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Interactive Training Tools in the Modern Educational Process

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ABSTRACT

The article considers the possibility of using interactive methods and means when conducting classes with students in higher education institutions. Possible implementations are presented. The advantages of using interactive tools in the classroom are indicated. The possibilities of the teacher when using interactive tools in the classroom are considered. It is determined that the use of interactive teaching methods is one of the methods during which there is a two-way mental interaction between the student and the teacher.

Keywords: Science Preparation, Higher Education Institution Training, Principle of Clarity, Discipline, Pedagogy, Special Disciplines.

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INTRODUCTION

Today, information technology makes it possible and necessary to form the teacher's knowledge in higher education institutions for their use in the learning process. Having the skills to master word processing and work in the Internet environment, an important place is occupied by the skills of creating presentation material, which is a traditional means of accurate training. A popular form is the linear form of slide presentation, which includes educational material. Another way to use slides is to present the necessary information in a non-linear form. The analytical solution offered by well-known software products is to create interactive presentations for the training session, in which there is a possibility of arbitrary transition between slides in one presentation.

Also, interactive presentations provide an opportunity to create an exam, not just types of testing with the necessary questions and a choice of answers. Test presentations can be used by students to test their knowledge. Thus, as a result of selecting active objects from the presentation slides by clicking on the active objects, students receive slides with the correct or incorrect version of the selected answer.

The purpose of the article is to evaluate the use of interactive teaching aids in conducting various types of classes in higher education.

MAIN TEXT

"The use of interactive presentations are presentations whose progress is determined by the choice of object on the screen" [1]. It is possible to attach an action to each object on the slide as text, image, button, artistic text, which is performed when you click on the object in presentation mode.

Interactive presentations in learning can change learning technology, promote the development of independence and creativity of students. The use of interactive presentations in class and with the help of computer software are more vivid, visual and perceptible [2].

It is a known fact that it is difficult for students with figurative thinking to master abstract generalizations, without a picture they are not able to understand the process, to study the phenomenon. To deepen the study and concept, the application of presentations allows the development of their abstract thinking occurs through images.

Presentations or videos with the use of moving elements, allow you to get a complete picture of any process in the student's mind, interactive models allow you to "build" the process yourself, correct your mistakes and learn independently. Perception of the material in person and in the process presented on the computer helps students to better learn and memorize the material, which saves the teacher's time in class and frees him from routine work [3]. The use of interactive learning tools, namely video tutorials, in particular, in the learning process occurs in several areas: visualization of various processes and phenomena. Fictional laboratory practical, installation and experimental work. Participation in competitions, Olympiads in various disciplines. Development of materials for seminars and conferences; [4.16.17]. The use of presentations makes it possible to build an open education system that will provide each student with their own field of study. Also, fundamental changes occur in the organization of the educational process, when the systemic thinking begins to form, rational use of cognitive activity in the educational process.

There is a need to use personal electronic computers to individualize the learning process, to turn to fundamentally new cognitive tools; to study processes and phenomena both externally and internally based on the use of computer graphics and modeling. When using interactive learning tools, it becomes possible to represent various physical and chemical processes in the teaching of any discipline on a scale convenient for study [5]. It is known that the usual technical teaching aids, interactive presentations not only saturate the student with a large amount of strictly selected, prepared, properly organized knowledge, but also develop creative and intellectual abilities of students, ability to work with different sources of information and acquire new knowledge [6].

The advantages of using interactive presentations in teaching are the improvement of the quality of teaching due to the interest in working with computers and the novelty of activities. The use of a computer in various subjects and lessons can become a new method of organizing active and meaningful work of students, which makes classes more interesting and visual [4]. Learning with the use of interactive presentations in the classroom activates the activities of teacher and student; improve the quality of discipline; reflect the essential aspects of the studied objects, visually embodying the principle of visualization; identify the most important (in terms of educational goals and objectives) characteristics of the studied objects and natural phenomena [8].

