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ROLE OF AND BENEFITS OF USING INFORMATION AND COMMUNICATION TECHNOLOGIES IN IMPROVING THE QUALITY OF THE «PEDAGOGY» COURSE IN PEDAGOGICALLY ORIENTED EDUCATIONAL INSTITUTIONS

Abstract. The effective use of information and communication technologies in the teaching process is accepted as an important factor in achieving effective results. In the process of online education introduced in connection with the COVID-19 pandemic, this was of particular importance. The widespread use of information and communication technologies (ICT) in the pedagogical process, as well as the provision of educational institutions with computers and other learning technologies, is one of the main directions of strategic activity in the new educational system, which reflects the spirit of independent state building. To some extent, the problem of introducing modern training technology equipment into this area for the comprehensive and widespread dissemination and development of training technologies in the new education system of the Republic is being solved. The rapid development of training technology equipment (or systems) must be constantly taken into account. Because the models prepared for training technologies and their structure and methods should be designed and applied according to this development. It is in this case that the developed learning technologies can achieve self-success in the pedagogical process. In general, the following can be achieved by using ICT in education: improving the quality of education; formation of information culture; access to education for all citizens; integration of the education system; creation of a centralized education system; preparation of electronic textbooks; creation of an effective education management system; the ability to use innovative methods in the training of pedagogical personnel. In order to achieve the set goals, in order to improve the quality, a comprehensive solution of many important

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problems is important, such as the creation of a single automated education system from information and communication technologies. It should combine information systems of all levels, as well as management, service, scientific-research, methodological-educational and technological centers of education. At present, the use of information and communication technologies at all levels of education to carry out these works directed to the information society, as well as the teaching of ICT itself, the formation of the ability to independently collect, analyze and transmit information in students is a requirement of modern times. In our republic, important steps have been taken and are being taken in the direction of modeling education and the introduction of ICT. From the studies carried out, it can be concluded that the role of ICT in education, especially in teaching pedagogy, is great. Thus, in modern times, students are surrounded by computers, televisions, smart phones, remote controlled devices, etc. One of the important tasks facing the teacher in order to involve the student in the lesson is to make the most of the possibilities of information and communication technologies in the educational process. The quality of the lesson will also increase as the flexibility prevails in the lessons organized in this form.

Key words: Education; training; personality; method; process; innovation; technology.

INTRODUCTION / ВСТУП

Formulation of the problem. ICT acts as a bridge between the pursuit of knowledge and other vital issues. If students understand the role education plays in their lives, they will feel more motivated to continue their education. Everyone will agree that today an ICT illiterate person can only accidentally find a promising job in the public or private sector. Informatization of society, computerization of all enterprises and organizations is one of the main directions of scientific and technological progress. Today, in the modern era, it is impossible to imagine any production without a computer. Computers have penetrated almost all areas of our lives and are already being used for various purposes in enterprises and organizations. The means of educational technologies used in education are scientific and pedagogical, methodological, aesthetic, economic and must meet the requirements. The technical means of teaching technologies create ample opportunities for mastering the basics of science, consolidating the acquired knowledge, conscious understanding, developing thinking, expanding the worldview, and forming moral qualities.

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These tools are compatible with the educational work of teachers and students, and also create conditions for the creation, selection and application of effective technologies, methods and principles, and their development.

Let us explain the technology and application of the audio-video technical system in the pedagogical process. As you know, the provision of visualization of the pedagogical process in our schools began in the 1930s. Since then, acoustic (audio), visual (video) and audiovisual (audio-video), etc. screen media have entered teaching and learning. They are still used in school today. These funds can be divided into three parts:

1. Voice tools. 2. Screen facilities. 3. Programmed audiovisual means (with computers, teaching, counting and checking machines).

When using acoustic means, information is conveyed to the student through the acoustic (auditory) channel. It includes radio, gramophone and tape recordings, a school radio station, etc. Visual media is a visual medium in which information is transmitted to the student through a visual channel. There are also silent slides, transparencies, motion pictures.

In audiovisual media, information is transmitted both through hearing and through vision. These include voiced slides, transparencies, documentaries, scientific and educational films.

The widespread use of cinematography in particular increases the intensity of visuality. Cinema, as one of the most powerful and wonderful means that allows you to revive the entire system of activities in the classroom, creates broad conditions for a deep assimilation of all areas of science, organically links upbringing and education, educates students in a high moral spirit.

