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Personal - Oriented Approach In Teaching Methods Of Complex Compounds

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ABSTRACT

This article discusses the use of information technology based on a person-centered approach. Considered proposals and recommendations for further improvement of teaching the discipline "Chemistry of complex compounds" in higher educational institutions.

KEYWORDS

Personality-oriented approach, information technology, informatization of education, teaching methods, learning efficiency, complex connections.

INTRODUCTION

Specialists of leading scientific centers and universities of the world develop recommendations for improving the process of teaching chemistry based on innovative and information technologies, the application of scientific developments in the educational process on the theoretical, methodological and methodological foundations of teaching. On a global scale, special attention is paid to improving the effectiveness of teaching

natural Sciences, forming the theoretical foundations of chemistry using information technologies and innovative pedagogical technologies based on a person-oriented approach [1].

The person-centered approach to learning refers to a humanistic direction in pedagogy, the main principle of which is the emphasis on learning, not on teaching. The student's personal growth, the meaning of teaching and

life are At the center of learning. Personality-oriented learning is not just taking into account the characteristics of the subject of learning, it is a different method of organizing the learning environment, which involves not "taking into account", but" including " his own personal functions or affirming his subjective experience [2]. The possibilities of a person-centered approach to teaching chemistry with actively implemented modern technologies in all spheres of human activity are realized together with the global Informatization of education, which consists in the development and use of information and communication technologies to achieve the goals of education, upbringing and development.

The information educational technologies used have a significant impact on the form of organization, the content of the methodology for the implementation of all academic disciplines and the educational process as a whole, in particular, chemical disciplines. To date, a number of practical works on the creation of educational and scientific laboratories have been carried out in foreign countries. In these scientific works, experiments with the use of the Internet or the hard disk are carried out using two-dimensional graphical models.

In our Republic, the issues of improving the system of education and upbringing of a harmoniously developed generation have become a priority area of state policy. The country's education system is undergoing large-scale reforms aimed at introducing innovative technologies and information and communication tools into the educational process, increasing the intensity and effectiveness of training, bringing it into line with international standards.

MATERIALS AND METHODS

The educational technologies used today are person-oriented. In modern conditions, it is

necessary to direct all the means and opportunities of the educational process to the development of personality, socialization, education of independent, critical thinking, and the development of students ' abilities. The education that provides all these opportunities is a person-centered education. One of the most intensively developing branches of chemical science "Chemistry of complex compounds" is closely related to modern organic, analytical, biological and physical chemistry [3]. The number of complex compounds is several thousand times greater than the number of substances of organic and inorganic nature, and it is possible to synthesize more and more of their types, whose role in life and economy is very important. For example, the substance chlorophyll, located in the green part of the plant, which performs photosynthesis, is a complex compound of magnesium, and hemoglobin, which provides oxygen to living cells – is a complex compound of iron. A very large number of minerals and aluminosilicates consist of complex compounds.

RESULT AND DISCUSSION

The study of the discipline "Chemistry of complex compounds" is of great theoretical importance [4]. Science is developing intensively and makes many scientific discoveries on the topic. The use of these innovations in the course of classes plays an important role in shaping the students worldview.

Also, when teaching this discipline, it is important to consider the following: spiritual and moral education of students in the process of chemical education, development and implementation of effective forms and methods of spiritual and educational work; intensification of the learning process with the use of a modular system for teaching chemical

subjects; wide application of innovative and information and communication technologies in the educational process in chemical disciplines; in the process of mastering chemical disciplines the formation of students' private competencies in the field of chemistry, taking into account the specifics and content of this discipline; development and implementation of a new generation of educational, methodological and didactic support for the process of chemical education. Defining the features of these approaches is an actual problem of teaching methods of chemistry, each of which is considered separately in the course of classes. In the literature, the advantages of information technology are called increasing interest and changing the attitude of students to the chemical discipline. One of the main reasons for this conclusion is the possibility of distance learning, obtaining the necessary information for laboratory work from the Internet resources and literature. According to psychologists, visual study of the material

