



METHODS OF USING VIRTUAL EDUCATIONAL TECHNOLOGIES IN TEACHING PRIMARY PREPARATORY SCIENCE

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Annotation: In this article, a method of using virtual educational technologies was created in the teaching of the science of primary preparation until the general convocation, and the improvement of the methodology of introducing virtual educational technologies was widely explained.

Keywords: virtual education, student, school, computer, analysis, design, application, internet, assessment, virtual presence, Perceptive - mnemonic, Didactic, Developmental, Targeting, Heuristic, Educative, Global network, Kalashnikov assault rifle, grenade launcher GP-5, fragmentation hand grenades

The large-scale use of virtual education technologies in the process of education and training is one of the global trends of world development. Therefore, creating virtual information educational environments for higher education institutions, forming suitable virtual educational technologies and improving modern teaching methods for developing creative thinking of students using them is one of the urgent issues. This creates an opportunity for the general education and professional training necessary for the formation of an individual educational direction of each student and further professional growth. "Therefore, the use of modern information and communication technologies (ICT) and the development of interactive forms of training remain relevant in the process of primary military education."

In order to eliminate these problems, it is considered appropriate to create and use a virtual information educational space for the education and training process of the subject of primary preparation before convocation. "The information resources, means of information exchange, web-nodes, educational portals and platforms are the main tools of the organizer of the information educational space." Therefore, the creation of virtual information educational portals and platforms for the educational system of our country, and the improvement of the methodology of using them on a





large scale is one of the urgent issues of today. In this regard, in the Decree of the President of the Republic of Uzbekistan No. PF-5847 of October 8, 2019, "E-MINBAR, which creates the possibility of monitoring and mastering lectures, practical, laboratory exercises online and uploading them to electronic information storage devices" "implementing the platform, using cloud technologies in educational processes, accelerating the creation of national e-educational resources, gradually increasing and improving the weight of e-educational resources" are defined as priorities. It is considered necessary to create virtual educational portals and platforms on the Internet for the educational process of initial preparation before convocation, and to improve the mechanism of their application to the educational process in order to fulfill the tasks specified in this decision.

Today, in the higher educational institutions of our country, professors and students use audio (recording, processing, video editing), graphic information (scanning, processing, creation of graphic documents) and multimedia tools (computer demonstrations and experiments). all opportunities for working with information and using Internet technologies are created, and the opportunity to use new forms of presentation of educational materials (conference, competition, lecture, seminar, demonstration of experiments, conducting virtual tours online) appeared.

With the emergence of these opportunities, the technology and methodology of teaching in higher education institutions are also changing. In the course of their work, professors-teachers have been achieving effective results by using new forms of educational information presentation (video lesson, video conference, webinar, forum, chat, multimedia applications, audio and video) together with passive materials. . "At the same time, a new form of conducting training has become possible, with the help of the Internet network, the possibility of conducting classes online (live on air)."

