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Annotation. The article discusses the key issues of informatization of education, the prerequisites for the digitalization of society. The introduction of information processing tools, information and communication technologies, digital technologies in education. In order to implement a unified state policy in the field of informatization of society and education, during the period of independence of the state, many programs were adopted that solve the problems of informatization and digitalization.

Keywords: informatization of education, digitalization, information and communication technologies, organization of training.

Today the Republic of Kazakhstan has entered the period of digitalization of society and economy. The informatization of the education system is a key condition for the digitalization of society and requires priority provision of resources.

All kinds of information processing tools, information and communication technologies are among the most significant factors ensuring the functioning of the world markets for knowledge, capital and labor. The introduction of information processing tools, information and communication technologies in all spheres of human activity began to be called "the process of informatization of society." The dynamic development and dissemination of information and communication technologies affects the way of life of people, brings with it dramatic changes in science and education, culture and socio-economic sphere of society, and as a result, society began to be called "information". Digitalization currently involves informatization, automation, robotization and artificial intelligence, which are constantly being modified, subject to dynamic changes, subject to integration. Informatization is a prerequisite for the digitalization process [1].

Analyzing research on the problems of informatization of society, one can single out the main features:

- creation of technologies for the formation of electronic information resources;
  - organization of citizens' access to electronic information resources;
- the growing role of infrastructure (telecommunications, transport organizational) in the economy;
- development of the information industry, which includes the developers of the audiovisual content of the telecommunications industry and manufacturers of software components and consumer electronics, etc.;
- creation of information products and their existence, development of the information services market.

The information society puts forward new requirements for the level of training of specialists of any profile in the use of information technologies, which is reflected in the informatization of the education system. Informatization of education is a purposefully organized process to ensure the methodology of the educational system and the optimal use of IT, focused on the goals of learning and education.

In order to implement a unified state policy in the field of informatization of society and education, during the period of independence of the state, many programs were adopted that solve the problems of informatization. The implementation of the tasks of state programs has shown the importance of computer, telecommunication equipment and technologies in the life of society. Possession of information and telecommunication technologies is becoming in the modern world on a par with such qualities as the ability to read and write, and a prerequisite for every individual. The acquired knowledge and skills in the future can largely determine the ways of development of society [2].

Informatization in the field of primary education of our country began to be carried out in accordance with the Program of informatization of the Kazakh SSR for 1991-1995 and for the period until 2005 (1991) and the Program of informatization of educational institutions of primary and secondary vocational education of the Republic of Kazakhstan (2001). By 2000, in spite of the very difficult socio-economic situation of the state, 100 percent computerization of secondary schools in our country was completed. A central communication center was created, to which the central office of the Ministry of Education and Science and telecommunication centers of the regional education departments were connected.

One of the leading directions of informatization of the education system is the development and implementation of an information system for managing secondary education (MSE).

The creation of the MSE system provides not only for the automation of routine work on processing statistical information for making management decisions, but also for further development in order to solve the problem "Creation of a single information space of the Republic of Kazakhstan", formulated by the President of the Republic of Kazakhstan. The MSE server will provide an

opportunity to obtain information available for wide publication via the Internet about the education system in the Republic of Kazakhstan, educational institutions, basic government and regulatory documents related to education in the Republic of Kazakhstan. Any employee of the education system will be able to promptly receive clarifying or additional information (consultation) on emerging issues. The publication on the server of the Ministry of materials for advanced training of teachers will lay the foundations of distance education for the secondary education system using Internet channels. On the server of the Ministry, it may be possible to publish material of the teachers of the Republic of Kazakhstan on the exchange of experience in the use of computer tools in the educational process.

The education management information system in the Republic of Kazakhstan is inherently a multi-level system:

- level 1 educational institutions, which are a source of information, which is prepared in accordance with existing forms of statistical reporting, as well as in connection with requests from higher institutions (district and regional Departments, the Ministry);
- level 2 regional Departments of Education, which, receiving information from level 1, process and transmit it to a higher level Regional Departments. In addition, district departments can be the source of requests from level 1 for district-specific information;
- level 3 regional Departments, receive information from the second and partially the first level and transfer it to the level of the Ministry. Oblast departments can also be the source of requests for area-specific information from lower levels;
- level 4 Ministry of Education of the Republic of Kazakhstan, whose employees process and analyze information received from Regional Departments and generate requests for information from subordinate institutions.

At the level of the Ministry, the hardware and software implementation of the system should ensure the work of the employees of the Ministry in the CLIENT-SERVER architecture. This architecture implies the organization of a local network (with a network bandwidth of 100 Mbps) and the presence of a dedicated data server (i.e., a database server). The data server should allow (taking into account the possibility of expansion) the simultaneous operation of several dozen users, while providing mechanisms to ensure data integrity, safety and recovery of data in case of malfunctions, authorized access to data and separation of access rights to data for various categories of users. Hardware and software implementation of the ministry's local network should allow the development of the network in the future, i.e. connection of additional workplaces to the network, the use of other modern office software systems not foreseen in the project, without reducing productivity in solving problems of education management information systems and without requiring significant investment in equipment modification.

Informatization of education has provided the following opportunities:

- participation of each student in an active cognitive process, and not in passive mastery of knowledge;

- selection of modern information and communication technologies that correspond to educational technologies and educational processes.
- creation of information portals (databases and data banks, electronic libraries, etc.) aimed at solving educational problems;
  - free access to information resources around the world;
  - joint work on cooperation in solving various problems;
  - extensive virtual communication with other users.

By the decree of the President on December 12, 2017, the State Program "Digital Kazakhstan" was introduced. The basis for the development of this program is the Address of the President of the Republic of Kazakhstan N.A. Nazarbayev "The third modernization of Kazakhstan: global competitiveness" dated January 31, 2017. As the Head of State noted in his Address: "We must cultivate new industries that are created using digital technologies. This is an important and complex task. It is necessary to develop in the country such promising industries as 3D printing, online commerce, mobile banking, digital services, including in healthcare and education, and others. These industries have already changed the structure of the economies of developed countries and have given a new quality to traditional industries."

Digitalization can be viewed as one of the most important means of reforming the entire education system.

In the era of digitalization of society, changing the goals and content of training is the leading link in this process. Technological re-equipment of the educational process, the emergence of new methods and organizational forms of training are derivative, ensuring the achievement of the set goals. The change in the content of training is in several directions, the significance of which changes as the digitalization process develops.

As stated in the State Program "Digital Kazakhstan", the first direction will be associated with updating the education system in accordance with the best world practices: "New education will meet the needs of the digital economy, with an emphasis, first of all, on skills in information analysis and the development of creative thinking, rather than learning facts and formulas. Increasing digital literacy in secondary, technical and vocational, higher education."

In conclusion, I would like to note that our society has a certain potential in the field of application of information and telecommunication technologies in education. Measures are needed to create a developed digital environment of society, considered as a combination of technical and technological, sociopolitical, economic and socio-cultural components, factors and conditions under which information and knowledge become a real and effective resource for the socio-economic and spiritual development of society.

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