## USE OF NEW PEDAGOGICAL TECHNOLOGIES IN TEACHING INFORMATION AND COMMUNICATION TECHNOLOGIES IN THE SECONDARY SCHOOL EDUCATIONAL SYSTEM

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**Annotation.** This article deals with the methods of using new pedagogical technologies when teaching information and communication technologies in the educational system of a secondary school. Theoretical considerations are given.

In order for our country to strengthen its independence and develop it, it carries out important work and activities aimed at raising a highly moral, spiritually and spiritually mature personality. In the 21st century, when progress has accelerated, the thoughts of young people are occupied with information and information technology, educating them to become spiritually rich and accomplished people remains a pressing issue. To solve this problem, trainers, educators and educational scientists are conducting in-depth research and research.

Considering that our national values serve the development of our nation, they can serve incomparably in the formation of national self-awareness among people, in upbringing and bringing them to adulthood, the Law "On Education" [1] and the "National Personnel Training Program" [2] and the indigenous The reform of the education and training system by the President of Uzbekistan is yielding positive results in educating a perfect generation and makes a great contribution to the formation of a perfect personality.

Retraining of teaching staff and improving their qualifications is becoming a vital responsibility. Currently, in the market economy and public life, the amount of information is increasing every day, but in order to accept and apply it in accordance with their specialty, teachers of secondary schools must have perfect knowledge in the field of computer science and information technology. Therefore, a creative approach to changes and communicating them to the audience requires serious responsibility and hard work from every teacher. Taking this into account, in order to improve the educational process and improve its quality, in order to improve

the educational process and its quality, improve the content of curricula and work programs and the level of proficiency in information and communication technologies. , lectures based on Internet news, It is necessary to carry out targeted work to introduce technologies for conducting practical work.

When it comes to a specific educational subject, electronic resources aimed at increasing the efficiency of the educational process are created on the basis of computer programs, as well as programs expressing the content of the subject and the corresponding curriculum: multimedia, technical teaching aids, as a result of the use of personal computers and other technical devices can achieve high efficiency and achieve the intended goal.

The direction of installation and use of personal computer networks in secondary schools is to monitor the operation of the main and additional devices of computer networks during the organization of practical training for students of educational training "Computer Science and Information Technologies" and the formation of initial professional qualifications and management skills; technical maintenance should be carried out during educational and industrial practice.

Pedagogical technologies used in the process of teaching "Information and communication technologies" in the education system of a comprehensive school can be divided into 4 stages:

The first stage is based on the use of textbooks and teaching aids, lecture materials based on scientific programs. Lectures on the high scientific, theoretical and methodological basis of the teaching program are expected. Students, in turn, must study theoretical issues in depth independently and with the help of teachers using textbooks and teaching aids.

The second stage - students must consolidate the knowledge acquired at the first stage in a practical way by solving examples, creating a program and independently discussing various issues, as well as using a computer.

The third stage is information technology, they become familiar with the technology of using a computer and its support, as well as with the technology of using additional computer devices.

The fourth stage - the acquired theoretical knowledge is completed with laboratory, abstracts, coursework and diploma papers.

Today, Uzbekistan is pursuing an active policy of integration into the world community and continues to strengthen cooperation with countries around the world in the fields of economics, science, education, and information exchange. In this regard, a number of works have been carried out in our country. One of the important tasks in the field of education is the introduction of information and communication technologies in our country at the qualitative stage of the national personnel training program, attracting into the education system the positive experience of new pedagogical technologies of foreign educational centers and using them in practice. It is known that today, with the rapid development of science and technology, the volume of scientific knowledge, understanding and imagination is increasing dramatically. This, on the one hand, ensures its differentiation through the development of new areas and

departments of science and technology, and on the other hand, creates a process of integration between sciences. In such conditions, the requirements for highly qualified teaching staff are increasing, capable of raising a competent generation in the spirit of universal and national values that have been formed over centuries, who are fluent in the fundamentals of science, methods of pedagogy and psychology, who have a high level of professional training and modern pedagogy, and it is also necessary to train creative teachers who have mastered in practice the skills and qualifications of information and communication technologies. Scientific and technological progress requires the introduction of modern information technologies both in the field of education and in many industries. Because the fact that the teacher becomes one of the sources of knowledge, and not the organizer of the educational process, a sharp increase in the amount of information at the developing stage of scientific and technological development and limited time for its use in teaching, the process requires the introduction of modern technologies into the education system.

