

EFFECTIVENESS OF MODULAR TECHNOLOGIES IN THE PROCESS OF CONTEMPORARY EDUCATION

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Abstract: This article examines the reforms carried out in the field of education and the role, features, advantages, and significance of modular educational technology in the teaching process. The author analyzes the effectiveness of teaching specialized disciplines using modern pedagogical approaches—specifically, modular technologies—and their influence on developing students' independent work skills. The article also highlights the state policy priorities given to education and innovation, based on the perspectives and initiatives of the President of the Republic of Uzbekistan in this area. The theoretical and practical aspects of modular technology are thoroughly analyzed: teaching subject matter divided into modules, ensuring active student participation, evaluation criteria, and the impact on improving the quality of the educational process.

Keywords: Modular educational technology, educational reform, innovation, pedagogical technology, specialized disciplines, independent learning, quality of knowledge, didactic materials, modules, evaluation criteria, presidential initiatives, New Uzbekistan.

INTRODUCTION

This article discusses the development of education and professional training, the adoption of healthy lifestyle decisions, the growth of science and innovation, and the fundamentals of modular educational technologies.

Relevance of the Research

Today, the advancement of education and upbringing, the adoption of healthy lifestyles, and the development of science and innovation are key pillars of our national ideology and should serve as a foundation for achieving these objectives. Creating broad opportunities for our youth to reach their goals and providing comprehensive support is a critical task for all of us. Only then, as emphasized by President Shavkat Mirziyoyev, will our children become the great and powerful force that will realize the centuries-old dreams of our nation.[1]

One of the main objectives of educational institutions is to provide students with the necessary conditions to acquire knowledge created throughout human history, receive systematic scientific education, satisfy their intellectual needs, and enhance their interest by selecting relevant information and fostering independent reading skills. These goals cannot be fully realized through traditional teaching methods alone, hence the need to adopt modular educational technology in the learning process.

Main Body

Since we have set the great goal of restoring the foundation of our Third Renaissance, we must create conditions that allow for the nurturing of new Khorezmids, Bairuniyids, Ibn Sina, Mirzo Ulugbek, Navoi, and Babur.

To this end, large-scale reforms will be implemented based on the belief that “New Uzbekistan begins at the threshold of the school, the education system.”

Firstly, we aim to provide the younger generation with quality education in kindergartens, schools, and universities by mobilizing all available resources so that they grow up physically and spiritually healthy and patriotic.

Secondly, attention was paid to raising youth into adulthood as independent and logical thinkers, possessing noble qualities grounded in modern knowledge, experience, national, and universal human values.

Priority is given to training our sons and daughters in modern professions demanded by the labor market, forming their entrepreneurial and labor skills, supporting their initiatives, and ensuring they have employment and housing.

In short, attention was paid to creating an integrated and continuous system that supports a child from birth to the age of 30 in every possible way, helping him to find a worthy place in life.

World experience shows that investments spent on bringing the younger generation to adulthood in every possible way bring tens, hundreds of times more benefits to society, President Sh.M.Mirziyoyev noted in his speech. [2]

The teaching profession in society should be the most prestigious and respected profession. It was pointed out that the state should create all conditions for our teachers to provide children with high-quality education and not think about anything but how to work independently.

Therefore, our work on decent pay for teachers, coaches and methodologists will continue in the coming year. To this end, 330 billion soums will be allocated to the territorial funds for the encouragement of public education workers.

At the same time, more than 240,000 school teachers receive 1.5 times more for classroom guidance, and another 400 billion soums will be spent from the budget.

Third, special attention will be paid to expanding the coverage and improving the quality of higher education. Starting next year, the number of government grants allocated to higher education will increase by at least 25 percent.

Мы увеличим количество грантов для девочек из семей, нуждающихся в поступлении в высшие учебные заведения, в 2 раза, до 2 тысяч.

Special scholarships are being introduced for girls who study with excellent grades and need social protection.

In this regard, I would like to express one opinion," the president said in his speech. Currently, young people are striving to enroll in the most prestigious universities, but there is no competition between universities to attract educated and talented young people. Therefore, the system of issuing state orders for the training of necessary specialists has been established for private universities. [3]

Sixty-five academic lyceums are placed at the disposal of higher education institutions in order to establish unity between higher education institutions and lower levels of the educational system.

Moreover, 187 technical divisions will be attached to universities of the same category and related network enterprises in their fields.

Attention was paid to the further development of relations with prestigious foreign universities, scientific and innovation centers, and cooperation with them in personnel training.

In this regard, it is planned to increase the number of young people who will be sent to study at master's and doctoral programs at leading foreign universities by the El-Yurt Umidi Foundation 5 times next year.

