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OPPORTUNITIES FOR DIGITAL EDUCATION IN HIGHER EDUCATION

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Abstract

Currently, in the context of digitalization of society, the introduction of digital technologies has affected all spheres and systems of society, without exception: education, health care, etc. The education system is undergoing changes due to many factors that indicate the need to include digital technologies in the educational process. This is the request of the state in the field of digitalization of education, and the current COVID-19 pandemic, etc. Thus, the article is devoted to the problem of using digital educational technologies in the educational process of the university. The publication substantiates the expediency of using digital resources in the higher education system, highlights the advantages and disadvantages of introducing this technology in the organization of the educational process at a university. The result of the study is the conclusion about the importance of using digital technologies in the educational process of a university in the preparation of highly qualified specialists who meet the standards of modern times. At the same time, it is shown that digital educational technologies, although they are actively used in building the educational process at a university, are nevertheless not the only and optimal means for increasing the effectiveness of the educational process in higher education.

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1. Introduction

The educational process of the university and its organization have always been one of the important aspects in the training of highly qualified personnel. Thus, a modern specialist must be mobile and competent in all areas of knowledge. The training of competent specialists, in turn, is one of the promising areas of education in the line of state policy.

It is the state that determines the demand for specialists in demand and sets the conditions for the development of such a specialist who meets modern standards and the requirements of the new time.

To effectively solve personnel problems in order to train highly qualified specialists, the state policy in the field of education sets a number of conditions where digitalization is becoming one of the promising areas in this area of knowledge. Thus, the inclusion of digital educational technologies in the training process of the new era is an essential condition for the development of the higher education system.

2. Problem Statement

The problem of the research is to determine possible methods and technologies for teaching students at a university that meet the modern requirements of society and the state, implemented in order to train highly qualified specialists.

3. Research Questions

Based on the analysis of scientific literature, determine the current state of the problem of researching digital educational technologies in higher education.

To study the significance of the study of digital educational technologies in the educational process of the university.

Determine and substantiate possible methods and technologies for teaching students at a university that meet the requirements of modern times.

4. Purpose of the Study

The purpose of this article is to analyze the theory in the field of training highly qualified personnel using digital educational technologies in higher education.

5. Research Methods

Theoretical methods act as research methods: a review of the literature on the research problem, the formulation of conclusions and inferences.

6. Findings

The problem of training highly qualified specialists has existed at all times (Akimova & Shcherbin, 2018). Since the entire world economy and the standard of living of the population depend on the quality and efficiency of working citizens. All this directly affects the quality of the services provided (educational,

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medical, etc.) However, at the same time, the state sets "high standards" and puts forward a number of requirements in the training of such specialists. A modern specialist must have the ability to analyze systems and management methods (Atanasyan, 2007). He is required to be able to independently set professional tasks and formalize methods for their solution. All this led to the fact that the traditional education system that existed in the Russian education system for centuries did not meet modern requirements, which entailed a number of changes that subsequently led to the modernization of the entire education system. So, with the entry of Russia into the Bologna process, our Russian system of training specialists has changed qualitatively. These changes affected, first of all, the very system of training a specialist. The changes are associated with the transition to a multi-level system of specialist training (bachelor's, master's) and the transition of the entire education system from a knowledge-based approach to a competency-based one.

Thus, the competence-based approach is aimed at the formation of students' competencies and, unlike the knowledge approach, is aimed not at knowledge, but at the skills and practical skills that a student acquires in a properly structured educational process of the university (Ivanova & Shcheblyakov, 2017). Accordingly, in this situation, the education system itself, as well as the educational process, must be flexible and technological, must meet modern requirements and have technologies that allow the student to form the necessary professional competencies. Professional competencies, thus, are formed through a competence-based approach, the essence of which is practice-oriented education, where a great role is given to the individualization of a developing personality, keeping up with the times.

The modern education system has long ago moved away from the traditional system and the use of traditional teaching methods, since that system could not answer the question of how to train a specialist who meets modern requirements and standards. Non-traditional methods allow you to achieve the desired result, since they, already from the very beginning, are aimed at development. Reutova (2012) argues that the introduction of non-traditional (interactive) learning technologies into the educational process leads to an improvement in the preparation of students, and is a prerequisite for the effective implementation of the competence-based approach. In our age of informatization with its many rapidly developing technologies, the educational process has been qualitatively transformed. Each educational institution, in particular, universities, have a sufficiently equipped material and technical base, capable of building the educational process in a qualitatively new way, taking into account modern standards. These transformations in the material and technical equipment of the educational process are justified by the requirements of the Federal State Educational Standard.

In addition, Rubenko (2017) believes that the use of digital resources in the educational process is a condition that provides a new level of education quality. In such a situation, the student has the opportunity to reveal his creative potential, regardless of his territorial location, state of health, etc. It becomes obvious that the use of digital technologies in the educational process makes it possible to improve the learning process, since in the conditions of digitalization of education, the teacher has the opportunity in a non-standard, non-traditional form present educational material to students, in connection with which the training opportunities are significantly expanded. Such training becomes more effective and efficient. Currently, smart didactics is one of the most important areas of digital education. The advantage of this technology lies in the ability to carry out targeted training of highly professional personnel through interactive information and communication technologies.

