# §1.3. APPLICATION OF DIGITIZATION TECHNOLOGY IN THE TEACHING OF INFORMATION TECHNOLOGY

Due to new conditions, «on education "and" personnel on the National Program "training" of the Republic of Uzbekistan law of the Republic of Uzbekistan for 2017-2021.

Strategy of action for further development of the Republic", Training of pedagogical personnel " of the president of the Republic of Uzbekistan, retraining of employees of public education and their qualification on measures for further improvement of the increasing system In accordance with the decision, the continuity and consistency of the educational stages ensuring, creating a modern methodology of education, the state on the basis of a competency approach to educational standards improving, developing a new generation of educational and methodical complexes exit and introduction into practice and re-training of pedagogical staff further improve the system of training and their qualification improvement is dictated.

"Teaching the science of Informatics and Information Technology information and information of the working training program of the" methodology " module training of teachers of technology it is structured on the basis of the program, it is Informatics and information the content and essence of the methodology of teaching technology reveals.

The following are the mandatory requirements for all stage graduates of compulsory secondary education in Computer Science Education: the concepts they should know: information, information and knowledge about. Information processes. Quality indicators of information. Units of measurement of the amount of information: bits, bytes, kilobytes, megabytes, gigabytes, terabytes, petabytes. Information imaging, storage, processing and transfer. About information technology. Information technology types. Internal and external factors of Information Technology. Information transmission methods and tools. Information technology role in an informed society. About information systems.

An informed society. Information Culture. Society fundamentals of informatization. Of the informed society material and technological foundations. Information resources of the community, educational information resources. Internet, Information Security, moral and moral norms in the use of information.

Professional the role and importance of information in activities (on the example of various professional fields).

Multimedia technologies. Office software package and its contents.

Document preparation. Text editors. Presentation and its creation.

Data warehouse. Spreadsheet editors. Graphic objects and the ways of describing them on the computer. Systematic programs, practical 32 programs. Technologies for solving issues in computer. Algorithmization basics. Basics of programming. Web design.

Information processes that need to be explained. Information collection, processing, storage and transmission. Information imaging. Information coding. Informative model. Means of information processing. Information educational information resources in technology. The Internet. Multimedia technologies. Document creation. Email.

Manifestation of theoretical knowledge. Learned information description and description of processes, their application in practice to give examples; to draw up an algorithm, in one of the programming language get to write an application. Create a Data Sheet. Count numbers know how to transfer from one system to another.

Information independently. From different sources (text, dictionary, scientificpopular publications, literature, TV, radio, computer data base, using Internet resources) use of information in scientific and practical content.

Can apply in practice. Correct the computer to the power source connects and disconnect. Information and the processes that are carried out with it: information use of information in collection, processing, transmission, being able to use computer devices, in the graphic editor form, prepare photos, solve issues related to the information processes studied and perform test assignments. Launch management software,

Ability to create documents using a text editor, computer image of information, coding issues know the solution. Transfer of numbers from one counting system to another practice to get done. To fulfill issues in the spreadsheet.

Preparation of presentation slides. Drawing up an algorithm, from the programming language the knowledge and skills that you have acquired to draw up a program for the issue in one application in everyday life and technique.

Over the centuries, man's activity plants in nature, animals, with the mastering of ready-made products such as solar energy have become connected. But over time, a person is only ready not only does it learn to take products, it also helps to influence nature also studied. People began to work on the ground, different. Began to breed, trained to catch animals, factories and factories, build hydroelectric power stations, railways and space routes they started. As a result of this, Once Upon a time with forests and seas updates have appeared on the ground where we have a covered Mother Earth. His name academic V.I.Vernadsky called the ionosphere.

Types of Human matter together with the creation of the Noosphere and he took advantage of the properties. But at different stages of this process each category of matter was not mastered in one. Initial when the emphasis on mastering the substance is more focused, further to assimilate energy and, finally, information preference was given to assimilation.

In science, that is, the study of nature, the collection of knowledge about it and it is known that there are such periods in the study that they are known as matter it is associated with the development of one type. Therefore, the ionosphere

it will be possible to distinguish three organizers. These are: technasfera application, landing. The emergence of the Techno sphere with the study of matter, the ergo sphere if the appearance is associated with the study of energy, then the info sphere and the emergence is associated with the study of information.

Study of Techno sphere and ergo sphere Chemistry, Physics, Mathematics and it is done through other sciences.

