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## FEATURES OF THE CREDIT-MODULAR SYSTEM IN THE PROCESS OF MEDICAL EDUCATION

## <sup>1</sup>Shadmanov Mirzamakhmud Alisherovich, <sup>2</sup>Ismailov Saidmurad Ibragimovich, <sup>3</sup>Akilov Farhad Ataullaevich

<sup>1</sup>Andijan State Medical Institute, <sup>2</sup>Republican Specialized Scientific and Practical Medical Center for Surgery, <sup>3</sup>Tashkent Medical Academy

**Abstract.** Credit technology gives students the right to choose optional subjects included in the working curriculum, thereby directly participating in the formation of an individual curriculum. They are given the freedom to choose not only subjects, but also professors. Giving students the opportunity to choose subjects is a positive thing. It is also considered a specific value indicator for evaluating educational processes.

**Keywords:** credit-modular system, medical education, features, problems.

Modern society is characterized by rapid and deep changes, and such changes are clearly visible in public structures, including independent states, relations between individuals and society, demographic policy, and urbanization processes. Education, as a separate component of the structure of the global community, should take into account all the changes taking place in society, and change its structure and content of activity on this basis.

The issue of education is one of the important tasks in many countries of the world. Fundamental reforms aimed at creating a flexible education system that meets the new requirements of global competition are being implemented in most countries. The main goal of these is to expand the adaptability of higher educational institutions and educational programs, through reforming academic and organizational structures, updating infrastructure, educational methods and technologies, improving the pedagogical process, and improving the composition and quality of teachers. is being implemented [1, 3].

In this regard, UNESCO is regularly developing recommendations on the development of higher education, and new ideas are being put forward to create the normative framework of international cooperation. The existence of universal standards for ensuring academic freedom and democracy, the international conventions and world declarations that are becoming more and more normative for the national education systems of UNESCO and the European Union are the basis for these processes.

Today, the fact that education lags behind the pace of development of society, that the technologies used in the educational process do not fully meet modern requirements, is often recognized by the world community. Because education, as a socializer, should follow the changes in society and have an impact on its development. However, the relationship between the development of the society and the education system has a complex appearance and is distinguished by a high level of enthusiasm [2, 7].

Education does not accept the influence of all active and slow changes, but it has its influence on the events happening in society. From this point of view, changes

in education are not only a result, but a condition for the future development of society.

In this sense, the credit-module system applied to the higher education process of Uzbekistan means the positive assimilation of the most advanced innovations used in the world education system by further technologicalizing the process aimed at the learner. 4, 6].

The credit system was first introduced in the 18th and 19th centuries in the universities of the United States. countries contributed to the formation of the credit-module system in higher education institutions.

In 1869, the president of Harvard University, Charles William Eliot, a well-known figure of American education, put the concept of "credit hour" into practice. Soon he will abolish the rigidly defined academic programs of the university. Now, at Harvard University, students will have the opportunity to choose and study the subjects they are interested in from among the subjects offered in the curriculum. That is, every student had the opportunity to shape his university study program in a certain sense. This reform revives interest in Harvard University among the country's youth. As students choose the subjects they are interested in, the subjects in the university curriculum naturally begin to be sorted. The list of university subjects begins to be occupied by economics, the labor market, and subjects suitable for the needs of students. In order to attract students to their subjects, teachers also try to improve the quality of their lessons. Otherwise, they could be expelled from the curriculum of the subject they are teaching. Students' activity in classes also increases considerably [5, 9].

After Harvard University abandons the strict curriculum, the university will need to solve a number of issues, i.e., the criteria for students to transfer from course to course or graduate, the description of their development in the study program, the students' specialist how much knowledge should be acquired in order to be formed as a At Harvard University, these questions are solved as follows: symbolic measurement units, i.e. credits, are allocated to each subject based on its study load. That is, each subject is reflected in a certain number of credits, and it is determined that the student must accumulate this number of credits by the end of one academic year. Now, the university begins to determine the progress of students in educational programs, the eligibility for a certain level of education, depending on the number of credits he has accumulated. It was a convenient and easy-to-understand system for both the university and the students. Little by little, other universities are starting to use the practice of Harvard University. Any universities that use this practice will increase interest in these universities among young people [6, 10].

