INTEGRATION OF FOREIGN LANGUAGES AND SUBJECTS IN EDUCATION

10.70728/tech.v2.i03.002

Nafisakhan KAZIMOVA
Associate Professor of Kokand state pedagogical institute, Kokand, Uzbekistan
E-mail: nafisakazimova@gmail.com

Gulshodakhon Abdullaeva
Student of Kokand state pedagogical institute, Kokand, Uzbekistan
E-mail: abdullayeva@gmail.com

Annotation. In this article, there are special studies on the organization of modern education, the use of convenient methods, the integration of foreign language and chemistry, and the study of chemical terms and at the same time learning these terms in English will be a great incentive for the reader. information about the possibility is given.

Key words: modern education, quality and indicator of education, atom, moleculeeducational practice, lesson efficiency, level of skills and qualifications, pe dagogical skill, technological approach.

TA'LIMDA CHET TILLARI VA FANLARNING INTEGRATSIYASI

Annotatsiya. Ushbu maqolada zamonaviy ta'limni tashkil etish, qulay usullardan foydalanish, chet tili va kimyo fanining integratsiyasi, kimyoviy atamalarni o‘rganish hamda ushbu atamalarni ingliz tilida o‘zlashtirish o‘quvchilar uchun katta rag'bat bo‘lishi mumkinligi haqida ma'lumotlar beriladi.

Kalit so‘zlar: zamonaviy ta'lim, ta'lim sifati va ko‘rsatkichi, atom, molekula, ta'lim amaliyoti, dars samaradorligi, ko‘nikma va malaka darajasi, pedagogik mahorat, texnologik yondashuv.

ИНТЕГРАЦИЯ ИНОСТРАННЫХ ЯЗЫКОВ И ПРЕДМЕТОВ В ОБРАЗОВАНИИ

Аннотация. В данной статье рассматриваются вопросы организации современного образования, использование удобных методов, интеграция иностранного языка и химии, изучение химических терминов и одновременное их освоение на английском языке, что может стать большим стимулом для учащихся. Представлена информация о возможности такого подхода.

Ключевые слова: современное образование, качество и показатель образования, атом, молекула, образовательная практика, эффективность урока, уровень навыков и квалификаций, педагогическое мастерство, технологический подход.

The role of modern educational technologies in the organization and development of students' educational thinking during the educational process is incomparable [1]

Observations of the process of educational practice show that the fact that the knowledge given to schoolchildren is quickly forgotten puts a number of issues before the science of pedagogy. It is necessary to recognize that the strength and stability of acquired knowledge depends on the interaction of teachers and students in the educational process and the process of educational thinking formed by them. Effective use of productive (productive) methods by students of continuous education system in educational takaffur activities is the basis of the lesson process, improves the quality and increases the effectiveness of education. and it is necessary to determine his understanding, but also to take into account his ability to analyze the content of the topic and creative approach to it [2]

One of the main tasks of teaching in secondary schools is to form and develop students' educational activities. Timely and correctly formed activities are one of the conditions that ensure the success of students in education. Therefore, improving the methodology of formation and development of students' educational activities in the process of chemistry education is one of the opportunities of increasing the efficiency of chemistry education that has not been sufficiently used until now. Various aspects of the formation and development of students' educational activities are reflected in the work and scientific research of famous pedagogues and psychologists. For example: Babansky Yu.K.[5], Davletshin M.G. [7], Mavlonov M.M. such psychologists as studied various aspects of human activity in their scientific research.

Working studying, playing are the main types of human activity, and in a certain period of a person's life, one of them is at a high level. Any activity consists of generalized abstract ideas about the system of actions that make it up. It is considered important to go abroad, to learn their methods and achievements in the field of education. [3] Natural and social factors affect the quality and performance of education.

Natural factors include the set of innate qualities that describe the individual's life activity, physiological, morphological and other qualities that make up natural factors. Social factors have a decisive influence on a person, on his personal qualities, on his formation as an equal member of society, and are not given by nature or innately. The acquisition of knowledge occurs in the course of a person's educational activity. On the basis of the individual's acquisition of accumulated knowledge, facts and ideas, concepts as an inheritance, it is necessary to gradually implement them with conscious actions. As a result, they become conscious actions.

