

## **Methods and Problems of Improvement of Technologies in Teaching Technology**

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### **Abstract**

In this article, the main goal of modernizing the engineering education system and raising the effectiveness of education to a new qualitative level is to ensure that students master modern knowledge and profession and take their rightful place in society.

**Keywords:** engineering, pedagogy, technology, innovation, education, training, system, knowledge, efficiency, competence, quality, process, personality, theory, practice, thought, activity, tool, method, factor, science.

The years of independence are literally spent with the implementation of large-scale reforms aimed at determining the perspective of the socio-economic and cultural development of the Republic of Uzbekistan, striving to take a worthy place among the countries of the world community. Experiences of developed countries of the world learning, local conditions, economic and intellectual resources taking into account the fact that fundamental reforms are being carried out in all spheres of society's life, ensuring new achievements. Although international cooperation in various fields is bearing fruit, strengthening of national independence in all aspects, achievements achieved enrichment, rapid elimination of existing shortcomings requires special dedication, enthusiasm, courage and determination from members of society.

The current development of science, technology, production and technology is defining the image of modern society. The most important characteristic aspect of modern society is globalization in all its spheres. Globalization itself means fast movement, immediate acquisition of necessary information, their processing and implementation.

Requires effective implementation. Only personnel who are experts in their field, have acquired professional skills at a high level, and have rich experience and skills will have the opportunity to move in this way. Therefore, in the process of training personnel in higher education institutions, this demand of the time it is appropriate to take into account.

In this regard, it is being strengthened by the decrees and decisions of the president of our country, including the fundamental revision of the content of personnel training in accordance with the priority tasks for the socio-economic development of our country, in order to create the necessary conditions for the training of highly educated specialists at the level of international standards. Decision No. PQ-2909 dated April 20 "On measures for further development of the higher education system" was adopted. With this decision, to raise the level of higher education in terms of quality and to fundamentally improve it, and at the same time, to train highly

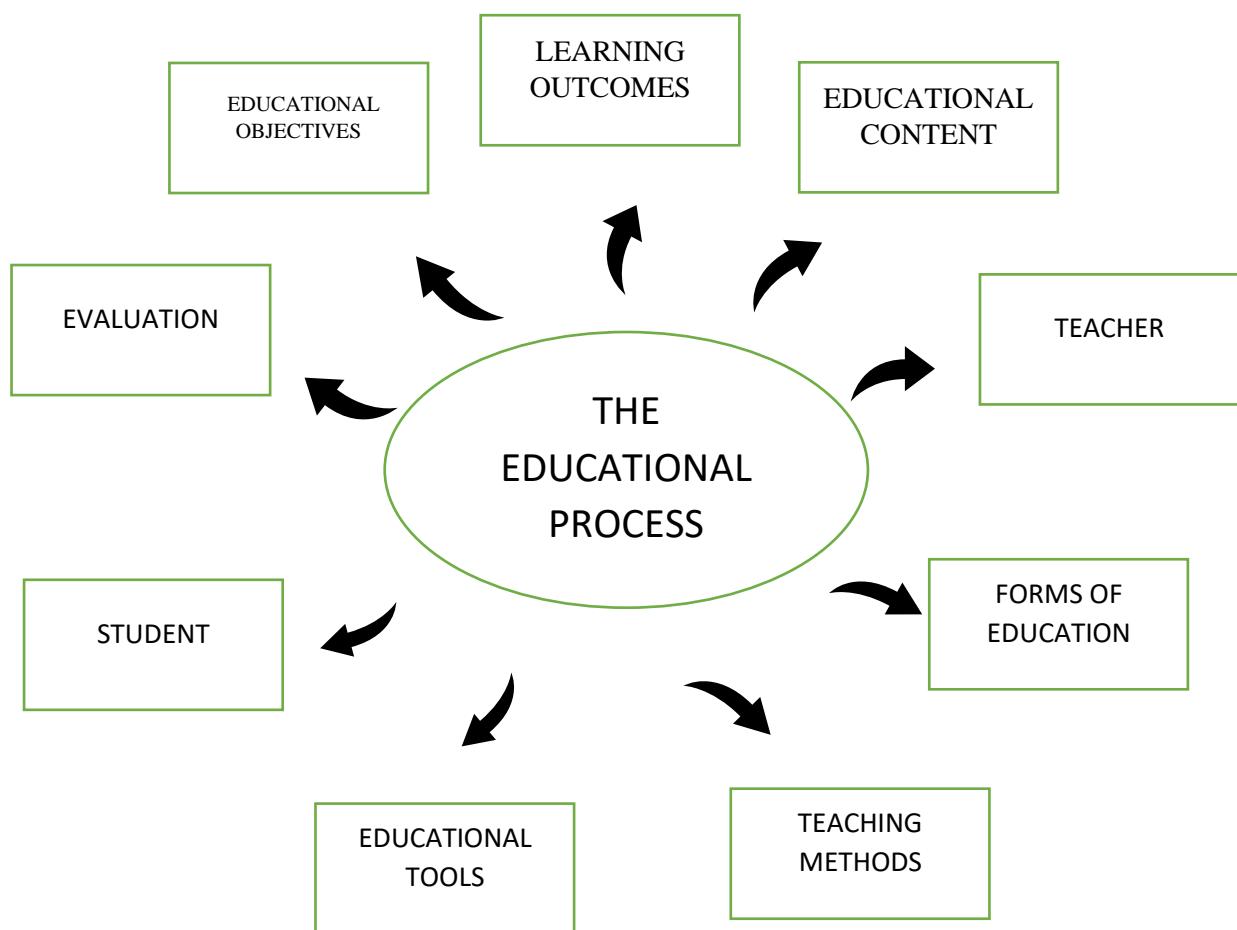
qualified personnel who meet the requirements of the times for the socio-economic development of the regions of our republic based on the needs of economic sectors and sectors in due time, the content of higher education is directly formation in accordance with technical, technological, production relations in enterprises, institutions and prospective development programs. The existence of discontinuities between higher education - science - production, ensuring integration, systematic training of highly qualified scientific and scientific-pedagogical personnel and training of highly qualified competitive personnel in the higher education system of the republic, the prospects of socio-economic development of the country, the needs of society, science , radical improvement based on modern achievements of culture, technique and technology. Forming the educational content directly to meet the requirements of production enterprises and organizations for the quality of training of specialists and introducing modern forms and methods of teaching, computer and information and communication technologies into the educational process. [2].

