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IMPROVING THE PEDAGOGICAL PRINCIPLES OF THE PROCESS OF CREATING A DISTANCE COURSE IN E-LEARNING

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ABSTRACT

This article discusses the use of information technology in higher education and the organization of the educational process on this basis, the development of pedagogical principles for the process of creating a distance e-learning course and the formation of practical skills.

KEYWORDS

E-learning systems, e-learning, learning process, didactic methods, e-learning tools, didactic principles of e-learning, information and communication technologies, learning object repository, course content, Platform Moodle, formation of e-learning, learning technology, architecture of the education system, course structure, e-learning methodology.

INTRODUCTION

Higher education opens up great opportunities for the development of various views, forms and methods of

education based on the use of new information technologies.

With this in mind, the organization of the educational process in the e-learning system requires clear

preparation, i.e. required level of education and logistics.

As in the traditional learning process, a key link in achieving high efficiency in the e-learning process is the teacher.

In e-learning, the main task of the teacher is to manage the independent work of students, the formation of emerging motives; setting goals and objectives; transfer of knowledge, experience; organizational activity; organization of communication between students; involves the performance of functions such as monitoring the learning process. Hence the learning objectives set for e-learning. Learning objectives define the system of knowledge, skills and competencies that are formed in accordance with e-learning standards and models. The learning objectives themselves have a hierarchical structure, which means that the main element of e-learning is the training of specialists. Thus, learning objectives create a system-forming function in pedagogical activity.

On the basis of a socially ordered pedagogical model and methods and forms of organizing the implementation of the educational process, it is possible to illuminate the content of education. The choice of e-learning content is based on the fact that there is a large distance and / or a separate time schedule for classes and / or physiologically inaccessible to traditional learning, etc. restrictions on the object (subject) of education should be taken into account.

Teaching methods are understood as tools that help students master the course content and achieve their goals. Like traditional learning, e-learning uses five general didactic teaching methods: information-receptive, reproductive, problem-based, heuristic and

research. They cover the entire set of pedagogical situations between the teacher and the student. In the absence of direct communication between the teacher and the student, i.e. when using technical means of e-learning, the features of the application of teaching methods are taken into account when creating learning technologies and their content.

THE DEGREE OF STUDY OF THE WORK

Educational tools used in information and communication technologies play an important role in the educational process. Without contradicting other forms of learning, e-learning uses the following learning tools known to all in practice: books (paper and electronic); online learning materials; simple and multimedia computer training systems; audio and educational materials; videos and educational materials; remote laboratory workshop; simulators; remote access database and knowledge base; remote access electronic libraries; didactic materials based on expert learning systems; didactic materials based on geographic information systems.

In the pedagogical practice of higher educational institutions, many forms of education have developed in the traditional form of education: lectures, seminars, laboratory classes, tests, term papers, exams, self-study, etc. All of them also have their place in e-learning.

The unchanging principles and external similarity of the components of traditional and e-learning models in education make it possible to transform the didactic model of learning; in the traditional form of learning, these features, according to some authors, are as follows [15]: student stands in the center of technology; there will be invisible competition between students; students play a passive role in the

classroom; the essence of education is the transfer of knowledge.

e-learning models include: student stands in the center of technology; cooperation is the basis of educational activities; students take an active part in the classroom; the essence of educational technology is to develop the ability for independent learning.

Thus, all elements of the pedagogical system of e-learning will change:

1. The content is based on professional knowledge, not the logic of scientific knowledge.
2. The requirements for methods and forms of teaching will change, which will also change the role of the teacher, i.e. the need to train teachers to work in the e-learning system.
3. The type of activity and the nature of the relationship between the teacher and the student differ. The student becomes a full-fledged subject who receives the necessary support from the teacher in solving professional problems, such as solving educational and professional problems.
4. The transition from the associative-statistical model of cognition to a dynamically structured system of mental activity.

The e-learning system is developing by summarizing all the advantages of the traditional education system and the advanced achievements of innovative pedagogical models. It is this generalization that ensures the effectiveness of e-learning, which determines its overall development.

The didactic principles of e-learning are defined, some of which are: principle of development and education of education, the principle of scientificity and complexity, principle of structure and sequence, the

principle of creative activity of students, principle of development of exhibitionism and creative outlook, principle of existence, the principle of creating a positive emotional background, principle of elementary knowledge (students have basic knowledge in the field of information technology); principle of student identity (create a system of access to educational resources through individual passwords and identifiers; use different passwords and codes to protect tests from unauthorized access, run test programs with a password; organization and implementation of control measures on the basis of certified regional training centers with Internet access, the use of additional peripherals such as video cameras, individual pin code input devices, and so on); principle of pedagogical approval; principle of integrated use of multimedia tools; the principle of adaptation of educational material and the modularity of educational material, etc. [15].