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The high professionalism of future specialists in this situation is achieved through the organization of high-quality effective independent work of the student, the possibility of distance learning for working citizens. Thus, the educational process takes on an individualized form, since the educational platform of online courses allows students to independently acquire the necessary skills and abilities. So, for example, training takes place outside of educational educational activities, concentrated on a single educational platform, for example, the LMS Moodle electronic distance learning system. During the COVID-19 pandemic, educational platforms have gained particular popularity in order to ensure educational activities of universities. Since it was these platforms that remained the only unimpeded option for obtaining a quality education that meets modern standards and the requirements of state policy. The use of digital technologies in education allows students to gain knowledge using all available types of Internet technologies, as well as mobile devices, which they have. All these devices provide an additional opportunity to enrich the content and quality of the knowledge received by students, which allows expanding the horizons of their knowledge, making them limitless. Currently, the student is required to have an independent search and selection of information, which allows them to master a number of competencies (general cultural, general professional, etc.) that are important for future professional activities. In this situation, students are competent in the Internet. In this connection, the use of Internet resources allows students to expand the sources of information received. Students have the opportunity to use the electronic library systems of universities, various educational resources, etc. for educational purposes.

Information and communication technologies are actively involved in the educational process, both in the organization of independent and classroom work of a student. Thus, teachers deliver lectures to students in the process of multimedia accompaniment of the lecture. In addition, teachers have the opportunity to create video lectures, webinars, etc., which are actively used during the educational process. It becomes obvious that such fragments of a video lecture are convenient to use both in the usual mode of classroom work with students, as an element of the educational program, and as a form of distance education. In the situation of distance education, video lectures are posted on educational online platforms, which makes it possible for each student in a convenient mode for him to receive high-quality content of the subject without interrupting work, when it comes to working citizens. As a rule, video lectures are supplemented with tasks of independent work necessary for mastering the subject. In this situation, feedback is carried out: "student - teacher" in the form of forums, online chats, going online through the inclusion of university webinar rooms: Zoom, Webinar, Skype, Microsoft Teams, etc. Automation of the monitoring system, assessment and correction of students' knowledge is also supervised by a teacher. In a digital education situation, the teacher turns from a knowledge translator into a coordinator helping students navigate a variety of knowledge bases.

In the situation of the introduction of digital educational technologies, it is necessary to increase the digital literacy of teachers. Since teachers, in our age of rapidly changing technologies, are required not only to develop online courses, but, above all, to use digital technologies in the educational process of the university. Thus, the role of the teacher in realizing the resources of the material and technical base of the university is great. This technology quite harmoniously complements the teacher's work, since the use of digital resources is quite competently included in the educational process. However, no matter how good this technology is, in any case, it cannot directly compensate for the live dialogue between the student and

the teacher through which feedback is realized. In addition, the lack of direct communication can also affect the quality of the material studied by students.

The undoubted advantage of using digital technologies in the educational process is their availability and relevance. Each student has the opportunity to access the Internet from a computer or phone, knows how to find the necessary information and understands how to apply it in a specific case. The flexibility of technology allows, taking into account individual characteristics, to build an educational trajectory for each specific student, taking into account his capabilities, resources, and in some cases, and deficits.

Thus, digital education makes it possible to make education qualitatively accessible for all students. This is especially true for the category of students with special educational health capabilities who are unable to be present in real time in the classroom due to their health characteristics or the presence of a defect. However, at the same time, it is precisely the possibilities of digital educational technologies that make it possible to make higher education of the same quality for all subjects of the educational process. Digital education allows in educational activities, taking into account differentiated learning, to take into account the needs of each student, which erases all boundaries and creates equal opportunities for the category of children with special educational health capabilities.

Digital education seems possible in modern conditions, but it requires serious software and methodological support.

7. Conclusion

Thus, the use of digital technologies is quite relevant for the modern education system and is justified by its practical significance. However, at the same time, the introduction of modern educational information and communication technologies into higher education has both advantages and disadvantages. Among the advantages of using digital educational technologies in education, first of all, it should be noted that:

- When introducing these technologies into the educational process, great emphasis in the
 development of didactic units of training courses is placed on familiarizing students with
 independent search and selection of information, which develops their personal and
 professional skills necessary for future successful professional activity.
- 2. The replacement of paper media with electronic ones greatly facilitates the content of the material being studied for teachers and students in order to master professional skills.
- 3. An individual trajectory of training, allows you to take into account the individual psychophysical characteristics of students.
- 4. There is a saving of time in processing the results of educational activities, since automated systems allow you to automatically check the work by pressing only one key, which greatly facilitates the teacher's work.
- 5. The role of the teacher is changing, due to the simplification of his work, since in the situation of digital education, the teacher acts only as a guide to the area of knowledge, as an assistant, which requires less labor and energy costs on the part of the teacher in translating knowledge and creating conditions that allow students to master professional competencies in a particular area of knowledge.

The disadvantages include:

- Lack of creativity and a decrease in mental activity, since digital technologies are a strictly
 formalized technology that includes a clear response algorithm, limited by the available answer
 options, template phrases, etc.
- 2. A decrease in physical activity leads to a decrease in the physical capabilities of the body, as well as the appearance of a number of problems (decreased vision, the appearance of obesity, etc.) caused by the lack of a mode of work and rest, etc.
- 3. The lack of live communication deprives all subjects of the educational process of the unhindered receipt of feedback as a result of the educational process at the university, in addition, it affects the socialization of the individual.
- 4. Lack of public availability of Internet resources, and in some cases, a weak material and technical base (lack of technology), cannot fully meet the modern requirements of the educational information environment, and also prevents the mass distribution of these resources in the field of education.

So, the article discusses only some of the issues of using digital educational technologies in higher education. The possibilities of introducing digital education into the educational environment of the university are highlighted. It is shown that the use of these technologies in the system of training highly qualified specialists makes it possible to make higher education publicly available and effective for solving the set tasks in terms of developing the quality of education, however, the existing shortcomings in the use of digital educational technologies can damage the entire educational policy of Russian society.

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