

Credit-unit system education in the dental students' preparation

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Abstract

Ukraine accession to the Bologna Process in 2005 provided the following changes - the transition to a dynamic multi-stage system of specialist training, which allows the possibility of the person to obtain a certain educational and qualified level in the desired directions according to the ability and to ensure their mobility in the labor market; the formation of the higher education institutions network (further the university), according to which the forms, programs, terms of training and sources of funding satisfy the interests of the individual and each individual needs and the state as a whole; increasing the educational and cultural level of society, creating conditions for learning throughout all life⁵.

Key words: *higher education; educational process; credit-modular system; ECTS; professional training of students; future professionals dentists*

1. Introduction.

In the traditional system of specialists training for higher medical education, there are certain disadvantages, they are as follows: the lack of systematic students' work the during the semester; low level of students' activity and the deficiency of competitive elements; the possibility of biased assessment of students' knowledge; considerable waste of time to the examination session; inadequate adaptation to the rapidly changing requirements of the global labor market; students' low mobility to change majors areas of training and higher education institutions; academic disciplines narrow range choice by the students.

One of the challenging ways to overcome these problems is the educational process restructuring in higher institutions through the introduction to the educational process the credit-unit system. It involves a digression from the traditional scheme of "the semester - academic year, training course"; the rational division of the academic discipline material on modules (it is a logically complete part of the theoretical knowledge and practical skills in a particular academic discipline) and to check the quality of theoretical and practical material mastering of each module; to control the quality of students' preparation to each laboratory, practical or seminar classes; to use the wide range knowledge assessment scale; the decisive influence of the obtained points during the semester, to the final grade of the discipline; the promotion of the students' systematic self-tuition during the whole semester and to improve the quality of their knowledge; to increase the assessment objectivity of students' knowledge; to introduce the effective competition in training; to identify and develop the creative abilities of the students.

2. The main part.

With the accession to the Bologna Process Ukrainian National High School did not lose their national achievements and traditions which are characterized by fundamental education, the principle of inseparability of education and science, the presence of original scientific and pedagogical schools, wholesome conservatism, combined with innovative development. One of the main principles of the Bologna process is not to create the harmonization of higher education in the countries that have acceded to the Bologna Declaration, and the assignation of the wide access to the population of these countries to European and world educational and cultural achievements.

It is created a powerful system of higher education in Ukraine, in particular in the sphere of health, the best examples of which are stored during the integration into the European educational space. Ukraine accession to the Bologna Process has made it possible to expand access to the European educational values, to improve the quality of higher education and make it better to use the specialists with higher education in our country and Europe.

The quality of higher education can be provided on the condition of entering the Universities well-trained high school graduates, the objectivity of entrance examinations and the organization of educational process in compliance with the standards of higher education (educational qualification characteristics, educational and professional programs, and standardized diagnostic knowledge and skills). The state mechanism of quality control provides for the licensing, certification and accreditation of educational institutions, which is conducted by the State Council for accreditation (SCA).

3. Responsibility for the quality of higher education

At the European level, the check of higher education quality provides control over the agreed standards, procedures and recommendations.

The direct participation in quality assurance, also take the students as the participants in the educational process. According to the Law of Ukraine "On Higher Education" (article 38) there are established student governments in higher education institutions, which deal with the issues related to their competence³.

The main task of the student government is to ensure and protect the rights and interests of students that is: the organization of educational process, the promotion in educational, research and creative activity of students, the creation of appropriate conditions for their living and recreation, the organization of cooperation with students from other higher educational institutions and youth organizations, the participation in the international exchange of students, including those in accordance with the principles of the Bologna process.

Local students can study in the European medical university selected discipline (disciplines), the individual discipline modules, because the partner institutions (as the members of the Bologna Process) assess the level of learning student in uniform units - ECTS.

The full recognition of training at a foreign medical university means that the period, including examinations or other assessment forms, corresponds to the same, as at the local university, although the content of the agreed partner universities of the curriculum may vary.

In addition, the national higher medical institution (hereinafter - HMI) decides what conditions a student should fulfill to obtain transfer credit to study abroad. These requirements are specified in the student's training contract [1].

Before studying in a foreign HMI student fills in an application form, get acquainted with the information package of this establishment, with a program of training and matches it with his/her HMI, signs an agreement with the foreign and national university. The Faculty and the University tutors (ECTS coordinators) help the student in completion of the above-mentioned paperwork. ECTS is European Credit Transfer System, which is designed, tested and refined in the pilot project of 145 European universities.

The ECTS system is based on three key elements: the information (concerning the training programs and student's achievement), the mutual agreement (between the partner institutions and the student) and the use of ECTS credits (identification of academic load for students) while studying disciplines, practices and etc.

