



DEVELOPMENT OF CONCEPTS OF SUSTAINABLE DEVELOPMENT IN CHEMISTRY CLASSES

Ramazonov Nabijon

is a student of Chirchik Pedagogical University,

Eshchanov Ruzumboy

*Professor of the Department of Scientific and Methodological
Chemistry of Chirchik Pedagogical University*

Vafa Masharipov

*is a teacher of the chemistry department of Chirchik
Pedagogical University*

Ataullayev Zokir

Urganch State University docent of Chemistry Department

It is possible to achieve a targeted deepening of the process of teaching chemistry. At the same time, reliance on various forms of the teaching process is included. Therefore, there is a need to develop the concepts of sustainable development in the teaching process.

Sustainable development is an organizing principle for achieving human development goals and enabling natural systems to provide essential natural resources and ecosystem services to people. The desired result is a society in which living conditions and resources meet human needs and do not compromise the integrity of the planets and the stability of the natural system [1]. The Brundtland Report of 1987 defined sustainable development as "development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs." The concept of sustainable development today focuses on economic development, social development and environmental protection for future generations.

Sustainability is a societal goal of people's ability to live together on Earth for the long term. It is difficult to agree on precise definitions of this term. They have changed according to literature, context and time. Experts often describe sustainability as having three dimensions (or pillars). These are environmental, economic and social [2].

Increasing students' interest in chemistry lessons, summarizing the concepts of the practical importance of chemistry, turning the concepts of sustainable development into an ecological and educational part of the lesson is one of the first steps towards sustainable development and sustainable education.

Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

The concept of education for sustainable development is a method of teaching students the concepts of sustainable development through chemistry, as well as chemical concepts such as elements, substances, reactions, nature, its resources and their rational use.

Through this periodic system, the student begins to understand the composition of the environment. Learning about nature becomes easier, the essence of sustainable development is revealed, and a wide path to sustainable education is opened.

The topic of the importance of concepts of sustainable development in chemistry is explained to students about the causes of natural phenomena based on chemical reactions, thereby increasing the student's love for nature and interest in chemistry, we can achieve two results in one lesson. For example, global warming is one of the phenomena that is happening right in front of our eyes today. The main reasons for this are the reduction of green areas, the release of various gases into the atmosphere by chemical enterprises, the increase in the number of cars, forest fires, the burning of petroleum products, which is explained by chemical means.

When wood burns: $(C_6H_{10}O_5)_n + O_2 = 6nCO_2 + 5,5n H_2O$

When coal is burned: $C + O_2 = CO_2$

Oil, gas, gasoline, kerosene, candles are hydrocarbons, and when they are burned, $CO_2 + H_2O$ is formed. The CO_2 gas produced in this process is the cause of global warming. If our regions were large, this gas would not have such an effect on the soil and nutrients for our plants. The reaction takes place in the plant

$6CO_2 + H_2O = C_6H_{10}O_6 + 6O_2$ and with sweet fruits we have more fresh air. By conveying such information to students, their worldview will not only expand, but also their interest in national culture, love for nature and chemistry will increase.

REFERENCES:

1. Азизов А.А., Акиншина Н.Г. Образование в интересах устойчивого развития.-Т., 2008.
2. Турсунов Х.Т. Экология ва баркарор ривожланиш.-Т., 2009.