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# TRAINING SYSTEMS FOR FUTURE ENGINEERS USING DIGITAL TECHNOLOGIES

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**Abstract**
To improve the quality of education, the success of the internal structure of educational organizations, to strengthen the educational system is to achieve the specified level oh introduction oh digital technologies in the educational process. Achieving a given level of digital literacy of the participants of the traditional education system, as well as the educational process.

**Keywords**: Digital technologies, transformation, engineers, education, procedures, information, systematization, technique, internet, competence, qualification.

The resolution of our President dated February 17, 2021 “On measures to create conditions for the accelerated introduction of artificial intelligence technologies” also provides for the development of the higher education system in accordance with the “Digital Uzbekistan – 2030” strategy. Particular importance is attached to the use of artificial intelligence technologies in digitalization, analysis, and teaching processes .


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The digitalization of the education sector in the Republic of Uzbekistan is characterized by the following main tasks: providing educational institutions with wide-scale access to the Internet, as well as equipping educational institutions with modern digital technologies that allow increasing the availability and variety of educational materials; creating a single knowledge base throughout the republic; developing the level of use of digital technologies in educational organizations at various levels, including e-learning and distance learning; monitoring the quality of education and evaluating the system of using e-learning in educational institutions; forming a continuous learning ecosystem, including identifying and supporting talents in all areas; To prepare highly qualified personnel who meet new requirements and key competencies for the education system.

The digital transformation of the education sector is a fundamental transformation of planned learning outcomes, educational content, methods and organizational forms of educational work, as well as a radical improvement in the assessment of results achieved in a rapidly developing digital environment, that is, the learning outcomes of each student are taken into account.

Digital technologies in education are a way of organizing a modern learning environment based on digital technologies. A digital learning environment (DLE) is a digital space consisting of a set of interactive information systems that unite all participants in the learning process.

Digitalization of the education sector is aimed at improving the quality of education, the success of the systematic structure of higher education institutions, and the improvement of the education system. study to the process modern and digital technologies current of the harvest to a certain extent is to achieve . The offline learning system, as well as the learning procedures, aim to achieve a given level of digital literacy among participants.




Digital competence is the ability to solve various problems in the field of information and communication technologies.

Digital literacy – information safety the basics to account received in case digital is the ability to use digital technologies, communication tools, and networks to search, analyze, create, and manage information for the purpose of collaboration and teamwork, to meet personal, educational, and professional needs in an environment. Also, ethical and legal norms for working with information.

Digital technologies have become so deeply embedded in our lives that today they have a huge impact not only on our daily activities, but also on the development of socio-economic, scientific and pedagogical spheres. He has. Of course, other in the fields what happened like like digital technologies The introduction of technology into educational processes is also fundamentally changing the way the education system operates. This only student young people maybe all higher education institutions in between relationships Not only is it related to the introduction of pedagogical innovations, but it is also introducing innovations in the design of the mountain education system and methods of storing information. Digital technologies basically again preparation and qualification increase in the process itself The characteristic level of listening, experience, and high level of thinking should therefore be taken as an active part of the activity of the subject of education.

Higher education The task of the teacher in the system is to use special methodologies, methods of influence, personal and professional qualities in the educational process, and to show examples of healthy competition, humane, and democratic relations to students and young people. necessary. This during student young people activity and knowledge skills analysis It is important to show with concrete examples the difficulties encountered in self-education, how to overcome them, the specific aspects of determining the content of education when

self-education indicators vary, and ways to take into account the specific characteristics of students and young people. In addition, higher education education by used digital technologies method and future engineers The ability to demonstrate with concrete examples how learning is the basis for increasing professional competence, acquiring knowledge, arousing motivation, and activating learning activities, as well as the formation of spiritual qualities and worldviews, arouses interest in the course of study among the listeners. Because the main subject of professional activity in the educational process is learning, and its subject is the formation of professional skills and the spiritual world.

