THE EXPERIENCE OF BOLOGNA IN REFORMING EDUCATIONAL SYSTEM: THE FORMING OF A CREDIT-MODULE SYSTEM IN THE EDUCATIONAL PROCESS

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Abstract- My article examines the role of Bologna experience in the reform of Education System and the introduction of modular-credit system in the educational process. It also deals the issues on advantages of step-by step transition of educational process in High Education Institutions (HEI) to credit-module system, the introduction of advanced standards of international experience in High Education, and orientation of theoretical knowledge in the curriculum to the formation of practical skills.

Keywords: ECTS, credit module system, educational process, Bologna process, student mobility, educational programs, competitiveness, information package, credit modules, contract for study, academic document, exam credits, structural logic scheme, education, content, rating points , semester, integral rating, LMS, mixed education

Introduction. It is obvious that transition to an informed society is one of the important tasks among the main trends of world. Nowadays, the impact of information technology in all spheres of society is considered to be one of the great pressing issues. Moreover, development of software tools on the recommendation of the Legislative Assembly of the Parliamentary Assembly of the European Union is essential knowledge in the field of information technology which contributes the formation of experience, as well as modern integral factor influence the media and the culture of our society. (3) It should be stated that at the present time assembling the society based on modern information and communicative technologies are key indicators of nation`s development. With this in mind, the educational system in our country has been radically reformed, and major changes have been made in the system of continuing education, including higher and secondary special education. In particular, the system of higher education has been further improved, the Ministry of Preschool Education has been established and the transition to an eleven-year education system has been made to strengthen the link between schools and colleges. In order to implement these focal processes successfully, teachers and trainers have to effectively illustrate the environment of information and communication technologies in their experience. Besides, the training of national staff and upbringing of young generation as harmonious and mature are considered to assist the government to achieve the goal. The Action Strategy for the further development of the Republic of Uzbekistan identifies areas such as increasing the capacity of quality educational services, training highly qualified personnel in accordance with the modern needs of the labor market4. For this reason, it is important to achieve the

development of students' competence in the field of information technology. According to the decree of the President of the Republic of Uzbekistan dated February 7, 2017 No PF-4947 "On the Strategy for further development of the Republic of Uzbekistan", Resolution of the President of the Republic of Uzbekistan dated April 20, 2017 No PP-2909 "On measures to further develop the higher education system" the present article serves to a certain extent in the implementation of the concept of e-commerce development in the Republic of Uzbekistan for 2016-2018 and the set of measures for its implementation, as well as the implementation of other regulations related to this activity, approved by Resolution No. 353 of December 4, 2015.

Within the framework of the Concept for the Development of the Higher Education System of Uzbekistan until 2030 [1] (4), more than 70 targets to be achieved by 2030 have been approved. In particular, it is planned to increase the coverage of graduates in higher education from the current 20% to 50%, enlarging the number of non-governmental universities, including public-private partnership (PPP) will rise from 5 to 35 and the coverage of the credit-module system will go up from 2% to 85%.

In order to fulfill the recommended missions, the educational process in a number of higher educational institutions are planned to gradually transfer to the credit-module system. Noticeably, this process will be based on international experience, the introduction of advanced standards of higher education, including the transition from theoretical knowledge in the curriculum to a system of education aimed at the formation of practical skills [2]. At the time, today the modern specialist is required to have a professional competence, a good decision-making quality in remarkable situations, team-working, independence to access new information and of course, flexibility in any situations. For the aim of training the specialists with these qualities involves the introduction to a credit-module system of education in higher education institutions (HEI). It should be stated that the target individualized and differentiated educational system is based on the alternative of educational institutions, the mobility of educational and program documents and adaptability to change socio-economic conditions [3].

In accordance with the Action Strategy for the five priority areas of development of the Republic of Uzbekistan in 2017-2021, the system of higher and postgraduate education will create conditions for Uzbekistan's accession to the Bologna process and introduce a credit system instead of the traditional system in education. One of the marked priorities in present reforming is improving the quality of our educational system with the help of exchanging an experience with the most advanced countries in this field, actively participating in global educational processes, as well as overcoming artificial barriers facing teachers and students. The other effective way to achieve goals in new system seems to be joined to the Bologna process, as the experience of many countries shows that education cannot be developed indoors. The following important information is mentioned as conditions for joining the Bologna process:

- Ratification of the European Cultural Convention and preparation for the implementation of the objectives of the Bologna Process in the higher education system;

- Adoption of a degree system which is recognized in the Bologna process, as well as a system of diploma applications developed by UNESCO. To simplify the procedure for certification of diplomas and recognition of their equality in other countries. Providing the Bologna Declaration- a special English language diploma application containing basic information on academic subjects, practical training and other types of education, which is expressed in the test ECTS credit unit;

- Ensuring high quality in higher education, mutual recognition of qualifications and relevant documents in higher education and implementing the autonomy of universities.

