

**IMPROVEMENT OF THE METHODOLOGY OF USING THE EXPERIENCE OF
FOREIGN COUNTRIES IN TEACHING PROGRAMMING LANGUAGES**

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Abstract: This article discusses the importance of using interactive teaching methods. It provides information on the basic adult learning and synonymous codes method used by educators to teach the Python programming language.

Keywords: andragogy, interactive methods, python, synonymous codes, Informatics in Korea, USA, England, Norway

Today, teachers are given ample opportunities to work on themselves and exchange experiences. In particular, in the resolution of our President Sh. Mirziyoyev No. PQ-4884 “On additional measures to further improve the education system”, it was stated: - “Transforming the process of improving the skills of public education workers into a system that provides for continuous professional development based on the principle of “lifelong learning” [1]. In the process of professional development, an andragogic approach is required to form the knowledge, skills and qualifications of teachers of computer science and information technology in programming. In order to teach high-quality assimilation of the information given in the lesson, the development and application of interactive methods that are suitable for adult education and at the same time aimed at teaching the programming language are an important factor in improving the quality of education. In pedagogy, interactive methods are defined as: A special form of organizing knowledge and communicative activity in which learners are involved in the process of learning, have the opportunity to understand and reflect on what they know and think. The role of the teacher in interactive lessons is partly to direct the activities of students to achieve the goals of the lesson [2,11].

Our time is developing very rapidly today, and information technologies are rapidly entering every field. In our country, the work being done in recent years to develop (digitize) every field is unparalleled. In order to manage today's education sector with modern methods, and to ensure that the quality of the educational process is among the developed countries, new information technologies and modern methods of teaching any subject are widely used. In this, the experience of foreign countries is the main criterion for implementing the above, modernizing each field, and achieving the intended effective goal. New modern technologies in the ICT sector of advanced foreign countries are constantly being studied and implemented in cooperation.

The history of the formation of teaching programming languages abroad The first steps in the use of computer technology in teaching in foreign countries began in the 70s-80s of the 20th century. The popularization of any technology usually has its own shortcomings. First of all, there was the problem of the lack of computer technology in schools. A. Bork, a professor at the University of California, rightly said at that time: “Let's equip more.”

South Korea. The Korean school system consists of 6 years of elementary school, 3 years of middle school, and 3 years of high school. Computer education in South Korea began in 1971,

and since 2000, when South Korea's ICT infrastructure was fully equipped with computers for almost every classroom, computer-related content has become almost mandatory. In the school education system, in 2007, computer education was replaced by computer science in the national curriculum, and the main emphasis was placed on the principles of computer science, its teaching methods, and the use of various modern technologies. In 2013, the importance of computer science education was greatly improved, and in 2018, a new curriculum was introduced in South Korea. It consists of a mandatory study of the subject "Computer Science" in high school and an elective subject in high school. The curriculum includes digital literacy, computational thinking, and programming. Since the education system in South Korea is largely textbook-oriented, new textbooks are currently being developed for the new curriculum. These textbooks are notable for their modernity and extensive use of new methods of teaching practical applications.

USA. The education system in America is not centralized. Each public school may have its own curriculum. At the same time, there is a trend in schools nationwide to introduce computer science for all age groups. Leading organizations (ACM, CSTA, Code.org, CIC, and NMSI) are working together to organize computer science education and develop basic computer science programs for 12 years of school education (K-12). This research provides a foundation for learning fundamental computer science knowledge that will benefit every child. The minimum required content defines 5 core concepts and 7 practices. To support high school students who want to study computer science at an advanced level, a new advanced course called CS Principles has been developed. It aims to provide a broad understanding of computer science and is organized around 7 big ideas of computer science: creativity, abstraction, information and data, algorithms, programming, and initiatives about the Internet and the global network, and is intended to provide a lot of modern knowledge about it. This project course is currently being tested, and extensive work is being done on this.

England. Among developed countries, England also pays great attention to the development of ICT. In the field of education, a new national curriculum came into force in 2014, which updated the curriculum for computer science, along with all other subjects. Currently, England is one of the few countries that focuses on programming not as an integrated section, but as a broader discipline. Computer science includes three structural components: computer science, information technology and digital literacy. The main goal of the discipline is to form a set of skills in students:

REFERENCES USED:

1. Uktamjon, Jumankuziev. "THE ROLE OF TEACHERS IN TEACHING PROGRAMMING LANGUAGES IN HIGHER EDUCATIONAL INSTITUTIONS OF PEDAGOGY." *Gospodarka i Innowacje*. 41 (2023): 360-362.
2. Jumankuziev, Uktam. "ANALYSIS OF NEW INNOVATIVE METHODS AND METHODS USED TO IMPROVE STUDENTS'KNOWLEDGE IN THE PROCESS OF TEACHING PROGRAMMING LANGUAGES IN HIGHER EDUCATION INSTITUTIONS." *Gospodarka i Innowacje*. 41 (2023): 351-355.
3. Raximjonovna, Fayziyeva Maxbuba. "DEVELOPMENT TENDENCIES AND CLASSIFICATION OF PROGRAMMING LANGUAGES TEACHED IN HIGH SCHOOLS." *Galaxy International Interdisciplinary Research Journal* 10.12 (2022): 185-189.
4. Jumankuziev, U. "USING NEW APPROACHES TO TEACHING PROGRAMMING LANGUAGES IN SECONDARY SCHOOLS." *Galaxy International Interdisciplinary Research Journal* 11.5 (2023): 280-283.

5. Жуманкузиев, Уктамжон, and Уткир Йулдошев. "Подходы обучения языкам программирования в общеобразовательных школах." *Общество и инновации 2.5/S* (2021): 344-350.
6. O'Ktam, O., Li Jumanqo'Ziyev, and Islombek To'Lqinjon O'G'Li. "MAKTAB O'QUVCHILARINING AXBOROT MADANIYATINI SHAKLLANTIRISHNING ASOSIY QONUNLARI VA TAMOIYILLARI." *Academic research in educational sciences 2.CSPI conference 1* (2021): 1073-1077.
7. Йулдошев, Уткир, and Уктамжон Жуманкузиев. "Определение ведущих педагогических закономерностей и основополагающих принципов формирования информационной культуры детей **школьного возраста.**" *Общество и инновации 2.5/S* (2021): 68-76.
8. Йулдошев, Уткир, and Уктамжон Жуманкузиев. "Определение ведущих педагогических закономерностей и основополагающих принципов формирования информационной культуры детей школьного возраста." *Общество и инновации 2.5/S* (2021): 68-76
9. Jumaqozievich, Yuldashev Utkir. "Systematic approach in education as a methodological problem." *INTERNATIONAL JOURNAL OF SOCIAL SCIENCE & INTERDISCIPLINARY RESEARCH* ISSN: 2277-3630 Impact factor: 7.429 11.09 (2022): 269-271.
10. Yuldoshev, Utkir, and Uktamjon Zhumankuziev. "Determination of the leading pedagogical laws and fundamental principles of the formation of the information culture of school-age children." *Society and Innovation 2*: 68-76.
11. Yuldoshev Utkir Zhumakuzievich. "FOLLOWING THE PRINCIPLES OF COMMUNICATION IN COMMUNICATIVE DIDACTICS". *Open Access Repository*, vol. 8, no. 12, Dec. 2022, pp. 573-5, doi:10.17605/OSF.IO/SZ9HQ.