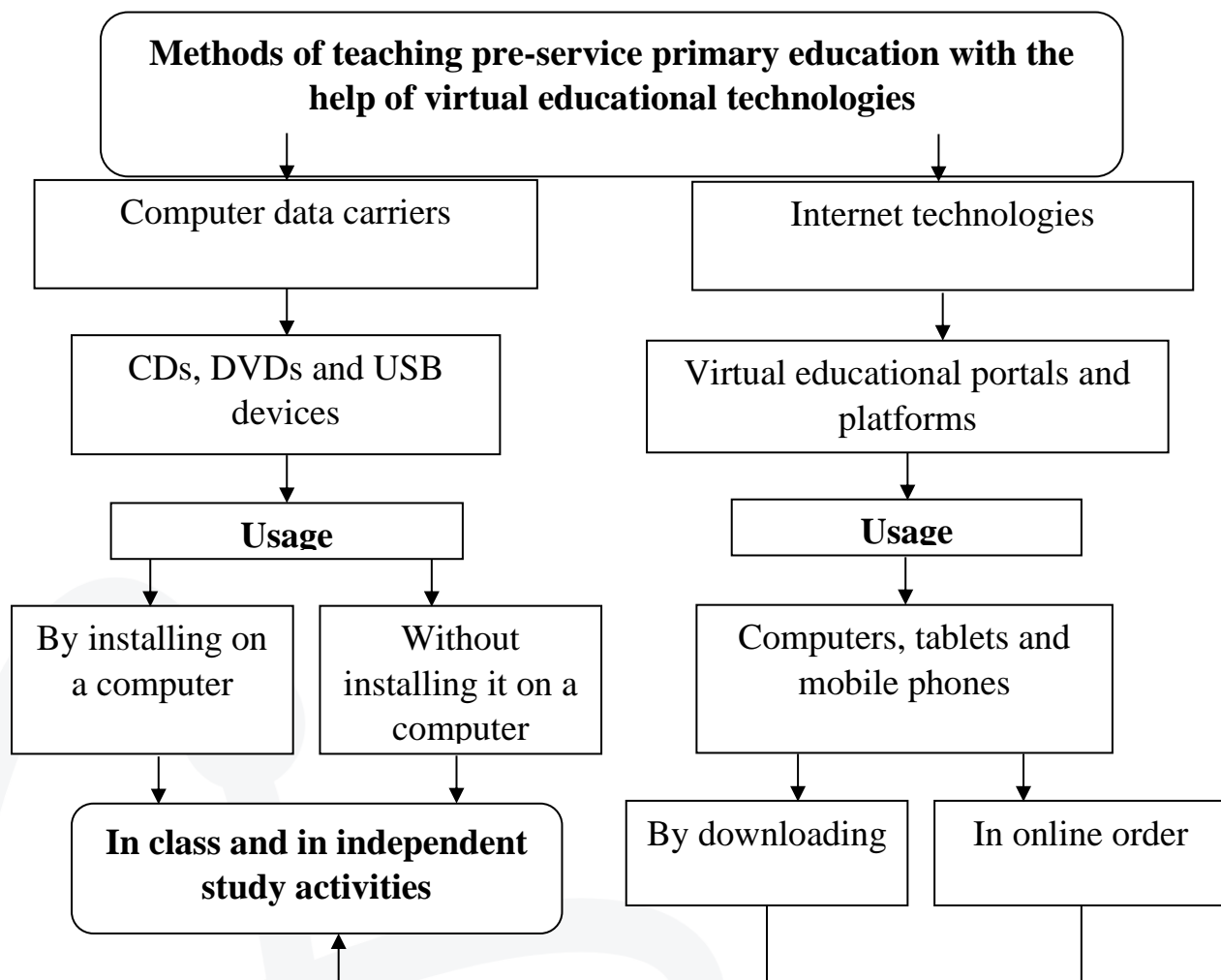
Teaching with the help of Internet technologies is considered a new stage of the education and training system today, and virtual educational platforms and corresponding virtual educational technologies are available for both the traditional education system and the distance education system. is being developed, which creates wide-scale conditions for the organization of educational materials and effective communication between students and their effective independent activity through network technologies. This is a modern teaching tool for teaching the science of primary training before convocation.

Therefore, it is necessary to further improve the methods of using virtual educational technologies in the process of education and upbringing of the subjects included in the primary military education, including the subject of primary training before





scription. At the moment, there are two different ways of using virtual learning technologies in pre-vocational science education (see Figure 1.2).



Ways of using virtual educational technologies to increase the effectiveness of pre-service education

- This is where the question arises. Which of these methods is effective today? Both methods are effective for student learning. However, when using virtual learning technologies that are adapted to the computer's data storage devices, they will not be able to be used when they fail. Also, there may be some problems in the distribution of these educational technologies to educational institutions and independent users (costs for the purchase of computer storage devices and their distribution).
- If we introduce remote virtual learning technologies into the educational system in an open learning environment designed for the Internet network, then we will have extensive opportunities (by downloading virtual learning technologies placed on the network at any time and place , or remote access). In this communication



environment, the pedagogue not only has no direct leadership, but also indirect leadership. If learners take a different position, they become subjects of education and a new relationship "student-educational environment" appears. This makes it possible to use all kinds of virtual educational technologies, not ordinary textbooks, to acquire the knowledge, skills and qualifications of the student from the subject of primary training before the convocation.

