

Methods of Teaching Materials Science on the Basis of Innovative Educational Technologies

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Annotation: The article provides comprehensive support for the creative ideas and creativity of young people who are the successors of our future at a time of rapid development of our country on the path of innovative development, the formation of their knowledge, skills and advanced foreign experience. , improvement of the evaluation system on the basis of international criteria and requirements, study of international experience in this field, comprehensive comparative analysis of the existing system, close cooperation with relevant international and foreign organizations, research institutions, innovative study of materials science The analysis of teaching methods based on lim technologies is given.

Keywords: innovation, foreign experience, creativity, foreign organizations, innovative technologies, creative idea, research institutions, educational technologies, game technology.

In order to improve the quality and efficiency of education, it is important to study foreign best practices and implement the requirements of international standards. The practical steps taken in this direction in the Republic of Uzbekistan include the adoption of a government decision on the organization of international research in the field of public education quality assessment in the public education system. This is one of the priorities of today's educational process.

Decree of the President of the Republic of Uzbekistan dated April 29, 2019 No 5712 "On approval of the Concept of development of the public education system of the Republic of Uzbekistan until 2030" Creating a national system of education quality assessment aimed at assessing the level of literacy of students in reading, mathematics and natural sciences on the basis of achieving membership in the ranks of advanced countries and the organization of international research in the field of education quality assessment in public education The introduction of general education programs and new state educational standards that meet modern innovative economic requirements, taking into account the definition of tasks, as well as the concept of students' critical and creative thinking, independent search for information, analysis concepts and emphasis on the development of countries. to increase the level of knowledge of students the assessment included permanent participation in international PISA, TIMS, PIRLS and other programs.

The use of innovative methods also builds students' competence to collaborate. In addition, a student who has not yet mastered the theoretical knowledge will be able to complete the task with the practical help of an active partner. Often, the reinforcement part of the lesson requires students to work individually, which is very important to develop the skills to apply the solutions of each task in practice. Data on pedagogical-psychological diagnostics show that an individual approach to education, innovative methods, along with increasing the effectiveness of teaching, also expands the opportunities for general development of students. Classified assignments, taking into account the intellectual potential of students, are presented online, using multimedia or a projector, which facilitates individual work. During the implementation of innovative methodological tasks, the teacher will be able to walk around the classroom, monitor the activities of all students, students with low mastery of the subject, and provide them with practical

assistance if necessary. Most importantly, it is possible to monitor the level of mastery of each student internally and use the right forms of guidance.

It is no exaggeration to say that the effective use of innovative methods in the classroom is one of the stages of accelerating the learning process, activating the learning process, increasing student motivation and entering the international education system, rather than entrusting the teacher's multifaceted and colorful activities to the computer. 'Imaydi.

It is worth mentioning that pedagogical technologies are "How to learn effectively?" and the analysis of the following definitions, as well as the criteria that make up the essence of pedagogical technology:

- Defining learning objectives (why and why not);
- selection and structure of content (what);
- optimal organization of the educational process (AS);
- Methods, techniques and learning tools (What to use);
- as well as accounting, taking into account the qualifications of the teacher (JSSV);
- Objective methods of assessing learning outcomes.

Game technology (didactic game). In the acquisition of new knowledge based on the use of knowledge, skills and abilities in practice, (Training dialogue is a specific type of technology, problem-based (Heuristic) learning technology). It is one of the most widely used educational technologies in the acquisition of learning knowledge, skills and ways of independent activity, the development of cognitive and creative abilities.

Prospective technology of advanced education. Minimum education to teach maximum education. Problem-solving knowledge, reviewing knowledge and skills in applying and applying knowledge in specific situations. Independently determine the ways, means, methods (results) of truth search for each study. Facilitate the formation of methodological competencies. In addition to providing students with an excellent plan for processes such as problem solving and information retrieval, it also provides a framework for problem solving.



Figure 1. Plate from the database of creating promising technologies.

Workshop technology. It is a technology used to study the life processes of students, to study their goals, to understand themselves and the world around them, to study their activities, to create conditions that contribute to the understanding of creativity, to create research work.

Research technology (project method, experiment, modeling) or research solution technology (inventor) tasks. It is an educational technology that answers a number of questions such as the study of the basics of research activities (formation of educational problems, study of hypotheses, use of research and various sources of information, presentation of work done).

EOR. (e-learning resources, ICT - technology). Different sources of information are technologies that help any student in performing activities such as self-education and teaching them to work with changes in the field of education. It is no exaggeration to say that on the basis of such technologies the student develops strong knowledge, sufficient skills and active skills.

At the same time, it is necessary to establish a system of teaching the subject "Materials Science (Materials Science and Technology of Construction Materials)" on the basis of advanced foreign experience, various educational technologies, e-textbooks prepared using e-learning resources. can be one of the important steps for future cadres.

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AMALIY MASHG'ULOTLAR	DASTURLASHTIRILGAN NAZORAT TESTI
MUSTAQIL TALIM MAVZULAR	TESTLAR
TAQDIMOTLAR	FOYDALANILGAN ADABIYOTLAR
ANIMATSIYALAR	MUALLIFLAR HAQIDA MALUMOT

Figure 2. Picture from the table of contents in the programmed e-learning complex.

The presentation of science lectures, practical classes and laboratory classes in electronic sources, which are difficult for students to imagine, is not only a requirement of today, but also provides a basis for the introduction of foreign experience.

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E-learning resources

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