- Transition to a credit system based on the ECTS system. Besides, credits can also be used (if they are recognized by higher education institutions) in addition to higher education, including in the process of lifelong learning (LLL);

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- Creating a good condition for lifelong learning (LLL)

- Development of cooperation with Europe in ensuring the quality of education in order to develop comparative criteria and methods;

- Relying on European traditions and systems in higher education, especially in the development of curricula, important issues related to inter-institutional cooperation, mobility schemes, jointing curricula and practical training and research;

- Creating conditions for the effective implementation of the free movement (mobility) of students, teachers and researchers: improving students` learning opportunities and providing practical training; and for teachers, researchers, and administrators identifying the results and practicing at other universities by taking into consideration the time which is spent on research or teaching.

It is not covert, despite the fact that the Bologna process was founded by the EU member states, today more than twice as many EU member states have joined to the process (48 countries). Switzerland and Norway, which are not members of the European Union, as well as six Eastern Partnership countries (including Belarus), Russia, Turkey and Kazakhstan have also joined to the Bologna process. In 2010, a final decision was made in Budapest on Kazakhstan's accession to the Bologna Declaration. In fact, Kazakhstan is the first country in Central Asia to be recognized as a full member of the European educational system.

On the other hand, there is also speculation that the Bologna process may not threaten or benefit the Uzbek educational system at all. Such assumptions can be caused by a number of factors. For instance, it may cause the radical change of the educational system that has been formed over the years, the costly and time-consuming reforms. Moreover, Bologna process can be reason for loosing educated and skilled people as a result of academic exchanges, and the risk of undermining national traditions. As it is mentioned before, the need for Uzbekistan to join the Bologna process is related to the objective realities in the field of education. As a full-fledged subject of international relations, Uzbekistan cannot stay away from current international development trends. The integration of our country into the education system of the Bologna process will ensure the expansion of relations with foreign countries in the field of higher education [3,4].

It should be mentioned that the Bologna Process- is a process of harmonization of higher education among European countries. It includes creating a system of levels that are easy to understand and the transition to a credit system of education, free academic movement in ensuring the quality of education, and educational cooperation in Europe. Shortly, it can be claimed that it is a process of harmonization of higher educational systems of European countries, which provides education for everyone equally, the formation and strengthening of intellectual, cultural, social, scientific and technological potential with the aim of improving the quality of education. It seems that the most common concepts applied in this process are the concept of module and credit.

Initially, it is necessary to briefly identify about the concept of module. The module is considered to be a separate individual study subject. It encompasses the acquisition of knowledge and professional aspects and involves the completion of the appropriate type of control of knowledge, skills and competencies formed as a result of the mastery of the curriculum by the learners. At the same time, the credit-module training system is a system of organizing the process of mastering the curriculum, which regularly assesses the knowledge, skills and competencies of students by monitoring the learning outcomes and final control of the module that is based on the composition of each training module. Furthermore, the target training system reflects the criteria for evaluating the performance of students in the form of lectures, theoretical and practical lessons, seminars, laboratory classes, internships, clinical internships, course project (work), as well as weekly hours of independent study of students. Credits can be accumulated after all types of mandatory activities have been completed and evaluated by students.

Early, the information on academic credits was firstly put on the agenda of U.S. universities in the late eighteenth and early nineteenth centuries. The reason for this was the necessity to introduce an independent education in foreign countries at that time. The creation of quantitative equivalents through credit units allows students to master the learning process independently through the content of teaching and the level of development of educational programs. As for the system of credit units, it is a systematic way of describing educational programs by attaching credit programs to its components, namely modules, module blocks, courses, and others. Additionally, it should be pointed out that the credit-module training system consists of the following forms of educational process:

- classroom training - lectures, theoretical/practical classes, seminars, laboratory classes and educational (clinical) practice;

- Extracurricular activities - working in the scientific library, independent works, individual counseling, clinical tasks, internships, course works, graduate works, participation of students in scientific conference and any type of scientific activities in master's specialties, etc.

Typically, a credit is a measurement of the student's completion of the curriculum and consists of the time (hours) spent on the relevant learning activities. This can be determined by the educational institution due to the characteristics of the module and the importance of the training work for a future specialist.

Each module has an independent credit. It should be noted that the transition to a credit-module system is a necessity of the today's modern life. In this system, teachers are chosen by students. The number of elective subjects are enlarged, i.e. the number of subjects that the student can choose to study in his / her field will be greater. Even so, if students do not get the required score in the credit-module system they will have to study at universities for many years. In order to apply of a credit-module system in the educational process of the university, first of all, we should implement the study of the peculiarities of the Bologna process.(5) The ECTS education system (6) is a system aimed at ensuring credit accumulation and mobility of students in European universities. The applying of ECTS in higher education is the key to development in the rapid integration into the global field of higher education.

