

**PROFESSIONAL COMPETITION AS PEDAGOGICAL
EDUCATIONAL TECHNOLOGY FOR FUTURE DENTISTS**

Ukrainian Medical Stomatological Academy (Poltava)

propedevtika_terstom@umsa.edu.ua

Relevance of work. According to the requirements of the Law of Ukraine «On Higher Education», of the National Doctrine of the Development of Education in Ukraine for 2012-2021, the Program of Medical Education Development till 2020, the problem of a person of a future specialist during his studies at a higher medical educational establishment is considered as one of the priority. Special attention is paid to the need to ensure a productive orientation of the individual, early inclusion in the process of professional activity and communication, actualization of the motives of achievement, to strengthen the need for self-development and self-realization, developing the skills of educational and cognitive activity as a means of didactic adaptation; development of professional thinking; as well as the need to increase the accordance of the tasks of the educational process to the real tasks that have to be solved by medical professionals at various stages of professional activity [1,2,3]. According to the requirements of the «Standard of Higher Education of Ukraine» in the course of training specialists of the second (master's) level of higher education in the field of knowledge 22 «Health protection» specialty 221 «Dentistry» discipline «Propaedeutics of therapeutic dentistry» ensures the acquiring general and professional competencies [4]. The main objective of the professional training of a dental student is to create a system of professional skills and knowledge that form the basis of his future activities. Professional activity of a dentist requires mastering of different skills on the basis of sensorimotor, perceptual, instrumental and settlement activity [5,6].

Advances in all aspects of science and discovery continue to occur at an exponential rate, leading to a wealth of new knowledge and technologies that have the potential to transform dental practice. However, the assimilation of this information into the dental curriculum has been slow. For the profession and the patients it serves to benefit fully from modern science, new knowledge and technologies must be incorporated into the mainstream of dental education. The continued evolution of the dental curriculum presents a major challenge to faculty, administrators, and external constituencies because of the high cost, overcrowded schedule, unique demands of clinical training, changing nature of teaching/assessment methods, and large scope of new material impacting all areas of the educational program. Nonetheless, the speed of this evolution must be increased if dentistry is to maintain its standing as a respected health care profession. The influence of new science on dental education and the dental curriculum is already evident in some dental schools [7].

There are five traditional mainstays of student performance evaluation-multiple-choice testing, lab practicals, daily grades, clinical competency exams, and procedural requirements-still comprise the primary assessment tools in dental education [8]. Theoretical

knowledge is necessary in the activities of the doctor, but only reinforcement of their manual skills, which are repeatedly worked out to automatism, allows the future specialist to get a higher level, namely, to master the professional competencies [9]. For this purpose, the team of teachers of the chair of Propaedeutics of therapeutic dentistry Ukrainian Medical Stomatological Academy developed a methodical scenario of the professional competition «Lege artis», which aims to developing and consolidating theoretical knowledge from the content module «Clinical features of the teeth structure, tissues and organs of the oral cavity» and the mastery and improvement of manual skills in modeling teeth of different groups.

The educational goal of the competition is to establish the priority of professional skills and theoretical training for a future specialist – a dentist who is able to provide the full range of medical services at the highest level.

«Lege artis» (literal translation from Latin – «according to the law of art») – the consistent statement of the ancient Romans, is still used in many languages of the world. Synonyms: reliably, surely, precisely, skillfully. The rapid development of modern restorative technologies, the widespread introduction of composite fill materials into the medical process require future dentistry readiness to work according to all the rules of art «Lege artis», since the reproduction of natural forms is more an art than science. As an artist, the artist needs creative inspiration, inner desire and desire to achieve results of the highest quality. As a doctor, some emotions are not enough. Necessary knowledge is the startup potential of the future student of a doctor, luggage, which is replenished constantly in the process of professional growth.

During the preparatory stage of the competition, a group of students of the contestants is formed, which can be selected by teachers from the best theoretical training and manual skills of students. In the first year of the contest participants were recruited at the request of the latter. Also, during the preparatory phase, responsible instructors are appointed to prepare individual stages of the competition, a list of required logistics is drawn up.