In the modern period, when educational reforms are being implemented, it is necessary to approach it from the point of view of re-analysis of the content of teaching each subject and its radical reform. Today, the rapid development and implementation of modern information and communication technologies has a huge positive impact on all areas of social development. The creation of many Web portals, Internet sites, information systems related to each area, and the widespread introduction of the use of electronic information exchange, centralized information resources, interactive services of various forms, as well as eliminating the lack of information among the population. the public, causes a sharp increase in the possibilities of receiving, processing and transmitting information and many other conveniences. Rapidly developing technologies require rapid improvement of the educational process and adaptation to the new technological environment, that is, the teacher needs to be able to fully use and utilize pedagogical and information tools. One of the most popular ICT media is television. Educational television programs are widely used throughout the world, which is a prime example of distance education. It is possible to display various educational tools prepared via television for a wide audience of users. Schoolchildren and students can test their knowledge with the help of special exams and tests. Thus, by increasing the efficiency of the use of information and communication technologies, the Internet, electronic textbooks and multimedia resources in the education system, the quality of the educational process is guaranteed.

An important condition for the development of our country is the implementation of an improved personnel training system based on the development of science, culture, technology and modern economy. The rapid development of science and technology required serious changes in the educational process. A pressing issue was the regular development of students' activity and curiosity during the lesson. It has become necessary for the student to stand at the center of the educational process and act as a subject. If the lesson process is not perfectly planned using modern pedagogical technologies, a clearly defined goal cannot be achieved. As a result, a weak, poorly organized lesson ends ineffectively. The student is bored, he indulges in

unnecessary emotions, his thirst for knowledge decreases and even his interest in learning breaks down. The student begins to have a negative attitude towards this science. Therefore, when using interactive methods in the educational process, the teacher should not leave in his plan the ability to arouse students' interest in science and the subject. They began to recommend the effective use of interactive methods in didactic literature, educational disputes and discussions.

The teacher is responsible for teaching and learning and for making effective use of available opportunities and facilities. To accomplish this task, the teacher must have complete knowledge of the teaching process and the scientific and technical aspects of the subjects being taught. The purpose of this is that the teaching method should be designed in such a way that students can fully master the subject being taught. In determining whether teaching methods meet the needs of students, the teacher must consider the following six basic components of his program: planning, facilities and conditions, methods, activities, feedback and control. Modern teaching methods have the following features, in which communication, which is an important vital human need, is used at all stages of the educational process. During the learning process, students are given equal opportunities to demonstrate their strengths, knowledge and talent. When students collaborate in small groups, a socio-psychologically favorable environment is created and the ground is prepared for gradual and effective participation in communication.

To actively participate in communication, students understand that it is necessary not only to listen, but also to analyze what they hear, think, and make their thoughts reasonable and understandable. In collaboration with students, they must complete assigned tasks to the required level, working in small groups, analyze the results obtained, check their correctness, present and gain recognition from other groups. The organization of educational discussions and debates will consist of the following stages:

- I. Familiarity with educational tasks that cause educational discussions and debates.
  - II. Determining ways to solve problems in educational tasks;
- III. Studying, analyzing the source of information or educational material in textbooks and extracting the main idea from it;
  - IV. Preparing solutions to problems;
    - V. Confirming answers using visual aids;
  - VI. Check the correctness of the answers:
  - VII. Self-control, mutual control.

Thus, the use of modern pedagogical technologies also makes it possible to increase students' interest in the subject being studied and develop independent and creative thinking skills.

To develop a suitable teaching and learning program based on the criteria defined above, the teacher must be able to:

- presence of real teaching skills;
- explain the criteria for determining the established standards for assessing the level of knowledge of the audience;

- make selective trainings learning objectives;
- determine the feasibility of the planned project and teaching methods for students' good assimilation of educational materials.

After introducing a specially designed program for the use of modern pedagogical technologies, the teacher should be able to check the content or methods of educational activities and provide feedback to students.

Instructions for teaching using modern pedagogical technologies:

- do not look at your personal teaching method from a critical point of view.
  - some teachers do not work on themselves and continue to teach in the old way.
- why should teachers change teaching methods?
- they have their own audience, and this audience respects them.
- To be aware of what is actually happening in the classroom or other educational environment, and to systematically determine whether the educational process is being carried out correctly, teachers use their own methods. It is very important for them to check whether the teaching methods meet the requirement or not.

