



METHODOLOGY OF TEACHING CHEMISTRY

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Abstract: The development of science and technology increases students' interest in the flow of knowledge and the wave of events. If we look at it from today's point of view, it is necessary for students to have high cognitive activity, good intellectual activity and be able to think independently. School teachers develop such qualities in students. It is the duty of every pedagogue to work responsibly in such an honorable work for the development of our independent country and for our future generation.

Key words: Chemistry, teaching methodology, modern pedagogical technologies, education.

Solving such a responsible task depends on the method of arming students with deep and solid knowledge, interest in science, independent work and thinking. The more any specialist pays attention to the methodology of his work, the greater results he will achieve. The main teaching method of the teacher's work is the method of teaching and educating students. The basis of the chemistry teacher's work is the methodology of teaching chemistry.

The methodology of chemistry, like the methodology of teaching other subjects, in its essence, addresses three main issues:

goals and tasks of educational work;

the content of this work;

determines the nature of the process of educating and educating students.

In his work, the teacher is obliged to perform the duties of director, actor, editor, organizer, if one of them is not present, it will have a negative effect on the learning process. In the chemistry teaching methodology classes, university intellectuals do not impart new knowledge, but teach methods of conveying student knowledge to students. Methods of chemistry can be distinguished from general pedagogical directions, therefore, the methodology of teaching chemistry tries to fulfill the following three tasks:

Choosing the right amount of evidence for the school chemistry textbook;

Choice of chemistry teaching methods;



To teach students to use books, movies, radio, television and other tools through teacher's activities to improve students' knowledge. The conclusions of chemistry require a close connection with life and a philosophical interpretation. Teaching chemistry should gradually create a chemical outlook in students. The role of the chemistry teacher:

- for the future of our great independent Uzbekistan, students will be able to consciously and thoroughly master the basics of modern chemistry;
- to acquaint students with the scientific foundations of chemistry necessary for explaining the surrounding nature and using it;
- paying special attention to the development of students' characteristics of a correct, materialistic view of nature;
- educating students to be able to use the chemical experiment, which is one of the means of scientific knowledge;
- it is necessary to train students for work - to prepare them for future practical activities;
- to increase students' interest in chemistry;
- to teach students to be independent and seek knowledge;
- formation of educational and skills that students will have in everyday life, in life;
- involvement of students in socially useful work;
- explain the importance of chemistry in our life;
- bringing to the level of physically strong, mentally mature people;
- concrete acquaintance with the periodic law of elements and the periodic system is the main content of the chemistry course;

Teaching chemistry is a powerful means of educating students, teaching chemistry makes students hardworking and love their country, deeply interested in science, having the ability to think independently about scientific subjects, and creative activity. shows, should educate in a way that looks at the basic concepts and laws in chemistry from the correct point of view. Among the methods of teaching chemistry, it is possible to use methods specific to teaching chemistry, as well as general pedagogical methods. For example, an experiment and explanation problem might be:

- a) experience first, then explanation;
- b) first explanation, then experience;
- c) explanation and experience together;
- g) Homework is assigned, showing the experience and then explaining.



In the development of new methods of teaching chemistry, it is necessary to use general pedagogical research: pedagogical observation, interview of the researcher with the teacher and the student, questionnaire, pedagogical organization of the observed lesson, experiment and offer it to many people. A chemistry teacher should be an ideologically formed person, have a deep knowledge of science, be able to correctly apply the basic theoretical knowledge of education and training in practical activities, and be aware of pedagogical experiences. Because this subject is a pedagogical tool that teaches and directs the content of the subject of chemistry teaching at school and the laws of its understanding by students. The essence of the methods of teaching chemistry as a science is the laws of the process of teaching chemistry, which includes: the purpose of teaching, content, methods, forms, tools, and activities between the teacher and the student. The function of the chemistry methodology is to find the optimal ways of expressing the main facts, laws and theories of high school students in sentences typical of chemistry. Based on the main conclusions, laws and principles of didactics, the methodology solves the main tasks of teaching chemistry that develops education and maturity. A great deal of attention is paid to the problems of the polytechnic teaching of students' career choice. Methodology, like didactics, examines the issues of development, cultivation of students' learning activities and formation of dialectical materialistic worldview. In this case, it is necessary to pay attention to the fact that the effect of the chemical method is different for different young people with different interests and other specific characteristics. In order to solve the chemistry methodology on a scientific basis, it is absolutely necessary to consider the concrete materials of the school chemistry course from the point of view of dialectical-materialistic philosophy, to take into account the current information of pedagogy, physiology and psychology in all respects.

Based on the methodology of teaching chemistry, there are the following methodological directions:

1. The general dialectic method, in which the development of concepts during thinking, the interdependence of various parts of teaching, the interdependence of internal contradictions, a problem approach to solving them.
2. Systematic-structural approach, in which to separate the main sections for teaching, to find their interdependence, and to show the stability and closeness of the interaction of elements and to see the unity of the school chemistry teaching methodology 'show.



3. View the above methodical categories based on three teaching functions: education, education and development.
4. Looking at the basis of chemistry teaching methodology through a didactic approach.

In the methodology of teaching chemistry, didactic training is taught by the laws of education, and the development of knowledge is taught by the sciences of psychology. During training, these three components interact, and the chemistry lesson is based on the dental methodology. Therefore, the methodology of teaching chemistry is a pedagogical science that teaches students to educate, educate and develop their knowledge during the teaching of chemistry classes. The methodology of teaching chemistry is located in the heart of pedagogy, chemistry, social studies and other sciences and is inextricably linked with them. The use of crosswords and rebuses in teaching chemistry helps students not to get bored, to increase their vocabulary of chemical terms and to think quickly. It is appropriate to choose objects, forms or experiences that are common and known to students when writing a chemistry lesson. Different objects, shapes and images given in rebus are known to students, so it can be used at all stages of education. It is possible to increase the level of students' graphic preparation and professional formation by making students interested in science, using interesting questions and didactic games in the lesson to create an active learning-cognitive process. Based on the purpose of didactic games in the educational process:

1. Before explaining new topics (in which the game is a problematic situation)
2. When explaining a new topic (in order to attract students' attention)
3. It can be used before strengthening the subject, as well as during the examination of students' knowledge, skills and qualifications (by engaging students in a unique game, forming small groups and creating competition).

Based on the above ideas, developing didactic games from chemistry and creating them in the form of computer games as much as possible and using them in the course of the lesson will increase the interest of students. Game programs created from the science of chemistry serve to form students' educational motivation, creative thinking, independent work and increase knowledge.

Conclusion:

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