APPLICATION OF A NEW APPROACH IN CHEMISTRY LESSONS

Mamadyorova Shaxnoza

Jizzakh Polytechnic Institute

Department of Chemical Technology

Senior Lecturer.

Masharipova Azizaxon

Jizzakh Polytechnic Institute

Student of group 702-21

Approach to chemical technology

Annotation: In this article, it was mentioned in the integration of higher education institutions that students should be trained on the basis of a systematic and active approach, and this, in turn, was explained in detail.

Key words: in higher education institutions, systematic-active, approach, student, chemistry, formation, new style.

Introduction: In the integration of higher educational institutions, the method of teaching, which students do not receive knowledge in a finished form, but in the course of their educational and cognitive activities, is called the method of activity. According to A. Disterweg, the method of teaching is universal. Accordingly, it should work not only in elementary schools, but also in all schools, even universities. This method is suitable for every student, where knowledge has not yet been acquired. In this context, today's pedagogy is very interested in activity-based learning technologies. The use of such technologies allows not only to arm the student with knowledge, but also to form his ability to act competently. Accordingly, learning should be a means of teaching action. Acquisition of knowledge does not occur before the beginning of the activity, but directly in its

process, in the process of applying this knowledge in practice and because of such application. It is known that a person best acquires knowledge that he uses in his practical actions, that he uses in solving some real problems.

Literature analysis and methodology

A distinctive feature of the new standard is its activity, which makes the development of the student's personality the main goal. The main task of the teacher is to organize and create conditions that shape the actions of students. These include, first of all, the recognition of metal salts, determination of the ability of metals to react when interacting with solutions of diluted acids, salts and alkalis, and other experimental tasks. Students observe, analyze the obtained data, explain them theoretically and draw conclusions during the experiment conducted based on a certain plan. Experimental tasks are a continuation of laboratory experiments performed in the classroom. Pupils are invited to expand the range of studied phenomena or demonstrate their own small inventions (find out the composition of medicines in a home first aid kit, the composition of various metal ions in them, determine the presence of water in gasoline or oil) and participate in project activities. directs to do. During such activities, students deeply study the essence of experiments, think about their results and try to answer the questions that inevitably arise in the process of their formation. It is important that the experiment does not acquire an interesting character, the purpose of the experiments should be clear to the students from the beginning: to prove the truth of the theoretical position, to confirm or reject the working hypothesis. In order to expand the volume of experimental information, qualitatively and completely generalize the material, the content of the experiment in practical work is slightly different from the demonstration experiment used in the study of new material. In my opinion, this additionally allows for a higher level of knowledge acquisition: students can apply their knowledge not only in a standard situation, but also in a similar, familiar situation, and some students are more advanced can reach the

level - creative application of knowledge to solve problems. only educational situations[6]. Through the science of "Chemistry" it is possible to create conditions for students' actions to be initiated, knowledge to be significantly increased, their concretization, clarification, and systematization. This is confirmed by the achievements of the students in competitions, intellectual and creative competitions, and the results of educational activities. Thus, it is possible to satisfy their cognitive needs and develop individual interests, which helps to increase professional competence in general. As an example, let's evaluate the skills diagnosed when performing a contextual task on the topic "Nitrogen". Nitrogen. One of the most common elements on Earth. The main component of air (78.09% of the volume), its separation produces industrial nitrogen (more than ¾ goes to ammonia synthesis). Nitrogen is one of the main biogenic elements that make up proteins and nucleic acids. Nitrogen is produced industrially by fractional distillation of liquid air. Nitrogen can be obtained by decomposing metal azides according to the following scheme: NaN3→ Na + N2↑. This salt is used in airbags, the purpose of which is to slow the passenger forward for a very short time. Liquid nitrogen is used as a refrigerant and for cryotherapy. Industrial use of nitrogen gas depends on its inert properties. Gaseous nitrogen is resistant to fire and explosion, prevents oxidation, decomposition. Because of the strength of the triple bond in the molecule, nitrogen is chemically very inert, but reacts with lithium at room temperature. In an electric discharge, it reacts with oxygen and forms nitrogen oxide (II). An important field of nitrogen application is its use for further synthesis of various nitrogen-containing compounds, such as ammonia, nitrogen fertilizers, explosives, paints, etc.

Results and discussion

One liter of liquid nitrogen is vaporized and heated to 20°C, producing approximately 700 liters of gas. The principle of extinguishing fire with liquid

nitrogen is based on this fact. When it evaporates, the nitrogen displaces the oxygen needed for combustion and the fire stops.

1. Write the molecular formula of nitrogen.

2. Create a scheme for the formation of a nitrogen molecule.

3. Write the structural formula of nitrogen

4. Show the type of chemical bond and valency of atoms in nitrogen molecule.

5. What is the reason for the chemical inertness of nitrogen?

Subject results: make formulas of substances; drawing up chemical bond formation schemes; creating structural formulas; determine the type of chemical bond and the valency of atoms. Use symbol modeling. research results: description of chemical properties of substances. Meta-theme results: use different sources for information, semantic reading results: description of methods of obtaining substances, distinguish between physical and chemical phenomena. the ability to establish cause-and-effect relationships, think logically, and draw conclusions. results: performing the simplest calculations on the equations of chemical reactions. Meta-topic results: modeling characters, choosing the most effective ways to solve problems depending on specific conditions, establishing cause-and-effect relationships, building a chain of logical reasoning. Describes the composition, structure, properties and use of substances. Semantic reading, question formulation, learning task. describes the composition, structure, properties and use of substances. The meta-topic is personal attitude, following certain rules when creating a cluster, creating written messages, forming a personal opinion.

Conclusion: In this article, it was mentioned in the integration of higher education institutions that students should be trained. Thus, contextual tasks help to form the ability to solve real practical problems and functional skills, open wide

opportunities for evaluating the level of creative development and the potential of the individual.

References:

1. Багрова, Н. В. Компьютерные технологии как средство индивидуализации процесса обучения / Н. В. Багрова // Химия в школе. - 2013. - № 8. - С. 31–34.

2. Бражникова, А. М. Применение ИКТ в процессе обучения химии / А. М. Бражникова // Информационные технологии для Новой школы. - СПб: Региональный центр оценки качества образования и информационных технологий, 2014. – Т. 4. – С. 29–31.

3. Atqiyayeva S. I., Komilov K.U. Developing intellectual capabilities of students in teaching chemistry. Международный научно-образовательный электронный журнал «ОБРАЗОВАНИЕ И НАУКА В XXI ВЕКЕ». 2021, Выпуск №10 (том 3), 684-692 стр.

4. Badalova S. I., Komilov Q. U., Kurbanova A. J. Case technology in chemistry lessons. Academic Research in Educational Sciences. 2020, Vol. 1 No. 1.. Page 262-265.

5. Badalova S. I., Komilov Q. U., Kurbanova A. J. Intellectual training of students of technical institute. Academic Research in Educational Sciences. 2020, Vol. 1 No. 1. Page 266-274.

6. Курбанова Г. Дж. Интеграция химии и русского языка// Касб-хунар таълими. 2019. №2. 36-40 бетлар.