### INTERNATIONAL BULLETIN OF APPLIED SCIENCE AND TECHNOLOGY

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### KEY APPROACHES TO PROFESSIONAL PREPARATION OF FUTURE TECHNOLOGY TEACHERS

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Abstract: This article provides information on the introduction of the credit-modular system in higher education and the main approaches to the professional training of future technology teachers. The structure of educational programs in the field of technology education and the competencies that future technology teachers should master are discussed.

Key words: technology, innovation, technique and technology, credit module, competence, vocational education, professional mobility.

Implementation of reforms in all spheres of Uzbekistan, change of people's worldview, preparation of mature and up-to-date specialist personnel is required by life itself.

Introduction of digital technologies and modern teaching methods into higher education processes, broad involvement of young people in scientific activities, fight against corruption, increasing the share of students studying engineering and technical education, introduction of credit-module system, training programs aimed at improving practical skills a number of legal documents were adopted, which specified specific tasks for increasing the share of practical training. For example, PF-5847 of the President of the Republic of Uzbekistan dated October 8, 2019 "On approval of the concept of the development of the higher education system of the Republic of Uzbekistan until 2030", "Strategy of Actions on the five priority directions of the development of the Republic of Uzbekistan in 2017-2021" "Science, enlightenment and digital economy" Special mention should be made of Decree No. PF-5953 dated March 2, 2020, "On the State Program for Implementation in the Year of Development". These documents became a unique legal basis for the new stage of higher education development.

Order No. 357 of the Minister of Higher and Secondary Special Education dated June 30, 2020 was adopted based on the implementation of the tasks defined in such regulatory and legal documents on the development of the field of higher education. Accordingly, in the 2020/2021 academic year, the educational process was organized in the credit-module system in 35 higher education institutions of the republic. The experience gained in one academic year became important in the introduction of the credit-module system. Of course, adapting the educational process to world standards is a process that cannot be delayed. Nevertheless, each introduced innovation required careful preparation. The introduction of the credit-module system was introduced step by step. Based on the order of the Minister of Higher and Secondary Special Education No. 311 of July 16, 2021, from the 2021/2022 academic year, the educational process in all state higher education institutions and their branches in the republic was organized on the basis of the credit-module system.

Nowadays, with the rapid development of technology and equipment, it is important to interest young people in various fields of technical creativity and production from school days.

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Special, psycho-pedagogical and methodical preparation content of special, psychopedagogical and methodical training programs of "Technological education" direction of higher educational institutions of pedagogy should correspond to the requirements of technological science of general education schools. General issues related to the methodology of technological training (job training) of learners Sh.S. Sharipov; Considered in the scientific works of O'.Q.Tolipov, N.A.Muslimov, O.A.Kuysinov, L.R.Zaripov and other similar scientists.

Training and professional formation of a technology teacher based on the credit-module system, the structure of the pedagogical activity of a technology teacher and his professional requirements include 3 parts:

- professional knowledge
- pedagogical skill
- personal virtue.

Also, in the classification of methodological approaches to professional activity modeling psychological), functional, dynamic, systematic analyzes pedagogical, corresponding models can be distinguished.

Vocational training of general education schools should be ahead of the changes in the society. In the meantime, when talking about the professional training of pedagogues, it is impossible to ignore the need to train specialists who meet the high requirements of the general education system and who can work effectively in rapidly changing socio-economic conditions. In 2017, the subject "Technology", which is an integrative education field, was added to the school curriculum instead of the subject "Labor Education" in secondary schools. But it was not just changing the name of one subject in the program to another subject, but it was the demand imposed on humanity by the changes in the global social production process as a result of the new technologies that appeared in all areas of human activity.

As a result, a technology teacher should not only be able to teach his subject in various conditions and educational institutions, but also to focus on other technology-related subjects, to have professional mobility and a polytechnic worldview, and the ability to engage in highlevel communication.

Until 2020, the curricula of the "Technological education" direction of the future technological science teachers in the country's universities, in accordance with the DTS, consists of 5 blocks (humanitarian and socio-economic sciences, mathematical and natural sciences, general professional sciences, specialized sciences, additional sciences).

Starting from 2021, after the introduction of the credit-module system in higher education in our Republic, the educational programs were divided into 2 blocks (compulsory subjects and optional subjects).

It was also established that a graduate of a higher education institution should possess general and professional competencies.

General competences refer to the social and personal qualities of graduates. These competencies ensure the implementation of professional activities at a certain quality level.

Professional competences relate to certain areas of professional activity and participate as a result of mastering the main aspects of professional activity. General and professional competences mean the ability to use skills, knowledge and experience acquired in a specific professional field.

The list of competencies intended for a specific field is determined by the qualification requirement of the field of study and they are filled by educational institutions when



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developing a program for a field, taking into account the characteristics of the field.

Today, there is a need for people with various professions in the society. Among them are a doctor, a builder, an artist, a teacher, and others. But day by day we are more and more accepting the idea that "everyone should be creative in their profession". In this way, the modern social demand imposed on the school requires the education of creative, creative thinkers, and not those who follow orders. Accordingly, one of the important tasks of pedagogical higher education institutions is to train teachers who are creative, able to analyze methodological and practical materials of various districts, choose the most suitable and correct ones, and perform their work in accordance with the evolving educational requirements. Graduates of a pedagogical higher education institution should independently evaluate and creatively apply traditional or modern approaches to education.