If the processes are carried out involuntarily, without paying attention to some small parts, that is, automatically, due to the less and less involvement of the mind, this is called

skill. As a result, the task is completed smoothly, without excessive effort, quickly and qualitatively.[4]

One of the important requirements for the organization of modern education is to achieve high results in a short time without spending too much mental and physical effort. formation, assessment of the level of knowledge, skills and qualifications acquired by them requires a high pedagogical skill from the teacher and a technological approach to the educational process.

In the process of education, if the teacher cannot use methods suitable for the student's personality, if conditions are not created for changing the student's personality, there will be a defect in his education.

In order for the student to develop as a person, it is necessary to have his own opinion, his own words, his own independent point of view. The initial basis for this is laid by the teacher at school. In this regard, the importance of social and humanitarian sciences, which lead children to free, independent thinking, respect each other, and in general, ensure the appreciation of a person as a person, is very important. The effectiveness of educational forms, methods and methods in teaching these subjects should be aimed at taking into account the intellectual and personal capabilities of children and increasing their activity.

Therefore, the teacher requires the student to be able to think correctly in different situations, to be able to compare their thoughts, to analyze, to discuss, to form the skills of expressing their opinion in a certain system. does not use the method, but requires the use of teaching methods in interaction.

In fact, the issue of raising a well-educated, well-rounded person requires pedagogues to implement new work principles and imposes a great responsibility. One of the tasks of a modern teacher should be to create conditions for students to work independently, to make them interested in the subject, to make a deep understanding of the events that happen in life with the help of the knowledge acquired at school.[4]

Today, the development of social development is impossible without the development of specific natural sciences without chemistry, which determines the scientific and technical potential of the country. Acquisition of new knowledge in the field of chemistry, like any other exact science, is impossible without information exchange, including between experts who speak different languages. Qualified chemistry teachers should be aware of all the news that has appeared in the field of science abroad, as well as receive useful information. Knowledge of English is required for this.

Society needs scientifically literate teachers who can acquire and use information not only in their native language, but also in a foreign language.

It is worth noting that English has become the main language of international communication in the fields of politics, business and science. Thus, the skills and readiness to communicate and work with information in several languages become important requirements of society for a modern youth - a high school graduate. In the process of studying, English includes expanding a person's general cultural outlook, getting to know the customs of other countries, mastering new methods and methods of communication, that is, often performing a general development and educational function, other to a greater extent than the educational sciences. This allows us to consider a foreign language as an acceptable means of interdisciplinary integration not only with humanities, but also with the subjects of the cycle of natural sciences.

Thus, the interdisciplinary integration of chemistry education is impossible without knowledge of English. Unfortunately, the problem of the integration of chemistry and English in school is not given much attention, probably because the teachers of natural sciences do not have enough language training and, therefore, they are not interested in using interdisciplinary relations with the unstudied field. "There are few serious studies on this topic in the Uzbek methodology of teaching chemistry. If many works are devoted to the integration of foreign languages with humanitarian sciences, then the issue of its integration with the sciences of the science and technology cycle is not sufficiently developed in local science and practice. There The basis of interdisciplinary integration is "language", "chemical language" and "English language". The English language is a multifunctional natural signal system, which is used as a means of communication, as a means of knowledge and professional activity. [6]

A chemical language is a system of concepts and rules used to represent chemical information. It is a complex artificial language, rich in terms, etymology goes back to different languages of the world. Integration with a foreign language

the organization of work on mastering knowledge in the field of chemistry includes several features:

- different communicative due to the content of the topic;

engaging students in active communication in a foreign language in situations, diagnosis and science and information;

- constant monitoring of students' achievements in order to take into account the formation of communicative competences;

- use of various visual aids.