For the first time, within the framework of this program, the issue of sending 100 sons and daughters to foreigners in the Bachelor's degree program was raised. In subsequent years, it was noted that their number increased 2-3 times.

In the new year, 30 leading universities in our country will have the right to develop educational programs, receive quotas and independently resolve financial issues.

Fourthly, science and innovation are undoubtedly the basis for the country's development.

Next year, the number of doctoral students at universities and scientific organizations in the field of science will be increased by 4,500 or 3 times compared to 2017. An additional 240 billion soums will be allocated from the budget for these purposes.

Based on the best international practice, the scientific titles of associate professors and professors, the scientific degrees of Doctor of Philosophy and Doctor of Sciences are transferred to the academic councils of prestigious universities in their field.

For the first time this year, the subjects of mathematics, chemistry, biology and geology were identified as priority areas of education and science, and measures were taken to develop them.

In particular, 98 specialized schools and a University of Geological Sciences were established. Educational programs have been radically revised, and teachers' salaries have been increased.

Next year, we need to identify priority areas of science, says President of Uzbekistan Sh.M.Mirziyoyev In an address to the Oliy Majlis of the Republic of Uzbekistan.

If we look at history, we will see that the science of physics has been the fundamental foundation for the creation of almost all discoveries and technologies in the world.

The fact is that without a deep understanding of the laws of physics, it is impossible to achieve results in areas such as mechanical engineering, electrical engineering, IT, water and energy-saving technologies that are in demand today.

The great thinker and poet Mir Alisher Navoi addressed the youth at one time and wrote: "If you want to be sunny, be a master of your profession."

Indeed, a person who wants to spread such a beautiful light as the sun among people, to do good, should strive for perfection and master various sciences and professions.

Nowadays, we would not be mistaken if we could not achieve such goals, as our great-grandfather said, without perfect study of foreign languages.

After such a surge in demand, studying physics and foreign languages was highlighted as a priority next year.

To this end, in the coming year, systematic work is being carried out in all areas of education to radically improve the quality of teaching these subjects, open specialized schools, and attract qualified teachers.

He pays attention to the organization of the Ahmad Ferghani International Olympiad in Natural Sciences in Physics.

Additional measures are also being taken to increase the volume and quality of scientific research in the field of physics, and to create the necessary conditions for young scientists.

Modular educational technology is based on modules. "Module" is a Latin word or means "Piece" ("Block"). [4] Therefore, a module is a concept that makes up a pedagogical technology that consists of components. Let's consider the application of modular technology using the example of teaching special disciplines.:

Currently, one of the effective directions for the development of economic education is the teaching of special disciplines based on modular technology. It is known that in traditional education, educational goals are mainly aimed at providing knowledge, and in modular technology-based education, at student-student activities.

The module is a block of educational materials that focuses on the study of fundamental concepts of science, interrelated with each other and based on the didactic principle, according to which curricula in natural sciences are stratified in an abbreviated and in-depth manner. As a result, step-by-step learning is possible.

In teaching based on modular technology, the purpose and content of reading instruction, the purpose and content of the modules are initially determined. At the end of the module, educational principles

define the knowledge, qualifications, and personal qualities that the student must achieve as a result of their studies.

When teaching based on modular technology in theoretical classes, visual aids with text are used, such as didactic reading materials, for example, educational literature, a card file and lecture texts, handouts, course materials in practical classes, and methodological guidelines.

Theoretical training in the field of studying special disciplines based on modular technology can begin with interesting, even non-instructive information. For example, a lesson begins with an interesting discovery, news, or an explanation of wisdom related to the subject. This will have a positive effect on the mood of the students and help them become interested in this area or the topic that will be studied in the next lessons.

The acquired knowledge is consciously synthesized and applied in practice to information about other fields of science.

After each assignment or exercise, student students should evaluate the work they have done.

It is also very effective to openly and sincerely discuss the results in groups.

At the end of the module, you should set aside time for a final conversation. This is a good opportunity to reflect on the results of the activities of teachers and students, their implementation, and nothing more.

When teaching special subjects based on modular technology, it is recommended to conduct practical classes, which are often conducted directly or indirectly.

Lectures, tactics, and demonstrations are used in practice, which are directly controlled. Also, the organization of training based on questions and answers, training conversations, and discussion of the problem will give good results.

CONCLUSION

Thus, when teaching special subjects based on modular technology, the student's knowledge and skills should be regularly evaluated in accordance with educational goals. The assessment is based on legal, pedagogical and psychological principles, as well as on the state educational standard. The evaluation checks the learning process of the entire module and the acceptability of all its components. In this case, it will be determined whether modular training gives the expected result or not.

The main essence of modular education is that students achieve their goals through educational and cognitive activities based on independent work using modular programs.

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