Experience and knowledge of mankind in the assimilation of nature the collection is accompanied by the mastering of information. That's exactly it the process led to the appearance of the info sphere. All in all since the emergence of the info sphere is associated with the study of information.

Information is derived from the Latin word information, an explanation, description of something or information about something or it means.

The world in which man lives are various material and intangible objects, also from the interaction and interaction between them, that is it consists of processes. Sensing members, various instruments and evidence of the outside world, which is recorded with the help of data.

It is called. Information is necessary and useful in solving specific tasks if it is found - it turns into information. So to the information he or she unused for reasons or reused in technical means characters being processed, stored, transmitted or recorded it can be viewed as observations. If anything from this information the possibility of use to reduce the abstract on the if it is born, the data becomes information. So that it is useful in practice found, that is, increased the user's knowledge data: you can call it information.

For example, write down phone numbers on paper in a certain order, when you show it to someone, it's information that does not give it any information will accept as.

But this is before each phone number the name of a particular enterprise or organization, if its type of activity is written, the previous information becomes information.

As a result of the solution of certain tasks, new data are learned, that is, systematized factual or tested messages will appear. These are laws, theories and attitudes other are generalized as community. Later this knowledge it is necessary to solve other tasks or clarify the preposition are part of the data.<sup>1</sup>

A person has a birthday in his life (if it is permissible to interpret, then even a mother from the first day of its appearance in winter) constantly data likes a work with. He perceives them through members of his intuition.

From the environment when we say information in our daily lives, perceive and accept through intuition our members (from nature or society) we understand any information we receive. Watching nature insist, communicating with people, reading books and newspapers, television we receive information when we review animations. Mathematician-scientist further informed understands wider. He concludes by thinking about the range of information it also includes the knowledge that is formed as a result of subtraction. Other area employees also interpret the information in their own way. So different the information in the fields is understood differently.

It is known that as society develops, economy, science, technology, various issues such as technology, culture, art, medicine etc. Available information about the company, use of information reserves more and more impact on the organizational and economic life shows. So it turns out that information is a multifaceted process it is happening.

Extensive development of computing techniques and communication tools in size and speed, which information cannot even come to a previously imagined collection, storage, processing and transmission, that is, automated created the possibility of processing. Information technology due to the activity of Man, the sphere of his daily communication is the world experience, knowledge and spirituality developed by civilization it is really in vain on account of the attraction of values. This way in turn, it requires the society to be highly informed will.

About the informed society, scientists think differently.

For example, Japanese scientists believe that in an informed society computerization process from a reliable source of information to people use, production and processing of information in social fields enabling high levels of performance automation provides. The driving force in the development of society is material the product should not be diverted to Information production.

In an informed society, not only production, but the whole the system of lifestyle values also changes. All actions industry focused on the production and consumption of tokens intelligence in an information society, knowledge in relation to its society it is produced and consumed in such a way that the state of mind is labor leads to an increase in its share. Ability from human to creative requires the need for knowledge will increase.

The material and technological basis of an informed society computer equipment and computer networks, information technology, it forms a variety of systems based on telecommunications communications.

Information society – most members of society information, production, storage of knowledge, especially those that are in its highest form, it is a society that is busy with processing and implementation.

Computer and telecommunications in the transition to an informed society new information processing industry on the basis of Information Technology occurs.

<sup>&</sup>lt;sup>1</sup> Zufarjonovna J. G. using web-quest technology in english lessons as foreign language //international journal of social science & interdisciplinary research issn: 2277-3630 impact factor: 7.429. – 2022. – т. 11. – с. 161-164.

Information processing, storage and transmission humanity each stage of development develops in different ways went and had different looks. Human experience and knowledge language and speech as an intermediary function in acquisition, exchange of information done.

Their oral hygiene meeting should be kept in memory and passing from generation to generation, the natural possibilities of man this is due to. As the stages of development develop, the information collection, processing and transmission of human beings are changing gone.

Reception, processing and transmission of information

carried out in stages.

I-stage. The emergence, preservation of writing and from generation to generation the passage is. Human first processing with the appearance of writing received power from technology.

Stage II. (XVI) book printing in the middle of the century connection with the creation, that is, led to the development of culture.

Book publishing along with the development of science, knowledge of the field led to intensive rivaling. In the process of labor, at the stations, new thinking of the knowledge gained by working on machines the source and scientific directions were applied.

Stage III. (XIX) end of the century. The emergence of electricity together with the phone, Telegraph, radio in large quantities the opportunity to transmit and receive information was created.

