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ПЕДАГОГИЧЕСКИЕ ВОЗМОЖНОСТИ ДИСТАНЦИОННЫХ ТЕХНОЛОГИЙ ОБУЧЕНИЯ В СОВРЕМЕННЫХ УСЛОВИЯХ

Сегодня с развитием современных информационных средств широкое распространение получили дистанционные технологии обучения, которые богаты новым ситуативным материалом и могут быть модифицированы в соответствии с реальными образовательными потребностями и с учетом дифференцированного подхода. Особое место среди сетевых технологий обучения занимает платформа Moodle как система управления обучением. В ходе нашего исследования было определено, что система Moodle становится все более популярной во многих областях за счет обеспечения контекста дистанционного обучения, при котором поддерживается методология, ориентированная на студентов. Проведенный опрос студентов и преподавателей позволил выявить условия системы Moodle, при которых осуществляется целенаправленное взаимодействие между преподавателем, студентами и электронными средствами обучения. Нами было выявлено, что методика создания учебных подкастов играет огромную роль как в развитии мотивации к изучению иностранного языка, так и в развитии когнитивно-коммуникативной компетенции студентов. Организация активного целенаправленного взаимодействия между преподавателем, обучающимися и электронными средствами обучения достигается за счет использования электронной образовательной среды, учитывая возможности информационно-коммуникативных технологий, при этом формируются у обучающихся определенные знания, умения, опыт деятельности и поведения, профессионально-личностные качества. Интернет- и современные информационно-коммуникационные технологии имеют большую педагогическую ценность и значительно расширяют иноязычное диалоговое пространство. В результате исследования было установлено, что использование системы Moodle в обучении студентов вуза и организации на ее основе самостоятельной работы объединяет общие принципы конструктивистского обучения и дает преподавателю возможность создания конструктивистской среды с целью улучшения преподавания и обучения.

Ключевые слова: сетевые технологии обучения, интернет-технологии, современные информационно-коммуникационные технологии, студенты университета, электронные средства обучения, педагогическое взаимодействие, учебные подкасты.

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PEDAGOGICAL POTENTIAL OF DISTANCE EDUCATIONAL TECHNOLOGIES NOWADAYS

Today, with the development of modern information means, distance learning technologies are widespread, which are rich in new situational material and can be modified in accordance with real educational needs and taking into account a differentiated approach. A special place among network learning technologies is taken by the Moodle platform as a learning management system. In the course of our study, it was determined that the Moodle system is becoming increasingly popular in many areas by providing a distance learning context that supports a student-centered methodology. The students' and teachers' survey revealed the conditions of the Moodle system under which purposeful interaction between the teacher, students and electronic learning means is carried out. We have revealed that the methodology for creating educational podcasts plays a huge role both in the motivation development to learn a foreign language and in the development of students' cognitive and communicative competence. The organization of active targeted interaction between the teacher, students and electronic teaching means is achieved through the use of an electronic educational environment, taking into account the capabilities of information and communication technologies, while students' certain knowledge, skills, experience of work and behavior, professional and personal qualities are formed. The Internet and modern information and communication technologies have great pedagogical value and significantly expand foreign-language dialogue spaces. As a result of the study, it was found that the use of the Moodle system in teaching university students and organizing independent work on its basis combines the general principles of constructivist education and gives the teacher the opportunity to create a constructivist environment in order to improve teaching and learning.

Key words: network learning technologies, Internet technologies, modern information and communication technologies, university students, electronic teaching means, pedagogical interaction, educational podcasts.

Network technologies have become the most priority types of distance learning technologies today. Network learning technology is a type of distance learning technology based on the use of telecommunication networks to provide students with teaching materials and interactive interaction between a teacher, an administrator and a student. Among the network learning technologies, a special place is taken by learning management systems (LMS). One of these systems is the electronic learning environment (ELE) Moodle. This environment is widely used in leading universities in the world and has been successfully introduced into the educational process of Orenburg State University. The rich pedagogical potential of the Moodle environment, its accessibility and easy-to-use form make it possible to distinguish it from similar systems.

We keep to the definition that electronic (network) learning (e-learning) is a way of organizing learning (regardless of its form) with the active use of computer network resources in order to provide students with educational and methodological material and for interactive interaction between teachers and students.