The teacher can more easily and simply convey information that he cannot convey to students by the indicated traditional means, due to the wide possibilities of the modern (interactive video) audio-video technical system. But what technical and technological elements are included in this system? This includes a TV, camcorder, VCR, VCR, video cassette and remote control. As you know, the footage displayed on the TV screen is controlled using the remote control. Thus, frames on the screen can be played with sound, without sound, forward, backward and static using the remote control. That is, such a technical system allows the teacher to replace traditional screen means in the pedagogical process, that is, sound and light equipment, with a single audio-video technical system.

Apparently, this interactive video-television system reception has the ability to take on the functions of all traditional on-screen teaching aids. Thus, the audio-video technical system has great potential for mass coverage of educational institutions. This has several advantages:

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- The teacher does not require deep technical knowledge and does not spend a lot of time on technical training.
- Protective equipment, fire protection, blackout curtains, etc. no need to purchase equipment, teachers and students are relieved of physical and mental stress.
- The complicated process of watching TV shows and scheduling lessons from TV programs has been discontinued. Most importantly, the teacher achieves pedagogical, methodological and psychological freedom by choosing the time of the exam.
- Traditional technical means lose their role and transfer their functions to modern technical and technological means. The cost of purchasing and repairing their spare parts, energy consumption and space are also significantly reduced.

The novelty of the work helps the teacher's work, arousing students' interest in learning. In addition, students can use a video camera and, under the guidance of a teacher, draw educational objects according to the requirements of subject programs and demonstrate them in the classroom. Such events instill in students the motivation of interactive learning, individual thinking, perception, creativity, search ability, knowledge, imagination, polytechnic outlook, etc. strengthens. This increases their propensity for independent learning.

Undoubtedly, given the current economic difficulties, the public should be involved in solving this problem together with the Ministry of Science and Education. Certain forces are involved in solving the problem, such as sponsors, sponsoring organizations, associations, entrepreneurs, municipalities, wealthy parents.

Analysis of major research and publications. The works of the following authors are devoted to the issues of ICT application in education: A. Huseynova, T. Aliyeva [9], I. Ismailova, J. Abdullayeva [10], R. Guliyeva, K. Alieva [11], F. Sait [13] and others.

The theoretical foundations and methodological features of the practical application of ICT were studied by A. Agaev [1], A. Alizade [3] and R. Aliguliyev and R. Makhmudova [7] others.

AIM AND TASKS / МЕТА ТА ЗАВДАННЯ

The ***purpose*** of the article is that in education, ICTs act as a catalyst, they encourage students to acquire new knowledge and skills. If the student understands the content of the subject, that is, if he is clearly aware of it, then a question related to the subject may arise: what and why should be studied? The desire for knowledge is based on a vital interest: what knowledge he needs most of all, with the help of what methods he can acquire this knowledge. The path to continuous quality education for students lies through the continuous education

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of teachers. In connection with the use of ICT in school practice, the role of the teacher must change. He must be able to master not only his subject, but also to perfectly use ICT equipment.

The ***main tasks*** arising from this are the following:

1. The role of the teacher should not be limited to conveying information to students. It should support and stimulate children's creative and critical thinking, promote the development of computer literacy, develop teamwork skills, teach them how to communicate effectively and act successfully in various situations.

2. To meet the educational needs of students, teachers need to revise their teaching methods and educational programs in terms of meeting the requirements of modernity.

THE THEORETICAL BACKGROUNDS / ТЕОРЕТИЧНІ ОСНОВИ ДОСЛІДЖЕННЯ

In modern times, the development of information and communication technologies (ICT) is one of the important indicators of each country. The rapid development and spread of these technologies creates great opportunities for the development of mankind. The foundation for perfect acquisition of ICT knowledge is laid in secondary school. Building education based on ICT, starting from primary school, teaching schoolchildren basic computer knowledge, psychological preparation of schoolchildren to work with computers and the Internet can play a very important role in the development of children as educated and talented personnel.

In this area, the Ministry of Education has implemented many activities in recent years. The Ministry of Education of Azerbaijan has declared 2010 the Year of ICT in Education in our country. Within the framework of this event, conferences, seminars, various stimulating and incentive actions, competitions were held. In the "State Strategy for the Development of Education in the Republic of Azerbaijan", approved by the order of the President of the Republic of Azerbaijan dated October 24, 2013, an important task is the informatization of education. All this is the result of the great concern of our state for the development of education.

