Седовичева Виктория Аркадьевна

студентка

Научный руководитель

Фомичева Татьяна Леонидовна

канд. экон. наук, доцент

ФГОБУ ВО «Финансовый университет

при Правительстве Российской Федерации»

г. Москва

ИНФОРМАЦИОННЫЕ ТЕХНОЛОГИИ В ОБРАЗОВАНИИ

Аннотация: в статье рассматриваются информационные технологии, которые оказывают сильное влияние на современное общество, проникая практически во все сферы человеческой деятельности. Сегодня происходит активное внедрение новой образовательной системы, вызванное осознанием того, что традиционные методы устарели. Новые формы образовательного процесса характеризуются совместным трудом и взаимодействием в учебном процессе. Для того, чтобы повысить качество образования, необходимо серьезное использование новых информационных технологий.

Ключевые слова: образование, информационные технологии, автоматизация, информатизация, деятельность.

Victoria A. Sedovicheva

student

Scientific adviser

Tatyana L. Fomicheva

candidate of economic sciences, associate professor

FGOBU VO "Finansovyi universitet pri Pravitel'stve Rossiiskoi Federatsii"

Moscow

INFORMATION TECHNOLOGIES IN EDUCATION

Abstract: the article examines information technologies, which strongly influence modern society, penetrating practically all spheres of human activity. Now there is an

active introduction of a new education system, as there is a growing understanding that the traditional scheme is morally outdated. The new forms of education are characterized by: cooperation and interactivity in the learning process. To improve the quality of education, it is necessary to intensively use new information technologies.

Keywords*: education, information technology, automation, informatization, activity.*

What is IT and how does it affect society?

Information educational technologies are a system of scientific knowledge, means and methods for creating, storing, collecting, transferring and processing information.

Types of information technologies by the degree of coverage of management tasks:

1) electronic data processing;

2) automation of control functions;

3) decision support;

4) electronic office;

5) expert support.

Informatization of society provides:

1) using the potential of society in various activities;

2) integration of IT with the aim of developing all spheres of social production;

3) increasing efficiency;

4) high level of information service, the availability of any person to information sources;

Tasks solved with the help of IT:

– improving training;

– increasing the individualization of teaching;

– increasing the productivity of self-training of students;

– acceleration of replication and access to the achievements of pedagogical practice;

– strengthening of motivation for learning;

– the possibility of attracting students to research activities;

– ensuring flexibility of the learning process [2].

The process of informatization of society contributes not only to the acceleration of progress, but also to ensuring the development of the creative potential of the individual. The relevance of this problem is also determined by a person's needs for self-expression in modern society. Thanks to the improvement of IT, a huge number of different opportunities appear: computer visualization of educational data, archival storage and transmission of large amounts of information, organizational management of educational activities and control over the results of assimilation, human interaction with software, control of educational robots [3].

What is the role of IT in educational institutions?

Information technologies in education are considered in three aspects: the object of research, the method of teaching and the tool for automating educational activities. The diffusion of technology allows the use of IT as an education, a means of communication, integration into the community. The traditional class of teaching includes: ordinary desks that do not allow a long stay due to inconvenience, blackboards where they write with chalk, textbooks. Also, some rooms are equipped with all kinds of posters with elementary information, such as the periodic table, multiplication table, physics formulas. A student in such a class does not take information seriously. Fortunately, progress does not stand still, and many schools are already equipped with technical equipment so that students receive high-quality and reliable information on subjects. Personal computers allow you to find information, improve the perception of discipline, which makes the task interesting, easy and understandable. Thanks to IT, the quality of modern education and the assimilation of subjects have improved [1].

Information technology in teaching:

1. Computer training programs, electronic textbooks, laboratory workshops, test systems.

2. Systems based on multimedia technologies, built with the use of personal computers, video equipment, optical drives.

3. Intelligent and teaching expert systems used in various educational fields.

4. Telecommunication facilities: e-mail, teleconferences, communication networks, data exchange networks, etc.

5. Electronic libraries [5].

The primary role of interactive teaching methods is to develop personal communication skills, interaction and cooperation between participants in the educational process, and the implementation of the social experience of individuals.