The national idea emerging in our independent Motherland is to build a humane, democratic, rule-of-law state and society, as well as raising it to higher levels of social, economic and cultural development, and occupying a worthy place in the world. community serves for implementation.

To have positive results in achieving these goals, first of all, to comprehensively teach the younger generation the basics of scientific knowledge, to form in them a broad outlook and scope of thinking, to effectively organize educational and educational work on the formation of spiritual and moral qualities. quality.depends. "We consider our priority task to be the improvement of the activities of all parts of the education and training system based on the requirements of today," said the head of our state Shavkat Mirziyoyev. In addition, as the first President of our country noted: "We want not only the physical and spiritually healthy growth of our children, but also for them to become harmoniously developed people who have the most modern intellectual knowledge and meet the requirements of the 21st century. We have set ourselves the goal of creating all the necessary opportunities and conditions for them to grow up into a responsible generation." Each level of an institution for training qualified personnel must perform certain tasks related to the effective organization of an educational institution, raising it to higher levels and at the same time bringing it to the level of world education. In particular, the third stage of this institution consists of a positive solution to current problems of further strengthening the resource, personnel and information base of educational institutions, fully providing the educational institution with new educational and methodological complexes, and advanced pedagogical technologies. Currently, the activities of educational institutions in our country are aimed at introducing new pedagogical technologies in collaboration with a number of leading organizations in the world.

In fact, if a person, regardless of his profession, approaches his work and learning diligently

and with love, he will perfectly master all its secrets, methods and tools, at the same time he realizes himself, that is, matures in this field. Whoever the teacher educates and educates also grows, matures, and acquires wisdom. Educational technology is the general content of an institution to achieve an educational goal, that is, the phased implementation of a pre-planned educational institution based on an integral system, the development of a specific system of methods, methods and means in order to achieve an educational goal, to achieve a specific goal, represents their effective, productive use and a high level of management of an educational institution. The central problem of pedagogical technology is to ensure the achievement of educational goals through the development of the student's personality. Pedagogical technology is the content of the institute of pedagogical activity, organized on the basis of a specific project, aimed at a specific goal and guaranteeing the achievement of this goal.

Features of pedagogical technology. Pedagogical technology has the following features:

- 1. Pedagogical technology is considered as a factor in satisfying the social need for improvement and optimization of a pedagogical institution.
- 2. Pedagogical technology a set of theoretical and practical knowledge of a didactic and educational nature, as well as a set of theoretical and practical knowledge on the effective and skillful organization of an educational institution, methodological science.
- 3. Pedagogical technology is a holistic institution that reflects the general essence of an educational institution.
- 4. Pedagogical technology acts as a guide, that is, it serves the development, education, and formation of a person.
- 5. Pedagogical technology is personal in nature, and there are no uniform, strict, regulatory requirements for the use of certain technologies in an educational institution. Each teacher has the opportunity to implement a certain technological approach, taking into account the characteristics of the educational environment in which he operates, the existing internal and external conditions.
- 6. Pedagogical technology represents the unity of education and personal development (maturity).

The qualification level of the population, naturally, plays an important role in the development of the country's economy, as well as in the formation of a democratic society, social and spiritual development of the nation. The student's level of knowledge and how well he has mastered the subject is reflected in the independent tasks he performs.

Consequently, as a result of the use of new pedagogical technologies in the educational process of a secondary school, when teaching information and communication technologies in the education system, the teacher, providing training and education to students, will make them educated. Ambitious, smart and ready for life in independent Uzbekistan. Contributes to the training of personnel with an independent creative approach.

## **References:**

- 1. Law of the Republic of Uzbekistan "On Education". The perfect generation is the basis for the development of Uzbekistan. T.: Shark. 1997. P. 20-29.
- 2. National training program. / The perfect generation is the basis for the development of Uzbekistan. T.: East. 1997. Pages 31–61.
- 3. Zaripova G.K. Umumiy o'rta ta'lim o'quvchilarini komil shaxs sifatida shakllantirishda o'zi-o'zini tarbiyalashning ma'naviy-pedagogik o'rni: "PEDAGOGIK AKMEOLOGIYA" xalqaro ilmiy-metodik jurnal «ПЕДАГОГИЧЕСКАЯ АКМЕОЛОГИЯ» международный научно-методический журнал "PEDAGOGICAL ACMEOLOGY" international scientificmethodical journal. №1(3) 2024. https://scholar.google.com/citations?view\_op=view\_citation&hl=ru&user=1xFAx7AAAAAJ &sortby=pubdate&citation\_for\_view=1xFAx7AAAAAJ:nrtMV\_XWKgEC
- 4. Zaripova G.K. Spiritual and pedagogical role of self-education in the formation of general secondary schools students as perfect persons: Journal of new century innovations. Vol. 49 No. 1 (2024), Volume-49. Issue-1, 133-142. https://www.newjournal.org/index.php/new/issue/view/337;

