METHODOLOGY OF TEACHING CHEMISTRY.

Badalboyeva Dilorom Sobirjon qizi
Qo'shaqov Doniyor Abdumutal o'g'li

Abstract: Methods of teaching chemistry are studied in a certain order. First, the main tasks of the study process are considered. Then the methods of organizing the learning process, teaching tools, the form and methods of scientific organization of the teacher's work are considered. He should know methods of solving chemical problems, teaching methods, etc. Therefore, they should do coursework and work independently in pedagogical practice. When teaching styles, it is necessary to make excursions to schools, academic lyceums, vocational colleges. The organization of special courses and internships from special courses is also of great importance. The development of science and technology increases the interest of students in the flow of knowledge and the wave of events.

Key words: Chemistry, experiment, practice, chemical problems, illustrative method, modern methods.

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. 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.[1]

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, films, 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;[2]

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.

The methods, forms, and sources of chemistry teaching are the most important sections of the organization of the teacher's work on a scientific basis, the theory of chemistry teaching is lib. If the content of the subject is considered the didactic equivalent of the subject, then the teaching methods are the didactic equivalent of the methods of the studied subject or things to be known. In didactics, there are methods of learning science and methods of teaching. The main task of the teacher is to choose the optimal methods that provide education and training to students and develop them. The teaching method is the goal-oriented joint activity of students under the guidance of the teacher. The methodology of teaching chemistry has its own special features: they are;

1. The content and methodology of teaching chemistry is a theoretical science based on practice.

2. The cognitive activity of students is aimed at developing thinking skills, and it leads students to think about changes in the specific properties of matter, its state, properties, structure, and composition. Each method should be used in the process where it effectively performs educational, educational, and developmental functions. Methods also educate students with their application. Therefore, when choosing each method, the teacher should pay attention to the effective implementation of all three functions.

There are problems of optimal selection of methods. It is necessary to pay attention to the following.

1) Laws and principles of education.

2) Goals and tasks of teaching

3) Content and organic compatibility of the content of this subject and the subject being studied.

4) Study opportunities of schoolchildren. (age, level of training, characteristics of the class team).

5) Specificity of external conditions.

6) The teacher's own capabilities.

The structure of teaching methods is different, and they continuously grow with the improvement of a certain process. This increase depends on the increase in the level of culture in the society. Therefore, there is a need to regulate and classify teaching methods. The basics of knowledge should be given in schools. The school of our independent Uzbekistan provides nurturing education. The educative feature of the education provided by this school is that it provides the students with real scientific knowledge that forms the basis of a Dalit-materialistic worldview. In our school, students' activity, initiative, independent thinking, striving for a set goal, sense of duty, other methods and methods play a big role in education. Methods of teaching chemistry are carried out in different ways. . Method means "way". It can be dogmatic, illustrative, heuristic.

The dogmatic method of teaching is the teacher's presentation of the material without the use of verbal or visual aids, without evidence, and only by involving the students in repeating and memorizing this material.

Illustrative method of teaching - the teacher explains ready-made knowledge to the student and uses various special methods. They are: the teacher's explanation, working with the textbook, working with tape recorders and handbooks. Such exhibitions use experiments, models, screen guides, tables. The teacher shows and explains laboratory experiments. In the illustrative method, the teacher also uses the technique and method of performing some practical exercises. This method is more widely used when students have a minimum level of knowledge. Forming practical learning skills in students, forming the technique of performing experiments M: putting a solution in a test tube, filling a spoon with a solution etc. Illustrative teaching method is often used in the initial part of the chemistry course. During this period, students will not have enough skills and qualifications. During this period, the teacher himself shows and explains the experiments. [3]

Conclusion:

This method is also widely used by students to interpret experiments independently. The heuristic method of teaching is based on the work of students themselves, students make discoveries directly under the active participation of the teacher. The name "heuristic" of this method comes from the word "research" method. For example, it is used to determine the essence of the mixed description of the properties of halogens. For example, if we put a starch paste in a solution of potassium iodide, the color will not be noticed, if we add a starch paste to separately chlorinated water, no color change will be noticed. If we mix the three components together, the starch will turn blue. The students themselves should explain the reason.

This is partly due to research. The research method is a type of independent work, independent research. The student tests the correctness of theoretical knowledge in practice. For example, this method is used to solve experimental problems. Classification has a basic character (relative character). In practice, several methods are used simultaneously. They are interdependent. In the classification, various cases are taken as the main character.

References:

1. Umumiy O’rta ta'lim davlat ta'lim standarti va o’quv dasturi. Toshkent, 1999, 3-son
2. I. N. Borisov. Ximiya o’qitish metodikasi. Toshkent, 1958.
3. Z.Azimova. “Kimyo darslarida o’quvchilarga ekologik ta'lim-tarbiya berish” T.: 1995.
4. “Xalq ta'limi jurnali” T.1998-2005 y.
5. X.T.Omonov., M.N.Mirvoxidova. “Kimyo o’qitish metodikasi” ma'ruzalarmatni. 2000