We believe that the process of improving the qualifications of future engineers is clear, and its improvement can be implemented on the following principles:

1. The training and formation of knowledge of engineers is not only an institution of higher education, but also a system of improving their professional skills. Therefore, education and its content, form and methods are a combination of general pedagogical skills, pedagogical project, systematized training and qualification practices.

2. Advanced training of future engineers is considered a system of improving the activities of a specialist in the field of education. In particular, the system of advanced training differs significantly from other educational systems in that it trains students in the field of engineering and technology. They approach their studies as experts in their field. The expertise of the trainees allows us to assess not only the usefulness of improving their qualifications, that is, what knowledge, skills and abilities they possess in the effective use of modern technologies, but also the degree to which the activities of the specialists who trained them have been implemented.

3. In training competitive engineers implementing the above features - speaker, practical and laboratory in training lesson from the beruvish professional

to prepare , the knowledge of their own characteristics in their professional practices make it necessary for them to become specialists.

Information technology is the use of information for use in various fields. gathering, storage, collection, search, use, change and distribution with related technologies.

associated with the introduction of information technologies into human activity

-product of the quality increase

-in the market competition exacerbation

-product life period on the steps expenses decrease

Modern business requires the rapid adoption of information technologies. Modern information to technologies device and program of means high It is characterized by rapid change.

The goal of teaching students an automated system of design based on modern programs is to study the ways of scientific and technical development in the garment industry and the basic principles of their development. Practical based on digital technologies lessons in organizing advanced and modern from the methods: slides to show, New pedagogical methods such as using electronic versions of the subject, using information via the Internet, and using interactive methods in lessons The application of technologies is of great importance.

To improve the processes of applying the theoretical and practical knowledge of future engineers, to develop knowledge and skills that meet world standards, and to adapt them to real conditions. The following activities are carried out for independent support:

- theoretical knowledge to give and literary sources to provide with ;
- science reports to grow distribution materials presentation to do;
- graphic from the organizers using education the result increase;
- interval methods with the help of practical skills shaping;

- of education under the leadership of student's independent work and teacher addition organizing counseling sessions;
- independent education educational-methodical in terms of supply;
- student's independent knowledge to take promotion;
- remote, electron and mobile education promotion ;
- student to assimilate regular control to do price to go.
- equipment of the field all directions therefore modern technologies to account It was made as received.

Conclusion: To achieve this goal, bachelors need theoretical knowledge, practical skills, practical work and to processes methodological approach also It consists of forming a scientific worldview.

Students theoretical knowledge, practical skills from shaping phrase.

To achieve this goal, the education system performs the tasks of providing students with theoretical knowledge, practical skills, a methodological approach to economic phenomena and processes, and forming a scientific worldview.

## REFERENCES

1. Uktamov DO Regulatory and legal framework for the use of digital technologies in the educational process. Collection of materials of the "International Scientific and Technical" conference on computer science and engineering technologies No. 2 October 13, 2023, 339-342.
2. Uktamov DO The role and importance of digital technologies in preparing future engineers for professional activity. Scientific Methodological Journal 2024 No. 2/2 131-136.
3. Uktamov DO Methodological system for using digital technologies in training future engineers. Professional education in Uzbekistan 2024 No. 1, 52-58.

4. Akhmedov JR, Nurov UX, Uktamov DO Technological map of the methodology for preparing engineering and pedagogues for innovative activities in an informational educational environment . International scientific and practical online conference "Computer linguistics: problems and solutions ". - Tashkent. 19.04.2021. Pages 29-36.
5. Uktamov DO Digital educational technologies as a means of preparing future engineers for professional activity. Innovative technologies in the environment of digitalization of higher education: Problems and solutions International scientific and practical conference March 14-15, 2024 105-109 .
6. Hamidov JA, Murodova AY (2023) Technology for development of professional and technical component of future engineers through virtual educational technology Atamuratov RK The educational advantages of virtual reality technologies. The Competing Science and Technology International Journal, 4 May 2023, pp. 87-90.
7. Murodova AY (2023) Virtualization in the training of engineers as a factor of increasing scientific efficiency. Academic Research Journal 2023. Pages 184-189
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