## METHODOLOGY FOR IMPROVING THE INTEGRATION OF INFORMATION COMMUNICATION TECHNOLOGIES IN THE TRAINING OF FUTURE PRIMARY CLASS TEACHERS

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**Abstract.** In this article, the methodology of improving the integration of information and communication technologies in the training of future primary school teachers and the methods of applying interdisciplinary integration in the course of computer science classes of primary school teachers are highlighted.

**Keywords:** communication, technology, information, improvement, internet, education, integration, methodology, informatics, technology, computer, QR code.

In the introduction to the article, a modern person has so much information that he cannot process and use information without new information and communication technologies. Year by year, the computer and information and communication technologies are rapidly entering the life of the society. The current main goal of the education policy is to provide modern education with high efficiency, which is important and necessary for future development, meeting the needs of the learner, society and the state. Therefore, on May 26, 2023, the Decree of the President of the Republic of Uzbekistan No. PF-79 "On measures to effectively organize the activities of the Ministry of Preschool and School Education and organizations within its system" was adopted.

According to the order of the Ministry of Education and Culture "On approval of the basic curriculum for general secondary schools for the 2023/2024 academic year", informatics and information technologies have been introduced in Uzbekistan for 1st grade students from the 2023/2024 academic year.

**Literature analysis:** The factors of development of information technology, computerization and computer networks are related to the need to develop both directions of computerization. For this, it is necessary to create a "concept of computerization" at all stages of the continuous education system, based on the legal documents adopted in this field. The service of Western scientists in researching the theory and methodology of introducing information and communication technologies to education, the methods of using Internet technologies in the educational process, and the problems of using distance learning technologies is incomparable. Researched by researchers such as A. Berglund, D. Geladze, H. Long, M. Sugata, K. Whattananarong, P. Alfred, B. Means, W. Olatokun, K. Peters, J. Traxler, B. Furuholt.

Scientists of the Commonwealth of Independent States A.A. Andreev, O.E. Belova, O.I. Lyash, L.A. Peskova, S.A. Sushkov, A. Yu. Uvarov, A. V. Khutorskoy, M. Ochilov,Pedagogical technologies and scientific works of scientists like M.N.Skatkinspecial attention is paid to their scientific foundations, and the problems of developing skills and competencies in educating the young generation on the basis of pedagogical technologies, designing the educational process, programmed education and innovative pedagogy are covered with scientific foundations in these works. Computer technology develops the ideas of programmed learning, unique to modern computers and telecommunications, opens up new technological options of education related to its possibilities that have not yet been explored.

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**Discussion:** Due to the changes taking place in the society, special demands are placed on the training of pedagogues who can perform effective creative work in modern dynamic conditions. In particular, the improvement of the state education standards of primary education, the introduction of elements of information and pedagogical technologies into it, as well as the high potential of the teacher in improving the effectiveness of classes, the knowledge that meets the world's requirements, and the education of comprehensively developed, competitive personnel that meet today's demands are one of the urgent problems. From this point of view, one of the important requirements for the training of a primary school teacher today is the need to be a skilled master of his profession, to be well versed in information technology, and to use it widely in his work. Therefore, it is one of the important tasks to train elementary school teachers who are able to meet the requirements of the current era, are well-educated, qualified, love their profession, and can use new pedagogical and information technologies in the teaching process. Pedagogical and information technologies introduced in primary classes, first of all, the relationship between subjects in addition to providing, it consists in carrying out a number of activities such as the proper tracking of student activities, efficient use of time, creating an initiative environment among children in the classroom and outside of the classroom, free thinking, creating a system of creative research. It is necessary to review the program and plan of teaching informatics and information technologies in the training of future elementary school teachers who will perform these tasks, and increase the amount of training hours that will serve to provide modern knowledge and form practical training skills in them. In the training of primary school teachers, it is necessary to pay more attention to the development of practical skills by testing the learned theoretical knowledge in practice, rather than only theoretical knowledge. Therefore, the issue of acquisition of knowledge, skills and qualifications of primary schools in informatics and information technologies, which are directly related to the organization of pedagogical processes, is considered one of the urgent problems today.