The most effective forms of work for the connection between chemistry and a foreign language can be lessons and selected courses using scientific and popular texts, articles from magazines and teaching-methodical manuals. In the general education school, the subject "Chemistry" begins to be studied from the 7th grade. By this time, the

student knows the English language well, which allows to expand the possibilities of using it. However, the stock of knowledge in chemistry is still minimal, so first of all, it is advisable to study biographies of famous scientists, as well as small texts related to interesting physical-chemical phenomena, discoveries in the field of physics and chemistry.[7]

As knowledge in the field of chemistry increases, the interrelationship of science and with specialized literature in English relating to relevant branches of technology will consist of formation of skills and qualifications necessary for work; to teach students the skills of reading and translating a simple special text, understanding special terminology, abbreviations, etc., the ability to conduct a simple conversation on the proposed topic. In secondary school, the level of knowledge increases, which allows working with texts of a scientific nature, but "special" preparation is required for working with such texts, since the vocabulary of scientific texts exceeds the norms established in the program.

Therefore, in this case, the relationship is a special dictionary, abbreviation, symbols and from mastering others and working on the text (reading, translating, speaking, working with grammatical material) begins.

The topic is with scientific achievements when working with a related foreign language text, you will develop practical language skills step-by-step collection of lexical material that allows for formation you should use the method. Working with the text - foreign words in the field of chemistry the best way to expand your stock. From the first integrated lessons one "Simple and complex substance".

This topic is considered at the beginning of the chemistry course in the 7th grade and is perfect for acquiring new knowledge through an integrated system of lessons. As an example, from the textbook M.M. Kutepova "English for Chemists". You have to find and write words related to chemistry.

When studying chemistry in the 7th grade, you are speaking in a foreign language you can use. The teacher can prepare questions and answer them students demonstrate their knowledge of the subject of the lesson (from chemistry), and also learn to express their thoughts in a foreign language.

Aslo, students should learn to write questions in English about the material of the paragraph.[8]

For example, the following questions were asked on the topic "Atom and Molecule" (Atom and Molecule):

1. What is an atom?

2. How does it differ from a molecule?

The most difficult type of work is listening. This type of work allows you to develop the ability to perceive information by ear. In the process of listening to a chemical text, there are certain difficulties in the process of understanding it, because the text contains chemical terms.

To simplify the task, the teacher can write unfamiliar words in advance, after listening, a discussion will be held, and new chemistry material necessary for learning the topic will be written. An important element in the study of chemistry is the development of knowledge obtained by solving chemical equations and problems. Solving problems and doing exercises can also be done using a foreign language.

For, example, a card task can have the following content: Using this type of work, for example, preparing lectures and essays for high school or freshman students, allows students to express their opinions on a topic of interest to them. , which may be related to their professional activities in the future. English language allows them to expand their vocabulary on this topic and get new knowledge from foreign sources. The following topics can be suggested.

1. What is a molecule?
2. What substances are called molecules?
3. Why is the atom described as indivisible?
4. What did Rutherford's experiment prove?
5. Is there a relationship between the formula and the chemical reaction?
6. What do index and coefficient have in common?
7. How are simple and complex substances formed?

Such forms of work increase students' interest in chemistry and help to master the material better. The use of English in integrated lessons in chemistry, free access to the global network, allows to expand the geography and space of the studied issues.

Using primary sources of information, it allows to observe and compare a wide range of situations. Integrated lessons allow the teacher to teach the child a holistic picture of the world from the first steps of learning. High school students have the opportunity to show themselves as specialists in the field of chemistry who know a foreign language through integrated lessons. Simple methods used during the lesson increase the efficiency of the lesson and increase the student's interest in science.

Distributed tests can be used in the reinforcing part. Including,

Test:

1. What kind of substance is hydrogen?

*A) gaseous substance; B) liquid substance; C) solid substance; D) complex substance.

2. What does table salt look like?

A) liquid; B) hard; *S) fine powder; D) in vapor state.

3.What substances are oxygen, nitrogen, hydrogen?

A) liquid substances; *B) gaseous substances; C) solid substances; D) complex substance.