The following conditions have been determined to ensure the modern level of organization and conduct of e-learning: training of future teachers in the field of creating distance learning courses using instrumental software systems in the course of information technology; stability of work with educational materials in different operating systems; usefulness; application or standardization package for displaying educational information; compatibility of technological systems, allowing their use in various functional systems; the ability to use one resource in several applications; technology for creating new learning materials and processes using already existing tools using the interface, parameters and functions of the tools.

Based on the foregoing, we can say that the main feature of e-learning is the organization of communication between the student and the teacher.

PRACTICAL SIGNIFICANCE OF THE RESEARCH

The Moodle platform plays an important role in shaping e-learning. The Moodle platform is based on the principles developed by such scientists as L. S. Vygotsky, John Dewey, Jean Piaget, Ernst von Glaserfeld. Based on these principles, Martin Duyamas formulated five principles that underlie the system under the general name “social constructivism”. Given these principles, we can consider such basic components of e-learning as subjects of education, communication systems between them and the sphere in which the educational process is carried out. The e-learning model provides for the transfer of information in a special information and educational environment (virtual) as a key component. The specifics of the region fundamentally affect all components of educational activities: learning motivation, learning status, monitoring and evaluation of students' knowledge.

All components of learning activities are, first of all, a look at the relationship between the teacher and the student through the Moodle platform.

The success of a distance course in e-learning often depends on the correct organization of the educational material. If the distance course is focused on learning, then the collection, sorting and placement of materials necessary for the course in most cases are organized on the basis of cooperation between the teacher and the student, which is determined by the didactic features of the course content. The creation of a distance learning course should be aimed at developing students' ability to learn independently. At the same time, the teacher must manage the learning process and control the acquired knowledge, skills and competencies.

The means of preparing educational material for a distance course are selected in accordance with the curriculum.

The course structure for the Moodle platform should consist of the following elements:

1. The block of motivation stimulates interest in effective cognitive activity, active assimilation of the main content. Motivation is a necessary part of a distance learning course and must be maintained throughout the learning process. Much attention here is focused on the specific goal set for the students. If the level of the task does not match the level of readiness of the student, motivation is lost.
2. The instructive block should consist of methodological and methodological instructions that are significant for the participants in the educational process, regulatory documents, the results of a questionnaire, the distance course schedule (course sections, assignments, tests, independent work) and be presented in a clear, understandable form.
3. The information block includes printed textbooks and manuals, electronic textbooks and guidelines, assignments for laboratory and practical work, a list of basic and additional literature, additional course materials. The Moodle platform contains elements such as a lecture, a glossary, a Flash video, a Scorm package, and resources such as a web page, hyperlinks to place information in this block.
4. The control block contains information that controls the learning process: current, intermediate and final tests, questions for independent work, control tasks on topics. At the same time, control work is an important factor in controlling the assimilation of educational

resources by students in a distance course, the formation of skills for independent work.

5. The communicative and consulting block describes the interactive interaction of distance students with a teacher. The Moodle platform has tools such as lectures, forums, chats for interactive communication between teacher and student. Counseling can be done individually or in a group (5-7 people at the same time). They can be real (chat, ICQ, Skype, webinar) and asynchronous (e-mail, forum, advertising).

According to the above, the formation of a distance course in an understandable and systematic form depends, first of all, on the pedagogical and professional skills of the teacher.

The Moodle platform allows you to design, create and manage resources. The platform's interface also provides easy-to-use options for educators with no background in programming and database management, and is well-designed. The teacher can independently create and manage a distance course in the system. In addition, for the convenience of teachers, a WYSIWYG HTML editor is used in the pedagogical process, which helps to enter data to manage resources and course elements. With this editor you can quickly and easily place text, tables, diagrams, pictures, audio, video, flash data in a remote course [14].

After registering as an administrator on the Moodle platform, students must be enrolled in their courses by distance learning instructors. After that, students will have access to distance learning courses filled with educational and methodological materials. The Moodle platform has tools that allow the student to learn independently under the guidance of a teacher.

When students first start working on the Moodle platform, they are first introduced to the course structure, guidelines, work procedures, and assignment requirements. The teacher gives the students an idea of how to work on the Moodle platform. On a distance course, after each theoretical material, students are evaluated on the basis of tasks, tests.

On the Moodle platform, theoretical material is presented using the Lecture element. In this case, the sequence of pages is given in the form of theoretical materials and questionnaires. The transition from page to page is predetermined by the teacher. When developing lecture material, lectures and assignments are given in an organic sequence [14].

