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# THE USE OF HIGHLY EFFECIVE INTERACTIVE TEACHING METHODS IN MEDICAL SCHOOLS

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#### Abstract

This article describes modern high-performance interactive teaching methods that help provide high-quality training for future medical professionals.

**Keywords:** interactive training, student motivation, managerial decisions, professional competence, Case Studie's technique, role-playing game, intergroup discussion

Introduction. Socio-economic transformation in Ukraine, accelerate reforms in education, changing attitudes to the place and role of education in the life of every citizen of Ukraine. Constantly rising quality requirements of modern education: motivation of students, strong growth in mental abilities, opportunities operate material, learning new skills. Nurturing health culture nation is justified in a modern State. Improvement of professional skills enables to operate effectively in difficult conditions, to make the right decisions quickly and with a minimum of information, promotes the development of initiative, perseverance m sociability. Contemporary forms and training methods allow you to effectively and efficiently teach students how to think and to make correct management decisions. Change and modernization of higher education system needs to introduce new interactive teaching material and qualitative change in the pedagogical process. Application of effective teaching methods should ensure the quality of future physicians.

**The aim of research**. Justification of application of modern highly effective methods of teaching in training medical students.

**Basic material.** The basis of modern interactive training are the following principles:

- a) direct involvement of each party of lessons in solving a problem;
- b) information and spiritual enrichment: the organization of the educational process for the exchange of information received; a personally oriented teaching. An effective learning process can occur only when the progressive, student-teacher interaction, which are

equivalent to the subjects of the training process. Modern interactive learning is modelling examples and finding the right solutions in the appropriate situation, expands the boundaries of cognitive capacities, promotes analysis and applications received during training information contributes to the accumulation of necessary skills for mastering the future profession. In the result of online learning students appears deep intrinsic motivation, they correctly take important decisions and learn to develop their professional medical skills. During the online learning student is a full participant in the process and encourages it to searching. In this tandem relationship provides students and teachers at the level of partnership, which provides an opportunity for the teacher to develop their organizational skills. According to American scientists, during the lecture the student acquires only 5% of the material, when reading-10%, work with video/audio-20%-30%, demonstration, discussion-50% during practice-75%, and when the student or preaches applies knowledge-90 %. As you can see, the relatively passive teaching methods (when the student only acquires and produces information) are 5-10 times less effective than interactive.

With proper application of interactive methods of instruction a student feels not only the object of the learning process, as well as subject knowledge that unquestionably causes intrinsic motivation in the process of education.

Modern pedagogical process high school employs various methods of training and disclosure of students as individuals. The main medical universities and necessary form of teaching are lectures. Advocates of traditional didactics are promoting the benefits of lectures, while their opponents argue that lecture Lecture-Hall as a form of communication with students is the least effective among other forms of learning in high school. During the lectures students perception of information activity is declining, and in the absence of technical means of teaching lecture use only auditory analyzers. In addition, a lecture makes remain on student object position pedagogical process and communication with a big enough audience deprived teacher ability to implement a differentiated approach for students with varying degrees of assimilation material.

However, the complete abandonment of lectures as a form of training reduces the level of preparation of students. Rational construction of material helps to overcome these shortcomings. It is therefore necessary to find approaches that would enhance the efficiency of lectures

Reasonably efficient method of teaching medical disciplines is the application of the method of "Case Studies". Given that the technique was first developed in the early 20th century at Harvard Business School, also known as the Harvard method. During the period from 1909 to 1919 year of training was going on there, when disciples asked practitioners to present the specific situation or problem and then give its analysis and recommendations. In 1920 (after releasing a collection of case studies Dean Donhmen) was navigated the entire system of management training at the Harvard School of the technique of "Case Studies". Quite effectively in various establishments used this experience today. In the leading schools of Western Europe cases in learning have been used only in 60-ies. In Ukraine, the methodology of "Case Studies" for the educational standards and traditions that are adopted in the United States, was introduced only in recent years. It should be noted that the practice of using this method in Ukraine, in contrast to foreign countries, is not yet very common. Situational training is a very effective teaching method, which involves the use of specific situations (practical cases) from a specific section or topic of a training course for joint analysis, discussion and decision making, brainstorming within a small group and public speaking with presentation and protection of an advanced solution.