Stage IV. Characterized by the presence of information revolution.

The beginning of this stage dates back to the 40-ies of the XX century, namely universal It coincided with the period of the creation of EXMS. Information in the 70's Micro technology and personal with the core of its technology computers were created. Development of computing techniques in his evolution, the direction of the microprocessor appeared.

V-stage. (XX) the end of the century. Facilitate control systems information technology for the purpose was processed. Information on the basis of meaningful processing, there are such algorithms and models, they give us the opportunity to study the management system.

The emergence of computers is a huge achievement of mankind information is collected in memory, processing them quickly have access to, but what is the purpose of information processing does not know that it is.

At the end of the XX century, various models were developed (mathematical, logical and b.) and technical control algorithms (automated and automatic production) and social systems. Any manufacturer on the basis of output to the goal that can't be achieved without management directed movements lie. By the end of the twentieth century, logical information production has increased. Intelligent capabilities of the manager it has led to an increase in the effect of management.<sup>2</sup>

The main content of the fifth stage is as follows, namely not only a sharp rise in the effect in management activities, but also the increase in the labor force in it was also taken into account. And so on a new type of Technology – Information Technology Information and where the product comes from is this information.

Model so is derived from the Latin word "modulus", which means measure, norm means meaning. Model says an object or objects the image or sample of the system is understood. For example, the model of the Earth that Globe, the sky and the stars in it that

<sup>&</sup>lt;sup>2</sup> J. G. benefits of using web-quest technology in English lessons as foreign language // international journal of social science & interdisciplinary research issn: 2277-3630 impact factor: 7.429. – 2022. – Vol. 11. – P. 158-160.

planetary screen of the model and as a model of each person takes a photo in the passport you can.

The process of creating a Model is called modeling.

When modeling say an object using their models research to construct models of existing subjects and phenomena and learning is understood.

A wide range of modern sciences from modeling style to the present using. Some of it eases the research process and in cases to the only means of studying complex objects turns. Distant objects, very small the importance of modeling in the study of volumetric objects it is incomparable. From the modeling technique to physics, astronomy, biology, in Economic Sciences, only a certain property of the object and it is also used in determining their relationship.

Depending on the tools for selecting models, divide them into three groups possible: abstract, physical and biological.

Formula by imaginary representation of something or object and the model used in the study using drawings abstract model is considered. Although the abstract calls the model a mathematical model.

Therefore, the abstract model is mathematical and mathematical-logical it is divided into models.

Subjects in the direction of "Informatics and information technologies" higher education in the areas of excellence, structure and functioning current rates and fundamental changes are taking place it is caused by the peculiarities of the process. Such in society the root of change is the formation of Information, their storage, transmission and it is worth going to new ways and means of their use.

We are in an information age. Constantly increasing information processing volume and more productive use within its own activities the number of members of the society faced with the need, the profession increasingly it is growing.

The Real conditions in the current period are as follows:

To the needs of an informed century of the educational system of the Republic adaptability is not possible. To this issue "training of Personnel special attention is also paid to the" national program".

The second implementation of the national program of Personnel Training high quality of the educational process at the stage (2001-2005 years) information technologies including literature and advanced pedagogy providing continuous education, carrying out informatization of the system the upgrade task was set. At present, the training of Personnel is National the third stage of the implementation of the program is taking place.

Informatics and information technology as a subject of study Informatics is inextricably linked with science and its study. Therefore the first method of teaching Informatics and Information Technology the queue is based on the methodology of Computer Science. Own in its conclusions, it relies on the general principles of education and upbringing.

As you know, these principles are developed by pedagogy and didactics will be released. In addition, Informatics and information technologies the teaching methodology is taught by the science of Physiology and psychology it also uses the legislation directly.

Informatics from the general objectives of education and training and the uniqueness of information technology as a science, its role and role in the system of Modern Sciences, the current society objectives of the study based on their importance in their lives it can be set as follows: formation of computer literacy in students; information processing, transmission and use in students the basis of knowledge about the processes of use is self-sufficient and ensure that they are consciously assimilated; to expose the modern-scientific view of the world to students the importance of Information Processes

in the formation of the society reveals the role of information and communication technologies in the development of action of going; conscious and rational use of computers in life formation of skills;

Pedagogical subject of Informatics and information technologies functions the basic functions of a person in general education the contribution in the solution is determined by the narrative of its elegance.