Thus, in 1870-1880, a system measured by credit hours was introduced. Studying with the credit system and mastering educational programs created an opportunity for students to independently plan the educational process, control its quality, and improve educational technologies. By the 1930s, almost all higher education institutions in the United States began to operate in the credit system.

In 1976, the ministers of education of the European Union countries reached an agreement on the introduction of joint study programs between the universities of these countries. But it took more than 10 years to implement this project, develop its

financial and legal aspects. And finally, in 1987, during the London Summit of the European Union, the Erasmus (ERASMUS) program was established, which supports the exchange of students between the higher education institutions of the member countries of the Union. The aim was to expand the opportunities for students studying in the universities of the European Union countries to receive education on mutual exchange for one year or one semester in the universities of other member states [8, 12].

In 1989, the Erasmus program developed the rules of a new credit-module system based on the American credit system and the Dutch higher education system and called it the European Credit Transfer System (ECTS). These rules included the principles of comparing the curricula of the universities of the European Union countries, the subjects offered in them, and the recognition of subjects studied in foreign universities as part of student exchange in their own universities. As a result of the introduction of the rules of the ECTS credit-module system, the exchange of students between the universities of the European Union countries begins to develop. Educational programs of universities participating in the program begin to gain recognition at the international level.

The credit-module system is a process of educational organization and is an assessment model based on a set of module technologies and a credit measure. It is a complex and systematic process that needs to be carried out as a whole. In the credit-module principle, two main issues are given importance: ensuring independent work of students; to evaluate their knowledge based on rating.

The following are recognized as the main tasks of the credit module system:

- organization of educational processes based on modules;
- determining the value of one subject, course (credit);
- assessment of students' knowledge based on the rating score;
- to enable students to create their own study plans individually;
- increasing the share of independent education in the educational process;
- the convenience of educational programs and the ability to change based on the demand for a specialist in the labor market [9, 11].

The above is not only teaching based on innovative educational technologies, but also independent learning from the student, a new attitude to education, acquiring the necessary and deep theoretical knowledge based on the demand of the labor market., consists of teaching to form practical skills. In short, this system is aimed at the professional development and maturity of the student. It is aimed at ensuring the education of the scholar throughout his life and forming human capital that can meet the labor market and modern requirements.

Today, four models for the implementation of this credit measurement system are widespread. These are the credit system of the United States of America (USCS); Credit system of European countries (ECTS); Credit system of Asia-Pacific countries (UCTS); Credit system of Great Britain (CATS) [6, 11].

Among these models, the most widespread are the US and European models. According to information, the Ministry of Higher and Secondary Special Education of our country prioritizes the use of the European ECTS system in introducing the

credit system. It has its advantages, conveniences, achievements and disadvantages, which we will discuss below:

ECTS (The European Credit Transfer and Accumulation System) - The European Credit Transfer System was founded in 1989 and is a credit distribution system developed, verified and improved by European countries. In this system, it is a system that provides for the free transfer of the student's acquired knowledge from one country (from higher education institution) to another country (from higher education institution), free recognition of acquired skills and qualifications, and ultimately, the awarding of a degree (diploma) taking into account everything. All types of education (daytime, evening, part-time, remote) and all forms of training (lecture, practice, laboratory, etc.) can be used [1, 10].

The introduction of the measure of credit accumulation not only gave the student great freedom, but also provided an opportunity to independently plan the academic process in order to become a competitive specialist in the chosen field in the future. At the same time, it also led to improvements in the assessment system and educational technology.

By 1999, the international forum for the development of mutual cooperation between the ministries of higher education of European countries, called the Bologna process, will start working in Europe. The purpose of the forum was to harmonize the standards and quality of higher education in European countries. In the Bologna process, European countries now agree to promote ECTS as the main way of organizing education in their higher education institutions. As a result, ECTS is now widely spread not only for the purpose of international exchange of students, but also as a method of organizing education in universities within European countries.

