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Specialised educational system of Djizzakh Region The Creative School named after Khamid Olimjon and Zulfiya, Chemistry teacher

MODERN METHODS OF TEACHING CHEMISTRY

Abstract: in the article, the level of knowledge of students in the teaching of chemistry, depending on the learning ability, source of education, didactic tasks, appropriately method opinions about the choice are stated.

Key words: chemistry, knowledge, skills, experience, "Intellect map", pedagogy and information Technology.

Achieving high quality and efficiency in the educational process requires an innovative approach to the educational process. The phrase "innovation" is derived from the English word "innovation" and means "introducing something new", "new idea". In innovative teaching, the function of knowledge changes. That is, from the previous constant memorization, logical thinking, research is passed. Such activity develops the creativity of the student. He enters into an active "subject-subject" relationship with his peers and teacher. The most common and characteristic modern pedagogical technologies in teaching chemistry are: design method, problem method, brainstorming, etc.

Currently, many pedagogical technologies are used in the process of chemical education, among them design education technology has a special place. Designing educational technology leads to an increase in student interest, develops creativity, independence and entrepreneurship in them. It is a project-based educational model, in which the teacher organizes an independent educational activity that has the form of a project, finding a problem, investigating it, achieving a specific, incomparable, personal and socially significant result (product), organizing and planning its public presentation and evaluation by the public.

Today, the use of interactive methods in the teaching of chemistry is closely related to the ideas of the main methodology. The use of interactive forms and methods of teaching helps to activate the cognitive activity of students, to independently understand the educational material. Interactive methods allow you to work on yourself, practice and develop new skills, that is, the main competencies of the student: learning, searching, thinking, cooperation. It is interactive education that helps the teacher to organize cognitive activities so that almost all students participate in the process of research and learning.

Analyzing the use of interactive media and interactive educational technologies as a method in the teaching of chemistry, interactive media in chemistry - directly thinking about chemistry, communicating with the audience are mass media with the potential. Their implementation is carried out with the help of mobile phone, video, satellite and Internet connection, computer and video games.

The business game is achieved by modeling a problematic professional situation, in the process of interaction of the roles of the participants according to a certain situation in solving the problem, setting rules, developing a plot, forming teams of players and "groups of experts". and the final decision, i.e. the solution to the problem, is evaluated. Conducting a business game helps students acquire professional knowledge and skills, solve non-standard professional tasks, and organize independent education in the process of joint preparation of team decisions.

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Achieving high quality and efficiency in the educational process is education and training requires an innovative approach to the process. The phrase "innovation". derived from the English word "innovation" - "new idea", "new idea" means In innovative teaching, the function of knowledge changes. That is, from the previous constant memorization, logical thinking and research are transferred. Such the activity develops the creativity of the student. He enters into active "subject-subject" relations with his peers and teacher. It is also new because the teaching process is a dynamic and living aspect It is natural that the entry and renewal process will continue. Therefore, it is necessary to use modern technologies that are tested and effective. Modern, which is the most common and characteristic in teaching chemistry Pedagogical technologies are the following: conversation, debate, game, case-study, project method, problem method, brainstorming, etc.

Debate (discussion) - exchange of ideas, discussion on a specific problem active method of teaching. The argument method does all the work This method is used for the following purposes:

-new knowledge in formation;

-students to think deeply about one or another question, their providing access to the essence;

-students based on evidence and evidence teaching to understand the difference between conclusions;

-mutual exchange of ideas in the formation of skills; to help protect him. Discussion is free when it is free if it develops, it can be manageable. It just needs to be mastered should be relevant to the topic and questions.

Insert is an interactive markup in the text for effective reading and thinking system. Questions to activate previous knowledge and mark it in the text placement procedure. After that, all kinds of information found in the text determination. Insert - to the learner in the process of working with the text a powerful tool that enables active monitoring of independent learning. Insert - solving complex tasks of mastering and learning material to strengthen and develop the educational skills of working with books is the teaching method used.