At the end of the lecture, students take a test on the assimilation of the studied material. Endless attempts are made to complete such tests without punishment for wrong answers. Test results are recorded in the assessment log, but are not taken into account when calculating the rating.

It is necessary to form the basis of the forthcoming work by familiarizing with the new material. Therefore, in the system, students are given tasks to test their knowledge. To do this, use the elements "Task" and "Test". These elements allow students to individually test how well they have mastered the new material.

Students are given practical tasks through the "Task" element. The student uploads the completed assignment to the server, the teacher checks and evaluates the assignment or sends it back to the student for re-completion of the assignment. If the student satisfactorily completes the task, he/she is allowed to move on to the next lecture.

At the end of the course, the student passes a control test on the “Test” element, and at the end of the test, the test result is issued. This ensures transparency and openness of test control.

The Moodle platform in the course uses various forums and chats to implement interactivity between the teacher and the student.

A hyperlink is used in the Moodle platform to allow students to solve problems set by the teacher and follow the appropriate links to independently search for the desired material.

Providing feedback between students and the teacher allows for constant monitoring of problems that arise in the activities of students. The feedback mechanism focuses on the study of goals and objectives at each stage of learning. Feedback can be carried out in any form, including (current, intermediate, final) control checks, discussions, teleconferences [47].

The Moodle platform uses a module-rating system for assessing knowledge, which allows students to assess their knowledge, develop skills for independent search for materials, and independently conduct research.

When forming a module-rating system for assessing non-core areas, the following main features are taken into account: modular course sorting; formation of control work on the course/module; determine the rating scale; inform students about the limits of assessment, the deadlines for passing the test, the transfer of points to the final grade; view the gradebook. At the same time, students are assessed for their work during the course.

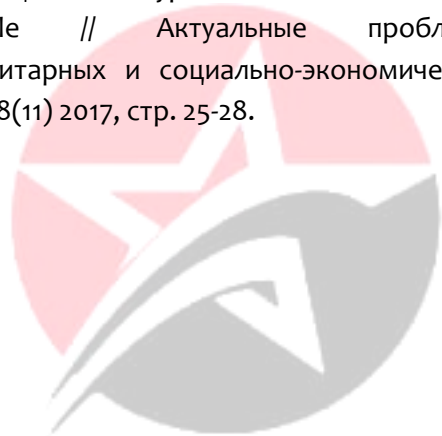
CONCLUSION

Based on the foregoing, we can say that on the basis of the use of information technologies in higher education and the development on this basis of various forms, forms and methods of organizing the educational process in the e-education system with the study of the most important aspects of the organization of the educational process and the architecture of the education system, the activities of teachers were organized to e-learning organizations, didactic principles of e-learning. An e-learning methodology has been developed with the study of the main features of the course structure for the Moodle platform when building the course structure in the e-learning process.

REFERENCES

1. Марчук Н.Ю. Психолого-педагогические особенности дистанционного обучения // Педагогическое образование в России. — 2013. — №4.
2. Куфлей О.В, Дмитриенко И.А. Внедрение электронного обучения как системный фактор развития образования. Ksla.kg. [Электронный ресурс]. URL: http://ksla.kg/upload/file/vestnik/vestnik_2014_2/90-94.pdf.
3. Taylakov, Norbek Isakulovich, and Fotima Urazalieva Anarbaeva. "Pedagogical Features Of Moodle Platform." The American Journal of Applied sciences 2.07 (2020): 104-107.
4. Anarbaeva, Fotima, and Gayrat Nurmatov. "Features of electronic learning." ACADEMICIA: An International Multidisciplinary Research Journal 10.5 (2020): 1781-1783.
5. Ф.У. Анарбаева. Очик кодли платофорамалар асосида электрон таълим

- методикасини такомиллаштириш // Диссертация. ТДПУ. -2022
6. Anarbaeva, F. 2021. THE IMPORTANCE OF ELECTRONIC EDUCATION METHODOLOGY. CURRENT RESEARCH JOURNAL OF PEDAGOGICS . 2, 06 (Jun. 2021), 127–130.
7. Вайндорф-Сысоева М.Е. Методика дистанционного обучения: учеб. пособие для вузов // М.Е.Вайндорф-Сысоева, Т.С.Грязнова, В.А.Шитова; под общ. Ред М.Е.Вайндорф-Сысоевой. – М.: Изд-во Юрайт, 2018. – 194 с.
8. Зиангирова Л.Ф. Разработка дистанционного курса на основе технологии Moodle // Актуальные проблемы гуманитарных и социально-экономических наук, 8(11) 2017, стр. 25-28.



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