There are the following main stages of "Case Studies", such as:

- introductory speech of the teacher;
- formation of micro groups;
- work in a small group;
- presentation by the speakers of the solutions developed;
  - a question for speakers;
  - · general discussion;
  - the final word of the teacher;
  - summarizing.

This method aims to maximize the involvement of each student in the process of analyzing the situation and making decisions. The group is divided into such a number of micro groups so that they consist of up to 5 people. The chairperson is responsible for organizing the work of the group, the distribution of questions among the participants and for the decisions made. The work ends with a short report on the results. The work

is organized as follows. A small group performs different topics from the same section during the whole lesson or group simultaneously working on the same section, competing with each other. Thus, the use of case studies in higher education develops students' initiative, readiness for action in various conditions and the ability to respond flexibly to them - all this is necessary for future doctors.

Intergroup discussion is the basis of creative thinking, a variant of the development of dialectical thinking as a component of creative thinking, the search for truth based on the active participation of all listeners. The result of the introduction of interdisciplinary discussion by the method of competitive groups: the ability to independently create their own approach to receiving, analyzing information and forming integrated conclusions and experience; the formation of clinical thinking; the ability to defend their point of view in the intellectual space, taking into account and perception of alternative ideas, to unite students around the solution of a specific clinical problem, to build constructive relationships in a group; understanding of the need for cooperation, improvement, formation of a creative personality; awareness of the need for constant creative search, intergroup discussion allows you to compare different, including opposing positions, and thus helps its participants to see the problem and how to solve it in different ways. Professional self-awareness allows the young specialist to become a competitive person in the conditions of the modern market, which focuses on the high quality of labor results. As one of the pedagogical methods of forming the professional self-consciousness of future doctors, interactive methods are increasingly being used recently, allowing to radically change the attitude to the object of study, turning it into a subject.

The main components of interactive technologies:

- 1. Motivation-fixing the attention of students;
- 2. The central part of the lesson is assigned to interactive exercises;
- 3. Providing information on the topic of employment;
- 4. Solving students of tasks, working on phantoms, modeling non-current situations, finding solutions to these situations;
- 5. Conclusions, evaluation of the results of classes. The method of competitive groups in student student's online training can be implemented by:
  - 1) dispute;
  - 2) discussions;
  - 3) debate or "round table";
- 4) the creation of a problem situation and its solution through a role-playing game.

A prerequisite for the effectiveness of classes is to treat students as equal participants in the educational process. The most effective is the arrangement of all participants in the class "in a circle." The teacher is in a circle on a par with students. The teacher should be liberal, ready for the emergence of non-standard situations, expressing different opinions regarding the solution of the problem situation. The student should not be afraid to express any thought, even a false one, to ask an unexpected question, to proceed to the discussion of

related problems. Because only in favorable conditions the emergence of the correct solution of a situational problem is possible. The teacher in turn should be enough competent, knowledgeable, highly qualified specialist in order to provide students with the necessary information at a high level, correct mistakes and direct the discussion in the right direction. In this case, the teacher is assigned the role of more observer, coordinator of the learning process than an active participant in the process of interaction between the teacher and students in the process of learning the emergence of which is more dependent on the teacher himself comes to the fore. Clinical thinking of students, the ability to form their thoughts, use medical terminology. The teacher pays great attention to the ability of the student to work in a team, to be an active "player". The group of students who found a non-standard solution of the task posed wins and accordingly receives high marks. Today it is known that it is necessary to treat not the disease, but the patient. Intergroup discussion - the basis of creative thinking, the development option of dialectical thinking as a component of creative thinking, the search for truth basis of the active participation of all students and the comparison of different points of view on purpose of finding the optimal therapeutic strategy. The result of the introduction of interdisciplinary discussion method competitive groups:

- 1. The ability to independently create their own approach to obtaining, analyzing information and the formation of integrated findings and experience;
  - 2. Formation of clinical thinking;
- 3. The ability to defend their point of view in the intellectual space with consideration and perception of alternative ideas;
- 4. The ability to unite students around a specific solution clinical problems, build a constructive relationship in the group;
- 5. Understanding the need for cooperation, mutual understanding;
  - 6. Formation of a creative personality;
- 7. Awareness of the need for constant creative search;
- 8. Intergroup discussion allows to compare various, including the opposite positions and thus helps its participants to see the problem.

and the ways to solve it in various ways.

9. If solving a problem is a logical conclusion from the discussion between

competing clinical groups and supported by all those present, his

the value increases as it turns into a group norm.

Among the methods of interactive learning, an important place is played by a role-playing game. The essence of the situational role-playing game is the improvised play of the situation, the simulation of typical activities for this group and the problems that arise in the course of this activity. The game involves several students, during the game they play the role of individual characters using numerous modifications of situational games. Role play should be based on several principles, the main ones of which are: - the principle of simulation of specific conditions and the dynamics of events, that is, the real conditions of professional activity;

- the principle of joint activity provides for the involvement of several participants in the cognitive activity:
- the principle of dialogical communication (dialogue, discussion on the maximum participation of the players, able to create a creative atmosphere and achieve students' understanding of aspects of future professional activity);
- compliance with the ethics and deontology of legal norms in accordance with the professional activities of the future specialist.

The situation simulated in the game should be as close to reality as possible. The situation includes: the plot of the game, the problem posed, the nature of the assigned relationships and the roles to be played. Role play includes the following steps. Stage one - introducing students to the initial information:

- 1) the presentation of the initial information by the teacher, the joint definition of the tasks of the game;
  - 2) the distribution of roles.

Stage two - conducting the game:

- 1) the participants perform role functions;
- 2) control the course of the game;
- 3) analysis of the results of the game by students;
- 4) a sub-vision of the game results by a teacher.

Postgame discussion has a goal: to establish the problems and phenomena that took place in the game; establish in real life similar patterns of behavior; suggest what needs to be changed in the game and / or in real life in order to achieve the best result. The scenario of the game may look as follows: students are given roles: the teacher calls the patient's (pharmacy visitor) diagnosis unknown to other participants, the patient presents complaints characteristic of the diagnosis and the clinical picture (reinforcement of knowledge of the symptoms of the underlying diseases), On the basis of the received data, the "pharmacist" should determine the sequence of actions according to the symptoms and give the appropriate - drug. Students with a high level of training are assigned the role of an "expert analyst" who monitors events, evaluates and corrects the action of the "pharmacist". The purpose of the educational game on this topic is to identify certain competencies: - specific knowledge on this topic; - communication skills that are found when meeting a patient, establishing trusting relationships with him, the ability to interview a patient, and working in a team. The distribution of roles is as follows: moderator (the role of the teacher or the teacher himself), the patient (pharmacy visitor), pharmacy pharmacist, expert analyst. Consider an example of a role-playing game with students of the Faculty of Pharmacy on the topic "Pharmaceutical care for patients with fever." A student-patient (pharmacy visitor) should formulate the complaints typical in this situation, model the clinical signs of the disease as individual symptoms characteristic of this case study.

This stage of the game includes conducting a survey of the patient in order to analyze information on the duration and intensity of the main and associated symptoms. The expert analyst analyzes the work of all the participants in the game step by step, evaluates the stages of working with the patient. The teacher, noting

the positive aspects and shortcomings of the role performers, encourages discussion, enables participants to protect individual positions, determines the level of assimilation of knowledge and professional skills on this topic. During the class, situations of a different nature are simulated on the chosen topic.

Conclusion. Interactive learning forms the ability to think extraordinarily, to see the problem situation, to get out of it; substantiate their positions, their life values; develops such traits as the ability to listen to another point of view, cooperate, into partnerships, while showing tolerance and goodwill towards their opponents.

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