*Therefore, the professor-teacher requires the development of integrated methods of educational activity in order to use computer technologies and its pedagogical software tools as educational tools in the preparatory classes before convocation. For this, it is necessary to pay attention to the following:

*Creating a virtual educational platform on the Internet, forming and testing virtual educational technologies suitable for them, and introducing them;

*organization of the educational process using virtual educational technologies.

*The following opportunities will be created for students as a result of the above-mentioned tasks:

*observing the ability to work with the educational text in a short time;

*monitor the dynamics of acquisition of information processing methods;

*increase the intensity of mental activity;

*formation of informational and communicative competences;

*attracting students to classes and increasing their motivation as a result of perfect mastery of them;

improves monitoring and evaluation of educational activities.

In addition, this teaching technology allows the student to control their own learning methods, the interdependence of their knowledge and their organization, as well as to cope with uncertainties in a new situation.

Based on the didactic, psychological and psychophysiological requirements and principles of creating virtual educational technologies, it is possible to design the educational process of the subject "Pre-vocational training" (see Figure 2).



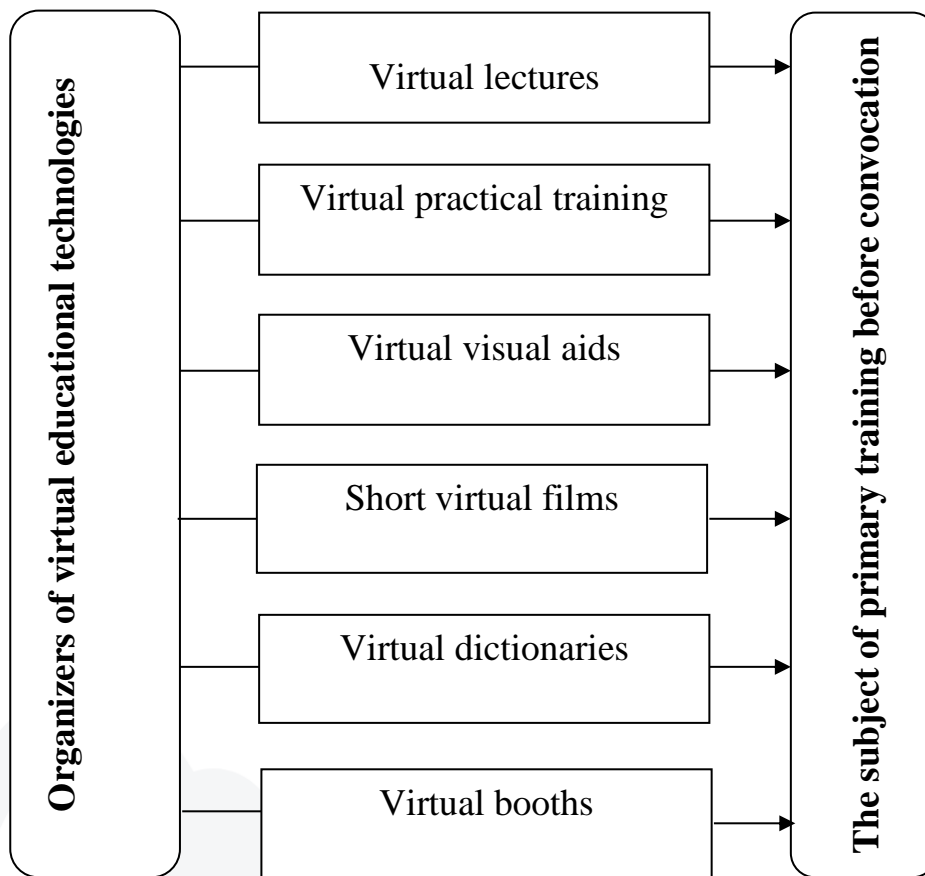


Figure 2. Organizers of virtual educational technologies from pre-primary education

The team formed for the design of virtual educational technologies shown in Figure 2 is required to be composed of various specialists, that is, teachers of primary education, pedagogy and psychology, programmers and designers. With the help of this team, it will be possible to create virtual educational technologies that are fully responsive in terms of pedagogical and psychological aspects for students from primary education to convocation.