ECTS provides transparency through: 1) the information package of the university, which provides written information to students and employees of educational institutions, faculties, the organization and structure of the training, its content, methods of control; 2) the academic contract between the partner institutions in Ukraine and Europe, and the student's concerning the implementation of

training programs; 3) the list of ratings on subjects showing students achievement in academically comprehensive and common way in a manner that can easily be passed from one institution to another; 4) ECTS credits are conditional units measuring the student workload during the development of the curriculum subjects. The subject credits are assigned only to those students who have successfully completed the course (final test credit).

The use of ECTS is voluntary and is based on mutual trust and belief on the quality of the educational institutions training work-partners¹.

The credit includes all kinds of the student academic work as a classroom activity (lectures, workshops, seminars, writing a case history, consultations, etc.) and self-study (preparation for practical classes, final control on the module, report writing, essay, participation in scientific research, independent study of specific topics and issues of the curriculum, etc.). All kinds of classroom and self-studying of students are described in the curriculum subjects, which the student can find at the department.

Credit-unit system is a model of the educational process, which is based on the join of modular training technology and credits ECTS as a measure of student workload required for learning content modules or block modules.

The module is logically completed part of the curriculum (with discipline, practical training, state certification), implemented by the relevant educational forms of the process⁴.

4.An exemple about ECTS

For example, on the 3rd year during the 5th semester students while studying the surgical dentistry also master module number 1 "Propedeutics of surgical dentistry", which includes separate sections i.e. tooth removal surgery, anesthesia of tissues of maxillofacial area, disease teething, periodontitis, inflammatory disease of the jaws, which are meaningful units.

The main types of training sessions on surgical dentistry at the university are: lectures, workshops, private lessons, consultation. Within the credit-module organization of educational process, there is no exam session; it is provided the following types of control: current control (during each practice session) and the final module control. The maximum number of points that the student can gain during the study of each module is 200, including current educational activity - 120 points, according to the results of final module control - 80 points.

The monitoring is carried out on each practical class according to the specific objectives for each topic. In evaluating the educational activity of students, the standardized testing methods are dominated i.e. testing, structured written works, structured procedure for monitoring the practical skills in conditions close to real.

During the mastering of each topic module for current educational activity of student's knowledge he/she is assessed by the traditional 4-point scale, which is converted into points according to the number of topics in the module. The program "Oral surgery" for students of the 3rd year during the module 1study, such a system of converting the traditional evaluation has been applied in the points, "5" - 3.0; "4" - 2.5; "3" - 1.9; "2" - 0

The maximum number of points that a student can score in the study of the module is 120 points. It is calculated by multiplying the number of points corresponding to the evaluation "5" on the number of topics in the module with addition of points for the self-studying work. The minimum number of points that a student can score in the study module is calculated by multiplying the number of points corresponding to the assessment of "3" on the number of topics in the module with addition of points for the self-studying work. The evaluation of the students self-studying work, which is provided in the subject close to the classroom activity is carried out during the monitoring the appropriate practical activity. The final module control is carried out on completion of the study of the module on the last control module class.

The final control is allowed to those students who complete all types of activity, provided by the curriculum and the study module scored points, with the amount not less than the minimum.

The final module control form is standardized and includes the control of theoretical and practical training of the students. The theoretical part includes the test control and interview.

Criteria for the test control evaluation are the following:

- 62-70 % of correct answers - 15 points;
- 72-80 % of correct answers - 20 points;
- 82 % or more correct answers - 25 points.

Students, who have not responded well to the 62% of the test, are not allowed for further final module control passing.

Individual oral questioning (interview) is carried out according to the list of theoretical questions on Oral Surgery.

The evaluation criteria for the interview with the conversion of the traditional evaluation system are as follows - "5" - 25; "4" - 20; "3" - 15; "2" - 15.

During the practical part it is conducted the evaluation of the students' practical skills that are provided by the program. The evaluation criteria of points that is converted into a traditional evaluation system is as follows - "5" - 30; "4" - 25; "3" - 20; "2" - 20.

The maximum number of final module control is 80 points (30 + 25 + 25). The final module control is considered to be enrolled if the student scores at least 50 points (20 + 15 + 15).

The number of points for the discipline, which is charged to the students, is converted to a 4-point ECTS scale.

Students who have received assessment F on completion of the discipline study (who did not complete the curriculum with at least of one module or not scored for current educational activity

with the module a minimum number of points) should undergo re-training from the corresponding module. The decision is taken by the university authority according to regulatory documents, approved in accordance with the established procedure.

The number of points that the student has scored on discipline, is defined as the average number of points for discipline all modules (the sum of the points for all modules is divided by the number of modules of the discipline).