World experience shows that the modern model of education, built using ICT, imposes new requirements and tasks on the teaching staff of the school. It becomes important for teachers to receive training not only in the field of fundamental knowledge, pedagogy and psychology, but also in the field of ICT. One of the main tasks facing this direction is to ensure the timely and effective implementation of new information technologies in education. It is known that the first steps should

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be taken at the school level. The foundation of computer knowledge should be laid in high school. Where computer skills used to be considered computer literacy, it is now considered general literacy or competence. It is extremely difficult for a person who does not own computers to study, engage in scientific creativity and research. Now ICT is not only a method that provides an educational process, ICT is also a tool that opens up new possibilities for ensuring independent understanding of students. ICT tools used in education greatly simplify the educational process, make it dynamic and flexible.

Adding a computer to the educational model "teacher-student-textbook" allows you to organize the educational process according to an individual program. In this regard, the role of the teacher is also changing: he becomes a consultant, coordinator and, most importantly, curator of the educational process. Its purpose is to support and develop the ability of students to make decisions, learn independently, understand and make judgments about the purpose of the subjects studied.

As you know, the psychology of teachers, as well as trainees, is different. There are students who think that their answers in the lesson are wrong, shy away from their peers and the teacher, and thus participate more passively in the lessons. A person sitting in front of a personal computer is no longer afraid of the machine, there is a feedback between him and the computer, he enters answers into the computer that he thinks, sees his mistakes, corrects them with the help of the computer, avoids negative emotions, and as a result, his confidence increases. in itself. When using a personal computer, each student has the opportunity to review the explanation if he did not understand the given topic, and repeat it until he understands. ICT enhances the student's ability to receive information through vision, so it realizes the description of things that are invisible to the naked eye and change their color and shape. Providing tasks in the form of videos or animations, accompanied by good text and beautiful music, has a strong influence, leads to the development of his artistic taste and better absorption of the material. Thus, ICT not only develops the intellectual capabilities of a person, but also creates new development prospects, a new global cultural system, and opens up interesting opportunities for improving the quality of education.

Each teacher of pedagogy who wants to conduct his lesson based on new technologies or interactive methods should always be ready to use interactive technologies, should be able to prepare didactic materials, presentations made using electronic resources, drawings, tables. Such an organization of the pedagogical process can play an important role in increasing the cognitive

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abilities, the complexity of thinking and the motivation of students.

The use of ICT in education and the creation of educational networks is an important condition for the further development of education. First of all, the widespread use of ICT carries with it the purpose and responsibilities of the teacher. Secondly, the creation of an educational environment in schools, colleges and universities creates opportunities for participation in educational knowledge. As a result, teachers and students can collaborate and communicate directly during classes and in virtual mode. At the same time, teachers should explore the possibilities of interdisciplinary connections, improve and implement the methodology of coordinated teaching of subjects. Therefore, it will be more effective if teachers of computer science and other subjects teach a subject in two, and in some cases in three subjects in the form of joint – integrative lessons, in order to increase students' interest in various subjects, assimilate information quickly and efficiently, starting from high school.

Teaching pedagogy, psychology, modern learning technologies and the subject of computer science and information technology provides great opportunities for deepening the knowledge of students in colleges. Teachers should carefully approach the problem of interdisciplinary communication. Experience shows that, in addition to their subject, teachers who know other related subjects at a certain level have higher educational achievements. The main reason for this is that these teachers conduct their lessons as if they were teachers of several subjects.

At the stage of activation in the classroom using a computer and a projector, the previous topics are quizzes, various games, face-to-face surveys, etc. asking what the problem is, conducting research around it, each student's reasoning about the problem, the teacher's attitude to each idea, as well as summarizing and explaining that all this can be done with the help of slides. In the process of teaching pedagogy, you can use various programs, one of which is Microsoft Word. Through this program, you can prepare various handouts (test papers, tables, various information, etc.), thematic plans for the educational process.