Internet-based virtual educational technologies of primary education are used in classes (lectures and practical exercises) and independent educational activities. The ease of use of these modern teaching tools, the openness of their resources, that is, the possibility of using them at any time and place through the network. For example, when studying the topic "Kalashnikov assault rifle, GP-5 underbarrel grenade launcher and parts of fragmentation hand grenades", several video clips and animations are presented to observe the dynamics of this process. "Thanks to this visual presentation of the material, students take the study of the subject seriously and are interested in the use of real weapons and their parts as scientific evidence that



reveals the performance characteristics." Therefore, it is necessary to use virtual educational technologies at all stages of primary training classes before convocation, that is: repeating the acquired knowledge; when explaining new material; in strengthening the acquired knowledge; as a simulator in preparation for controls.

The opportunities of the global network provide collective opportunities for pre-service training. Through the online communication environment, the student will have the opportunity to perform educational projects together with peers. Also, students will have the opportunity to conduct interactive discussions in different geographical areas after being released from compulsory classes. Through the Internet network, the professor-teacher in charge of distance education will have the opportunity to schedule a certain time for questions and answers with students and to explain topics that they do not understand, and at that time to conduct online discussions.

In this regard, several information educational environments, virtual educational portals and platforms have been created and widely used in foreign countries for the interactive capabilities of the global network and the use of distance learning and corresponding virtual educational technologies. . These include Pennsylvania State University (worldcampus.psu.edu), Virtual University of California (cvc.edu), Open University of Washington (gwu.edu), Western Governors University (umuc.edu), Virtual University of Minnesota ([iseek.org/sv /index.jsp](http://iseek.org/sv/index.jsp)), University of Florida Distance Learning Center (fcd.ufl.edu), UK Open University (open.ac.uk), German Kharkov Correspondence University (fernuni-hagen.de), Dresden University of Technology ([tu -dresden.de](http://tu-dresden.de)) can be cited as an example of informational learning environments.

On February 22, 2023, under the chairmanship of President Shavkat Mirziyoyev, the meeting of video selectors on issues of accelerating digitalization processes in sectors and areas and regions gave the following tasks:

A separate TV channel was established to teach foreign languages to young people in remote and remote areas. The Ministry of Digitization was instructed to ensure the placement of IT training courses and at least 30 percent of interesting content on this TV channel.

Graduates of each university should learn to work in IT programs in their fields.

For example, drawing drawings, making estimates, creating infrastructure for construction projects can be completed in 1-2 months based on specialized programs. It was shown that young people study such programs abroad.

In this regard, to the Ministry of Higher Education and Digitization:





- studying modern software products for training engineers-technologists in such areas as construction, geology, mechanical engineering, transport, and introducing them in universities from the new academic year;
- IT park and its branches were connected to such universities, and teachers and students were instructed to work in new programs.

In the educational system of our country, a single base system for the use of remote virtual education technologies, which serves as a didactic model for the subject of primary training before convocation, has not been introduced. One of the main stages of reforming the field of pre-vocational education can be implemented through the widespread introduction of modern virtual educational technologies. It performs the following main task (see Table 1):

Table 1.

	Name	Opportunity
1.	Perceptive - mnemonic	Increases memory and sensitivity.
2.	Didactic	Develops the cognitive process to acquire new knowledge.
3.	Developer	It develops students' understanding and skills about the science of primary training before convocation.
4.	Targeting	Strong curiosity creates conditions for receptivity.
5.	Heuristic	Creates a mental challenge.
6.	Illustrative (exhibition)	The initial preparation before the call is the rapid acquisition of knowledge.
7.	Educator	Increases creativity and curiosity.

In general, analyzing the possibilities of remote teaching of pre-service subjects through the Internet, the following advantages can be distinguished: flexibility. Ability to use at a convenient time and place; unregulated time period; modularity and variability. The ability to create a training plan that meets individual or group needs from independent training courses (modules); parallel. In parallel with professional activity, that is, without stopping production, the possibility of constantly increasing their level of education; extensive coverage. To refer students to a lot of information at the same time (electronic libraries, databases, etc.); communication with each other and professors and teachers through the network; potential expansion of the global audience; profitability. Efficient use of educational and technical means, concentrated and integrated presentation of educational information, increasing access to it and reducing costs in training specialists; production capacity.