Since 2015 HMI IV level of accreditation of Ukraine a new curriculum was introduced to the training educational qualification level "Specialist" qualification dentist in specialty "Dentistry" and in accordance with which:

- the duration of training is 5 years; academic year lasts 40 weeks (2 sessions each of 20 weeks), includes 60 ECTS credits, 1 week - 1.5 credits, and one credit equals 30 academic hours;

- the weekly student workload is 29-30 hours of training. The amount of independent work is in average 36% of the total training;

- the schedule of the educational process of 1-5 years consists of two semesters. The schedule provides additional time for completing individual modules (retaking them, upgrading, etc.) - 1-2 weeks after the end of the semester for 1-4 years. On the 6th week of the sixth semester it is provided an integrated taking of the exam "Step 1 Dentistry". The tenth semester on the 5th year foresees except the training, the preparation for the state certification and its implementation;

- the list of the names and disciplines of the curriculum are based on the Educational and professional program for Specialist's training "Dentistry" and aligned with their names in the curricula of medical faculties and medical universities in Europe;

- the practical training of the students is carried out in the form of work experience and clinical practical training of students. The practical training courses are fulfilled on the second year during the academic year i.e. nosotrophy - 60 hours in the 3rd term in hospital departments; nurse-run practice - 60 hours in the 4th semester in dental clinics. The professional clinical practical training of students of the 3-5 courses is held in accordance with the requirements of the educational qualifications of the study during the professionally-oriented disciplines and during the production practice. The internship for the 3rd year (4 weeks) and the 4th year (6 weeks) and the 5th year (3 weeks) is carried out either during the academic year or during the summer on the decision of the Academic Council by the university. The requirements to the practical training of students are defined in programs for practical training in all educational programs standards on clinical disciplines, including pass-through training programs for restorative dentistry, surgical dentistry,

prosthetic dentistry, pediatric surgical dentistry, children's preventive dentistry, orthodontics, prosthetic dentistry;

- the graduates state certification includes standard test and practically-oriented state exam.

Standardized test state examination consists of two test exams "Step 1" and "Step 2". The test examination "Step 1 Dentistry" is an integrated exam, which is held on the 6th week of the sixth semester and measures the performance quality of professional components of basic higher education. The test examination "Step 2 Dentistry" is an integral part of the graduates' state certification of higher medical educational institutions and measures the performance quality of professional components of a complete medical education. The practically oriented state exam is conducted in the form of the final state exams or integrated final exam². The form of the practically oriented state examination is determined by the higher education institution. The curriculum also determines which disciplines for the educational qualification of the specialty the student should study compulsory (normative discipline), and which can be chosen independently (random subjects and elective courses, elective courses). And, for the academic year the student should accumulate a total of 60 credits, which include the time to study normative and selective subjects. During the training in each year the student should study one optional course by free choice.

The self-study work of students on mastering academic discipline is one of the most effective forms of training. This very kind of student's activity prevails in the curricula of leading universities in the world. At the same time, this activity is effective on the condition of the sufficient educational-methodical and material support. The self-study work of the student includes: preparation for practical classes, final control module for writing the report, medical history, essay, participation in scientific research, the self-study activity of specific topics and issues of the curriculum, individual assignments, etc. This work is assessed during the current and final module control. The systematic and profound mastery of knowledge, practical skills, and professional skills is the responsibility of the student. This fulfillment is possible in case of the regular training sessions attending. The student should attend all lectures, practical classes, laboratory, and seminars provided by the curriculum.

The absences on the classes are the subject to mandatory training sessions working out at the department in the next two weeks after classes on schedule, which is elaborated by the chair.

The student, who missed training sessions, is not allowed to the final module control and, accordingly, is not certified in the discipline.

Before teaching in each course the student agrees with the tutor (ECTS coordinator of the faculty) on the basis of the working curriculum, class schedules the individual curriculum. It includes a list of required courses and elective courses, number of training hours for each discipline (classroom in general, self-study work) modules in the disciplines, as well as the results of the final module control and evaluation of the discipline. The individual curriculum is approved by the dean of the faculty prior to the beginning of the semester. The students are transferred to the next semester by

the order of the rector of the institution on condition that the individual semester plan is fulfilled (obtaining points of normative and regulatory disciplines, absence omission in training sessions on subjects, the study of which expands to the next semester)⁴.

A student who has fully complied with requirements of branch standards of education after graduation receives the "Specialist's Diploma" and "Diploma Supplement for higher education established sample. Ukraine accession to the Bologna process allows students to obtain «Diploma Supplement» i.e. the Diploma Supplement, which is developed by UNESCO. The Supplement is designed for academic and professional recognition in Europe of the higher education. The Supplement involves several sections: the information about the diploma holder, the information about graduate qualification, the level of qualification, the content of education and its results, the information on professional and job opportunities for the certification application and the description of the higher education system in the country. All the above information in the supplement is required. The supplement is in the national and English languages⁵.

Conclusions.

The integration of the higher education system of Ukraine into the European educational space, the introduction of higher education credit-unit system, the special place in which belongs to the system of evaluation of the professional training graduates' level, requires each teacher to study the experience of foreign and national higher institution and to use it creatively in their practice.

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