https://scholar.google.com/scholar\_url?url=http://www.newjournal.org/index.php/new/article/view/12315&hl=ru&sa=X&d=13700377225825864947&ei=mab\_Zeb2LY-

- Sy9YP6ICD0Ak&scisig=AFWwaeY81IU2g4d6b61RJnlJCsQd&oi=scholaralrt&hist=1xFAx7AAAAAJ:4401037987834098197:AFWwaebLEXpCNrB4TedFUl0syXIb&html=&pos=0&folt=cit&fols=
- 5. Зарипова Г.К. Ведущее значение образования в средней общеобразовательной школе в формировании личности учащегося в процессе урока и в событиях вне него и в его профессии: Journal of new century innovations. Vol. 49 No. 1 (2024), Volume-49. Issue-1, 161-184.

https://scholar.google.com/scholar\_url?url=http://newjournal.org/index.php/new/article/download/12317/11940&hl=ru&sa=X&d=11771490114323368116&ei=mab\_Zeb2LY-Sy9YP6ICD0Ak&scisig=AFWwaeaQXWfIvnwCGSnZsvFNQYc8&oi=scholaralrt&hist=1xFAx7AAAAJ:4401037987834098197:AFWwaebLEXpCNrB4TedFUl0syXIb&html=&pos=1&folt=cit&fols=

6. Zaripova G.K. Dars jarayonida va undan tashqari tadbirlarda o'quvchi shaxsini shakllanishida hamda uning kasb egallashida o'rta umumiy ta'lim maktabidagi tarbiyaning yetakchi ahamiyati: Vol. 42 No. 1 (2024): ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ | Выпуск журнала № 42 | Часть-1. 76-92. https://scholar.google.com/scholar\_url?url=http://newjournal.org/index.php/01/article/view/123 26&hl=ru&sa=X&d=13592918638829847184&ei=mab\_Zeb2LY-

Sy9YP6ICD0Ak&scisig=AFWwaeb2ncyTQaARMr4goepKrrff&oi=scholaralrt&hist=1xFAx 7AAAAAJ:4401037987834098197:AFWwaebLEXpCNrB4TedFUl0syXIb&html=&pos=2 &folt=cit&fols=