(broadcast on the screen) is more effective than studying a book. Animations, video images, and voice data make it easier to understand the essence of the phenomenon being studied, making the learning process convenient and interesting for trainees [5-6]. In our research work, attention is paid to improving the methodological support for the subject "Chemistry of complex compounds" in higher education institutions, increasing the knowledge of students and their creativity based on their knowledge of the subject, activating their abilities based on a person-oriented approach. Computer animations, tests, and virtual laboratories have been developed that students can learn based on their personal abilities and perception of the material. (Fig. 1). As can be seen from the figure, the methodological and educational system for the subject "Chemistry of complex compounds" in higher education institutions serves to increase the creativity of students and their acquisition of subject and basic competencies.

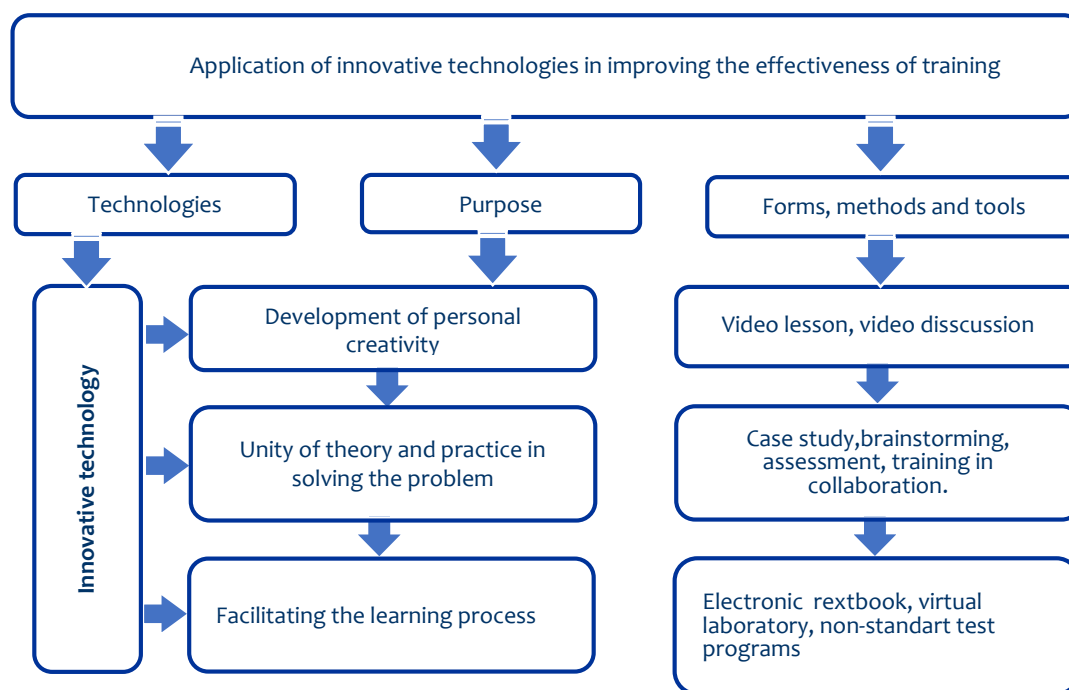


Fig. 1. The use of innovative technologies to increase training effectiveness

CONCLUSION

Thus, based on the above, it should be noted that the subject of the University "Chemistry of complex compounds" is systematized on the basis of an innovative pedagogical environment, adapted to the individual capabilities of students, which contributes to the opening of new didactic opportunities, as well as ensuring the effectiveness of teaching topics of this subject. In the course of the research process, we confirmed the possibility of achieving the improvement of training and optimizing the use of time, the development of motivational, creative and independent thinking of students on the basis of laboratory work, organizing and conducting independent training in the classroom in natural and virtual forms, teaching the subject based on the integration of information and communication technologies with a person-oriented approach when teaching the subject "Chemistry of complex compounds" in universities.

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