Visual aids allow to present educational material as a system of bright reference images filled with comprehensive structured information in an algorithmic order. In this case, different channels of student perception are involved, which allows to enter information not only in the actual but also in the associative form in the memory of students [9]. The basis of such a presentation of educational information is the formation of students' thinking system. The presentation of educational material in the form of a multimedia presentation reduces learning time, frees up student health resources. The application of these factors is possible due to the interactive properties of e-learning programs, which are best suited for the organization of independent cognitive activity of students [9]. When using interactive learning tools in the classroom it is possible to build a learning process based on psychologically correct modes of memory, attention, pedagogical interactions, humanization of learning content and reconstruction of the learning process in terms of integrity, you need to use multimedia presentations at any stage of the lesson and at any stage of studying the topic [10]. Presentation of presentations in different variants in the educational process speaks of many advantages of this form of organization of the educational process, as it is now possible to fully realize:

Assimilation of the presented material:

increase understanding and quality of knowledge, mastering the system of quality control of knowledge, as well as consolidation of previously acquired knowledge (strength, depth, consistency). Obtaining knowledge (about concepts, facts, theories, methods of activity, processes, laws); Gaining a variety of practical skills when working with natural and virtual objects. Understanding through presentations of different methods of scientific knowledge in the subject activity of the teacher. Comprehensive understanding:

activation of the cognitive process (perception, attention, presentation, thinking, imagination, language and

memory).

activation of creative abilities; Emergence of methods of analytical and synthetic thinking. Growth and improvement of education: acquiring the ability to algorithmize their own activities and the formation of a scientific style of thinking and scientific worldview.

construction of socially positive elements of behavior. Construction of socially valuable motives for learning (in particular, interest in learning); Development of moral and volitional qualities of man [5]. The ability to use information is an indicator of one of the competencies of the teacher. "Everything flows, everything changes." Also, during the lesson the teacher can: present tasks, as well as numerous and various examples in an interactive mode; apply contextualization of educational material using various methods of animation and visual aids; analyze complex phenomena in the system, perform computer modeling and interaction of part and whole. To trust the student's personality by creating the effect of immersion in the learning environment. Activate increased motivation by influencing the emotional sphere with the help of attractive design of multimedia developments, sound, video and animation. To build purposeful intellectual efforts and attention among students through interactive interaction [11, 13, 14, 17-24].

To apply these principles in practice, the teacher must master modern technology. Thus, the ability to create author's electronic learning resources, as well as to plan and conduct classes using their own multimedia development, is a major didactic problem, as well as the problem of teacher training in the field of information computer technology [10]. When developing a presentation, you need to pay attention to a number of negative aspects that may arise due to its misuse. This fact makes it difficult to present voluminous, holistic and interconnected information; reducing the scope of creative activity and cognitive activity of students; suppression of the intuitive principle by excessive algorithmization of mental activity and efforts of logical thinking; reduction of socialization with isolation of students from each other and lack of interpersonal communication; difficulties in mastering and operating with concepts of a high level of abstraction; difficulties in developing students' speaking and writing skills [10, 12, 15].

CONCLUSION

To sum up, interactive learning is special learning, during which there is an interaction between the student and the teacher, as well as between the students themselves.

The essence of using interactive tools in learning is the social interaction of students, their interpersonal communication, while an important feature is the recognition of a person's ability to "take on the role of another", "see" how the interlocutor perceives, interprets situations and build the communication process.

Visual teaching aids are designed to help the teacher and allow convenient and clear presentation of the material. Using even the simplest graphical tools is an extremely effective tool. A well-made presentation can attract students' attention and arouse interest in learning. No need to admire or abuse the exterior of a special effect's presentation. You can overdo it, then the effectiveness of the presentation as a whole will decrease. Choose a balance between the supplied material and the side effects. This rule is true for all multimedia presentations in general, but especially for educational presentations.

When creating educational multimedia presentations, it is necessary to take into account, on the one hand, the general didactic principles and methods of conducting the lesson, and, on the other hand, to maximize the opportunities offered by the telecommunication network software and modern information technologies.

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