Interactive methods include the following:

– discussion;

– role-playing and business games;

– trainings;

– case method;

– project method;

– group work with illustrative material;

– discussion of videos, etc.

There are three levels of interactivity:

1. Reactive interaction. The teacher controls, starts the setups, returns to the previous slide, uses simple navigation tools. The student responds productively to the teacher's programs and assignments.

2. Active interaction. The teacher controls the program, chooses the pace, volume, trajectories of the lesson.

3. Mutual interaction. The teacher models and constructs a learning lesson with tools of learning activities. The student interacts with the learning environment. Simulates real objects and processes, controls environmental elements, solves complex problems.

What opportunities does IT provide in education?

1. IT enhances the ability to provide educational information. The use of color, graphics, sound allows you to recreate the real environment of the activity.

2. Computers can increase the motivation of students to learn.

3. Increases the possibilities of setting educational tasks and managing the process of their solution.

4. Computers allow you to build models of various objects, situations, phenomena.

5. The training program enables students to visualize the result of your actions, determine the stage in solving the problem on which a mistake was made, and fix it.

The listed capabilities of the computer can contribute not only to ensuring the initial formation of the child's personality, but also to the identification and development of his abilities, the formation of skills and the desire to learn, the creation of conditions for assimilating knowledge and skills in full.*IT hardware*:

1. Computer is an electronic computing device for information processing.

2. Printer – allows you to translate graphic information from your computer onto plain paper.

3. A projector is an output device that displays a computer screen on a large surface. In education, projectors are often used to show presentations.

4. Text Input Devices – Keyboard and mouse are important for students with movement problems.

5. Devices for visual and sound input information – make it possible to include information images of the surrounding world in the educational process. For example: scanner, camera, camcorder, etc.

6. Data loggers – expanding the class of different processes involved in education while reducing educational time spent on long data processing.

7. Computer-controlled devices – enable students to master the principles and technologies of automatic control.

8. Audio-video – means – provide an effective communicative environment for educational work and various events.

9. Peripheral equipment – used for lectures and for distance learning. Main types: plasma panels, interactive screens, projectors, laptops, video cameras, microphones, etc. [4].

What online educational programs help in learning?

1. The Moscow Electronic School allows you to use all the possibilities of information technology. MES includes: an electronic diary, an online library, interactive

lesson scripts, virtual laboratories for teachers and students. It is available online for everyone at any time.

2. The program «Zoom» makes it possible to conduct video conferencing, online meetings and distance learning. Video conferencing is open to anyone with a link or conference ID. The event can be scheduled at any time and a link for a permanent lesson can be made.

3. Teams is a platform that allows you to organize a real room with support for speeches and two-way conversations, file sharing, setting individual tasks, receiving and checking exercises done by students. Students can comment on what is happening in the text chat, as well as be included in the voice discussion. With the help of «Teams» it is easy to organize not only distance classes in the classroom, but also visits to virtual circles. There are many opportunities for distance learning:

– demonstration of any training materials;

– work with a digital board;

– joint work with documents;

– file exchange;

– placement of links to external resources and applications;

– video recording of an online lesson.

In conclusion, we can confidently say that information technologies are an integral part of education, as they allow effective use of new resources of society, which today are a very important strategic factor in its development.

References

1. Impact of information technology on education / K.S. Chernov, E.A. Kosenko, V.V. Ermolaeva. URL: https://moluch.ru/archive/208/51049/

2. Information technology / K.A. Sushkova. URL: https://nsportal.ru/shkola/raznoe/library/2017/09/01/statya-informatsionnye-tehnologii-v-obrazovanii

3. Types of information technology. URL: https://works.doklad.ru/view/2_D9wActzuk.html

4. Information technology and interactive learning. URL: //zamikt12.blog-spot.com/p/blog-page_7067.html?m=1

5. Information technology in schools / T.V. Emelianova. URL: https://urok.1sept.ru/articles/312893