Recently, the basis of e-learning is often based on asynchronous interaction of participants' learning. In pedagogical literature, e-learning is understood as one of the areas of distance learning based on the use of information and communication technologies (ICT) [10], [13].

Considering the situation today asynchronous learning is mainly based on Internet technologies, the modern development level of which allows to create an electronic learning environment (ELE) where asynchronous interaction of participants' learning takes place [13].

The advantages of the asynchronous method compared to the synchronous method is that using the asynchronous method, the student has great freedom: there is no need to be at the computer at a time strictly set for the lesson and work simultaneously with fellow students. The disadvantages of such training include: feeling of «isolation», «lack of another.»

This problem is devoted to the work of F. Mayadas, D. Wu, M. Bieber, S. Hiltz [14], [17], [18]. These researchers proved that the effectiveness of asynchronous learning in the electronic environment is increased by enhancing intersubjective interaction, working in small groups and using the «collaboration learning» method. This means that the main condition for ensuring the effectiveness of asynchronous learning is to increase the interactive level of the electronic learning

environment through the intensive use of interactive teaching methods and technologies. According to S.R. Hiltz, interactive technologies contribute to the students' professional and personal development through ongoing interaction with other persons of the educational process as well as enhance the students' cognitive activity. Students gain knowledge through their own ideas, which were first expressed to other students, and then developed in a joint discussion [14]. We adhere to the definition of D. Johnson, in which an interactive teaching methodology in an electronic environment is defined as a special organization form of cognitive and communicative activities, in which students are involved in the process of on-line learning, have the opportunity to reflect on the fact what they know and how they perceive [1]. S.R. Hiltz conducted an experiment in several American universities and, according to the result, studying asynchronously in the electronic environment together in groups, students have a higher level of motivation, exhibit a higher level of subject knowledge and skills, are more satisfied with the result of their work, compared with those who performed the same job individually. The obtained data indicate that the students' individual work with electronic learning resources is inferior to similar work performed in classroom settings. But it is possible to increase the effectiveness of the learning process to the level of classroom studies through the use of group methods in e-learning [14].

According to the Swedish researcher S. Hrasinski, the effectiveness of asynchronous learning in the electronic environment increases with the organization of students' joint activities. But an important factor is also the specifics of the tasks and the goals of their implementation. According to his research, asynchronous communication in the electronic environment is more conducive to the development of cognitive skills, and synchronous communication has a greater impact on the motivational and emotional sphere of educational activity. This can be explained by the fact that students have more time to think over, to process information, to formulate their ideas precisely in the process of asynchronous interaction. Real-time communication requires a quick response, therefore, emotions and stimuli are more often included [15]. Mikhailova N.V. considers the ELE interactivity as an interaction characteristic of the participants' learning with the environment, that is, with all its elements at the subjective and intersubjective levels [4]. At the same time, an increase in the level of ELE interactivity involves the use of such methods and technologies that make it possible to activate the student's independent educational activity at

the level of intersubjective interaction and dialogue in the process of mastering educational material, ensuring the students' personal inclusion based on their subjective experience, and the development of students' creative potential. The main factor determining the success of asynchronous e-learning, in addition to increasing the interactivity level of the e-learning environment, is also taking into account the students' individual learning style (learning style) [5], [6], [13]. The concepts of «style of educational activity», «learning style», «individual learning style», «cognitive style», «personal cognitive style» are fully disclosed in the works of Russian psychologists and educators A.A. Doronina, E.A. Kalinina, L.O. Selverova, E.G. Tarevoy, A.A. Tkachenko, M.A. Cold. Among foreign works, one can distinguish a typology of educational styles and the methodology for their determination, which was proposed by British psychologists P. Hani and A. Mumford.

Thus, the main advantage of asynchronous learning in the electronic environment is the ability to choose an individual course for studying educational material, time and place of fulfilling the educational work. Such learning increases the level of students' cognitive skills, develops their ability to reflection. The main disadvantage of the asynchronous learning model can be defined as «a feeling of isolation and lack of external support.» But it is possible to compensate for this by activating the student's subjective and intersubjective interaction with the elements of the environment using interactive methods and technologies. Also, when organizing asynchronous learning in the electronic environment, one should remember the students' individual styles of educational activities, the development of a rational working style, and the design of the corresponding types of the electronic environment [11], [13], [19].

