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PRACTICE OF USING DISTANCE LEARNING TECHNOLOGY IN THE EDUCATIONAL PROCESS OF A HIGHER EDUCATIONAL ESTABLISHMENT

The technological progress has radically changed men's existence in the 20th — early 21st centuries, having created the special world, it is virtual reality. The Internet has become that channel for transmitting information which has influenced the lifestyle, a lot of human habits, including mental and intellectual ones. It has opened access to a great variety of information, and also made a person the object of his influence, having transformed his mental and cognitive activity. Until recently, it was believed that the mental capacity of the brain was stable in its nature. But modern scientific research indicates that our brain is developing and updating, it is able to form new ways of processing information, according to the updated conditions and circumstances.

The new educational environment, which has been purposefully created for realizing the educational process and for students to master any professional educational program, irrespective of time, their place of residence, age, and other features, refers to new conditions that have changed the life and work of people.



The information educational environment has a wide variety of capabilities: electronic information resources, technical means, the combination of information and telecommunication technologies, etc. Theoretical and practical aspects of its creation and effective work have been considered in a number of psychological, pedagogical, sociological and technical studies. For example, I. N. Rozina considers the high speed of mastering the knowledge system, interactivity and high-quality feedback, individual motivation, modularity, etc. as one of the most important principles that contribute to the high quality of graduates' training [3].

Innovations certainly include distance learning technologies, which are increasingly being used by educational establishments. This fact meets the requirements of the modern education development, and the introduction and effective use of new information services, training systems and technologies, electronic educational resources is one of the indicators of its effectiveness [2].

Distance learning technologies are realized by means of using information and telecommunication networks, at a distance, i.e. with the indirect interaction of teachers and students. The use of distance learning technologies provides the organization of distance education.

Distance education, along with traditional one, is considered to be a special form of learning. Does this fact mean that it will substitute the traditional education? This problem is being actively discussed in scientific and public societies; it excites educators, parents and students themselves. Of course, distance education has a number of advantages.

First of all, it is its accessibility and democracy, i.e. a person with any disabilities (including those with disabilities) can receive knowledge at home, while at work, anytime and anywhere. Such conditions allow a person to learn all his life, improving professional skills, diversifying himself as a person, i.e. putting into practice the trend of continuous learning. The use of Internet technologies provides new opportunities for advanced training, retraining, mastering further education and, of course, reduces the cost of obtaining it.

Secondly, it has more individual character, because people have different abilities. A student himself may regulate the pace of mastering the material, return to poorly understood topics, not being afraid of external negative psychological effects, and overcome his shyness and excitement, etc.

Thirdly, distance education encourages a person to study without an instructor, to be active, to develop skills of internal motivation and control. The positive results achieved in the process of such work increase self-esteem, self-confidence, and form business orientation.

Fourthly, this form of education involves more objective assessment of students' educational activities by teachers without personal likes and dislikes, without individual prejudices and social stereotypes (nationality, gender, status, etc.).

And, of course, distance education has modern, very attractive technologies for young people: chat classes, webinars, newsgroups, virtual communities, etc. Such technologies create vivid sensual images, improve memorization, make the cognition process more saturated and deep, create interest and intrinsic motivation for learning.

In order to improve the quality and efficiency of providing distance education services, to identify its shortcomings, we have conducted a survey which was performed on the basis of the Vyatka State Agricultural Academy. Anonymous and voluntary online questionnaires were answered by the students of various modes of study and of different faculties: engineering, biological and of veterinary medicine. Among them were 89% — full-time students, 11% — part-time and evening classes students; freshman classes (82%) and undergraduates (18%), urban residents (65%) and rural residents (35%).

In order to achieve the goal, the following tasks were set:

- 1. To study the students' readiness for distance education.
- 2. To compare the students' attitude to distance education. The respondents were full-time, part-time and evening classes students who have different places of residence (city and village).



- 3. To identify the advantages and disadvantages of organizing the educational information environment at university and the use of distance learning technologies.
- 4. To develop recommendations for improving the distance learning system at the academy.

The following methods have been used in the study: the study of psychological and pedagogical literature, observation, conversation, questionnaire survey, statistical data processing.

Several questions of the questionnaire were aimed at studying respondents' opinions about the conditions created at the university for realizing distance education, including special circumstances (self-isolation due to the quarantine). At the appropriate times at the academy the order about distance education was issued, the distance education regulation was developed, which determined the procedure for providing educational and methodological assistance to students, for conducting current and final control of knowledge; the faculties deans formed the timetable in accordance with the curriculum, and all the participants of the educational process were informed. The academy teachers took short courses on the organizing distance education. Two thirds of the total number of respondents (both urban and rural residents) had already had their personal account and actively used it. But only one third of students praised the convenience of its use in the process of online education.

To receive educational materials and send answers, students mainly use the electronic information educational environment on the official website of the academy (36%), e-mail (24%), social networks (18%), and personal account (12%). Other educational resources, programs (Whats App, Viber messengers, Zoom applications, Microsoft Teams corporate platform, etc.) are seldom used by students.

Half of the total number of respondents (regardless their residence and year of study) quickly mastered the use of the information educational environment (51%), 29% mastered, but not immediately, the remaining 20% are still experiencing difficulties, at the end of the academic year. Thus, we can state that one fifth of students have the lack of computer literacy and the lack of experience and distance education skills.