Ensuring the quality of education in higher education institutions and several issues are envisaged. The Ministry of Higher Education of the Republic of Uzbekistan and the managements of secondary special educational institutions, in their turn, take a model from the modern teaching methods and technologies used in the most developed countries of the world, including the USA, Great Britain, Germany and other countries, and are consistently implementing educational reforms step by step. A new generation of state education standards and curricula is being created. In order to base education, curriculums have been revised, science programs covering high techniques and technologies are being created, new generations of educational literature in many areas and disciplines are being published, aimed at modern requirements and the goals of training mature competitive specialists. We all know that the improvement of the use of new pedagogical technologies and methods of teaching in engineering sciences, as well as the formation of mastery and adaptation to the profession based on educational tools, depends primarily on the factors of the formation of the scientific level of lessons and the use of information technologies. Therefore, in the factors and methodical foundations of the scientific and technological level of engineering education, it is necessary to develop the factors of increasing the effectiveness of the scientific research work of engineer-pedagogues and to develop the improvement of the information technology base in education. Today, pedagogical technology is not a research in the field of technical methods of teaching or the use of computer tools, but it is a factor that increases educational efficiency. [3]. In the era of developing technology, students are taught according to the needs of the times it is most urgent to educate mature educated, intelligent, and capable people remains one of the tasks. In order to effectively use educational technologies in the educational process and to increase the technological possibilities of teaching, engineering sciences are carried out on the basis of new pedagogical technologies, would be appropriate. Engineering or engineering is a technology in the field of natural sciences that studies phenomena important to the creation and development of technology.

The activities of scientists of technical sciences are carried out within the framework of scientific and technical activities and are mainly used in nature. The practical direction of scientific and technical research makes them contradict fundamental science. There is an integral connection between applied research and fundamental sciences: on the one hand, the results of fundamental research are the theoretical basis for conducting applied research, on the other hand, the results of scientific and technical activities are evidence that confirms or rejects scientific theories created by theoretical scientists [4].

The importance of the advantages of educational technologies and the use of educational criteria in the teaching of engineering sciences was mentioned. It forms the quality of the processes of development of the factors of increasing the technological capabilities of training sessions in the future directions of engineering education, adaptation of students to the labor process. That's it therefore, formulating practical proposals and conclusions in the development of teaching technologies of engineering education and methods of development of education on the basis of new pedagogical technologies includes important factors of training competitive personnel with

professional qualifications directly in the educational process. Today, students' educational activities are provided with modern equipment and educational equipment, qualified teaching staff. This plays an important role in increasing the efficiency of this process. Improving the efficiency of education in the engineering education system is one of the serious tasks. For this, every teacher is required to know the most effective modern pedagogical technologies of teaching his subject and to constantly improve his professional skills by continuously studying the innovations in this field. Every pedagogue knows that improving the quality and efficiency of the educational process is the basis of our future development. Therefore, it is necessary for teachers to work on themselves and increase their professional experience in the implementation of pedagogical technologies in the educational process. The main goal of modernizing the engineering education system and raising the efficiency of education to a new level of quality is to ensure that students acquire modern knowledge and profession and take a worthy place in society. Teaching education based on new opportunities and requirements, as well as technologyzation of education, requires the application of modern educational technologies based on information technologies. Educational process as a system [5].



One of the main factors of improving the use of educational technologies in classes is the provision of all technical means of teaching in the educational process. In the course of education, the lessons organized using the technical means of teaching showed that it is possible to solve the following issues among students:

- ensuring scientific and systematic education;
- increase visibility;
- increasing students' enthusiasm for learning;
- ensuring that students get deep and solid knowledge;
- to accelerate the pace of studying and mastering the educational material;
- individualization of education;

- implementation of the system of control of the assimilation of knowledge
- increase;
- increase students' attention to the lesson;
- develop the skills and abilities of students to learn independently to do;

Another factor in the development of the use of educational technologies in engineering education is the improvement of the information base of the institution. Improvement of the economic information base, increasing the possibilities of students' mastery level, formation of technical education levels of students, implementation of work on the issues of creating methodological materials of educational factors, first of all, includes the factors of creating informational and methodological support of engineering-pedagogues for teaching technical sciences. in order to improve the teaching of subjects based on modern educational technologies, it is considered necessary to pay attention to the following: [6].

- to improve the material and technical base of the educational institution;
- textbooks of subjects to be taught, training manuals supply;
- Pedagogical skills of students in an educational institution to develop;
- Pedagogical technologies in theoretical and practical teaching to create different views;
- creating problem situations, finding ways to solve them to look for;
- education that increases the activity of students during the lesson to create technologies;
- students to think independently through problematic issues to teach;
- up-to-date handouts related to the topic, to be diverse;
- efficient use of modern technical tools in the course of the lesson organization of use, etc.

Summary. Taking into account all the above points, it can be said that modern educational technologies and interactive based on them science, education, whose methods are being improved day by day and should be used in accordance with the characteristics of the profession.

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