- 7. Zaripova G.K. Madaniyatshunoslik yondashuvi asosida oʻqituvchilar umumiy oʻrta ta'lim maktabi oʻquvchilarini ma'naviy-ma'rifiy tarbiyalash tizimida oʻz-oʻzini tarbiyalashni shakllantirishining ahamiyati: Vol. 42 No. 1 (2024): ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ | Выпуск журнала № 42 | Часть-1. 50-57. https://scholar.google.com/scholar\_url?url=http://newjournal.org/index.php/01/article/view/123 24&hl=ru&sa=X&d=11741118385377896405&ei=mab\_Zeb2LY-
- Sy9YP6ICD0Ak&scisig=AFWwaeYAgP8PeiLgFmNT9BSWSZy3&oi=scholaralrt&hist=1x FAx7AAAAAJ:4401037987834098197:AFWwaebLEXpCNrB4TedFUl0syXIb&html=&pos=3&folt=cit&fols=
- 8. Зарипова Г.К. Духовно-педагогическая роль самообразования в формировании учащихся общих средних школ как совершенных человеков: Vol. 42 No. 1 (2024): ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ | Выпуск журнала № 42 | Часть-1. 58-75. https://scholar.google.com/scholar\_url?url=http://www.newjournal.org/index.php/01/article/vie w/12325&hl=ru&sa=X&d=9735756815312938566&ei=mab\_Zeb2LY-
- Sy9YP6ICD0Ak&scisig=AFWwaeY6jJD0R6zSIfDr7G-
- lp5BC&oi=scholaralrt&hist=1xFAx7AAAAAJ:4401037987834098197:AFWwaebLEXpCN rB4TedFUl0syXIb&html=&pos=4&folt=cit&fols=
- 9. Zaripova G.K. The leading importance of education in a secondary school in the formation of the student's personality during the lesson process and in events outside him and in his profession: Journal of new century innovations. Vol. 49 No. 1 (2024), Volume-49. Issue-1, 148-163.
- https://scholar.google.com/scholar\_url?url=http://newjournal.org/index.php/new/article/download/12317/11940&hl=ru&sa=X&d=11771490114323368116&ei=mab\_Zeb2LY-
- Sy9YP6ICD0Ak&scisig=AFWwaeaQXWfIvnwCGSnZsvFNQYc8&oi=scholaralrt&hist=1x FAx7AAAAJ:4401037987834098197:AFWwaebLEXpCNrB4TedFUl0syXIb&html=&pos=1&folt=cit&fols=
- 10. Zaripova G.K. Umumiy oʻrta taʻlim maktablarida oʻquvchi shaxsini shakllanishida pedagogik yondashish va uning kasb egallashida yetakchi ahamiyati: Buxoro: "PEDAGOGIK MAHORAT" ilmiy-nazariy va metodik jurnal. 2023, № 9. 98-106- betlar. https://buxdu.uz/media/jurnallar/pedagogik\_mahorat\_9\_2023.pdf.
- https://scholar.google.com/citations?view\_op=view\_citation&hl=ru&user=1xFAx7AAAAAJ &pagesize=80&sortby=pubdate&citation\_for\_view=1xFAx7AAAAAJ:\_axFR9aDTf0C
- 11. Shafiyev T.R. Development of a mathematical model and an efficient computational algorithm for predicting atmospheric pollution in industrial regions. AIP Conference Proceedings, 2024. https://scholar.google.com/citations?view\_op=view\_citation&hl=ru&user=t6yS4uUA AAAJ&sortby=pubdate&citation\_for\_view=t6yS4uUAAAAJ:qxL8FJ1GzNcC
  - 12. Shafiyev T.R. Masofaviy va elektron ta" limning modellari va nazariyasi:

- masofaviy va elektron ta" limning modellari va nazariyasi. (Buxdu. uz): Tom 1 № 1, 42 tom (2020): Maqola va tezislar toplami. 2023. https://scholar.google.com/citations?view\_op=view\_citation&hl=ru&user=t6yS4uUA AAJ&sortby=pubdate&citation\_for\_view=t6yS4uUAAAAJ:M3ejUd6NZC8C
- 13. Shadmanov, T. Shafiyev. Mathematical modeling of the processes of combined heat and moisture transfer during storage and drying of raw cotton. E3S Web of Conferences, 2023. https://scholar.google.com/citations?view\_op=view\_citation&hl=ru&user=t6yS4uUA AAJ&sortby=pubdate&citation for view=t6yS4uUAAAAJ:Wp0gIr-vW9MC
- 14. T. Shafiev, S. Nazarov. Studies of the influence of vegetation cover on the process of transfer and diffusion of harmful substances in the atmosphere. E3S Web of Conferences,

  2023.
- https://scholar.google.com/citations?view\_op=view\_citation&hl=ru&user=t6yS4uUA AAAJ&sortby=pubdate&citation\_for\_view=t6yS4uUAAAAJ:4TOpqqG69KYC
- 15. Shafiyev T.R. Technology And Relevance Of Creating An Electronic Training Course. ЦЕНТР НАУЧНЫХ ПУБЛИКАЦИЙ (buxdu. uz), 2021. https://scholar.google.com/citations?view\_op=view\_citation&hl=ru&user=t6yS4uUA AAAJ&sortby=pubdate&citation\_for\_view=t6yS4uUAAAAJ:KlAtU1dfN6UC
- 16. Shafiyev T.R. Нелинейная математическая модель процесса переноса и диффузии вредных веществ в атмосфере с учетом переменной скорости частиц и орографии местности. ЦЕНТР НАУЧНЫХ ПУБЛИКАЦИЙ (buxdu. uz), 2020. https://scholar.google.com/citations?view\_op=view\_citation&hl=ru&user=t6yS4uUA AAAJ&sortby=pubdate&citation\_for\_view=t6yS4uUAAAAJ:5nxA0vEk-isC
- 17. Eshankulov H.I. Multi-agent tizimarining business intelligence integratsiyasi uchun petri to'ri asosidagi modeli. DIGITAL TRANSFORMATION AND ARTIFICIAL . 90-99-bet. 2-tom. 2024. https://scholar.google.ru/citations?view\_op=view\_citation&hl=ru&user=vgUt64gAA AAJ&sortby=pubdate&citation\_for\_view=vgUt64gAAAJ:BqipwSGYUEgC
- 18. Eshankulov H.I. Business intelligence dasturlarini bulutga koʻchirish va bulutli hisoblashning asosiy vazifalari. DIGITAL TRANSFORMATION AND ARTIFICIAL INTELLIGENCE 1 (4), 1-7. 2023. https://scholar.google.ru/citations?view\_op=view\_citation&hl=ru&user=vgUt64gAA AAJ&sortby=pubdate&citation\_for\_view=vgUt64gAAAJ:YFjsv\_pBGBYC
- 19. Eshankulov H.I., Zaripova G.K. va boshqalar. Mathematical model for information monitoring system of fat and oil enterprises. AIP Conference Proceedings 3004 (1). 2024.

