

APPLICATION OF PEDAGOGICAL TECHNOLOGIES IN THE PROCESS OF TEACHING CHEMICAL SCIENCES

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ABSTRACT

In our country, a number of projects are currently underway in the sector of education. The creation of a new interpretation of the Republic of Uzbekistan's law "on education" demonstrates that great attention is devoted to work in this field. The employment of pedagogical tools in the process of teaching Chemistry subjects improves teaching effectiveness. This essay will address the use of pedagogical tools in the process of teaching chemical sciences.

KEYWORDS: *Chemical Sciences, Process, Pedagogical Technology, Experiment, Application, Chemistry, Organic, Effective Methods.*

INTRODUCTION

In the process of teaching the subject of organic chemistry, oxygen-containing organic compounds, pedagogical technologies can be used to further raise the level of understanding of the students and increase their interest in the lesson.

When reading about organic compounds containing oxygen, it is feasible to use concepts from innovative technologies and essential assignments.

The correct use of each student's educational opportunity, the availability of questions and assignments based on their interests, all contribute to an increase in the students' level of knowledge in the subject.

The "analysis of concepts" method can also be used to repeat, consolidate, or determine the initial knowledge of pupils on a new topic, what concepts they have mastered, and what they have learnt from today's topic at the end of the class.

"Conceptual analysis" method This method aims to have students memorize all of the subjects of the subject or section mentioned (completed in a quarter or year), independently making their own comments on the concepts given by the teacher on any topic, thereby creating an opportunity for the teacher to check and evaluate their knowledge, and to evaluate all of the pupils in a short time.

The purpose of the method. To teach the students to master the subject mentioned in the lesson and to determine the degrees of assimilation of the basic concepts on the subject, to be able to freely describe their knowledge independently, to be able to evaluate their level of knowledge, to be able to work alone and in groups, to respect the opinion of their comrades, as well as to

Application of the method: it is intended to assess the degree of assimilation, repetition, reinforcement, or intermediate and final control of the subject mentioned in all types of training (at the start of the lesson, at the end of the lesson, or at the end of any section of science), as well as to check students' knowledge before beginning a lesson. This strategy can be organized during the training process or as part of the training in a single, small, and team-based setting. When assigning duties to the House, the approach can also be employed.

Tools used in training: hand-held materials, a list of base concepts, a pen (or pen), a slide.

The procedure for training:

- Students are divided into groups (depending on the circumstances);
- Students will be introduced to the requirements and rules laid down for training;
- Distribution and didactic materials are distributed to group members;
- Students will get acquainted with the concepts given in the distribution material on a single topic or a new topic;
- Students write comments (individually) on the basis of the knowledge (or their own) that the distribution is next to the concepts given in the material on the subject (no matter how they understand the concepts given);
- the teacher reads the concepts given in the distribution material on the topic and together with the team determines the correct explanation for each concept or is introduced on the screen by a slide (if possible) where the explanation of each concept is given;
- each reader will be able to determine the difference in the answers determined by the correct answer, will have the necessary understanding, will check themselves, will evaluate, and will also strengthen their knowledge once again.

Below we give an example of distribution materials used on the basis of the method "concept analysis" in the teaching of the topic of organic matter with oxygen:

METHOD " ANALYSIS OF CONCEPTS"

№	Concepts	Meaning
1	What is said to be one-atomic saturated alcohols	Organic matter, in which the general formula is $C_nH_{2n+2}O$, contains one OH.
2		
3	Saturated alcohols with one atom interact with alkaline metals:	Saturated alcohols with one atom form alcohols with alkaline metals.
4		Saturated alcohols with one atom interact with alkaline metals, but do not react with alkalis.
5	Tell me the difference of multi-atomic alcohols with single-atomic saturated alcohols.	Since complex ethers have a pleasant aroma, they are mainly used in the food and snack industry.

The application of the keys-Stadi method of education in the study of various situations is an educational process aimed at organizing the study of ordinary situations taken from life or requiring educators to seek purposeful solutions to relevant problems based on artificially created

situations. This method allows educators to diagnose the relevant life situation on the subject, to model their practical activities in the field of expressing hypotheses, identifying problems, collecting additional information, clarifying hypotheses and solving problems, as well as designing specific stages of their implementation. The use of keys dedicated to specific life situations connects the learning process with real life. When considering keys, the educators create the process of learning. In the same process, their real state of exchange of views arises in mutual action. Keys give educators the freedom to analyze, compare, and solve problems. The use of various innovative technologies in teaching topics of oxygen-containing organic compounds in the science of organic chemistry has increased the interest of students to the lesson.

It is recommended to give the following "keys assignments" on the topic.

Keys description: it is used in medicine as a disinfection agent and in thermometers for temperature measurement. This substance has a strong effect on the body. It leads to severe diseases, disrupting the work of the nervous system, digestive organs and cardiovascular system.

Keys assignment: how organic matter is talking about, draw the structure in a suitable way.

Keys description: these substances are used in the food and snack industry because they have a pleasant aroma. Again, they are used as an additive in the production of cool drinks, confetti and other food products. Some of their representatives are used as solvents in the preparation of varnishes.

Keys task: draw the structure of complex Ether in a suitable way.

Keys assignment by students is prepared on the basis of information. In the lesson it is possible to assess the knowledge of students on the basis of keys assignments, which are included in the problematic educational technologies. Kengaytiradi improve the students' knowledge about oxygen-containing organic substances and improve their imagination. Correctly write the formulas of gidroksil Gruppa, carboxyl Gruppa, efir Gruppa, through which they perfectly understand the chemical composition of oxygen-containing organic substances. The above educational technologies enable students to support their previously acquired knowledge and skills in new situations, acquire new knowledge, develop their independent and creative thinking skills.

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