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Digital Technologies Are one of The Important Factors of the Development of the Educational Process

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Annotation: the article offers some solutions and recommendations about what should be paid attention to in the development of education in today's globalization process through digital technologies, digital information, computer technical and software tools.

Key words: Digital information, Data digitization, Digital technology, Computer, Printer, scanner, Mobile devices, Projector, screen and electronic boards, MS Office software package, Web camera, Social networks, Zoom program.

Although the use of digital technologies in the world education system is becoming more and more advanced today, the history of the creation of these technologies goes back to the second half of the 20th century. (<https://ru.wikipedia.org/wiki>) Learning management systems were first created in universities, where the large number of students at that time led to a large workload for academic departments. This, in turn, led to the formation of sources for creating software. Currently, the possibilities of using digital technologies in the world education system are increasing. Before considering the use of digital technologies in the educational system, it is necessary to understand and master the basic skills of some concepts. By understanding the meaning of terms such as "digital information", "digitalization of data", "digital technology" and mastering the relevant knowledge, we can fully master the methods of full digitization of the education sector and its effective use. The main goal of digital education is not technology, but the creation of opportunities for learning and teaching using information technology as a method. Information and communication technologies enable the use of methods that promote learning, which cannot be implemented otherwise in practice. In this way, digital education introduces several pedagogically appropriate working methods for communication and distance learning. Currently, the main focus of digital education in communication and distance situations is focused on collaborative forms of work. Digital learning, for example, can consist of online learning and structured work with learning tasks. Learning objectives

methodically define how students observe and process information—how they learn. Therefore, the purpose of educational tasks is not to check what has already been learned, but to always learn something new. Another key element of digital learning is knowledge creation. Students combine and construct new knowledge for themselves using various sources. Available sources include, for example, web pages, books, magazines, or personal experiences and observations. Learning is seen as an activity that creates new information for students themselves.

Digital information is information that can be transmitted, received, stored and processed, stored in computer memory and other technical devices that store information.

Data digitization is a method of storing, changing, transmitting and processing information in the form of text, image, sound, image using special devices.

Digital technology is a set of technical and software tools that enable data digitization. The development of competence in the use of digital technologies is the main factor in the effective use of digital technologies in the educational system. What is necessary and necessary for today's teacher to know and be able to use?

➤ Therefore, it is necessary for them to have the competence to independently digitize information related to their subject.

➤ Secondly, download information in another language (English, Russian) suitable for one's direction from the Internet using special facilities and translate, understand, and analyze it into Uzbek.

➤ Thirdly, the ability to organize online classes within the scope of his subject through social networks or educational platforms, to advertise his potential, ensures that he will be a professional teacher at the level of today's requirements.

Digitalization competence requires effective use of the following tools and programs:

➤ Computer and telecommunication tools - ability to use mobile devices, projector, screen, electronic board, printer, microphone, internet tablet, graphic tablet, copier, scanner, web cameras;

➤ Software tools - MS Office suite, e-mail (gmail.com, mail.ru, inbox.ru), social networks (Telegram, Instagram, Facebook, You Tube), e-learning platforms (Google classroom, Moodle , Blackboard), educational portals (ziyonet.uz, uzedu.uz), Google translate, screen recording programs (Web-Cammax, Camtasia Studio, Bandicam), image editing programs (Paint, MS Office, Face app, Persona app), video editing programs (Pro shop, InShot, Viva cut, KinMaster), electronic libraries (Google Book Search, Open Library, Gallica, World Digital Library), virtual laboratory for visual learning of various subjects, antivirus and archiving programs , using the Zoom program, and having the ability to install, uninstall, and update various software tools is the most important requirement today.

The role of digital technologies in education and training is a unique and indispensable tool. The most important factor in organizing the educational process and obtaining effective results is information technology. Using information technology, we create a digital learning environment. Here the question arises, how many types of information technologies are there today and for what purposes we can use them in the educational process? How much do pedagogues working in educational institutions use these technologies today? These questions should be asked every day and the answer should be positive. When we talk about information technology, we first think of a computer, but today there are mobile devices and their own software tools that can partially replace computers. Its use in the educational system opens up many

possibilities. It would not be a mistake to say that most of the students today have access to computers and the Internet. Any pedagogue working in the educational system should have the competence to use the digital technologies described below, which is the first condition for increasing the effectiveness and quality of education.

Computer. Described as an automatic calculating device, this device is used for many purposes today. This device is invaluable for teachers. Working with information, using the Internet, organizing classes, working with various sources, using programs, sharing information around the world. It is possible to prepare many types of educational materials, such as training manuals, presentations, video lessons, lecture texts, didactic tools, knowledge testing tools of various forms (test, crossword, scanword, rebus).

Printer, scanner, copier. It serves to print, copy or enter data in the form of a paper into the computer memory.

Mobile devices. These devices are not only a means of communication, but also one of the most important means of receiving and imparting education today. Educational applications created for mobile devices are the most effective way for students to learn languages, mathematics, physics, biology, and chemistry through virtual programs. Mobile devices are in the first place as a convenient tool for preparing video lessons for teaching subjects, bringing lectures and science books to audio format, online communication, and organizing online classes.

Projector, screen and electronic boards. Displaying available information on the screen during the teaching process is one of the commonly used methods of controlling students' attention and increasing their interest in science and the subject. The demonstration method has been tested to improve the effectiveness of the lesson, and teachers use this method a lot.