To date, 48 countries of the world are participating in the Bologna process. Among them are the Republics of Russia, Ukraine, Azerbaijan, Moldova, Armenia, Georgia, Kazakhstan and Belarus from the Commonwealth of Independent States. Among the countries of Central Asia, the Republic of Kazakhstan joined the Bologna Declaration in 2010 and is currently the only one in this region. The Bologna process is a process of harmonization of higher education among European countries. It includes the creation of an easy-to-understand and similar system of higher education degrees, the transition to a credit-module system in education, free academic movement to ensure the quality of education, and educational cooperation in Europe. So, this is the process of harmonizing the higher education systems of European countries, providing equal education for everyone, forming and strengthening intellectual, cultural, social, scientific and technological potential, improving the quality of education [2, 5].

As envisaged in the Bologna Declaration, the credit-module system, with an emphasis on independent education, mainly serves to perform two activities: the first is the mobility of students and teachers, that is, from one higher education institution provides a free transition (study or job transfer) to another HEI without obstacles; the second is academic for all educational and scientific activities in the chosen field of study or specialization of the student loading — credit is calculated accurately. The total number of credits shows how much the student has mastered in the chosen program.

One of the most important aspects of the Bologna Declaration is that higher education institutions use a single "credit system" (ECTS). A credit or credit unit is a value indicator of any educational activity included in the curriculum.

Today, experts involved in the education system have different opinions about the Bologna system and its importance. In order to create this system, since the 70s of the last century, it has been necessary to ensure the integration of all higher education institutions in Europe, to create its single standard, to establish the mobility of students and teachers, to recognize diplomas, student knowledge, qualifications and Efforts are being made to solve a number of problems related to the unification of points assigned to skills [3, 7].

The ECTS system offers great advantages to the students of the European and Bologna process participating countries - the academic knowledge acquired at the university where the student is studying is recognized in the higher education institutions of the member countries of this system, that is, a unique "conversion" is guaranteed. At the same time, this system gives the members the opportunity to restore, transfer and terminate the studies of students at another institution of higher education.

The ECTS system also offers a number of advantages to universities. In particular, it ensures the similarity and uniformity of educational plans, which clearly reflect information about the educational process in a certain educational direction and section of specialties. Also, in order to achieve the recognition of the degree of specialization, it allows to agree in advance the content of the programs at the higher educational institutions that receive and send the student. The responsibility and independence of the student in solving all issues related to education is preserved. In the European education system, courses and the entire educational process are counted in credits, and in Uzbekistan and other CIS countries, they are counted in academic hours.

According to the ECTS system, each higher education institution calculates the credit structure, the number of credits per module, as well as the total amount of credits that must be accumulated by the student to complete each course and the entire period of study. defines independently [4, 9].

In contrast to the current teaching procedure, in the credit system, in addition to compulsory subjects, optional subjects are also included in the student's individual lesson schedule. Students will not be expelled or suspended from a course. If he fails to collect the specified credits in any subject (course), he only retakes the exam in that subject. A diploma of higher education is awarded after collecting certain credits.

According to the ECTS system, the number of credits that students must collect in one year is 60. If we assume that one academic year consists of two semesters, the student must accumulate 30 credits in each semester. If the bachelor's program is 3-4 years, the student must collect a total of 180-240 credits to get the bachelor's degree, and 60-120 credits to complete the 1-2-year master's program.

A module is a part of the curriculum that is studied across several subjects and courses. It is a set of several subjects (courses) aimed at students' ability to acquire certain knowledge and skills, to conduct analytical and logical observation. In this, the teacher organizes the educational process, gives live, video and audio lectures,

coordinates and monitors the student's activities. The student studies the subject independently and completes the assigned tasks [4, 10].

According to foreign experience, the educational process in the credit-module system consists of 2-4 modules per semester. The subjects included in the module are formed from easy to complex, from theoretical-methodical subjects to applied subjects and based on the principles of logical complementarity. In order for a student to become a specialist, it is necessary not only to acquire information, but also to be able to process it and put it into practice.