"Brainstorming" is derived from the English word "brainstorming". is one of the methods of active education, management and research is considered This method stimulates mental activity, creative and innovative processes accelerates.

Pinbord (from English: pin- fastening, board - writing board) discussion methods or adapting the educational interview with a practical method. Educational game Business and role (situation) games are a type of problem task. Just like that instead of textual material, it is played by students staged life situations are used. Modern education in teaching chemistry Many of the technologies are being used effectively. Of them we will get acquainted with the description of some of them and their use in teaching chemistry.

For example: Blitz survey on the topic "Metalless" 1. The lightest non-metallic. (Hydrogen) 2. What is the heaviest non-metal in the gaseous state? (Chlorine) 3. Which is not a metal in the "permanent list" of the periodic table? (Hydrogen) 4. Which What does the name metallas mean "lifeless"? (Nitrogen) 5. Napoleon which poisoned by a compound? (Arsenic) 6. Which non-metal artificially taken? (Astat) 7. Diamond is composed of which non-metallic atoms? (carbon) 20 8. What element deficiency causes gout? (Iodine) 9. Which element deficiency causes caries? Fluoride 10. First world yellow-green gas that was used as a chemical weapon in World War II? (Chlorine) 11. Single

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liquid metal? (Bromine) 12. Smelly element? (Bromine) 13. Radiant non-metallic. (Phosphorus) 14. Which element is in the main composition of alchemists "philosopher's stone". did they think it would happen? (Sulphur).

Description of "Zinama-zina" technology. This training students as an individual and a small team on the topic that has been passed or should be passed thinking and remembering, remembering and accumulating acquired knowledge to be able to summarize thoughts and express them in writing, drawing, drawing teaches to get. This technology is one-on-one with students in a group or divided into groups, it is conducted in writing and presented. The purpose of technology. To help students to think freely, independently and logically, to work as a team, to research, to collect ideas from theoretical and practical ones to create an understanding, to be able to influence the team with one's opinion, to approve it, as well as the knowledge acquired in explaining the basic concepts of the subject teaching to use.

Application of technology: lecture (possibility and if there are conditions), individually in seminars, practical and laboratory classes or can be used in small groups and control classes. Tools used in the training: prepared in A-3, A-4 formats Subtopics to the left (corresponding to the number of subtopics in which the topic is divided). written handouts, felt-tip pens (or colored pencils).

Conceptual table of the studied event, concept, thoughts, two and more provides comparison in more aspects. Systematic thinking, information develops the skills of structuring and systematization:

1. Get acquainted with the rules of creating a conceptual table. Comparables are determined based on comparisons separate features

2. Individually or in small groups, they fill in the conceptual table: - width comparable (opinions, theories) are placed; - according to height comparison various descriptions to be carried out are written. Presentation of work results.

References:

1. Suvorov, N.I. Interactive education: new approaches / N. Suvorova. -M.: Teacher, 2000. -#1. Pages 25-27.
2. Zair-Bek S. Technology of development of critical thinking through reading and writing / S. Zair-Bek.- M.: School library. - 2001. - No. 12.
3. Clarin M.V. Interactive education as a means of mastering new experience / Klarin M.V. - M.: Pedagogy. 2000. #7 84 p.
4. Clarin M.V. Innovations in global pedagogy: Learning through inquiry, play and discussion. (Analysis of foreign experience). / Clarin M.V. - Riga: SPC "Experience", 1998. p. 56.
5. Pometun O.I., Pirozhenko L.V. Daily lesson. Interactive educational technologies. / O.I Pometun- K.: A.S.K., 2004. p. 12.
6. Ishmuhamedov R.J. "Ways to increase the effectiveness of education with the help of innovative technologies" (methodological recommendation for teachers of academic lyceums and vocational colleges). / R.J. Ishmuhamedov .: T.0 teacher. 2013. p. 20.