

**Simulated Additional Computer System - As an Information and New
Educational Environment in the Vacuation of Future Specialists**

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Abstract: The introduction of modern information and communication technologies in the educational process is one of the best ways to increase the interest of future engineering engineers in the study of educational disciplines, as well as contribute to the development of logical thinking, a culture of mental work, and the formation of independent work skills. In this regard, improving organizational and methodological support for the development and implementation of programmed auxiliary computer systems is of great importance. In this article, the speech is about improving the methodological and didactic support for preparing them for professional activities that meet innovative conditions.

Keywords: pedagogical innovations, competency requirements, professional education, educational technologies, programmed auxiliary computer system, technical engineer.

In the strategy of actions for the further development of the Republic of Uzbekistan, “the continuation of the course of further improvement of the continuous education system, increasing the availability of quality educational services, training highly qualified personnel in accordance with the modern needs of the labor market, the introduction of international training standards and assessing the quality of teaching” is defined as a priority task [1]. The introduction of pedagogical innovations and competence requirements for the training of specialists in educational institutions is a global trend in modern education, therefore, rethinking the priorities of training specialists in accordance with the needs of society determines the urgency of the problem of ensuring the quality of vocational education.

In this regard, it is of great importance to improve the organizational and methodological support, the development of educational and programmed auxiliary computer systems corresponding to the object of professional activity, the improvement of the methodological and didactic support for their preparation for professional activity, corresponding to innovative conditions.

Currently, science is developing the concept of a new civilization - the civilization of quality. Quality assurance is becoming a key idea and a new philosophy of education, and quality management of educational activities is becoming a complex pedagogical problem [2].

At the present stage, the general goals of vocational education are:

1. In creating conditions for mastering knowledge in the field of professional activity, obtaining qualifications or, if necessary, retraining, so that a person can engage in socially useful work in accordance with his interests and abilities.

2. In meeting the current and future needs of production in the economic, social, cultural and other spheres in qualified specialists who meet the requirements of the humanitarian, social and scientific-technical process, with a broad general educational and professional outlook, professional mobility [3,4,5].

Thus, modern education cannot be limited to a list of requirements for subject knowledge, skills and abilities, it should cover all the main components for the development of the competence of mechanical engineers. Today, the state of vocational education requires the development of a new strategy for its development and serious reform on the basis of promising educational technologies aimed at improving the efficiency and quality in the training of mechanical engineers. The solution of the problems facing modern education is possible through the use of modern technologies, including a simulated additional computer system. Their introduction into the field of education led to the emergence of the term information and educational environment, usually understood as a set of computer tools and methods of their functioning used to implement educational activities. Thus, the information and educational environment is understood as a systemically organized set of information, technical, educational and methodological support, inextricably linked with a person as a subject of the educational process [6,7].

The simulated complementary computer system covers a vast amount of information on a discipline. The simulated additional computer system provides new opportunities in the educational process of mechanical technicians in the study of disciplines such as "Use and maintenance of irrigation and drainage machines and equipment" search and analytical methods of working with information, individualize the learning process. All this allows us to assert the possibility of using the Internet as an information and educational environment in the training of mechanical technicians [8].

The simulated additional computer system consists of the following elements (Fig-1):

Theoretical - a set of theoretical information on a topic (definitions, basic concepts, rules, laws, principles, criteria, etc.). In the process of explaining the topic, the teacher can use this theoretical information, linking it with the material in the rest of the sections.

Practical - the state of application of the topic in practice, as well as individual tasks, practical exercises on each topic and methodological instructions for their implementation. In this section, it is also possible to use theoretical information, stand, Internet, materials of the test section, and contact them.

Information - includes tables, basic formulas, constants, physical quantities, signs of physical quantities related to the topic. There is also the possibility of communication with such parts as theoretical, practical, stand, test, Internet.

Stand - includes visual information on the topic, including excavators and tractors, units, equipment (electrical circuit diagrams, equipment images, mock-ups, photographs of models, vector diagrams, graphs), etc. There is also the possibility of communication with such parts as theoretical, practical, test, Internet.

Test - includes a set of questions on the topic and indicators of results to control the student's assimilation. At the end of the test, topics are indicated that correspond to the test questions that the student could not answer.

In this software system, the student can re-view and independently study the topics that he could not master. Test control is carried out at the end of each topic or chapter. The introduction of a software system into the learning process in the process of forming -professional skills based on a competency-based approach makes it possible to achieve effective results.

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