

ENGLISH TEACHING AND SCIENCE INTEGRATION IN CHEMICAL TECHNOLOGY FIELDS

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ABSTRACT

The article describes the perspectives of integrated teaching of chemistry and English. In this, the problem of the need to know the English language when entering the database from chemistry and familiarizing with the scientific works of world scientists is highlighted. In the process of integrated lessons, the most effective forms of work on connecting chemistry and English were considered.

KEYWORDS: *English Language, Chemistry, Integrated Lessons, Work Forms For Each Class, Bachelor, Master, Doctoral Student.*

INTRODUCTION

Currently, there are many areas that determine the bright future of our country and ensure its strength. The higher education system is undoubtedly of special importance among them. Because the future of our nation and people is closely related to the fate of young specialists who are receiving higher education today. From the first years of our country's independence, attention has been paid to the issue of reforming the education system at the level of state policy, to ensure that our young people receive education in conditions corresponding to world standards, to mature into physically and spiritually mature people, to bring out their abilities and talents, This noble goal is embodied in the heart of the incomparable efforts made to form feelings of loyalty and devotion to the country.

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 the exchange of information, including between experts who speak different languages. Qualified chemistry teachers should be aware of all the news that 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 mother tongue, but also in a foreign language.

Literature Analysis and Methodology

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, the English language includes the expansion of a person's general cultural outlook, familiarization with the customs and traditions of other countries, the acquisition of new methods and methods of communication, that is, the general development and educational function are often performed. To a greater extent than in other academic subjects. 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 integration of chemistry and English language in school is not paid much attention, probably due to the fact that the teachers of natural sciences do not prepare the language enough, 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 are separate studies on the integration of foreign language and chemistry. The basis of interdisciplinary integration is "language", "chemical language" and "English". And used as a professional activity tool. Chemical language is a system of concepts and rules used to express chemical information. This is a complex artificial language, rich in terms, the etymology of which goes back to different languages of the world. The organization of work on the acquisition of knowledge in the field of chemistry in the context of integration with a foreign language includes several features: engaging students in active communication in foreign language in communicative 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 science and popular texts, articles from magazines and teaching manuals.

In the general education school, the subject "Chemistry" begins to be studied from the 7th grade. By this time, students have a good command of the English language, which allows them to expand their 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 physicochemical phenomena, discoveries in the field of physics and chemistry.

Results and Discussion

As the knowledge in the field of chemistry increases, the interdependence of the sciences will consist of the formation of skills and competencies necessary for learning the special literature in English related to the relevant branches of science and technology; 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 high school, the level of knowledge increases, which allows working with texts of a scientific nature, but working with such texts "requires special training, because the vocabulary of scientific texts exceeds the standards set by the program.

Therefore, in this case, the relationship begins with mastering special vocabulary, abbreviations, symbols, etc., and working on the text (reading, translating, speaking, working with grammatical material). When working with a text in a foreign language, the topic of which is related to scientific achievements, you should use the method of step-by-step collection of lexical material that allows you to build practical language skills.

Conclusion Such Forms of Work

Increase students' interest in chemistry and help to master the material better. The use of the English language in the integrated lessons of chemistry "allows free access to the global network, expanding 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.

From the evidence presented above, it is known that today attention is being paid to the issue of providing educational institutions with qualified foreign language teachers and training personnel with deep knowledge at the level of state policy. Above As we mentioned, foreign language teachers in higher education institutions are special requirements are set and relevant for their work as a foreign language teacher they are required to have a certificate. In addition, the second of higher education stage is considered for master's degree, post-higher education is considered for a certificate of knowledge of one of the foreign languages for admission to doctoral studies is required to have. In addition, it is mandatory for professors of higher education institutions to know foreign languages. In addition, specialization in higher education institutions after the specified period it is also decided that subjects will be conducted in foreign languages. It can be seen that teaching foreign languages, including English, in higher education institutions is given importance. Ensuring the performance of these specified tasks, higher education teaching foreign languages, including English, in accordance with the needs of the times output, the following in order to improve students' learning of foreign languages we consider it appropriate to implement.

REFERENCES

- 1) Integration chemistry and foreign language [Electronic resource]. URL : <https://rosuchebnik.ru/upload/iblock/f80/f80c8a77f7024e8e11421ca4e20c12d7.pdf>(data obrashcheniya: 26.06.2018).
- 2) Kutepova M.M. The World of Chemistry : English language for khimikov. 3- eizd. M.: KDU, 2005.
- 3) Kurbanova A.Dz., Komilov KU Case-study method for teaching general and inorganic chemistry// Academic Research in Educational Sciences. 2021. No. 6. Pade 436-443.

- 4) Petrovich, RM, Nasirovich, AA, Muhitdinovich, SA, Shamil-Ogly, PR, Azamatovich, SJ, Zakirovich, VA, ... & Kaplanovna, BN (2018). Hydatid cyst morbidity in endemic regions of the community of independent states: A multicenter study. Medytsinsky newspaper Severnogo Kavkasa, 13(3), 453-458.
- 5) R. Roziyev, RI Ismailov, IA Toshev, BB Muhitdinov "Analytical chemistry" textbook - Tashkent Science, 2004