USE OF INTERACTIVE EDUCATIONAL METHODS IN TEACHING THE SUBJECT OF SATURATED CARBOHYDRATES

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Annotatsiya. Maqolada o'qituvchining to'yingan uglevodorodlar mavzusini o'rganishda dars va tajriba va labaratoriya jarayonlarida interfaol metodlardan foydalanish o'quvchilarni mustaqil fikrlash qobilyatlari rivojlantirilib, ularda erkin fikrlash, mustaqil qaror qabul qilish, xissiyotlarni boshqara olish, tankidiy va ijodiy fikr yuritishning rivojlanishiga zamin tayyorlanadi. pedagogika oliy o'quv yurtlarida o'quv faoliyatida talabalarning fanlararo aloqadorlik asosida ijodkorlik qobiliyatlarini rivojlantirish jarayonini samarali amalga oshirilishini ta'minlovchi pedagogik sharoitlar yoritib o'tilgan.

Kalit so'zlar. mustaqil fikrlash qobilyatlari, erkin fikrlash, tankidiy va ijodiy fikr affekt va intellekt birligi, ijtimoiy-madaniy konteksti, motivatsiya, pedagogik faoliyat.

Аннотация. В статье использование учителем интерактивных методов на уроке и экспериментально-лабораторных процессов при изучении темы насыщенных углеводов развивает у учащихся способности к самостоятельному мышлению, подготавливает почву для развития свободного мышления, самостоятельного принятия решений, способности к контролировать эмоции, критическое мышление и творческое мышление. Выделены педагогические условия, обеспечивающие эффективную реализацию процесса развития творческих способностей студентов на основе междисциплинарности в образовательной деятельности высших учебных заведений педагогики.

Ключевые слова. способности к самостоятельному мышлению, свободное мышление, танкидное и творческое мышление, единство аффекта и интеллекта, социокультурный контекст, мотивация, педагогическая деятельность.

Annotation: In the article, the teacher's use of interactive methods in the lesson and experiment and laboratory processes in studying the topic of saturated carbohydrates develops students' independent thinking abilities, and prepares the ground for the development of free thinking, independent decision-making, ability to control emotions, critical thinking and creative thinking.. Pedagogical conditions that ensure the effective implementation of the process of developing creative abilities of students on the basis of interdisciplinarity in the educational activities of higher educational institutions of pedagogy are highlighted.

Key words. independent thinking abilities, free thinking, tankidy and creative thought, unity of affect and intellect, socio-cultural context, motivation, pedagogical activity.

Today's specialists, regardless of their sphere of activity, should have a wide range of knowledge of new pedagogical technology, modern technology, information communication and communication systems, office equipment and sufficient skills in their use. Especially in the teaching of chemistry, the role of practical exercises and laboratory equipment is incomparable, and new methods are available to the teacher in conducting these lessons.

The national personnel training program assigns a great responsibility to teachers to bring up mature, well-rounded, healthy and highly moral young people. In particular, in the preparation of qualified personnel for the chemical industry, which is one of the main branches of the economy of our republic, students are given the basic concepts of chemistry at school. In the teaching of chemistry in grades 7-11, it is necessary to attach great importance to the mastery of the subject by students. Today, it is known from the literature that the learning of the topic by students is 10-15% by hearing, 25-30% by seeing, and 40-45% by practical implementation. Therefore, today's chemistry teacher cannot achieve his goal if he conveys materials related to the subject only as information to the student. Therefore, in the teaching of chemistry, teaching using new pedagogical technologies, comprehensive coverage of the topic, interesting experiments and problem-solving methods, if possible, will give good results in explaining each topic.

Familiarity with saturated hydrocarbons, their representatives, chemical properties, and teaching the subject using interactive methods is very effective. This method is based on the active relationship between the teacher and the student, the full explanation of each other. Through these methods, students' independent thinking abilities are developed, and the ground is prepared for the development of free thinking, independent decision-making, ability to control emotions, creative thinking. The main goals and tasks of interactive methods are as follows: 1. To teach students to think independently, creatively, creatively, logically: 2. To perform practical and real tasks with problematic situations; 3. Force to think; 4. Activation; 5. Encouraging students to organize: Here we need to say that the teacher uses several types of these methods in a subject or laboratory exercise, in other words, several types of innovative technologies come together in each successfully conducted exercise. comes out. For example, let's take the study of the topic "Hydrocarbons" in practical classes of organic chemistry. This topic is written on the blackboard, that is, "Hydrocarbons". In addition, the key word "hydrocarbon" is also written on the board. After that, students are given 5 minutes to repeat the topic once. Students repeat the topic during this time. Each

student is asked to write a sequence of important phrases, laws and reactions on the subject. The goal is that all of these records will ultimately confirm what hydrocarbon naming, isomerism, production, and properties are based on. Thus, almost all students write down the information they remember about the topic in a row, and as a result, they form their own understanding of carbohydrates. Students who do not have any ideas are recommended to write information about where and when hydrocarbons are used in which fields and their advantages and disadvantages. At this stage, if any ideas come to their brains, it is recommended to immediately write them down in notebooks.

Each student is instructed to write down the reaction equations according to the chemical properties of hydrocarbons and their production methods. For the control to be convenient, it is required to choose the reaction according to the sequence number in the magazine. In the process of writing chemical reactions, advanced students in the group are allowed to form groups of 3-4. It is required that the student has a very good understanding of the process and essence of a chemical reaction, regardless of how he writes it. Chemical reactions should be given another chance without criticizing them as wrong even in the case of improperly designed ones. For this, it is recommended to get advice from an advanced student in his group. In these ways, the knowledge on the topic of saturated hydrocarbons will be mastered by the students and they will be able to apply it in their life activities in the future. Taking into account their participation in the course of the lesson, the teacher motivates them by means of points according to their actions. As indicated above, each interactive method can improve the quality of education, increase its effectiveness, and improve the interaction between teachers and students, students and groups of students, as well as the community. It has great potential in creating the necessary conditions and environment for decision-making cooperation, achieving ideological and spiritual unity, striving for a single goal, realizing the inner potential of each learner, and manifesting as a person. Interactive methods, by their nature, provide a certain level of efficiency in the implementation of educational or educational goals, but each of them has different opportunities to ensure productivity in the educational or educational process.. Therefore, when choosing interactive methods, teachers should pay attention to the studied topic, problem or issue that needs to be solved. In addition, the effectiveness of interactive methods increases when the age, psychological characteristics, level of worldview, and life experiences of the students are taken into account in their application. This requires teachers to have professional skills, competence, knowledge, sensitivity and intuition.

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