IMPORTANCE OF MODERN TECHNOLOGIES IN TEACHING CHEMISTRY CLASSES

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The modernization of the education system in our country, its structural reconstruction, the integration of modern technologies into the teaching process taking into account the modern achievements of education, science, technology and technology at the world level of economy and culture, as well as the educational process of the participants from the point of view of their capabilities and needs, creating the necessary and sufficient conditions for them is becoming one of today's requirements.

Integrated lessons are an interactive educational system that explores the secrets of creating visual skills based on the deepening and expansion of integrative knowledge. The visual education system is built on the basis of various types, forms, methods, and objects.

The goals and objectives of the integration course are described in the school natural science education system. Methods and means of integration in the integrated (demonstration) network of knowledge: depending on the amount of time at the place of teaching in the educational plan, the time of full mastery of this course, the level of mastery of students is multi-purpose and color- characterized by color. The creation of appropriate mental excitement for students while studying each educational subject greatly helps the mastering of this material, it helps to remember it quickly, emotional awareness, and the growth of thinking ability. , leads to the development of speech and imagination.

The traditional system of chemistry lessons has existed for a long time. We now complement these traditional lessons using modern information technology. In this case, the teaching process should be chosen taking into account the type of tools and equipment used in practice. First, the goal of the lesson is to activate the motivational field in learning chemistry. Chemistry lessons using assistive technology are fundamentally different. In this case, the role of the chemistry teacher changes: the teacher is no longer a source of knowledge, but rather gives advice in the learning process and focuses on summarizing the topic. In the use of technology, modern e-textbooks, virtual chemistry textbooks and an explanation of the effective use of the Internet. In this process, the task of the chemistry teacher is to check whether the educational tools are compatible with the educational materials, to check the level of use of the student's personal computer for educational purposes, taking into account the age and psychological characteristics of schoolchildren.

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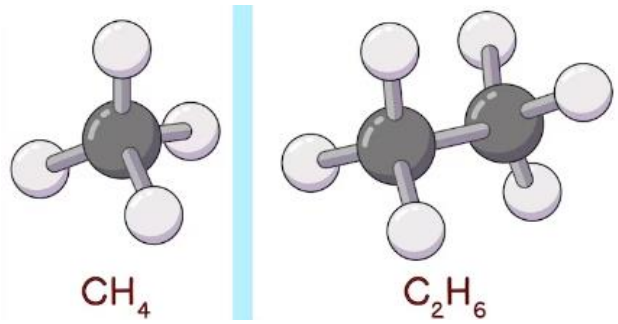
In the 3D model program, we can more clearly study the position of chemical substances in space. Through the 3D model, we can clearly see not only the position in space, but also the structure of the atoms in the substance. For example, through this 3D model, we can easily distinguish the location of methane (CH4) and ethane (C2H6) gases in space, and hydrogen atoms attached to carbon from carbon atoms:



3D model of methane and ethane.

Effective use of presentations in the process of teaching chemistry topics helps to save time, speeds up the process of learning chemistry, makes the topic material in a certain form, uses various animations, makes it more convenient, and facilitates the student's perception and understanding process.

The main goal of integrating education is to lay the foundations of a good idea of nature and society at school, and to form one's attitude to the laws of their development. That's why it is important for a school student to see the subject or the phenomena of reality from several sides: from the logical and emotional side, etc.

Mastering natural sciences and establishing intra-subject and inter-subject connections in understanding the laws of things in the world is the methodological basis of the approach to the integration of education.

Currently, it is necessary to develop and test a system of integrated lessons, where the psychological and methodological basis is the establishment of connections between common concepts for a number of subjects. At the same time, intersubject relations should be taught at the level of the curriculum and provided with the necessary teaching tools. The main goal of integration in chemistry is to use modern information technology tools in the teaching of chemistry in traditional lessons, to integrate, facilitate and make lessons more interesting. , and to direct students to the correct use of information technologies, to organize training of students to independent research through personal computers.

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