Some training is also needed by the contestants themselves, namely the work with literary sources, including textbooks, methodological developments, professional algorithms. To do this, they are given a list of issues, practical tasks on the topics of practical training on this content module. Material and technical support of this stage is plaster model of teeth, phantoms of dental rows with removable teeth, stands, tables, specialized literature. The main points are:

1. Knowledge of the histological structure of the tissues of the tooth and organs and tissues of the oral cavity.

2. Knowledge of clinical and anatomical features of the structure of incisors, canines, premolars and molars of the upper and lower jaw.

3. Interpretation of signs of tooth belonging to the upper and lower jaws, right or left side (signs of the angle and curvature of the crown, deviation of the root, proximal surfaces).

Basic skills should be:

1. Modeling with plastic masses of teeth of different groups.

2. Reproduction of the main signs of tooth belonging to the upper or lower jaw, right or left side.

For the development of practical skills students are given a modeling material (plasticine, plaster, wax, etc.), a set of dental instruments (plastic or metal spatula, gloves of various sizes and types, angle probe, etc.).

The competition is held in 2 rounds. First round is a tooth design that will be determined by drawing lots. For objectivity, evaluation of work is done incognito. Each participant takes out a poster from 1 to 20 and after modeling attaches a postage number to his work (without the surname and name). As a result of the competition, 7-10 participants with the best points will pass in the second round. In the 2nd round the participants will answer 20 questions. The sum of points for the 1st and 2nd rounds will determine 3 winners.

Technical support of the main stage: the badges and number plates from 1 to 20, the paper with the task of modeling of various teeth of the upper and lower jaw to the right and to the left.

For 1 round – modeling of the tooth – given 20 minutes. Students contestants receive dental trays with tools, plasticine, boards or cardboard for modeling.

For present students, fans are encouraged to review a study film, for example, "Restoration of carious cavities of 1st stage by Black".

The assessment of the 1st round of the "Tooth Modeling" is conducted by a jury from experienced professors and associate professors of the chair. The jury consists of 5 members and it is announced, among which the numbers of works for evaluation are distributed: 1 – 4, 5 – 8, 9 – 12, 13 – 16, 17 – 20. For the jury, the evaluation protocols are prepared – 20 copies. The protocol of the jury specifies the work number, evaluates for each tooth modeling parameter, calculates the total result. The signature of a jury member is given.

The assessment of the quality of teeth modeling is performed on the following parameters:

- form of crown;
- ratio of sizes of crown/root;
- number, position, form of chewing cusps;
- form, depth of fissure, presence of a blind pit, additional cusp;
- number, position, form of the roots, apical foramens;
- expressed signs of crown curvature;
- expressed signs of the crown angle;
- expressed signs of deviation of roots;
- expressed signs of contact surfaces.

Each of the parameters is evaluated as follows:

0 points – the sign is missing or is not executed correctly;

1 point – sign done, but inaccurate;

2 points – the sign is done correctly.

The maximum number of points is 18.

When calculating the results of the first competition for fans and presenters there is a quiz «What do you know about Ancient Rome?» The presider asks questions about the history of Ancient Rome (based on the following information). For a correct answer the fan receives a token.

Ancient Rome – one of the leading civilizations of the Ancient World, the largest state of the Ancient, received its name from the main city (Roma – Rome), in turn named after the legendary founders – Romulus and Remus (which, according to legend, raised the wolf). The peak of its power Ancient Rome reached in the 2nd century AD, when under his control there was a space from modern England to the north to Ethiopia in the south and from Iran in the east to Portugal in the west. The modern world of ancient Rome was presented with Roman law, some architectural forms and solutions (for example, an arch and a dome) and many other innovations (for example, wheeled water mills). Christianity, as a religion, originated in the territory of the Roman Empire. The official language of the ancient Roman state was Latin. Religion for the most part of the period of existence was polytheistic, the unofficial emblem of the empire was the Golden Eagle (aquila), after the adoption of Christianity appeared labarum (a flag set by Emperor Constantine for his troops) with Chisma (the monogram of Jesus Christ – the crossed letters of Hii and Ro).