**Result:** The directions of introduction of modern information technologies into the process of pedagogical education can be defined as follows:

- introduction of information technology tools into the educational process;

- increase the level of use of information and communication technologies by all participants of pedagogical educational processes;

- systematic integration of informatization of educational, research and management processes;

- creation and development of a unified information-educational environment of pedagogical education.

The process of informatization of education requires the training of pedagogues on the first information technologies. Computer classes are usually staffed by computer science teachers, but other subject teachers are also available, they don't always use this opportunity enough. Computer literate pedagogues have a wide range of opportunities. For example, a pedagogue who can use information technologies can organize his lectures based on multimedia tools.

The field of education related to computer science in grades 1-4 is mainly a propaedeutic stage, that is, primary school students learn simple information about computers, including materials about the basic elements of computer science. Elementary school students unknowingly apply the concept of information, algorithms, in the process of solving examples and problems or

logical tasks in mathematics classes. In order to explain the essence of these concepts to students and apply them in practice, the teacher should know the following:

1. The fact that the information fully expresses the thing or event under study, that is, the information has the quality of completeness.

2. Information should be valuable in a certain sense and otherwise there is no need to use it.

3. The information must be reliable, otherwise there is no need to process it. If the word "information" is Latin "information" that is, if we pay attention to the meaning of "explaining", "describing", the basis of human development is the development of information for a purpose, its use, and the concept that currently occupies an important place in our lives - information storage. The whole life of a person is connected with receiving, storing and processing information. The advantage of teaching modern information technologies in primary education is that it:

- active participation of students in the lesson, increase in the quality of learning;

- interesting organization of classes with the help of electronic textbooks created for primary education;

- development of students' self-management and independent thinking;

- formation of students' information concepts in the lesson;

- ensures an increase in the quality and efficiency of the lesson.

That is why it is preferable to study computer science course in the following direction in primary education:

1. Formation of students' general ideas about information or informational processes.

2. Pupils learn the methods of interaction with the computer and get acquainted with various information editors;

3. Algorithmic direction - development of thinking and writing algorithms for the executive.

**Summary:** In grades 1-2, students master the general concepts of interaction with a computer: main keys, mouse, menus, practice typing and correcting errors. In preparing the future elementary school teachers who will carry out these tasks, we need to revise the curriculum and curriculum of computer science and information technology, and strive to provide the future teachers with the most up-to-date knowledge and instill good practical training. It is very important to develop advanced pedagogical and information technologies, to create modern educational and methodological complexes. It is necessary to give sufficient knowledge to the future elementary school teachers about the basic elements of computer science, their specific features, the methodology of solving them, and the technology of working on the problems applied in computer science classes in elementary grades. At the same time, it is required to develop 34 lessons of computer science for primary school teachers. In order to ensure the quality of training of pedagogic personnel, the modern information society requires that pedagogic personnel be able to use Internet information resources in a targeted manner, and to introduce the possibilities of information and communication technologies in the process of acquiring independent knowledge.

## **REFERENCES:**

1. Ўзбекистон Республикаси Президентининг ПФ-79-сон Фармони , Тошкент ш., 2023-йил 26-май.

## SCIENCE AND INNOVATION INTERNATIONAL SCIENTIFIC JOURNAL VOLUME 2 ISSUE 12 DECEMBER 2023 UIF-2022: 8.2 | ISSN: 2181-3337 | SCIENTISTS.UZ

- 2. А.А.Абдуқодиров. Г.У.Умарова. "Бошланғич таълимда информатика элементларини ўқитиш методикаси".Т.:2016.
- 3. Фан ва таълимда ахборот-коммуникация технологиялари: республика илмий-амалий конференция маърузалар тўплами. Т.: ТАТУ.2018 й
- 4. Фан ва таълимда ахборот-коммуникация технологиялари: республика илмий-амалий конференция маърузалар тўплами. Т.: ТАТУ.2018 й
- 5. Р. Ишмухамедов, А. Абдукодиров, А. Пардаев. "Таълимда инновацион технологиялар: таълим муассалари педагог-ўкитувчилари учун амалий тавсиялар".-Т.: Навруз.2019 й.
- 6. Бегимқулов У.Ш. Педагогик таълим жараёнларини ахборотлаштиришни ташкил этиш ва бошқариш назарияси ва амалиёти мавзусидаги педагогика фанлари доктори илмий даражасини олиш учун ёзилган диссертация. –Тошкент. 2007 й.