https://scholar.google.ru/citations?view\_op=view\_citation&hl=ru&user=vgUt64gAA AAJ&sortby=pubdate&citation\_for\_view=vgUt64gAAAJ:JV2RwH3\_ST0C

20. Eshankulov H.I. Katta ma'lumotlar (Big Data) ni tahlil qilish usullari. ЦЕНТР

- HAУЧНЫХ ПУБЛИКАЦИЙ (buxdu. uz), 2021. https://scholar.google.ru/citations?view\_op=view\_citation&hl=ru&user=vgUt64gAA AAJ&sortby=pubdate&citation for view=vgUt64gAAAJ:isC4tDSrTZIC
- 21. Eshankulov H.I. Ontologik yondashuv orqali integratsiyalash usullarining tahlili. ЦЕНТР НАУЧНЫХ ПУБЛИКАЦИЙ (buxdu. uz), 2021. 8 tom. https://scholar.google.ru/citations?view\_op=view\_citation&hl=ru&user=vgUt64gAA AAJ&sortby=pubdate&citation\_for\_view=vgUt64gAAAAJ:bEWYMUwI8FkC
- 22. Зарипова Г.К. Духовно-педагогическая роль самовоспитания в формировании учащихся общих средних школ как совершенных личностей: Buxoro: "PEDAGOGIK MAHORAT" ilmiy-nazariy va metodik jurnal. 2023, № 13. 161-169- betlar. https://buxdu.uz/media/jurnallar/pedagogik\_mahorat\_10\_2023.pdf.
- https://scholar.google.com/citations?view\_op=view\_citation&hl=ru&user=1xFAx7AAAAAJ &pagesize=80&sortby=pubdate&citation\_for\_view=1xFAx7AAAAAJ:86PQX7AUzd4C
- 23. Зарипова Г.К. Миллий меросимиздаги педагогик технологияга оид ғоялардан фойдаланиш: "Узлуксиз таълим". –Тошкент: 2005 й. –№ 1. Б. 35-40. https://scholar.google.com.vn/citations?view\_op=view\_citation&hl=ru&user=1xFAx7AAAA AJ&pagesize=80&sortby=pubdate&citation for view=1xFAx7AAAAJ:URolC5Kub84C
- 24. Zaripova G.K. Masofaviy ta'lim tizimida ilg'or pedagogik texnologiyalardan foydalanish usullari: "Fizika, matematika va informatika". Toshkent. 2014 y. №5. B.114-118.
- https://scholar.google.com/citations?view\_op=view\_citation&hl=ru&user=1xFAx7AAAAAJ &pagesize=80&sortby=pubdate&citation\_for\_view=1xFAx7AAAAAJ:SpbeaW3--B0C
- 25. Zaripova G.K. Informatika va axborot texnologiyalari fanini o'qitishda yangi pedagogik texnologiyalardan ta'lim tizimida foydalanish:"Fizika, matematika va informatika". − Toshkent. 2014 y. − №3. − B.6-9. https://scholar.google.com/citations?view\_op=view\_citation&hl=ru&user=1xFAx7AAAAJ &pagesize=80&sortby=pubdate&citation\_for\_view=1xFAx7AAAAJ:e\_rmSamDkqQC
- 26. Зарипова Г.К. INTERNETдан фойдаланиш этикаси: "Халқ таълими". Тошкент: 2006 й. —№1. Б. 75-77. https://scholar.google.com.vn/citations?view\_op=view\_citation&hl=ru&user=1xFAx7AAAA AJ&pagesize=80&sortby=pubdate&citation\_for\_view=1xFAx7AAAAJ:BwyfMAYsbu0C
- 27. Zaripova G.K. Informatika va axborot texnologiyalarining jamiyat taraqqiyotida oʻrni va istiqbollari:"Fizika, matematika va informatika". − Toshkent. 2012 y. − №4. − B.6-9. https://scholar.google.com/citations?view\_op=view\_citation&hl=ru&user=1xFAx7AAAAJ &pagesize=80&sortby=pubdate&citation\_for\_view=1xFAx7AAAAJ:kz9GbA2Ns4gC
- 28. Eshankulov H.I., Zaripova G.K. va boshqalar. Mathematical model for information monitoring system of fat and oil enterprises. International scientific and practical conference on "Modern problems of applied mathematics and information technology (MPAMIT2022)" 11–12 May 2022, Bukhara, Uzbekistan, AIP Conf. Proc. 3004, 060008(2024)

