# PROBLEMS OF DEVELOPING BILINGUAL EDUCATION IN TEACHING CHEMISTRY IN HIGHER EDUCATION

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**Annotation:** This article provides information on the widespread use of bilingual types in the teaching of chemistry in higher education, which will be necessary for the education system, the Internet, digital technologies, foreign languages.

**Key words:** education system, higher education, chemistry, innovation, information and communication, IT technology, bilingual education, intensive, globalization and integration.

# ПРОБЛЕМЫ РАЗВИТИЯ ДВУЯЗЫЧНОГО ОБРАЗОВАНИЯ В ПРЕПОДАВАНИИ ХИМИИ В ВЫСШЕМ ОБРАЗОВАНИИ

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Учитель химии 17-й государственной специализированной школы-интерната. **Аннотация:** В статье представлена информация о широком использовании билингвальных типов в преподавании химии в высших учебных заведениях, что будет необходимо для системы образования, Интернета, цифровых технологий, иностранных языков.

**Ключевые слова:** система образования, высшее образование, химия, инновации, информация и коммуникация, ИТ-технологии, двуязычное образование, интенсив, глобализация и интеграция.

Introduction. Significant structural changes in the education system, in particular, in the higher education system of the Republic of Uzbekistan are changing under the influence of modern innovations in the teaching of chemistry. The development of bilingual education in the teaching of chemistry in higher education also leads to some innovative changes. Foreign languages and information and communication technologies play an important role in the study of chemistry in higher education and the understanding of the language of chemistry in today's modern education. Similarly, in the era of rapid development of IT technologies, the development of bilingual education in higher education is effective in all respects.

Bilingual education is the development of bilingual education based on the results of extensive use of information technology. It is expedient to develop bilingual education systems in chemistry. In recent years, it is proposed to use bilingual education in the higher education system of the Republic of Uzbekistan, and it is necessary to include bilingual education in the regulations of higher education. The advantages of this education are that it provides an in-depth understanding of the essence of two languages, an in-depth study of chemistry in two languages. This offers new prospects in higher education.

Main part. Today, many foreign higher education institutions offer bilingual education and study at any foreign higher education institution on the basis of TOEFL and IELTS certificates. Students with a bilingual education will have higher chances of getting a high-paying job, and salaries for English-speaking graduates will be on average 20% higher. Through the extensive use of scientific publications and literature, they develop new innovative innovations, and the main reason for this is that 80% of all scientific works on the Internet are published in English. Extensive use of English in the teaching of chemistry in higher education, strengthening its integration with chemistry and foreign languages, extensive teaching of chemistry in bilingual education are required.

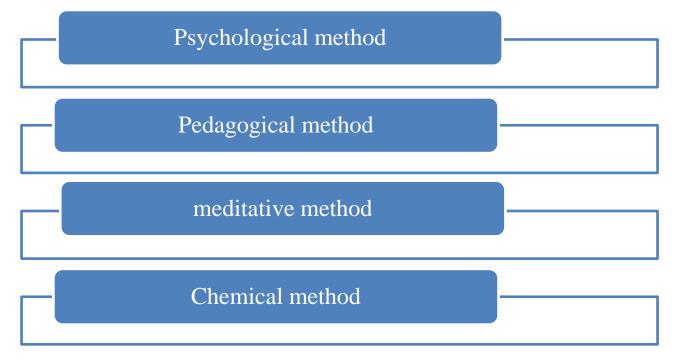


Figure 1. Research methods of bilingual education

Figure 1 shows the need to accelerate the improvement of field modeling and forecasting based on Bilingual education research methods. Methods of observation, pedagogical experiment, questionnaire, testing are widely used in this research. Bilingual education is intensively developed in foreign countries. It will be necessary to make extensive use of development factors in education.

**Results and discussion.** In the development of bilingual education in chemistry, the aim is to strengthen the methodological support, the development of organizational and methodological bases, the rapid development of a bilingual education system, combining methodological methods and factors in chemistry. In chemistry, the development of bilingual communication through the extensive development of information is carried out in the performance of written work.

In the context of globalization and integration in the modern world economy, significant changes in higher education, the development of practical measures to improve the level of quality. Under the influence of such changes, the society will move to new ways of development and serve the rapid development of higher education. One of the most pressing issues is the development of a bilingual education system, providing a new flow of scientific information to the field through the modernization of higher education. In the open information society, under the influence of globalization, a new

generation is being formed and education is gaining a central place, the role of computer science, foreign languages, specialties is growing. Given that science and technology and new innovations are mainly presented in English, it is necessary to pay more attention to foreign languages.

Based on such issues, in the higher education system of the Republic of Uzbekistan, in addition to higher military educational institutions, there are 119 higher education institutions, which include 7 academies, 58 universities and 5 higher religious education institutions and branches. According to the State Statistics Committee, a total of 138.1 thousand people were enrolled in higher education institutions at the beginning of the 2019/2020 academic year, which is 114.5 thousand more than in the same period last year (23.8 thousand or 20.6%). increased). In terms of high enrollment rates in the regions, Tashkent region increased by 40.3% compared to the previous year, Andijan region by 31.3% and Fergana region by 25.7%. In 2019, the number of students with a bachelor's degree was 65.4 thousand, of which 18.6 thousand were educated on the basis of state grants. In 2019, 25.0 thousand undergraduate graduates were girls (38.3%). In 2020, 76.9 thousand students are expected to graduate from the bachelor's degree, of which 22.1 thousand (28.7%) are students studying on the basis of state grants. Today, students of many higher education institutions are active in the global Internet, they are more fluent in foreign languages, have free access to information technology.

Conclusions. In the course of this research, bilingual education systems with two or more foreign languages are being introduced in the higher education system of the Republic of Uzbekistan. Attention is paid to stimulating students' interest in teaching chemistry in higher education, the formation of bilingual education on the basis of integration with the educational process, increasing the activity of students in the use of information and communication technologies.

The teaching of chemistry in higher education is carried out individually and through a group of students. At the same time, there is a process of integration with a number of other areas, and it is expedient to modernize the system of teaching chemistry, the

introduction of bilingual systems of teaching chemistry in higher education with the widespread use of digital technologies.

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