Perspectives of Distance Education of Future Engineers

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Abstract: This article focuses on the prospects of training highly qualified engineers and technicians who are able to solve important scientific and technological production tasks in higher education institutions, specialized technical schools and colleges in the republic that train all engineering personnel through distance learning educational platforms based on international standards.

Keywords: Distance education, information and communication technologies, electronic and intellectual education technologies.

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Introduction

Currently, in our country, great importance is attached to the organization of construction, reconstruction and capital repair works based on the requirements of the times, the use of advanced technologies and engineering solutions based on innovative technologies, resource-efficient and quickly built constructions and materials in this process. In solving these tasks, one of the important tasks is to organize a system of training highly qualified engineering and technical personnel for the digital economy, to prepare highly qualified engineering and technical personnel capable of solving important scientific and technological production tasks at the level of international education standards.

Development of the system of specialist and scientific personnel training based on the principle of continuity and consistency of education and science, as well as integration in accordance with the world educational and scientific community, development of new educational programs and forms of training aimed at improving and modernizing the system of engineering and technical personnel training and current is one of the important tasks. Moreover, to support the development of pedagogical potential, to actively improve pedagogical methods and technologies of teaching, to develop and strengthen long-term relations with leading educational institutions and research centers of foreign countries in the fields of education and scientific and technical fields, and to create a form of distance education for engineers are the important tasks.

In this regard, it is an important direction of modernization of education, it is necessary to inform the educational process, expand the use of interactive educational forms in the educational process, and introduce special educational programs for online education. Creating an educational system that can adapt to the rapidly changing needs of the labor market in the integration into the modern industrialized world is the most pressing issue today.

Today, the ownership of information and communication technologies is becoming one of the most important powers of an intellectual person, because technologies serve as a powerful tool for education, and at the same time, their proper integration into the educational process and accompanying them with new educational models is an important tool for training future personnel. For this, many developed countries are developing a transition to interactive and project-based education using innovative and technological solutions.

In the current period, the problem of in-depth study of information and communication technologies, reception of large amounts of data, processing and independent work is emerging.
Modern information and communication technologies require the development of new forms and methods of teaching, educational platforms in order for students who come to study at an educational institution to have sufficient skills for independent thinking and work.

The e-learning platform, which is being created to practically strengthen students’ theoretical knowledge gained from specialized subjects, will make a great contribution to their development as a high-level specialist. Increasing the efficiency and quality of scientific and research activities is one of the urgent tasks in the current era of rapid globalization and to find rational solutions to tomorrow's global challenges. We believe that the acquisition of modern sciences at the level of international standards by our youth, who are considered the future of our country, will bring the scientific potential of our country to even higher heights.

It is known that the development of SMART technologies and the intensity of their penetration into everyday life reveal the diversity of educational activities and the possibilities of their individualization, allowing to organize the interaction of educational subjects in a new way, to establish an educational system in which the student becomes an active and equal participant in the educational process. In addition, SMART technologies allow quick access to educational resources, completion of assignments, communication with the teacher at any time, any place, increase the student's motivation with the help of familiar technical tools, virtual environment, and develop continuous work skills.

It includes the possibility of practice-oriented education through the introduction of electronic and intellectual learning technologies, electronic content that is regularly formed by teachers and students at the same time, "participation" in virtual seminars, watching lectures online or in writing, as well as smart education, which provides the opportunity to take tests in an electronic learning environment. aimed at solving the problems of Web2.0 consists of creating information and software tools, introducing cloud technologies, and developing educational resource management systems (EMS).

Distance education of future engineers includes the following:

- development of a project concept for the implementation of an intellectually flexible virtual environment;
- development of an information infrastructure project for an intelligent virtual environment;
- development of a project to transfer the existing virtual environment to the information infrastructure using cloud computing technology;
- development of a virtual environment support project based on cloud computing technology;
- development of a methodology for setting up a virtual environment for an individual educational project.

**Conclusion**

Smart education, which provides the opportunity to receive practice-oriented education through the introduction of SMART technologies and intelligent learning technologies, electronic content regularly created by teachers and students at the same time, "participation" in virtual seminars, watching lectures online or in writing, as well as taking tests in an e-learning environment aimed at solving the problems of Web2.0 consists of creating information and software tools, introducing cloud technologies, and developing educational resource management systems (LMS). It serves to strengthen the theoretical and practical knowledge of pupils and students on the basis of the results of the creation of software for remote training of engineers and its results using "SMART" technology.

**References**

1. Bekturdiev S.Sh., Dushanov B.B. University the use of smart technologies in developing professional individuality. «ISSUES OF INNOVATIVE DEVELOPMENT OF SCIENCE, EDUCATION AND TECHNOLOGY» International scientific and practical online