The conducted survey revealed some problems and disadvantages of distance education. Among the most frequent were: the impossibility of revising the educational material (18%), the lack of time to pass check-up tests, to get credits and pass exams (15%), poor feedback from teachers (13%), low Internet speed and the lack of literature (11%), inability to open course content (10%). Other indicated reasons included the Internet inaccessibility, insufficient knowledge of the PC or its absence, restrictions on the volume of downloaded files, inability to download course content, etc.

As can be seen from the above data, many of the disadvantages are technical in nature. Thus, we need good technical readiness of the university and the willingness of students themselves to use distance learning tools.

It must be noted that the education system is still quite inert, it is lagging behind modern innovations, and it mostly has traditional forms of education. So, among the answers to the question "What distance learning tools are used in the education process?" respondents mentioned the following: tests (26%), presentation of textual material (24%), individual tasks (19%), presentations (17%). The following tools are used very rarely: online lectures, virtual laboratory work (4%), educational films (3%), case solving (2%).

In the practice of the academy staff there are no such forms of classes organization as webinars, conferences, virtual scientific communities, etc.

Of course, this result can be explained by the fact that the significant part of the university's teaching staff is older people (including retirees) who do not have good computer skills, learn new technologies more slowly, and they get used to traditional forms of conducting classes. There are not many teachers who are competent not only professionally, but also technically, i.e. they can create and use new educational technologies. The problem of the slow mastering and introducing new



forms and methods into pedagogical practice is also related to the fact that most teachers conduct not one, but several academic disciplines, and have a lot of current affairs, i.e. they have very high labor intensity and so they have little free time to create complete, interesting electronic material and to update it regularly (in the students' curriculum there are such disciplines where information is constantly changing), and to improve their professional skills. The creation of electronic learning tools still requires special knowledge, skills that many teachers do not possess. In addition, low wages of the staff don't motivate for mastering and applying modern educational technologies.

Of course, young personnel use modern means of communication and information actively and with great desire. The respondents marked the following advantages of distance education: learning in the familiar home environment (22%), individual rate of learning the material (17%); saving time, including on the road (14%), the flexibility of organizing the educational process (9%), the accessibility of the preservation of educational material and the ability to combine study and work (8%). However, 15% of the surveyed students failed to find the benefits of distance education. It should be noted that the students living in rural areas found more advantages in distance education than urban residents (21.1% versus 5.6%), and it is more convenient, although technically difficult to learn and use (47.4% versus 30.6%).

As for disadvantages of distance education, among them were: the increase in the study load and time for mastering topics and completing assignments (19%), the decrease in the education quality in general (16%), poor feedback from teachers (14%); reduction of free time for personal affairs and activities, recreation, creativity, great physical and mental fatigue (13%), difficulties in using the academy educational portal (11%), the lack of direct contact with other students (8%). Based on the curators' conversations with their student groups, it was found out that young people are not satisfied with the replacement of "live" classes by simple reading of educational materials, electronic textbooks and manuals, posted on the portal; the lack of emotional contact and anonymity of communication. In their opinion, it leads to misunderstanding of the theoretical material and the foundations of professional activity, to the inability to apply theoretical knowledge in solving practical problems, to weak formation of practical skills.

Undoubtedly, distance education also demands higher standards of the students themselves: they should possess formed high motivation for obtaining education (but many students are motivated to get a diploma, not knowledge), they should understand the importance of self-education, hard work and perseverance, developed skills for applying mental efforts, willpower, perseverance, determination, etc. Poor development of such abilities, as a rule, reduces the quality of e-education.

For all of the above reasons, the majority of students are not satisfied with the process of distance education (47%) or found it difficult to give evaluation to it (27%). But the students living in rural areas rated their satisfaction higher than urban residents (36.8% and 16.7%, respectively). This fact should be used by the university as attractive for expanding the scope of educational services and attracting applicants living very far from our town.

And, of course, the significant part of the respondents do not want to continue their distance education after ending the self-isolation regime: "no" answered 55% of students, 24% of respondents found it difficult to answer the question, only 22% of the students answered in the affirmative.

We were pleased with the students' indifference to improving the quality of distance education services. Students advocate for each teacher to create their own chat for communication, to introduce online broadcasts, to improve the quality of feedback between a teacher and a student, to increase the volume of downloaded files, and to organize the electronic information educational environment more clearly.

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Conclusions and Recommendations

The electronic information educational environment of the university, including distance technologies, is not only the addition to the traditional forms of education organization, but it should also become the significant factor in improving university education and meet the requirements of the law "About the Education in the Russian Federation" [4].

The efficiency of the pedagogical process in distance education directly depends on the modernization of its technical component, as well as on instructional design, which is aimed to develop online activities of teachers and students in details, thereby ensuring high quality of the teaching process.

For this purpose it is necessary:

- 1. To conduct systematic, regular training of teaching staff, to increase their digital literacy, using not only the mass teaching principle, but also the individual one (taking into account age, employment, level of training). To improve the quality of training and retraining organization.
- 2. To develop a flexible system of motivation (internal and external) for creation and active use of distance learning technologies both by the teachers side and by the students. A well-motivated teacher will be more productive in encouraging his students to learn.
- 3. To improve the methodological support of distance education, it is necessary to create mobile creative groups (if possible, at each faculty) from several highly qualified specialists: programmers, methodologists, computer designers, subject teachers, whose main task will be to create the creative educational environment (rich interactivity, multimedia, non-linearity, integrativity, mathematical modeling, accounting for individual characteristics, etc.).
- 4. To combine traditional teaching methods and forms with modern computer technologies in order to realize educational programs fully and to ensure the high-quality of students' training.

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