Analyzing the students' activity in the Moodle system we can conclude:

- 75% of students complete all tasks in a timely manner;
- 20% of students do not adhere to the established deadlines or tasks were partially completed;
- 5% of students do not use the Moodle system, thereby do not complete any tasks: 3%–students have lack of technical capabilities and 1% – lack of internal motivation and ability to work independently.

The students' survey showed that they choose forums, messaging systems and other tools for communication. But the most important indicator for them was the possibility of access to the text

materials, assignments, tests and other elements of the course (87%).

Teachers of Orenburg State University (93%) think that the main advantage of the Moodle system is an extensive toolkit for presenting teaching materials of the course, conducting theoretical and practical classes, organizing educational activities of students (both individual and group).

The Moodle system, according to Land and Hannafin, is «a learning environment that is directional and constructivist, which is based on five main components: psychological, pedagogical, technological, cultural and pragmatic». These principles are applied in the design of the learning environment for students [13].

By constructivism it is understood that the student associates new information with existing and future-oriented knowledge in unique and meaningful ways [18]. Social constructivism, as a branch of this theory, highlights the value of knowledge that is socially built in the learning community. This paradigm, created by Vygotsky, emphasizes that culture and context are important for the formation of understanding. Indeed, training is not a purely internal process and not a passive formation of behavior. Vygotsky considered the concept of learning as a social construct, which is mediated by language through social discourse [8].

It is the Moodle system that contributes to the social discourse in learning through modules of synchronous and asynchronous activities. Students can form groups themselves or the teacher can manage this process. In any group students work together and participate in a more individual interaction with each other. Despite the fact that the program supports this type of training, the art of combining certain types of activities with activities based on individual or group work is one of the factors reflecting the pedagogical skills of the teacher. The teacher can develop and implement a discussion forum, chat, or even a personal two-way dialogue in any training activity of the course.

A special place among information technologies is occupied by «multimedia learning». The term «multimedia learning» means all available media tools that help to intensify and optimize the educational process of foreign language teaching, as well as to form communicative and linguistic competencies [8]. This kind of learning is aimed at solving problems related to the information exchange between the teacher and students, the intensification of educational interaction with students in order to improve it.

Learning based on multimedia technologies can contain text and graphic images, audio and

video materials. In addition, their widespread use broadens the students' outlook and increases their interest in learning a foreign language, and, consequently, the effectiveness of training [2].

Language proficiency is a complex skill and includes communicative competence (listening, speaking, reading and writing abilities). If the teacher wants to achieve effective development of communicative competence, then he should focus on the development of students' motivation not only in contact, but also in independent work [6], [7], [10].

The methodology for creating educational podcasts has widespread practice of foreign language teaching. So when studying topics of a regional geographical character, students can create podcasts about the history of the country, sights, features of living in these countries, and national cuisine. Educational podcasts provide great opportunities in professionally-oriented foreign language teaching [2]. In preparation for classes, students can independently create podcasts related to their future profession. While working on podcasts, most students prefer not to work as a team, but individually. This is due to the opportunity to show their preferences and creativity. But we should remember that multimedia education is not a goal, but a tool, an auxiliary tool for teaching students.

The development and presentation of their own podcasts contributes to the formation of such competencies among students as: the ability to improve and develop their intellectual and cultural level; the ability to independently acquire and use in practice new knowledge and skills, including new areas of knowledge; the ability to use a foreign language as a means of professional communication. It should be noted that this type of work plays a huge role both in the motivation development to learn a foreign language, and in the development of cognitive-communicative competence of students [9].

The learning courses are rich in new situational material and can be modified in accordance with real educational needs and taking into account a differentiated approach.

The Moodle platform integrates the general principles of constructivist learning and provides a distance learning context in which a student-centered methodology is supported. This system is based on the theory of cognition and cognitive flexibility and gives the teacher the opportunity to create a constructivist environment in order to improve teaching and learning. The Moodle system is becoming increasingly popular in many areas by providing a constructivist learning environment that makes a significant contribution to improving distance learning.

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