The purpose of ECTS is to increase student mobility, ensure the compatibility of curriculum and skills, teach them to approach any part of the curriculum independently, improve the quality and competitiveness of education, use the labor market and increase the prestige of the educational process in Uzbekistan.

The advantages of introducing the ECTS system are as follows [5,6,7]:

- For Uzbek students who want to continue their studies at one of the foreign universities and return to their university to master the educational program without stopping academic education in their home country;

- For foreign students who are studying in universities of Uzbekistan.

To implement the ECTS system, the university must have the following features:

- Information package (package) - general information about the university (faculty), the name of bachelor's (master's) and vocational (specialty) programs, annotation of disciplines (credit modules), form (mandatory or optional) and content, teaching methods and technologies, forms and terms of control, a description of the assessment of knowledge and skills for each student, the steps and demands of admission of students, a description of accommodation, etc;

- agreement on study between the student and the university (direction, level of education, sources and stages of funding, fees);

- academic transcript confirming the student's mastery in a certain period. This document contains information about the ECTS-modules mastered by the student;

-diploma of the European standard and its supplement, that confirm obtaining academic degree /

qualification . They have a clear format approved by the European Commission and the Council of Europe and adopted by States which have signed the Bologna Declaration.

Basic terms and definitions

- ECTS (European Credit Transfer System) is a systematic way of describing educational programs by assigning credit units to its components (subjects, courses, etc.). The ECTS system serves to keep track of the student's total workload when mastering a particular educational program on the credit module.

- The credit module (ECTS module) is a course of study in a particular semester. The credit module consists of a fixed number of ECTS credits, and the student's mastery level must be in accordance with the ECTS assessment system.

- Individual plan - auditorium (lectures, practical and seminars), independent work, preparation and defense of theses and dissertations, etc.

- A module - is a part of a curriculum, a course of study, a topic, a discipline. Achieving a certain logical completeness in relation to the objectives and the planned outcomes of curriculum development.

- The direction of training - is a set of training programs at different levels, one professional field

- Educational direction (profile) - programs in which the target direction of education determines its specific content and (or) priority.

- Qualification is a description of the level of preparation (readiness) for its implementation, a specific type of professional activity or a specific job function

- Competence - is a function in solving problems that are specific to many types of activities, readiness to act on the basis of existing knowledge and skills

-Internship - is a type (form) of educational activity aimed at the formation and development, in which practical skills and abilities in the process of performing certain types of work are related to future professional activity;

-An ECTS credit - is a standard credit unit for measuring the study load of a particular educational program. In most universities, 1 credit is 36 academic hours (classes, independent study, supervision and internships).(7)

- Exam credits - a unit of measurement of the study load and the measurement of study, which represents the quality of knowledge of the student in a particular period of the educational program. In order to receive exam credits, students must first master certain credit modules and have positive learning outcomes.

- The Structural Logic Scheme of the Curriculum (SLS) - a document that defines the natural and logical relationships of priority between credit program training programs. SLS imposes certain requirements on the sequence of mastering credit modules in the preparation of individual curricula of students.

- Credit assessment system is a system based on the step-by-step monitoring of students' learning and teaching activities and the accumulation of rating points in order to master a particular credit module.

- Teaching (content) is a logically completed part of the curriculum, which means the acquisition of specific knowledge and skills.

- Rating Points of Discipline (RK) are quantification of results in points of sertain a student's educational activity depending on its importance and quality.

- Rating score of discipline (RD) is quantification by multi-scale-level learning by a student of a certain credit module depending on the quality of educational activity during the semester.

- The ECTS Grading System is a European system for assessing student mastery of credit modules. The rating system includes a seven-level scale (A, B, C, D, E, FX, F) (8) and two-sided (descriptive and

statistical) definitions of these ratings.

- Semester rating R (t) is a quantitative description of a student's performance in the current semester.

- Integral rating RI (t) is a quantitative description of the success of student learning in general, for the previous period of study.

ECTS principles. Basic principles of ECTS [5,7]:

- Respect for the autonomy of countries and universities in the field of educational policy;

- Improving the "transparency" of the existing national education system and skills at the international level;

- Compatibility with any national / regional educational system, which may have or may not have a credit system;

- Apply all kinds of forms and modes in higher education (full-time, part-time, distance, distance) and all types of educational programs in continuing education;

- Use and development of existing ECTS parameters (international flexibility of exam scores, information package, recording of grades, etc.);

- Conformity with "Diploma Supplement», explaining and making transparent academic and professional qualifications of the university

The main element of the credit-module system is academic credit, which represents a scoring system in accordance with the workload and advanced principles of management of the educational process to provide quality knowledge to the student. The basic principles of educational process management are:

- Clearly point ideas (ideals) and aims of education;

- Pedagogical support of the educational process;

- professional advice;

- Prompt, reliable, objective, complete, accurate and continuous monitoring of academic performance and accounting;

- Attitude of politeness for students

- Mutual respect for students and teachers;

- Encourage students to complete assignments (tasks) in a quality and timely fulfilling

- Improving the quality of companionship between students and teachers, ensuring objective mutual control.

