

ANALYSIS OF DEVELOPED COUNTRIES IN THE DEVELOPMENT OF PROFESSIONAL TRAINING OF INFORMATICS TEACHERS

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Abstract

This article examines the professional training of computer science teachers in the developed countries of the world, the USA, Great Britain, Germany and Poland.

Keywords: Informatization of the society, the goal of training a modern teacher abroad, training of informatics teachers abroad.

Currently, almost all developed countries of the world have realized the need to reform the national education system. The strategic direction of the development of the school education system in different countries of the world is the way to solve the problem of person-oriented education. According to this principle, educational systems are developing in advanced countries, which corresponds to the humanist direction in philosophy, psychology and pedagogy. The old, traditional, pedagogical paradigm of education was replaced by a new, developmental, humanitarian, person-oriented paradigm.

In connection with informing the society, introducing informatics into the educational process, educational programs were developed in the direction of using digital technologies in the professional activities of teachers in developed countries, various professional development courses were organized, and programs for continuous training of informatics teachers was created.

Training of informatics teachers is carried out in the pedagogical education system, which in turn is inextricably linked with the school and higher education system. Therefore, the analysis of the training of informatics teachers abroad should include the general issues of the organization of the educational system of these countries and their pedagogical education, which will allow a better understanding of the organization of the training of informatics teachers.

The realization that the development of the country depends more and more on the increase in the level of education of the population has forced many foreign countries to adopt the global program "Education for All", which focuses on private education. aimed at the development of educational programs, they pay great attention to the development of students, to create conditions for taking into account their interests and inclinations, to meet educational needs. Changes in the education system of foreign countries have led to the

improvement of systems of training and retraining of pedagogues, including computer science teachers, due to the development of the individual-oriented educational methodology. The goal of training a modern teacher abroad is to create a humane teacher who has great creative potential and who can realize it based on the interests of the student - individual and citizen in the process of learning and developing the personality of the student, his knowledge and creative abilities. consists of formation. The change in the goals of teacher training is reflected in curricula and programs, in the structure of teaching, in pedagogical technologies and methods that help to implement person-oriented education.

Below is an analysis of the experience of training computer science teachers in countries such as the USA, Great Britain, Germany and Poland. It allows identifying points of convergence, commonalities and differences in approaches to the organization of training of informatics teachers, which is especially important within the framework of the "European House of Knowledge" concept, which is increasingly recognized in the world during the Bologna process. Theoretically summarizing the experience of training informatics teachers in the pedagogical education systems of developed foreign countries allows to develop the training of informatics teachers based on the trends identified in Russia from this experience.

Before considering the training of computer science teachers abroad, it should be noted that there are terminological features that are taken into account in the process of translation and analysis of information from foreign sources. In the USA and some other countries, a computer science teacher is called an Information Technology teacher or a Technology teacher, in Ireland, a computer science teacher is called an ICT teacher.

In connection with the recognition of Computer Science as a major subject in the USA and the need to train 50 to 100 computer specialists to work in schools, the problem of training computer science teachers first appeared in the 1970s. Their training is aimed at teaching computer devices and programming, forming knowledge and skills in using a computer in the educational process.

In the United States, there has been a transition to higher education as the only form of teacher training, more than 90% of which are already being prepared by the country's universities. Students study for 3-4 years in university colleges - multidisciplinary educational institutions, they undergo general education and special training in the field of knowledge they choose. They can be equated with Russian institutions.

The International Society for Educational Technology (MOTO) has developed recommendations for curriculum development and computer science teacher training, which distinguish between computer science as a science and as an educational technology tool, and inform science teachers. It is emphasized that they need to have more in-depth knowledge than what is required in the curriculum they teach. In accordance with this, training and advanced training courses for informatics teachers should be organized. In addition, a new

standard was proposed, based on which curricula for computer science teachers were developed in the United States.

The application of the ideas of synergy to the process of teaching students in the USA and other developed foreign countries is carried out through the use of problem-oriented and corporate education, which contributes to the social adjustment of students, the acquisition of effective interpersonal skills, interdisciplinary helps strengthen relationships, self-awareness in modern conditions, etc.

Analyzing the experience of Ireland, we consider the training of teachers in the field of informatics in Great Britain. Here, Informatics is called "Information and communication technologies (ICT)", and the teacher is a bachelor's or master's degree in ICT.

In Great Britain, training of informatics teachers is organized according to the secondary education system, in which teachers are given the opportunity to go through all stages of higher education.

The training of computer science teachers for primary schools in Great Britain is carried out in Colleges of Education, where students receive a 3-year Bachelors Degree. Each college of education is affiliated with or affiliated with a degree-granting university. Training of secondary school teachers is also carried out in some of these colleges. The most popular higher education institution for training teachers (and other professionals) is the University of Limerick in Ireland, where students complete a four-year program and receive a degree.