During the lessons, students can be activated through slides in the form of text, pictures, diagrams or video files, topics prepared using various programs using the Power Point program. As in other subjects, Internet sites are used in the teaching of pedagogy. The main goal of using ICT in conducting pedagogy classes is to significantly enliven the educational process through the use of ICT, to increase the level of education and knowledge, to make lessons more interesting and understandable for students, to increase the efficiency and transparency of teaching, to improve the education management system. When

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using a computer while teaching a subject, each student can answer a question, and thus the whole group is actively involved in the learning process. Teaching with the use of interactive models, illustrated materials, multimedia not only raises the learning process to a higher level, but also becomes more interesting and colorful for them than lessons conducted according to traditional schemes and tables. As a result, the student, as a researcher, that is, freely using the Internet, himself obtains the necessary materials. With the help of test or test tasks prepared in the Word program, you can prepare ready-made test tasks on the topics of the system of concepts of Pedagogy, Pedagogical areas, the connection of Pedagogy with other sciences, branches of pedagogy, etc., and facilitate the assimilation of difficult educational material.

In the lessons conducted through ICT, the student feels like a subject, and the teacher basically acts as his assistant, adviser, a person who evaluates his intellect, knowledge and skills, encourages activity, independence, and initiative. The reforms carried out in the education system require the improvement of the content of modern lessons, the introduction of new learning technologies in the process of teaching pedagogy. The use of interactive teaching methods has a positive effect on the quality of education. The teacher should not be content with teaching the subject only in the form of blackboards, tables, layouts and oral lectures. A more important factor is considered to be an increase in students' interest in the subject of pedagogy, as well as in the taught subject, in learning and applying the acquired knowledge [8].

RESEARCH METHODS / МЕТОДИ ДОСЛІДЖЕННЯ

The use of information technology in pedagogy classes creates a number of opportunities for the teacher. An example is the organization of the conscious activity of students in the learning process, the creation of broader opportunities for monitoring the events and processes taking place in the world of both micro-education and macro-education in a short period of time. When using ICT tools in teaching pedagogy and other subjects, the stages of the lesson should be specified in advance. Along with this, it must be taken into account that pedagogical and psychological knowledge plays an important role in the life and work of students. The comprehensive development of students is one of the main goals of personalized learning. Therefore, to develop creative thinking, first of all, it is necessary to teach them how to learn, use the information received and form skills. Such an educational process instills in students a sense of self-confidence, allows them to participate in the organization of classes and lessons, freely express their opinions, answer questions themselves, establish mutual

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dialogues and debate in order to increase activity.

The use of modern teaching methods and information and communication technologies orients teachers towards the creation of classes in which active, interested students, in short, students striving to become full-fledged citizens of society, make changes to the classroom environment at a university, secondary vocational education, at an academy, at a university . These methods and tools, which stimulate the learning process to a more creative process, develop students' ability to discuss and judge, at the same time ensure that students approach the lesson with great interest and enthusiasm. Directing the main approaches arising from the essence of the principles of modern teaching technologies to the interests and needs of students, their developmental psychology, social lifestyle, level of knowledge, opportunities and abilities, providing cognitive activity in the learning process, learning with the support of a facilitator who independently masters the necessary information and using it correctly. The effective use of pedagogical technologies can be achieved through the implementation of cooperation, student orientation.

In the modern period, new and more digital learning resources (SDGs) are created every day. Using the SDGs allows you to save time when preparing a lesson, select the necessary resources for the full assimilation of new material, check and consolidate the results. With the help of digital learning resources, we can demonstrate processes and situations that are inaccessible in time and space. In this regard, the use of interactive whiteboards, such as the ActivBoard 300 Pro interactive whiteboard and ActivInspire software, creates a wide range of opportunities for teaching various subjects. This program allows the teacher to create new and interesting lessons, as well as evaluate individual students, groups, as well as the entire audience.

The following research methods were used in the article: cognitive methods, such as a system-structural approach, analysis, synthesis, modeling, forecasting, observation, study of performance results.

RESEARCH RESULTS / РЕЗУЛЬТАТИ ДОСЛІДЖЕННЯ

The electronic board serves to improve the quality of education using modern technologies. Modern lessons conducted with the use of ICT differ from traditional lessons in many advantages. If in the traditional lesson teaching was organized in the sequence teacher-textbook-student, then in the modern lesson the sequence student-textbook-teacher prevails and the comprehensive development of students is ensured. At the modern lesson, the task set at the beginning is finally solved and the expected result is obtained. The modern

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lesson is personalized. Research and development stands out as a major factor in modern pedagogy. As the student understands himself better in the process of communication, activity, cooperation, creativity, relationships are formed in the work, both in groups and in pairs. The teacher should take into account the interest of students when choosing the form of technological classes. ICT tools greatly simplify the educational process, make it dynamic and flexible. From this we come to the conclusion that the use of ICT in the classroom allows:

- increase the effectiveness of the lesson and the quality of knowledge;
- focus on modern educational goals;
- increases students' motivation;
- makes lessons emotional and memorable;
- implements an individual approach to learning.