The use of advanced pedagogical and scientific-technical achievements, modern information and telecommunication technologies, which contribute to the progress of humanity in the global post-industrial information space, in the educational process; lack of compatibility problems with computer equipment and operating systems; social equality. Equal opportunities regardless of the student's place of residence, health and financial security; ease of updating content and the ability to archive old material; encouraging independence in teaching, critical thinking skills, academic discipline, self-discipline and responsibility, and persistence in achieving the goal; Using remote technologies, students develop and strengthen such qualities as perseverance, responsibility, the ability to make constructive decisions, as well as intelligence.

Despite the advantages mentioned above, it also has several disadvantages:

- lack of confidence in electronic communication and teaching tools;
- that students do not have the opportunity to communicate live with professors;
- the success of the training is partially caused by computer management, Internet work and technical difficulties;
- the lack of a number of practical skills acquired during the performance of real (not virtual) practical training;
- in some cases, problems caused by Internet operation;
- lack of diversity of opinions in the educational process;
- methodological requirements for textbooks, limitations of the authors' ability to fully express the studied material in the absence of professors-teachers.

Currently, due to the modernization of computer devices and the emergence of appropriate pedagogical software tools, new approaches to teaching methods are becoming more and more widespread. , is to form project thinking and analytical abilities, communicative competences, tolerance and independent learning. For this, it is necessary to implement open information educational portals and platforms on the Internet on a large scale.

In higher education, the main focus is on the formation of individual and independent educational directions of students. This is, on the one hand, to significantly deepen the content of the initial preparatory education before the draft, and on the other hand, it is necessary to introduce specialized training to master the requirements for the level of military education preparation of the graduates before the draft.

Pre-vocational training as a science subject is an integral part of scientific education at all levels of education. As one of the important components of the field of pre-draft military education, the future field of pre-draft military education will make an important contribution to teachers in achieving general educational goals aimed at





developing the foundations of academic subjects, intellectual and creative abilities, and forming a scientific outlook. .

Virtual educational technologies that allow for systematized management of the educational process of initial training up to convocation within the framework of distance learning, defining educational material, systematizing, strengthening, mastering students' knowledge, skills and abilities during the lesson ranks high.

In addition, students can practice various tasks that are used to monitor knowledge in final exams. Also, the use of virtual educational technologies modern military training describes a process or event, implements automated control of knowledge on a specific problem and the course as a whole, and uses special forms of presentation of available information to a group of students , creates an individual learning path.

Virtual educational technologies can be used at various stages of pre-service primary training classes (learning new material, strengthening it, checking knowledge) and in the process of independent education. The use of computer models, animations, video clips achieves a more perfect study of the educational process in a visual form and increases interest in the subject of primary training before the convocation.

At the same time, virtual educational technologies enrich the teaching methodology of basic pre-conscript training with new technologies, help teachers to describe pre-conscript military educational processes through multimedia technologies and teach by automated management of student knowledge. It also reduces to a certain extent the deficiencies in the textbooks and in the teaching of pre-service teachers and provides an opportunity for qualified methodologists to use virtual educational technologies.

Virtual educational technologies should be designed to deliver theoretical and practical materials. This ensures the use of the acquired knowledge in the practical activity of the student. Educational materials provided with the help of virtual educational technologies should define the system and scope of knowledge that students need to understand, and should also include information that expands and deepens the core of the lesson content, which is the training. allows to implement the principles of differentiation and individualization in the nation. In order to form the experience of emotional reaction to natural phenomena, the textbook should consist of materials designed to have an emotional impact, taking into account the psychological characteristics of students.

There is a search for and support for positive, social identification of communication in the field of virtual educational technologies, which is an important factor in stabilizing the communication participant. The process of virtual education in the subject of primary training before convocation is one of the forms of education that





can occur in the usual interaction between professors and students of the studied objects. Its informational potential is as follows: it combines knowledge - skill - experience and didactic components of the computer with structurally interacting virtual models.

Based on the above analysis and the theories of experts, it can be said that virtual educational technologies designed for the distance learning system, which is considered a new stage of pedagogy, should be introduced into the military education system of our country up to the draft, including before the draft, after studying foreign experiences. It is an effective modern teaching tool used in the teaching of elementary school subjects.

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