Presenters are provided with the meanings of constant expressions, which are often used until now:

A priori – «before and beyond any experience», «in advance», «consciously», «explicitly», «indisputable», «originally»;

Amat Victoria Curam – «Victory loves training!»;

Amicus Plato, sed magis amica est veritas – «Plato is a friend, but the truth is a bigger friend» («Plato is a friend to me, but the truth is more expensive» – the words attributed to Aristotle have been used.) In meaning, «one should not yield to truth or justice under what circumstances»;

Amicus verus – rara avis – «a faithful friend is a rare bird»;

Ars longa, vita brevis – «the art is durable, and life is short»;

Labor omnia vincit – «Labor overcomes everything»;

Labor est etiam ipse voluptas – «work is by itself – a pleasure»;

Memento mori – «remember about death»;

Memento vivere – «remember about life»;

Mens sana in corpore sano – «a healthy body in a healthy body»;

Medicus curat, natūra sanat – «the doctor treats, the nature heals»;

Nemo omnia potest scire – «nobody can know everything».

For each correct answer the fans receive tokens, the number of which in the end is determined by the winner.

Upon the end of the competition for the fans, the jury chairman announces the best 10 students – winners of the 1st round tooth modeling.

2nd round of the competition – these are answers of participants (by choosing the correct answer from 5 options) in the section "Clinical features of the structure of teeth, organs and tissues of the oral cavity." Techni-

cal support of this stage: multimedia presentation with 20 original questions and 5 variants of the answer. For contestants, tablets with numbers from 1 to 5 (10 variants for participants of the 2nd round) are prepared in advance. For each correct answer a student receives a badge. The calculation of the results of the second round is based on the number of tokens of each participant.

At the end, the announcement of the results of the practical and theoretical tours of the competition is held. There is one or several jury members who evaluate the activity, the effectiveness of the work of the contestants, the importance of participation in such contests.

The calculation of the total result of the 1st and 2nd rounds is recorded in the consolidated content of the results of the contestants. The winners are determined (3 prize places). In the final word of the head of the de-

partment, winners – participants of the competition for the total number of points received and fans' competition are announced. Awarding diplomas for the 1st, 2nd, 3rd places, the letter to the most trusted fan, prizes, gifts.

Conclusions. Improving teeth modeling techniques has great educational capabilities. This, at first sight, a child's play, contributes to the development of a good eye, a sense of form, rhythm, the ratio of part and whole, educates accuracy, patience, perseverance. The work on modeling the tooth, on the one hand, facilitates the ability to use the acquired theoretical knowledge "in practice", on the other hand it is nourished by questions that arise in the process of practical work. In the future, the art of dental modeling will be transferred to the clinic of therapeutic dentistry during restoration work.

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ПРОФЕСІЙНИЙ КОНКУРС В ЯКОСТІ ПЕДАГОГІЧНОЇ ТЕХНОЛОГІЇ НАВЧАННЯ МАЙБУТНІХ СТОМАТОЛОГІВ

Марченко І. Я., Ткаченко І. М., Шундрік М. А., Назаренко З. Ю.

Резюме. Результатом навчання студентів-стоматологів має стати набуття ними професійних умінь, які формуються на основі знань і практичних навичок. Удосконалення загальних і професійних компетенцій студентів-стоматологів можна проводити шляхом участі в конкурсі з моделювання зубів «Lege artis», введеного кафедрою пропедевтики терапевтичної стоматології Української медичної стоматологічної академії для студентів 2-го курсу. Конкурс дозволяє поглибити і закріпити знання по клінічним особливостям будови різних груп зубів і мануальних навичок з моделювання зубів і їх реставрації.

Ключові слова: професійний конкурс, навчання студентів-стоматологів, моделювання зубів.

ПРОФЕССИОНАЛЬНЫЙ КОНКУРС КАК ПЕДАГОГИЧЕСКАЯ ТЕХНОЛОГИЯ ОБУЧЕНИЯ БУДУЩИХ СТОМАТОЛОГОВ

Марченко И. Я., Ткаченко И. М., Шундрік М. А., Назаренко З. Ю.

Резюме. Результатом обучения студентов-стоматологов должно стать получение ими профессиональных умений, которые формируются на основе знаний и практических навыков. Совершенствование общих и профессиональных компетенций студентов-стоматологов можно проводить путем участия в конкурсе по моделированию зубов «Lege artis», введенного кафедрой пропедевтики терапевтической стоматологии Украинской медицинской стоматологической академии для студентов 2-го курса. Конкурс позволяет углубить и закрепить знания по клиническим особенностям строения различных групп зубов и мануальных навыков по моделированию зубов и их реставрации.