REFERENCES

1. Tojiboeva, Shohista Komiljonovna, Alibek Kodiralievich Abdullaev, and Nargiza Roxatalievna Abdullaeva. "GENDER ANALYSIS OF ZOONYMS IN ENGLISH AND UZBEK." *Scientific Bulletin of Namangan State University* 2.10 (2020): 301-305.
2. Abdullayeva, N. R., and A. K. Abdullayev. "The Basis is a Mobile Industrial Robot Core Characteristics and Shape of the Spatial Structure." *International Journal on Orange Technologies* 3.3 (2021): 253-256.
3. Abdullayev, A. Q., and N. R. Abdullayeva. "UMUMIY O'RTA TA'LIM MAKTABLARIDA MATEMATIKA FANINI O'QITISHDA INNOVATSION TA'LIM TEXNOLOGIYALARI ASOSIDA KREATIV FAOLIYATINI RIVOJLANTIRISH." *MY ALJIM CEYM ZLIKSI3 BILIMLENDIRI*² 99.
4. Abdullayeva, Nargiza, and Alibek Abdullayev. "MATEMATIKA FANINI O'QITISHDA ZAMONAVIY AXBOROT-KOMMUNIKATSION TEXNOLOGIYALARINI O'RNI." *Interpretation and researches* 1.8 (2023).
5. Qodiraliyevich, Abdullayev Alibek. "ISSUES OF PREPARING FUTURE TEACHERS IN US PRACTICE." *Gospodarka i Innowacje*. 40 (2023): 16-19.

6. Abdullayev, A. Kh, and B. M. Aliyeva. "About One Task of Mixed Integer Programming of Large Dimension and its Solving Algorithm." *Scholedge International Journal of Multidisciplinary & Allied Studies* 5.7 (2018).
7. Rokhataliyevna, Abdullayeva Nargiza, Abdullayev Alibek Qodiraliyevich, and Jeremiah Swallo Andrew. "USING OF MODERN INFORMATION AND COMMUNICATION TECHNOLOGIES IN MATHEMATICS LESSONS." *Open Access Repository* 9.7 (2023): 57-61.
8. Husseyenov, Zamin R., et al. "PREPARATION AND IMPLEMENTATION OF AGRICULTURAL DEVELOPMENT MASTER PLAN FOR ADMINISTRATIVE RAYON BASED ON SUSTAINABLE AND INCLUSIVE DEVELOPMENT PRINCIPLES." *Economic and Social Development (Book of Proceedings)*, 37th International Scientific Conference on Economic and Social Development–. 2019.
9. Абдуллаев, Артур Камилович. "Институт становления судебных приставов." *Государственная служба и кадры* 4 (2021): 141-144.
10. Qodiraliyevich, Abdullayev Alibek, Madraximov Shuxratjon Shukurovich, and Madraximova Maxfuza Axmedovna. "TALABALARNING MUSTAQIL ISHINI TASHKIL ETISHDA MASOFAVIY TA'LIMNING O 'RNI." *INTERDISCIPLINE INNOVATION AND SCIENTIFIC RESEARCH CONFERENCE*. Vol. 2. No. 15. 2023.
11. Shukurovich, Madraximov Shuxratjon, Madraximova Maxfuza Axmedovna, and Abdullayev Alibek Qodiraliyevich. "RELATIONSHIP OF QUATERNIONS AND VECTOR ALGEBRA." *INTERDISCIPLINE INNOVATION AND SCIENTIFIC RESEARCH CONFERENCE*. Vol. 2. No. 15. 2023.
12. Shukurovich, Madraximov Shuxratjon, Madraximova Maxfuza Axmedovna, and Abdullayev Alibek Qodiraliyevich. "ZAMONAVIY RAQAMLI TEXNOLOGIYALAR VA INTERFAOL METODLAR INTEGRATSIYASINING GEOGRAFIYA O 'QITISHDAGI AHAMIYATI." *INTERDISCIPLINE INNOVATION AND SCIENTIFIC RESEARCH CONFERENCE*. Vol. 2. No. 15. 2023.
13. Axmedovna, Madraximova Maxfuza, Abdullayev Alibek Qodiraliyevich, and Madraximov Shuxratjon Shukurovich. "INFORMATIKA FANINI O 'QITISHDA TALABALARNING TADQIQOTCHILIK KOMPETENSIYALARINI RIVOJLANTIRISH YO 'LLARI." *INTERDISCIPLINE INNOVATION AND SCIENTIFIC RESEARCH CONFERENCE*. Vol. 2. No. 15. 2023.
14. Qodiraliyevich, Abdullayev Alibek, Madraximov Shuxratjon Shukurovich, and Madraximova Maxfuza Axmedovna. "MATEMATIKANI O 'QITISHDA KOMPETENTSIYAVIY YONDASHUV." *INTERDISCIPLINE INNOVATION AND SCIENTIFIC RESEARCH CONFERENCE*. Vol. 2. No. 15. 2023.