Module-based training programs are developed based on a special scheme and include:

- full disclosure of educational goals and tasks;
- the requirements for the qualification that the student must acquire after starting and finishing the subject (course);
- a summary (syllabus) of each subject included in the module, i.e. topics of lectures, a plan of seminars and practical exercises, tasks intended for evaluating independent education;
- a brief description of teaching: methods and means of teaching; consists of methods and forms of knowledge assessment [5, 8].

**Conclusion.** In the module-based teaching system, the rating evaluation system is used to evaluate students' knowledge, qualifications and skills. In it, all the student's educational activities, i.e. the knowledge acquired and mastered in the classroom and outside the classroom, are evaluated by giving points. Credit - for the student's study in the classroom and independently, as determined by the normative document, usually for a week. Is the minimum amount of time allocated? Credit is given to the student after completing the assigned tasks in a certain subject and successfully passing the final exam.

Each student must accumulate credits in order to obtain a diploma in the field and specialty of his choice in the future. The accumulated credit will serve the student to improve his qualifications or receive additional higher education throughout his life. In economic terms, accumulated credit becomes a student's academic "asset".

## References

- 1. O'rinov V., Umarov A. Credit module in higher education: what awaits students in the new academic year? https://kun.uz/news/2020/07/22/oliy-talimda-kredit-modul-kelayotgan-oquv-yilida-talabalarni-nimalar-kutmoqda . [in Uzbek]
- 2. Jessica Shedd (2003), "The History of the Student Credit Hour". New Directions for Higher Education. 122 (Summer) (122): 5–12.
- 3. Resolution of The Council and of the Ministers of Education, Meeting within the Council, Official Journal of the European Communities, 1976. <a href="https://eur-lex.europa.eu/legal">https://eur-lex.europa.eu/legal</a>).
- 4. Robert Wagenaar, A History of ECTS, 1989-2019. Developing a World Standard for Credit Transfer and Accumulation in Higher Education. International Tuning Academy, 2020.
- 5. Maxmonov U.A. Introduction and possibilities of the credit-module system in higher education // Modern education / 2021 year, (1). [in Uzbek]

- 6. Abdullaeva U.K. Znachenie interaktivnых metodov obucheniya v sovershenstvovanii urovnya klinicheskix znaniy studentov // Meditsinskoe obrazovanie i professionalnoe razvitie. 2019. №1(33). P. 29-33. [in Russian]
- 7. Timofeev A.A. Kreditno-modulnaya sistema organizatsiya uchenogo protsessa v vыsshem uchebnom zavedenii / A.A. Timofeev // Sovremennaya stomatologiya. 2019 P.142-143. [in Russian]
- 8. Buslyuk G.E., Andreenko R.E., Kolechyonok A.A. Modulnoe obuchenie. Minsk: Krasiko-Print, 2007. 176 s. 3. Kachestvo vыsshego obrazovaniya i sistema zachetnых yedinis // Vыsshee obrazovanie v Rossii. 2004. No 5. P. 14-18. [in Russian]
- 9. Kuznesova Ye.I., Kraves A.G. Modelirovanie kreditno-modulnoy strukturы individualnoy traektorii obucheniya studenta / Izvestiya Volgogradskogo gosudarstvennogo texnicheskogo universiteta. 2009. Т. 6. Р. 99-102. [in Russian]
- 10. Metodicheskie rekomendatsii po vnedreniyu v vuze sistemi zachetnых yedinis (kreditov) / Gosudarstvennыy universitet upravleniya, Sentr kachestva : [sost. O.V. Davыdova, V.I. Zvonnikov, M.B. Chelыshkova ] M.: GUU, 2010. 50 p. [in Russian]]
- 11. Smolyaninova, Yu.V. K probleme vnedreniya ballno-reytingovoy sistemы v vuze / Yu. V. Smolyaninova // Ekonomika. 2010. -. 5. P. 64. [in Russian]
- 12. Xobotova, E. B. Vozmojnosti sovershenstvovaniya kreditno-modulnoy texnologii obucheniya / E. B. Xobotova // Vestnik Xarkovskogo natsionalnogo avtomobilno-dorojnogo universiteta. 2009. No45. P. 7-9. [in Russian]