CONCLUSIONS AND PROSPECTS FOR FURTHER RESEARCH / ВИСНОВКИ ТА ПЕРСПЕКТИВИ ПОДАЛЬШИХ ДОСЛІДЖЕНЬ

The results obtained with the systematic application of information technologies in education show that information technologies completely change the environment in education and allow the learning process to rise to a new stage. As a result of the wide and comprehensive application of information and communication technologies, the activity of a person and society as a whole is undergoing changes, completely new realities, values, and a socio-psychological environment are being formed.

Prospects for further research in this direction. In recent years, the development of ICT infrastructure in the education system and bringing the use of ICT in education to the level of world standards has been one of the main directions in our country. During this period, various projects and activities were implemented in the field of ICT application in education, which is one of the most important stages of reforms in the country's education sector aimed at creating an ICT infrastructure in educational institutions.

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РОЛЬ ТА ПЕРЕВАГИ ВИКОРИСТАННЯ ІНФОРМАЦІНО-КОМУНІКАЦІЙНИХ ТЕХНОЛОГІЙ У ПІДВИЩЕННІ ЯКОСТІ КУРСУ «ПЕДАГОГІКА» В ПЕДАГОГІЧНО-ОРІЄНТОВАНИХ НАВЧАЛЬНИХ ЗАКЛАДАХ

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Анотація. Ефективне використання інформаційно-комунікаційних технологій у навчальному процесі прийнято як важливий фактор досягнення ефективних результатів. У процесі онлайн-навчання, запровадженого у зв'язку з пандемією COVID-19, це мало особливе значення. Широке

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використання інформаційно-комунікаційних технологій (ІКТ) у педагогічному процесі, а також забезпечення навчальних закладів комп'ютерною технікою та іншими технологіями навчання є одним із основних напрямів стратегічної діяльності в новій системі освіти, яка відображає дух незалежної держави. Певною мірою вирішується проблема впровадження в цю сферу сучасного навчально-технологічного обладнання для всебічного і широкого поширення і розвитку тренінгових технологій в новій системі освіти республіки. Необхідно постійно враховувати швидкий розвиток обладнання (або систем) технологій навчання. Оскільки моделі, підготовлені для технологій навчання, їх структура та методи мають бути розроблені та застосовані відповідно до цього розроблення. Саме в цьому випадку розроблені технології навчання дозволяють досягти самостійного успіху в педагогічному процесі. Загалом за допомогою ІКТ в освіті можна досягти: підвищення якості освіти; формування інформаційної культури; доступність освіти для всіх громадян; інтеграція системи освіти; створення централізованої системи освіти; підготовка електронних підручників; створення ефективної системи управління освітою; вміння використовувати інноваційні методи у підготовці педагогічних кадрів. Для досягнення поставлених цілей, для підвищення якості важливим є комплексне вирішення багатьох важливих проблем, таких як створення єдиної автоматизованої системи освіти з інформаційно-комунікаційних технологій. Він має поєднувати інформаційні системи всіх рівнів, а також управлінські, сервісні, науково-дослідні, методично-навчальні та технологічні центри освіти. В даний час використання інформаційно-комунікаційних технологій на всіх рівнях освіти для виконання цих робіт, спрямованих на інформаційне суспільство, а також навчання власне ІКТ, формування в учнів умінь самостійно збирати, аналізувати та передавати інформацію є вимогою сучасності. У нашій республіці зроблені і робляться важливі кроки в напрямку моделювання освіти та впровадження ІКТ. З проведених досліджень можна зробити висновок, що роль ІКТ в освіті, особливо в навчанні педагогіці, велика. Таким чином, у сучасний час учні оточені комп'ютерами, телевізорами, смартфонами, пристроями з дистанційним керуванням тощо. Одним із важливих завдань, яке стоїть перед учителем, щоб залучити учня до уроку, є максимально використати можливості інформації. та комунікаційних технологій у навчальному процесі. Якість уроку також підвищиться, оскільки в уроках,

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організованих у цій формі, переважає гнучкість.

Ключові слова: освіта; навчання; особистість; метод; процес; інновація; технологія.

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