Ключевые слова: профессиональный конкурс, обучение студентов-стоматологов, моделирование зубов.

PROFESSIONAL COMPETITION AS PEDAGOGICAL EDUCATIONAL TECHNOLOGY FOR FUTURE DENTISTS

Marchenko I. Ya., Tkachenko I. M., Shundrik M. A., Nazarenko Z. Yu.

Abstract. *Relevance of work.* The problem of becoming a personality of a future specialist during his study at a higher medical educational establishment is considered one of the priorities of the Law of Ukraine "On Higher Education", the National Doctrine of the Development of Education in Ukraine for 2012-2021, the Program for the Development of Medical Education till 2020.

Special attention is paid to the need to ensure a productive orientation of the individual, early inclusion in the process of professional activity and communication, actualization of the motives of achievement, to strengthen the need for self-development and self-realization, developing the skills of educational and cognitive activity as a means of didactic adaptation; development of professional thinking; as well as the need to increase the accordance of the tasks of the educational process to the real tasks that have to be solved by medical professionals at various stages of professional activity.

According to the requirements of the "Standard of Higher Education of Ukraine" in the course of training specialists of the second (master's) level of higher education in the field of knowledge 22 "Health protection" specialty 221 "Dentistry" discipline "Propaedeutics of therapeutic dentistry" ensures the acquiring general and professional competencies. Monitoring and assessing the quality of their acquisition, that is, the organization of feedback as a means of managing the educational process, is a topical issue of educational services of higher educational institutions.

For this purpose, the team of teachers of the chair of Propaedeutics of therapeutic dentistry Ukrainian Medical Stomatological Academy developed a methodical scenario of the professional competition "Lege artis", which aims to developing and consolidating theoretical knowledge from the content module "Clinical features of the teeth structure, tissues and organs of the oral cavity" and the mastery and improvement of manual skills in modeling teeth of different groups.

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Key words: professional competition, student-dentists learning, teeth modeling.

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Морозова Н. С., Головчак Г. С., Коробкова И. В., Попов А. А., Ридный С. В.

О ПРОБЛЕМАХ ПРОФЕССИОНАЛЬНОГО ОБУЧЕНИЯ НЕСПЕЦИФИЧЕСКОЙ ПРОФИЛАКТИКЕ ИНФЕКЦИЙ, СВЯЗАННЫХ С ОКАЗАНИЕМ МЕДИЦИНСКОЙ ПОМОЩИ

Харьковская медицинская академия последипломного образования (г. Харьков)

sergey.readney@gmail.com

Обеспечение эпидемиологической безопасности лечебно-диагностического процесса является одним из основных условий прогресса современной медицины. Заболеваемость инфекциями, связанными с оказанием медицинской помощи (ИСМП) является показателем качества оказания медицинской помощи населению и важной социально-экономической характеристикой развития общества.

Пациенты с ИСМП находятся в стационаре в 2-3 раза дольше, чем аналогичные пациенты без признаков инфекции. В среднем на 10 дней задерживается их выписка, в 3-4 раза возрастает стоимость лечения и в 5-7 раз – риск летального исхода. Экономический ущерб, приносимый ИСМП, исчисляется миллиардами долларов (США – 4-10 млрд. долларов, Великобритания – 1 млрд. фунтов стерлингов).

К сожалению, сегодня в Украине отсутствуют обобщающие достоверные статистические сведения

о конкретном социальном и экономическом ущербе, причиняемом ИСМП населению. Есть лишь гипотетические расчетные представления о его масштабах, базирующиеся на результатах научных исследований отечественных ученых. Отмечено, что в Украине ИСМП регистрируются в среднем по годам 3-7 тысяч случаев, что составляет 0,2 – 0,3% на 1000 пациентов, в то время как даже в высокоразвитых странах ИСМП поражают 5-10% пациентов. По данным США от ИСМП ежегодно страдают более 2 млн. пациентов, из которых около 88 000 больных погибает.

Учреждения здравоохранения по-прежнему остаются зоной повышенного риска в части обеспечения инфекционной безопасности пациентов и персонала. В специфических условиях системы ЛПУ уровень инфекционной заболеваемости определяют своевременные и адекватные профилактические и противоэпидемические мероприятия.