4. What substances are water, alcohol, sulfuric acid?

A) gaseous substances; B) solids; C) complex substance; *D) liquid substances;

5. What process occurs when CO32- and H+ interact?

*A) gas is released; B) the color changes; C) no change it won't happen; D) precipitation is formed;

6. What process occurs when NH_4^+ interacts with OH^-?

*A) sharp-smelling gas; B) odorous gas if used; C) odorless gas; D) pale green colored gas;

7. What substances are carbon, graphite, sulfur, iron, aluminum?

A) complex substance; B) liquid substances; *S) solid substances; D) gaseous substances;

8. What factors does the aggregate state of the substance depend on?

*A) depends on temperature and pressure; B) depends on concentration and pressure; C) depends on temperature and volume; D) depends on concentration and volume.

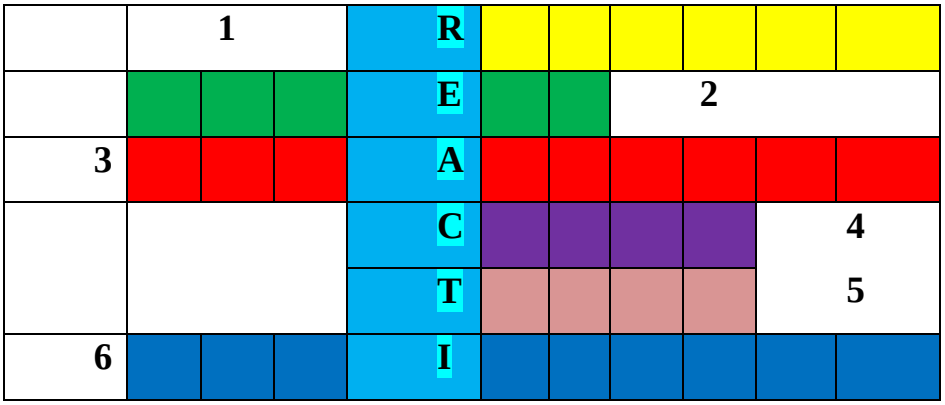
9. What is the substance called "dry ice"?

A) table salt; *B) carbon dioxide; C) bromine; D) iron.

10.What is the name of the phenomenon of direct transition from a solid state to a gas state

A) "Dry ice"; *B) Sublimation; C) Allotropic shape change; D) Simple substance.

Or, it will be possible to develop knowledge and the ability to know one and two languages by effectively using the test and crossword created by the teacher.



7		**O**					
8		**N**					

Crossword questions: Reaction

1.Name of substances involved in reactions - *Reagent

2. Observable process - *Effect

3. Mixing of one substance with another - *Mixture

4. A substance that forms a normal alkali - *Potassium

5. What is the definition of the aggregate state of matter called? -*Quality

6. The term that means "equally strong" - *Equivalent

7. The place where the central atom of matter is located is the nucleus

8. The….. part of the article -*Content

It is worth noting that the answers to the questions of the above test and crossword are in Uzbek and English, which is very interesting and necessary for students.

REFERENCES

1. O`. Hoshimov, I.Yakubov.Methodology of English language teaching.Textbook."Sharq"editor-in-chief of publishing-printing joint-stock company, Tashkent-2003

2. Gene N.I. i dr. Methodology of foreign language learning in middle school. M. 2009

3. H.T. Omonov, Yu.G. Mahmudov, I.Sh. Ismatov, Z.J. Kholmirzayev. Extracurricular activities in improving the content of chemical education. Publishing house. Tashkent-2015.120 p

4. I.R. Rakhimova, A.K. Kulimov. Use of didactic games in chemistry education. Educational technologies scientific-methodical journal. No. 5.2013, p. 104.

5. S.O. Nizamova Didactic materials for the organization of current control of knowledge, skills and qualifications in chemistry for grades 8-9. - The boston of thought. Tashkent - 2013, 80 p

6. A. J. Kurbonova and others. Article "Integration of Chemistry and English Language Sciences". Scintific Journal 2021, pp. 185-190

7. I. Askarov, N. Tokhtaboyev, K. Gopirov, Chemistry 8th textbook, Tashkent-2014, "New way polygraph service" pages 107-110

8. I. Askarov, K Gafurov, A. Rustamov, M. Rakhimov, "Chemistry test" Tashkent. Teacher 1997 p. 166