That is why high demands are placed on the training system of future teachers. A graduate of higher education institution should not only possess a set of ready-made knowledge, but should be able to find new information, process it and use it in new conditions, and of course, teach it to the growing generation in time.

It is necessary to teach the graduates of HEIs and create conditions for their personal development, self-improvement and becoming professional owners of the teaching profession. These can be taught to future teachers through the use of various innovative technologies in the educational process, but the fact is that modern technologies increase the quality of professional training of graduates.

The quality of training of specialists means the level of meeting the requirements of the professional environment in which he must work. Market relations have dramatically raised the level of professional requirements for specialists. This situation has created clear obligations to ensure that the educational services provided by higher education meet the quality.

According to experts, the quality of training of technology teachers lags significantly behind the demands of life, and the formation of professional knowledge, skills and qualities is becoming a very urgent issue. The current system of training technology teachers does not allow us to achieve our goals, does not always fully prepare graduates for creative work rich in modern information, and therefore needs improvement.

It was found that a great deal of attention in professional education should be focused on the training of future teachers of technology in the training of future pedagogues, because it is these specialists who face the issues of training for transformational activities in production. A teacher of technology should not only be able to teach his subject in different conditions and educational institutions, but should also be able to pay attention to subjects that are closely related to other technologies, have professional mobility and technical-technological world view, and the ability to engage in high-level communication. For this, the future technology teacher must know how to teach his subject using educational technologies that improve the quality of education. Under such conditions, a person who has received education will have a broad technical-technological outlook and professional mobility.

Professional mobility refers to the system of general professional methods and its effective application in the performance of tasks in the relevant areas of production and easy transition from one activity to another. Professional mobility also means a high level of generalized professional knowledge, readiness to quickly choose and implement optimal methods of performing various tasks in one's profession.



# IBAST | Volume 3, Issue 1, January

# INTERNATIONAL BULLETIN OF APPLIED SCIENCE AND TECHNOLOGY

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**IBAST** ISSN: 2750-3402

At a time of rapid improvement of production techniques and technologies, professional mobility is the main component of the specialist's qualification structure. Improving the quality of higher education and developing professional mobility in our republic makes it possible to introduce the credit-module system. The main content of the introduction of the credit-module system in higher education from 2021 was to adapt it to the educational standards of the developed countries of the world. The credit-module system takes into account not only the complexity of subjects, the workload of classroom hours, but also the time spent on the student's independent study of the material, including preparation for exams. The student's total learning load should take into account the total time spent in and out of the classroom to master the program.

Credits are equally required by the employer to determine the extent of knowledge and skills acquired by the student in each subject and to support the system of academic mobility of students. Thanks to the loans, the student has the opportunity to study at other higher education institutions for a long time, from there he brings credits, the credits accumulated in the foreign higher education institution are used to calculate the education account of the main higher education institution and to make a decision on awarding a diploma.

In turn, each individual course and other components of the educational program may be considered as units of credit together with their corresponding certifications. A student must collect 30 credits in one semester and 60 credits in one academic year. Fractional numbers are not used when expressing the loan amount.

The quality of the educational program largely depends on the correct placement of substantive and structural priorities in its formation. The definition of information on the levels of educational courses begins to gain importance, the loading volume of different subjects is reflected in different levels of educational programs. It is equally important to determine the structure of the curriculum and the structure of each subject by class types: classroom (lecture, seminar, practical training, laboratory), outside the classroom (reports, term papers, library days, work in computer rooms). All these should be reflected in credit units. Credit units represent each course, each subject, and ultimately the curriculum load.

The credit-module system was introduced primarily to determine the demand for education, to increase the number of students, to control their workload and to create opportunities for independent work.

The credit-module system makes it possible to organize the curriculum, curriculum, lesson schedule, assessment of students' knowledge, teachers' workload and other similar activities. In general, the introduction of the credit-module system in higher education changes the integral-module teaching, organization and planning of the educational process in the professional training of technology teachers and, accordingly, serves to increase the quality of education in HEIs.

### **References:**

- 1. Sharipov Sh. Theory and practice of ensuring continuity of students' professional creativity. Diss. ... ped. science. doc. - T., 2012. - 307 p.
- 2. Zaripov L.P. The innovative approach is a method of forming technological competence among 5th-7th grade students. Dec. ... p.f.f.d. (PhD) - Tashkent, 2020. - 141 p.



# **IBAST** ISSN: 2750-3402

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UIF = 8.2 | SJIF = 5.955

- 3. Zaripov L.R. Technological training of students in the conditions of innovative education // Journal of Pedagogy. 2019 year. No. 5. - B. 92-98.
- 4. Guzeev V.V. Innovative ideas and modern education // Shkolnye tekhnologii. 1997,- No. 1
- 5. Clarin M.V. Innovation and training. Metaphor and model: Analysis of zarubezhnogo opyta. -M.: Nauka, 1997. - 224 p.
- 6. Kuysinov O.A. Technologies for the development of professional-pedagogical creativity of future teachers based on a competent approach: Doctorate in Pedagogical Sciences (DSc) diss.

- Tashkent, 2019. - 200 p.