15. Qodiralievich, Abdullaev Alibek. "CONCEPTUAL FOUNDATIONS OF DEVELOPMENT OF CONTINUOUS PROFESSIONAL TRAINING OF INFORMATICS TEACHERS." *Galaxy International Interdisciplinary Research Journal* 11.11 (2023): 841-844.
16. Kodiralievich, Abdullaev Alibek. "ANALYSIS OF TRENDS IN THE DEVELOPMENT OF CONTINUOUS PROFESSIONAL TRAINING OF INFORMATICS TEACHERS." *Open Access Repository* 9.11 (2023): 88-91.
17. Mashxura, M., & Siddiqov, I. M. Z. (2023). Effects of the Flipped Classroom in Teaching Computer Graphics. *Eurasian Research Bulletin*, 16, 119-123.
18. Meliqoziyevich, S. I., & Shuhratovich, S. F. (2023). USE OF INNOVATIVE TECHNOLOGIES IN TEACHING INFORMATICS AND INFORMATION TECHNOLOGIES. *Open Access Repository*, 9(6), 262-264.
19. Miryahoyeva, M., & Siddiqov, I. (2023). TEACHING METHODOLOGY OF COMPUTER GRAPHICS MODULE USING "QUEST" TECHNOLOGY IN GENERAL SECONDARY SCHOOLS. *Modern Science and Research*, 2(4), 162-170.
20. Melikyzievich, S. I., Turdalievich, M. I., Shukurovich, M. S., & Mansurovich, Z. M. (2022). THE METHOD OF REFERENCE TESTS FOR THE DIAGNOSIS OF DIGITAL DEVICES. *International Journal of Early Childhood Special Education*, 14(7).
21. Siddikov, I. M. About Testing Digital Devices by Reference Tests. *JournalNX*, 7(06), 315-317.
22. Normatov, R. N., Aripov, M. M., & Siddikov, I. M. (2021). Analysis Method of Structural-complex System Indicators by Decomposition Into Subsystems. *system*, 7(4).
23. Siddikov, I. M., & Sh, S. O. (2021, March). ABOUT ONE INNOVATION METHOD OF LOCALIZATION OF INDEPENDENT DIGITAL DEVICES. In *E-Conference Globe* (pp. 204-205).
24. Siddiqov, I. M. (2021). THE IMPORTANCE OF USING THE ACT IN THE PROCESS OF DEVELOPMENT OF PRESCHOOL CHILDREN. *Экономика и социум*, (5-1), 458-461.
25. Ikromovich, H. X., Meliqo'ziyevich, S. I., Mo'ydinovich, I. R., & Shuxratovich, S. F. (2022). MATHEMATICAL MODEL OF CHECKING THE BEHAVIOR OF AN INDUSTRIAL ROBOT IN THE STRUCTURE OF A TECHNOLOGICAL MODULE FOR STAGNATION. *International Journal of Early Childhood Special Education*, 14(7).
26. Meliqo'ziyevich, S. I. (2022). UMUMIY O 'RTA TA'LIM MAKTABLARIDA INFORMATIKA VA AXBOROT TEXNOLOGIYALARI FANINI O 'QITISHDA RIVOJLANTIRUVCHI TEXNOLOGIYALAR. *IJODKOR O'QITUVCHI*, 2(19), 231-235.

27. Melikuzievich, S. I. (2022). Providing The Integration of Modern Pedagogical and Information-Communication Technologies in Higher Education. *Texas Journal of Engineering and Technology*, 15, 103-106.
28. Melikuzievich, S. I. (2022). AN EFFECTIVE WAY TO PRESENT EDUCATIONAL MATERIALS. *Galaxy International Interdisciplinary Research Journal*, 10(12), 224-229.
29. Siddiqov, I. M., & Egamnazarova, S. X. (2023). CANVA DASTURI VA UNING TA'LIMIY IMKONIYATLARI. SCIENTIFIC ASPECTS AND TRENDS IN THE FIELD OF SCIENTIFIC RESEARCH, 1(8), 343-347.
30. Egamanazarova, S. X., & Siddiqov, I. (2023, January). ZAMONAVIY TA'LIMDA SCRIBING INTERAKTIV VIZUAL ALOQA VOSITASI SIFATIDA. In *E Conference Zone* (pp. 62-69).