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## METHODOLOGY OF TEACHING INFORMATION TECHNOLOGIES IN MEDICINE USING INNOVATIVE TECHNOLOGIES

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### ABSTRACT

Reforming the modern system of medical education is aimed at increasing the efficiency of training future doctors who not only have knowledge and skills, but are also ready to apply them in solving problems of professional activity. The authors show the need for biophysics in the future professional activity of a future specialist doctor in solving professional problems.

**Keywords:** information technologies in medicine, medicine, methodology, integration, contextual learning.

### INTRODUCTION

Interest and attention to the use of innovative technologies, pedagogical and information technologies in the educational process is growing day by day. One of the reasons for this is that, until now, in traditional education, students were set to acquire only ready-made knowledge, but modern technologies teach them to search for the acquired knowledge by themselves, to study and analyze it independently, and even to draw their own conclusions.

Pedagogical technology and knowledge, experience and interactive methods of pedagogical skills ensure that students acquire knowledgeable, mature skills. Innovation (English innovation) is innovation.

#### **Three-step strategy for solving physical problems.**

Innovative technologies are innovations and changes in the pedagogical process and teacher's and student's activities. Interactive methods are called collective thinking, that is, pedagogical influence methods are unique in that they are implemented only through the joint activity of the pedagogue and the student.

Such a process of pedagogical cooperation has its own characteristics, which include:

- forcing the student not to be indifferent during the lesson, to think independently, to create and search;
- student - to ensure that students are constantly interested in knowledge during the educational process;
- to strengthen the student's interest in knowledge by independently approaching each issue creatively;
- organization of activities of pedagogue and pupil-student in constant cooperation.

In the opinion of teachers, researchers, and practitioners studying the issues and problems of pedagogical technologies, pedagogical technology is defined as the use of TSO, computer, distance learning, or various techniques that are related to information technology and must be used in the teaching process.

It is up to the teacher and the student-student to choose the technology to achieve the goal, because the main goal of both sides is clear: to achieve the result, in which the technology used is chosen depending on the level of knowledge of the students-students, the nature of the group, the situation, for example, maybe a movie to achieve the result, handouts, drawings and posters, various literature, information technology will be needed, it depends on the teacher and the student.

Together with the teacher, it is necessary to plan the teaching process in advance, in this process, the teacher must take into account the specific aspect of the educational subject, the place and conditions, TSO, and most importantly, the ability and need of the student, as well as his ability to organize cooperative activity, so that the desired rewarded result can be achieved. In short, the pupil should be brought to the center of education.

### **Problem definition and problem solving.**

It is necessary for the teacher to design the future lesson process in order to see each lesson as a whole, in a situation, and imagine it. It is very important for the teacher to draw up a technological map of the future lesson, because the technological map of the lesson is created based on the nature of the subject, the subject taught for each subject, the possibilities and needs of the students. It is not easy to make such a technological map, because for this the teacher needs to be aware of pedagogy, psychology, special methodology, pedagogy and information technology, as well as to know a lot of methods and methods. Making each lesson colorful and interesting depends on the planned technological map of the lesson.

### **Strategy design.**

How to create a technological map of the lesson depends on the teacher's experience, goals and discretion. No matter how the technological card is structured, it should reflect the lesson process as a whole, and the clearly defined goal, task and rewarded result, the technology of organizing the lesson process should be fully expressed. The structure of the technology card saves the teacher from writing an extended synopsis of the lesson, because all aspects of the lesson process are reflected in such a card.

### **Implementation of the strategy.**

The modern methods presented in this methodical manual, or technological trainings that help to increase the effectiveness of teaching, help students to form logical, intellectual, creative, critical, independent thinking, develop their abilities, become competitive, mature specialists and educate the professional qualities needed by a specialist.

Below is a description of some technologies (trainings) that can be used in the training process, and a recommendation on the procedure for conducting some of them.

### **"Fifth plus" method**

This method is especially important for students to acquire logical thinking skills. Being able to show and justify the logical connection between the concepts that illuminate the essence of the subject forms in students the skills of independent thinking, the ability to justify a personal approach, as well as the ability to compare their personal opinions with the opinions of their peers.

### **"Charkhpalak " technology**

This technology is aimed at helping students to remember the topics covered, to think logically, to independently answer correctly to the questions, and to assess the knowledge acquired by all students by the teacher in a short period of time.

The purpose of technology. This technology teaches students to think logically during the lesson, express their thoughts independently, work individually and in groups, respect other people's opinions, and choose the right one from many opinions.

### **"Networks" method (Cluster)**

Brainstorming is a pedagogical strategy that helps students learn about a topic in depth by teaching them to freely and openly link a topic-related concept or specific idea in a coherent sequence.

This method can serve to intensify and expand the thinking activity of the students before any deep learning. It also encourages students to consolidate, master, and generalize the learned topic in the form of drawings.

### **Boomerang technology**

This technology aims to help students to work with various literature during the lesson, outside of the lesson, memorize the learned material, express their opinion

freely, get a lot of information in a short time, and be able to evaluate all students by the teacher during the lesson.

The purpose of the method. Through this method, the students are able to determine the sequence of actions shown on the cards distributed to the students independently, to be able to convey their opinion to others in small groups or to stay in their opinion, and to form skills such as being able to agree with others.

#### **"I know. I want to know. I learned" method**

This method allows students to assess their level of knowledge on specific topics. In the process of applying the method, it is possible to work with students in a group or mass. When working as a group, at the end of the training, the activity performed by each group is analyzed. The activities of groups can be organized in the following form:

1) each group performs the tasks given by the teacher based on the general scheme, and at the end of the training, the relations of the groups are summarized according to the project items;

2) groups perform the tasks given by the teacher according to the separate clauses of the general scheme.

#### **"BLITS - SURVEY" method**

This technology is aimed at teaching students to correctly organize the sequence of actions, to think logically, to choose what they need from many, diverse opinions and information based on the subject they are studying. During this technology, students are able to communicate their independent thoughts to others because this technology provides the perfect environment for this.

The purpose of the method. This technology helps the listeners to determine the sequence of actions shown in the distributed papers first independently, and then to be able to transfer their opinion to others or stay in their opinion and agree with others.

In academic lyceums and vocational colleges, management representatives, management staff, methodologists, teachers are often puzzled about what to pay attention to when entering the teachers' classes and analyzing the lesson. In fact, entering the teacher's lesson and analyzing it, first of all, depends on the goal of the person entering the lesson. For example: "I wanted to learn (observe, publicize) your experience in presenting a new topic or your assessment, strengthening the topic, organizing a complete lesson plan, communicating with students, etc.

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