Functionally, the exam credit system is based on:

- Individual-oriented development of the educational process, determining the sequence of mastering academic subjects for students, independent execution of educational content, education on the basis of individual lesson schedules;

-Development and continuous progressing of educational programs, curricula and SES;

- Expanding the academic freedom of teachers.

3. Organization of the educational process on the basis of ECTS. In the ECTS system, a full-time student receives 60 credits per academic year. In most cases, the academic year at the university is 36-40 weeks. In this case, the ECTS credit is 32-36 academic hours [8,9,10]. Thus, ECTS-credit is a unit of labor activity in education, which determines the content of the educational program that a student can master during a 36-hour course. An ECTS credit for a bachelor's degree student with a term of 3 years and 10 months is at least 240.

In the ECTS system, the student's workload includes: time spent on classes, internships, independent study (preparation for lessons and controls, individual assignments, preparation of theses) and semester supervision.

Examinational Credits are a method of determining the quantitative results of the assessment of

students' knowledge and skills (knowledge, ability to perform). Students and faculty can formulate a lesson schedule synchronously or asynchronously.

In an asynchronously organized learning process, students have opportunity to the mastering of training at any suited time and convenient place. In this case, the course schedule is not formed and the LMS (Moodle etc.) System is used mainly for part-time and distance learning students [11, 12]. In the learning process organized through LMS, students can use computer programs, training and test assignments for independent work, control tests, video materials recorded in electronic media, a set of instructions and traditional textbooks and other learning materials for independent work.

The asynchronous learning process also provides access to university laboratories, classrooms, computer labs and the library as needed. However, today, the organization of the learning process in asynchronous and synchronous form (blend learning) is becoming more worldwide [13, 14, 15].

The synchronous organization of the learning process means that there is a regular lesson schedule for students and faculty. Synchronous organization of the learning process can be done in groups or individually. One of the main features of the credit-module system is the constant monitoring of the student's performance of independent educational tasks.

Conclusion. It is noticed that participation in the Bologna process will give chance for new opportunities in the labor market for graduates of higher education institutions. Experience of students and academic exchanges in a globalized world, the level of Uzbek staff will increase, which in turn will allow us to apply the experience of developed countries. This process will allow Uzbekistan to establish cooperation with innovative and research universities in the field of scientific and industrial research structures for the effective use of intellectual wealth. At the same time, it will allow Uzbekistan to use the European education system, recognize the professionalism of diplomas and skills, set foot in the credit system (ECTS) and diploma application, assess the quality of education, implement academic harmonization of students and faculties and ensure continuing education. According to the recommendations of the Bologna Declaration, every student must spend at least one semester at another university, preferably abroad. The importance of such contacts and exchanges, especially in the context of the scarcity of modern literature in Uzbekistan and the often limited and outdated laboratory equipment, helps students to acquire the necessary knowledge.

Participation in the Bologna process will be the basis for the republic to increase the competitiveness of educational services, improve the skills of our scientists and teachers, create the necessary conditions for strengthening the position of Uzbekistan in the field of international education. Recognition of our diplomas in the international arena will allow us to become part of the common European educational space in the future.

As a result of the forming of the credit system of education in higher education in Uzbekistan, there will be unification of knowledge in the disciplines, the elimination of subjectivity in assessment, more self-reliance of teachers, the creation of a competitive environment. Teaching materials are developed by teachers on the basis of modern ICT tools and placed in the LMS system of the university. However, this process also incurs additional costs associated with the introduction and improvement of innovative teaching technologies. The LMS provides the student with the opportunity to work with scientific resources and access the necessary information in an infinite world of information. The educational process, organized on the basis of a new approach, allows to increase the independence and creative activity of students. It also eliminates negative effects such as lack of flexibility in higher education curricula, high workload of students and faculty, and separation from production. The forming of the credit system means a change in the philosophy of education, that is, the transition from a type that controls mastery to a type that is self-regulating - incentive. When setting up the credit system, it is necessary to take into account our national mentality and age-related features. For this purpose, it is expedient to conduct the teaching and educational

process in higher education in a harmonious way, to increase the social status of the scientist, the teacher, that is, to achieve the envy and following of students. Only then, with the help of credit technology of education, it is possible to cultivate highly spiritual, creative, unusual-minded, innovative and enterprising professionals.

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