https://doi.org/10.1063/5.0199923.

https://scholar.google.com/citations?view\_op=view\_citation&hl=ru&user=1xFAx7AAAAAJ &sortby=pubdate&citation\_for\_view=1xFAx7AAAAAJ:kh2fBNsKQNwC

- 29. Зарипова Г.К. "Информатика ва ҳисоблаш техникаси асослари" фанини узлуксиз ўқитиш муаммолари: "Узлуксиз таълим". Тошкент:2005 й. —№ 6. Б. 68-70. https://scholar.google.com.vn/citations?view\_op=view\_citation&hl=ru&user=1xFAx7AAAA AJ&pagesize=80&sortby=pubdate&citation for view=1xFAx7AAAAJ:AvfA0Oy\_GE0C
- 30. Zaripova G.K. Agarki bu insonni avliyo desak...: "Boshlang'ich ta'lim". Toshkent: 2006 y. –№1. –B. 6-7. https://scholar.google.com.vn/citations?view\_op=view\_citation&hl=ru&user=1xFAx7AAAA AJ&pagesize=80&sortby=pubdate&citation for view=1xFAx7AAAAJ:vbGhcppDl1QC
- 31. Zaripova G.K. Future specialists spiritual and professional education of secondary school students a need for the development of our independent country: Educational Research in Universal Sciences, 2(9), 97–105. Retrieved from http://erus.uz/index.php/er/article/view/3872.

http://scholar.google.com/citations?view\_op=view\_citation&hl=ru&user=1xFAx7AAAAAJ&pagesize=80&sortby=pubdate&citation\_for\_view=1xFAx7AAAAAJ:VLnqNzywnoUC

32. Зарипова Г.К. Педагогический подход в формировании личности учащегося в общей средней школе и его значение лидера в получении профессии: VOLUME 2, SPECIAL ISSUE 10 SEPTEMBER 2023. ISSN: 2181-3515. 8-22-стр. https://t.me/Erus\_uz Educational Research in Universal Sciences, 2(10), 8–22. Retrieved from http://erus.uz/index.php/er/article/view/3794.

https://scholar.google.com/citations?view\_op=view\_citation&hl=ru&user=1xFAx7AAAAAJ &sortby=pubdate&citation\_for\_view=1xFAx7AAAAAJ:j8SEvjWlNXcC

33. Zaripova G.K. Building the professional competence of globally competitive teachers in digital and information and communication technologies: Journal of Survey in Fisheries Sciences. 10(3S) 2254-2264. 2023. 2254-2264- pages. https://sifisheriessciences.com/journal/index.php/journal/article/view/844/837.

https://scholar.google.com/citations?view\_op=view\_citation&hl=ru&user=1xFAx7AAA AAJ&sortby=pubdate&citation\_for\_view=1xFAx7AAAAAJ:-\_dYPAW6P2MC

- 34. Zaripova G.K. Development of professional competence of specialists in the training of teachers in digital and information technologies in our society:- Buxoro: Pedagogik Mahorat. 2022. (maxsus son). 36-43- betlar. http://scholar.google.com/citations?view\_op=view\_citation&hl=ru&user=1xFAx7AAAAAJ& pagesize=80&sortby=pubdate&citation\_for\_view=1xFAx7AAAAAJ:PVjk1bu6vJQC
- 35. Zaripova G.K. In the continuous education system, upgrading and retraining of pedagogic personnel is the current demand. "ACADEMICIA: An International Multidisciplinary Research Journal".ISSN: 2249-7137. Vol. 12, Issue 06, June 2022 SJIF 2022 = 8.252. A peer reviewed journal. Page. 8.

