduction. Moodle is known to be a virtual learning environment. Moodle is an abbreviation of the English word Modular Object-Oriented Dynamic Learning Environment (modular object-oriented dynamic learning environment) [1, 2, 5].

Over the past decades, the Moodle distance learning system has taken an increasingly strong position in all areas of educational activity. In the educational process, the LMS has penetrated into teaching activities and is actively used to train competitive specialists and create conditions for the formation of professional qualities and the development of a personality capable of adapting to modern social and economic transformations. Adaptation skills include such qualities as tolerance, flexibility, sociability, the ability to self-education and self-regulation [3,4].

Currently, students (students, residents, undergraduates, doctoral students, trainees) of a medical university are ready to study various disciplines using the Moodle distance learning system. Of course, LMS requires active use of Internet resources. With the help of Internet resources, students in the study of the discipline of biostatistics and ICT get the first idea of the possibilities to apply the Moodle system [3].

The use of the Moodle distance learning system in the educational sphere, namely in universities, was considered by many authors, including O. Zelenko, E. Yu. Klimanova, O. Zatsepina, G. V. Lavrent'ev, N.B. Lavrent'eva. and others [1,3].

The researchers drew attention to the fact that the Moodle LMS helps to increase the educational and cognitive motivation of students. Therefore, it can be argued that Moodle LMS is involvement in the information and computer space with an emphasis on future professional activities, increasing the level of information culture through the ability to form a problem using the terms of a computer model and the correct interpretation of research results.

As in other forms of education, Moodle distance learning involves an algorithm for pedagogical design, including the creation of electronic courses, electronic textbooks, complexes of teaching aids, the development of pedagogical technologies for organizing the learning process in networks, etc.

In the process of using the LMS, we distinguish the following goals:

1. Developing students' techniques and skills in using the Moodle system in the process of studying the discipline in the educational process.
2. In-depth study of theoretical material, the implementation of practical tasks, independent work of students, test tasks of current control.
3. Preparation of students for passing midterm control and final control of knowledge.

The electronic portal Moodle of NJSC "Astana Medical University" (<http://dl.amu.kz/>) was used as e-learning.



In the application, the teacher's personal account "Site Pages" - "My Courses" - developed courses in the disciplines "Biostatistics", "Information and Communication Technologies", "Information Systems". For each course there is an educational and methodological complex of the discipline (UMKD), test tasks, a set of practical tasks for all sections of the discipline and electronic textbooks.

Main part. At the Department of Biostatistics, Bioinformatics and Information Technologies, for the study of educational material with the help of the Moodle SDO, appropriate organizational and pedagogical conditions have been created for students that contribute to the development of skills in self-education in the discipline, optimization of students' activities (development of attention, memory, thinking, imagination, etc.) and the correct interpretation of professional information with the simultaneous use of ICT resources.

Distance learning Moodle includes syllables, lecture material and practical lessons with high-quality presentation content using slides, illustrations. In the classroom, students adhere to methodological principles that make it possible to effectively use all information technology and also combine computer technologies with traditional ones. The use of Moodle in each lesson should be appropriate and methodologically sound.

Distance learning should be used only if it provides a higher level of the educational process compared to other teaching methods. In the case of using Moodle, a computer can replace the main part of visual aids and models (sometimes they are too voluminous and cumbersome, besides, the number of aids is not always enough to provide students). When organizing distance learning Moodle in practical classes, the computer becomes a very effective assistant. To improve their knowledge, students can use electronic textbooks provided with three-dimensional illustrations that contribute to the development of spatial and imaginative thinking.

The use of computer models contributes to better assimilation of the material. Computer technologies can be used in the classroom when learning new material, when initially consolidating the knowledge and skills gained in class, when practicing skills and abilities (educational testing), during a workshop, as well as when monitoring knowledge in the assessment summary by a teacher.

The implementation and verification of the practical task includes independent study of the content of the electronic material. The consolidation of the material is carried out with the help of control questions and test tasks. At the same time, students learn to choose the main thing, express their thoughts and, accordingly, get an assessment of knowledge.

To carry out independent work of students (SRO), individual assignments are given, where students completely complete the work using the Internet. Other types of individual independent work related to the use of information and communication technologies may include the creation of multimedia presentations on a specific topic. The use of Moodle for SRO allows you to reduce the time for completing tasks, perform work efficiently, and increase the number of factors studied. Search, analysis, processing of video information by students, its presentation to the audience is assessed by additional points for individual independent work.

In the process of studying the discipline, the most common today is the use of computer testing to control students' knowledge. At Moodle, teachers have developed the necessary testing conditions, which allows an objective assessment of the student's knowledge, excluding subjective factors.

When studying a discipline, the distance learning system is a productive pedagogical factor for effective training and development of a future doctor could be the creation of an electronic knowledge base on the discipline based on the collected material. The initial basis of this base was created by the teachers of the department in the form of an electronic textbook, test assignment, links to literature for each topic. Further, the information in this database is replenished, and both teachers and students can provide additional information. The electronic knowledge base is accessed via the Internet.

Results and discussion. The results of our research confirm that the students who used Moodle distance learning systems in the educational process better understood and assimilated information, had the best indicator of motivation to study the discipline. Some students took the initiative to independently search, accumulate and preserve information of a professional direction, sought to share information and discuss it with others.

The teacher's support for the students' initiative contributes to the development of skills and professional self-education of future doctors. The direction of the teacher's search activity of students brings the process of unconscious self-education (obtaining information on the initiative of the student based on interest) to the level of conscious study of the material, that is, receiving, processing, presenting information in a certain direction.

Conclusions. Thus, the greatest effect in the process of studying the discipline is achieved when the communication technologies of the Moodle LMS are used by both teachers and students.

1. The technical equipment of the department and the activity of teachers and students in the use of the Moodle online learning system increases the quantity and quality of educational information.
2. The use of online learning Moodle increases the efficiency of the teacher and student (influence on the process of understanding, perception, memorization by students of the material, reducing the time in the process of calculating research results, activating the student's independent mastery of the discipline, etc.).
3. The use of the Moodle distance learning portal by students has a positive effect on increasing the level of knowledge and on the formation of professional knowledge, skills and abilities of future specialists.

References

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