Graphic tablet. Although this device is primarily a working tool for designers, using it in online classes or preparing video lessons will help students learn the subject better. With the help of a graphic tablet connected to the computer, the teacher explains the methods of solving problems with the help of a pen on the blackboard, which makes the participants of the online class feel as if they are listening to the lesson in the classroom, as if they were involuntarily looking at the blackboard. In drawing or visual arts classes, a teacher who teaches drawing lines, drawing, and painting methods using a graphic tablet has a much higher level than a teacher who requires a drawing on paper and drawing accordingly. being high and respected will increase students' interest in their subject.

Web camera, microphone. This device is invaluable for organizing video lessons and conducting online training. A web camera and a microphone serve to increase the efficiency of the lesson, provide complete information, and expand the imagination of the subject. The fact that science teachers constantly use these tools to create new lesson tools ensures a deeper understanding of today's topics.

When using any technical means, we know that it is necessary to be able to use special software related to it. There are such programs that have their place in the educational process, and it is impossible for a pedagogue not to use these programs. Here we will discuss these programs and their capabilities:

MS Office suite of documents, presentation slides, videos, spreadsheets, lecture notes, booklets, handouts, articles, training manuals, flyers, promotional products and lessons It is possible to create many products necessary for organization.

Table 1.1.1

MS Office programs name function and capabilities

<i>Program name</i>	<i>Duties and opportunities</i>
MS Word 	Word processor. It is possible to prepare, edit, and save various documents, articles, lecture texts, manuals, didactic tools.
MS Excel 	Electronic table. Allows you to create various types of tables, perform calculations, create diagrams and graphs.
MS Power Point 	It is a program designed to create a presentation, it has the ability to save ready-made slides in video or image format, prepare, edit, and process tests of various complexity.
MS Publisher 	It is a program intended for the preparation of materials in the field of publishing, with the help of which you can prepare publishing sets such as business cards, booklets, flyers, invitations, and honorary certificates.

Antivirus and archiving programs. These programs serve to protect the data created. Nod32, Kaspersky antivirus programs are often used on computers. They protect data from viruses and ensure that they are kept intact. The market for creating software is developing so quickly that not long ago widely used antivirus programs are being replaced by computer memory cleaning programs. Their advantage is that at the same time they protect data from viruses and help to increase the performance and speed of the computer memory by cleaning it from unnecessary programs. Ccleaner, Advanced System Care, Wise Care 365 programs can be examples of such programs. Win Rar and Zip archiving tools ensure safe sending and downloading of data over the network, save computer memory by reducing the size of data in various forms (video, image, sound, document). Archive programs that have been used for years by their users have not lost their effectiveness. Knowing about these programs and being able to use them helps teachers to keep and protect their information for a long time.

Email. When using Internet search engines, social networks, and various platforms, you must be able to open and use e-mail. This will give you a small glimpse into the culture of using the net. We will be able to use the capabilities of these networks by registering on various platforms and social networks through email addresses. For this, it is necessary to pay special attention to some important aspects:

- write postal addresses correctly, pay attention to the spelling of words and the choice of name;

- choose a strong email password and remember it;
- after using the mail, it is important to exit the mail using the "Exit" button. This ensures the cyber security of your data.

Social networks (Telegram, Instagram, Facebook, You Tube). We should learn to look at education as a part of the development of these sectors, which have become an important part of our life, and direct it to this goal. So, now learners of any age are often limited to only watching entertainment shows and useless videos of network stars from all social networks. And we pedagogues are using ineffective methods, such as not using the phone during class, to turn them away from this path. It is known from psychology that the more we restrict a person from something, the more he tends to the restricted area and resists. Today, a pedagogue is forced to be as quick as time, that is, to be in tune with the times, to be aware of the news that appears at every step, to be able to apply it, at least, through pedagogical skills, the student's life should be able to give new knowledge to others using it. What role can social networks play in education? Deliver science-related news through live broadcasts, organize knowledge tests among students, organize live conversations with parents, advertise their training courses, teach how to prepare advertisements that promote the interests of young people, social creating additional sources of income using networks and training them, etc. Many such examples can be cited. What is the advantage of this method? The advantage is that the student learns to use the networks purposefully, begins to recognize you, increases his interest in your subject, discovers ways to gain knowledge and earn money for himself.

Zoom program. It is a tool for organizing video conferences. Its advantage is that it allows not only communication through a computer, but also participation using mobile devices at any time and in any place. The disadvantage is that you have to spend more traffic. With its help, you can conduct online classes, interviews, discussions, and take online exams for various certificates. This program is one of the competencies that every pedagogue should acquire.

It is correct to say that our education system can produce competitive personnel for the society only if each subject teacher is able to master not only the knowledge of his subject, but also the advanced technologies of the present time.

References

- R. Ishmukhamedov, M. Yuldashev. Innovative technologies in education and training. - T.: Nihol, 2016.
 Ghulomov S.S., et al. Information systems and technologies. Tashkent., "Sharq", 2000.
 Aripov M.A., Marakhimov A.R. Informatics, Information technologies. Textbook., T: TDYuI., 2004.
 R.H. Alimov. „Information technology and systems“, T.: 2011.-36 p.
 A.R. Mirakhimov., S.I. Rakhmankulova. "Internet and the basics of its use", T.: 2001-38 p.
 A.Cho'ponov, N.Zoirov, O.Shukurova, G.Sherbobayeva, "Computer graphics and design" lecture text, Karshi 2009 p.76.
 A. Abduqadirov, A. Pardaev ,Theory and practice of distance education“, T. 2010, 136 p.
 Гильмутдинов А.Х. Электронное образование на платформе MOODLE. Казань, КГУ. – 2008.–169 с.
 Энгель В. Moodle для новичков. Обзор возможностей Moodle в вопросах и ответах / В. Энгель. – Moodle Center, 2012 — 18 с.