- http://journal.buxdu.uz/index.php/journals\_buxdu/article/view/7954/5040; https://scholar.google.com/citations?view\_op=view\_citation&hl=ru&user=1xFAx7AAAAJ &pagesize=80&sortby=pubdate&citation\_for\_view=1xFAx7AAAAAJ:Tiz5es2fbqcC
- 36. Зарипова Г.К. Методы использования программами архиваторов в архивировании и резервировании информации:МЕЖДУНАРОДНЫЙ НАУЧНЫЙ ЖУРНАЛ «ИНТЕРНАУКА» №2 (24) /2017 1 т. 140-142-стр. https://scholar.google.com/citations?view\_op=view\_citation&hl=ru&user=1xFAx7AAAAAJ &pagesize=80&sortby=pubdate&citation\_for\_view=1xFAx7AAAAAJ:9yKSN-GCB0IC
- 37. Зарипова Г.К. Обучения студентов компьютерным технологиям: Российкая федерация. «Готовим урок». Курск: 2016 г. 30 июнь. Свидетельство о регистрации СМИ: ЭЛ № ФС 77 65563. http://gotovimurok.com/?page\_id=28459Ж; http://scholar.google.com/citations?view\_op=view\_citation&hl=ru&user=1xFAx7AAAAJ& pagesize=80&sortby=pubdate&citation\_for\_view=1xFAx7AAAAJ:q3CdL3IzO\_QC
- 38. Zaripova G.K. Internet tarmog;idan foydalanish ko'nikmalari va uning jamiyat rivojlanishidagi ahamiyati:"Maktab va hayot". − Toshkent. 2015 y. − №7. − B.24-26. https://scholar.google.com/citations?view\_op=view\_citation&hl=ru&user=1xFAx7AAAAJ &pagesize=80&sortby=pubdate&citation\_for\_view=1xFAx7AAAAJ:HbR8gkJAVGIC
- 39. Zaripova G.K., Avezov A.A., Qobilov K.H. Developing the implementation of the digital technologies' tendency in the training of future teachers. European Journal of Molecular & Clinical Medicine ISSN 2515-8260 Volume 09, Issue 07, 2022. WOS. 5547- 5563- pages. https://www.ejmcm.com/article\_20660.html; https://scholar.google.com/citations?view\_op=view\_citation&hl=ru&user=1xFAx7A AAAAJ&pagesize=80&sortby=pubdate&citation\_for\_view=1xFAx7AAAAAJ:5Ul4i DaHHb8C
- 40. Zaripova G.K. Umumiy oʻrta ta'lim maktabi oʻquvchilarining yosh va individual xususiyatlarini hisobga olish ular tarbiyasi samaradorligini oshirishning muhim faktoridir: "TA'LIM VA INNOVATSION TADQIQOTLAR" "ОБРАЗОВАНИЕ И ИННОВАЦИОННЫЕ ИССЛЕДОВАНИЯ" "EDUCATION AND INNOVATIVE RESEARCH." ISSN 2181-1709 (P); ISSN 2181-1717 (E); SJIF: 3.805 (2021). 2024/1. 288-296-betlar.
- https://scholar.google.com/citations?view\_op=view\_citation&hl=ru&user=1xFAx7AAAAAJ &pagesize=80&sortby=pubdate&citation\_for\_view=1xFAx7AAAAAJ:YohjEiUPhakC
- 41. Zaripova G.K. The Problem of Employment in the Digital Economy in the Government of the Russian Federation: Academic Journal of Digital Economics and Stability 2024, Volume 37, Issue 2, feb-2024, ISSN 2697-2212. 1-7. https://economics.academicjournal.io/index.php/economics/article/view/885/847, https://economics.academicjournal.io/index.php/economics/.
- https://scholar.google.com/citations?view\_op=view\_citation&hl=ru&user=1xFAx7AAAAAJ &pagesize=80&sortby=pubdate&citation\_for\_view=1xFAx7AAAAAJ:rmuvC79q63oC