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## ADVANTAGES OF INFORMATION TECHNOLOGY IN ORGANIZING THE PEDAGOGICAL PROCESS

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Article history:		Abstract:
<b>Received:</b>	08th December 2023	This article mentions the use of modern information technologies in
Accepted:	07 <sup>th</sup> January 2024	improving the quality and efficiency of the educational process, the
Published:	10 <sup>th</sup> February 2024	pedagogical and psychological aspects of the computerization of the
		educational process, the main directions of using information technologies.
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Today, it is a professional qualification that serves to ensure the physical, intellectual and moral maturity of the young generation, to educate them in the spirit of respect for our national historical heritage, national and universal values, comprehensive implementation of scientific research on spiritual and moral aspects of socio-pedagogical knowledge is of particular importance[1].

The degree of assimilation of information is related to its perception. Studies show that a person remembers 15% of information in the form of speech and 25% of information in visual form[2]. If both forms are submitted together, then 65% of the information can be accepted. The possibilities and advantages of the computer as a means of introducing information technologies are that it provides the maximum use of the possibilities of receiving information by seeing and hearing at the same time. This, in turn, has a positive effect on the first stages of the process of acquiring knowledge, that is, on the effective course of feeling and receiving. The signals received through the sense organs are logically processed and sent to the area of abstract thinking. And at the end of this, the sense organs enter the processes of discussion and conclusion. As a result, the ground is created for the next stage of the cognitive process - perception[3]. Through the use of effective IT tools in this perceptual stage, key concepts, evidence, inferences, and inferences help to develop and master the skills of reasoning with cause-and-effect establishing mutual evidence, relationships. According to psychologists and experts in the field of didactics, the audio-visual capabilities inherent in computer technologies affect the creation of necessary conditions for thought processes that occur at the perception stage, as well as education (learning) provides easy and effective memorization, which is the logical end of the process: the learner guickly and conveniently understands logical units from the studied materials with the help of basic signals[4]. The use of IT in the educational process also has a number of emotional effects, it helps to

focus the main attention of learners on the content of the presented educational material, arouses interest and emotional reactions during perception. brings about. One of the urgent issues of pedagogy is to maintain attention during the entire educational process. KD Ushinsky also noted that the attention of the learner is one of the important factors that ensure the success of education and the effectiveness of education. It also shows the means of maintaining a steady focus[16]. According to the scientist, factors enhancement such as the of impression, concentration, taking measures against fantasy, and the interestingness of the educational material ensure the student's attention[5]. Three of the four tools cited by KDUshinsky are specific to IT. IT tools help to create an impression on the learner with a wide range of possibilities of influence and expression[6].

According to psychologists, the student's involuntary attention increases during computer use. For example, the frequent exchange of video information on the computer monitor requires constant attention from the learner: when a key is pressed, the computer immediately responds in the form of a "popup menu" or an interactive dialog[7]. Research in the field of pedagogy and psychology shows that the computer stimulates the development of creative abilities in students and creates opportunities for the perception and conscious understanding of the acquired knowledge[19]. Graphics options allow the student to draw pictures on the monitor, make diagrams and graphs, copy them at the same time, create models of various objects, compare the model with the original copy of the object[17]. Also, the learner will be able to model the events occurring in the environment and predict the strength of the factors affecting them [8]. The knowledge obtained by means of voice symbols on the monitor creates a basis for the student's knowledge to rise to the stage of understanding and drawing theoretical conclusions. In addition to physical and visual visual aids, IT is also provided with logical visualization[18]. Logical visualization includes textual descriptions, classified

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schemes, schemes of relationships between concepts, circular schemes, etc., which appear on the monitor as written speech. Such demonstrability implies giving symbolism to concepts, thoughts, logical units[9]. IT tools can provide logical visualization in a dynamic form and adapted to individual learning patterns. From the above, we can conclude that the rational use of IT tools can have a positive effect at every stage of the pedagogical process. In particular:

• at the stage of providing information to learners;

• at the stage of assimilation of educational materials during interactive interactions;

• at the stage of repetition and strengthening of acquired materials (knowledge, skills and abilities);

• intermediate and final controls and self-control of the learner;

• at the stage of making corrections to the educational process by improving, systematizing and classifying educational materials in terms of volume and content, and so on.

But at the same time, it should not be forgotten that the use of IT tools in educational processes has a number of negative effects. This negative effect is due to the fact that the learner stays in front of the monitor for a long time[10]. In order to avoid this effect or to reduce it as much as possible, it is necessary to observe the ergonomic norms of using the computer during study.

These types of activities are actively used by teachers and students as a means of forming skills and competences, such as self-awareness and selfawareness, creating an independent imagination, turning existing information into knowledge, realizing new things for oneself when discovering the outside world. implies its application[11]. The use of IT in the educational process is aimed at improving the traditional methods and forms of education, as well as introducing the methodology of training students based on the approach of individual orientation. In order to organize the types of educational activities listed above, the teacher is required to skillfully use IT tools and master the practice of introducing them to the teaching methodology.

IT is mainly involved in the development of methodical (lesson development, methodological recommendations) and didactic (visual, interesting materials, handouts, etc.) materials, as well as development of pedagogical software tools (PDV), organization of intellectual games. are more widely used in directions[12].

Creating favorable pedagogical and psychological conditions for the use of ICT can be

achieved within the framework of the concept of integrity. According to this concept, the acmeological approach lies at the heart of the search for an effective option for creating an informative educational environment[13]. The acmeological approach envisages less access to information throuah information and communication technologies at all stages of learning, and each student and teacher transforms information into knowledge by developing their creative abilities.

In order to effectively use information and communication technologies, it is necessary to create the following pedagogical and psychological conditions in the educational institution:

• development of an integrative pedagogicalpsychological model of using ICT in an educational institution;

• Determination of the model, technology and didactic principles of using ICT in the "teacher-student" system;

• Sufficient personal-pedagogical training of the ICT-using teacher;

• Determining the system of organizational measures that is optimal for the educational institution on the use of ICT.

The following tasks are determined based on the research objectives and the proposed hypothesis:

1. Clarification of the theoretical and methodological conditions for the pedagogical and psychological analysis of the use of ICT in the educational institution.

2. Scientific justification of the theoretical model of ICT use in the educational institution.

3. Development of scientific-practical means of studying and evaluating the level of effectiveness of ICT use in an educational institution[14].

4. Determination of pedagogical and psychological conditions of effective use of ICT in an educational institution and determination of factors affecting it.

The student can show animation of many events and processes on a computer monitor, as well as using a multimedia projector, and improve the innovative teaching method. Every science teacher should use computer training program properly in planning his lesson[15]. Because computers can be used in any lesson or activity. Therefore, the teacher needs to know when and how to use the computer to plan it and achieve a positive result.

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