



Use Of Didactic Capabilities Of Information And Communication Technologies In Teaching Geography

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Abstract. In this article, the leading axiom of providing quality education in the context of globalization is the presentation of theoretical knowledge in visual or direct visual form. As a reflection of this axiom, information and communication technology (ICT) helps to solve the problem of providing students with visualized knowledge. With the help of many programs, browsers and applications that have these technologies, any theoretical knowledge can be visually expressed. The didactic nature of geography provides ample opportunities for the effective use of information and communication technologies in the educational process. The article discusses the didactic possibilities of using information and communication technologies in the teaching of geography.

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1. Introduction

In all periods, too, teaching has been organized using specific tools. Commonly referred to as “teaching aids”, these tools serve to effectively convey the theoretical information presented by the teacher to the learners, to form clear ideas about the information (information) received from them, as well as to increase the effectiveness of the expressed speech.

Prior to globalization, the educational system consisted mainly of teaching aids (chalk, index, whiteboard), textbooks (textbooks, manuals, manuals, guidelines, manuals, recommendations, maps, atlases, dictionaries, reference books), visual aids (posters), dummies, overalls, geometric figures), equipment (measuring instruments, instruments used in various fields, scales), laboratory equipment (flasks, test tubes, funnels, droppers, glass rods, glass, porcelain, metal and plastic containers) and technical equipment (bench, microscope, film device, lingophone, tape recorder, television, machine, mechanism).

At the same time, the use of information and communication technologies for educational purposes as a key element of the information society has led to the addition of the list of educational tools at their expense.

One of the most actively used concepts in modern terminology is the term "information and communication technologies". The concept of "technology" in the use of language as a unit of the

terms "information" and "communication" or as a separate independent term

used. In particular, IA Eshmamatov explains the concept of "information technology" as follows: 1) processes, methods of search, collection, storage, processing, presentation and dissemination of information, as well as the use of methods for the implementation of these processes; 2) methods, tools and techniques that allow the use of computer technology in the collection, storage, processing and use of information; 3) resources needed to collect, process, store and disseminate information [9, p. 31]. In fact, the very name of the concept of "information technology" means that the main "feed" of these technologies is information and work with it.

At the heart of the concept of "communication technology" is the term "communication". Translated from Latin, the term means "communication", "link" and theoretically means "1) transport, communication routes and underground networks of the economy and its structures; 2) process of information exchange; 3) exchange of ideas, communication"[10, p. 395].

This concept is also actively used in the process of communication, and also reflects the meaning of interactions and attitudes in the dialogue between social actors. Through communication, social subjects react to each other's opinions, views: approving, supplementing, supporting or denying them.

In pedagogy, the concept of "communication" is derived from the point of view of the nature of the industry.

In the early stages of human historical development, information (information) was organized orally, on paper and in writing, and in written form (letter), while in the industrialization stage it was carried out by technical devices - telegraph, radio, television, postal service. Dissemination of information through these devices took some time.

2. Material and Methods

The creation of information and communication technologies has opened up a wide range of opportunities for the rapid dissemination of information and messages.

It should be noted that the research focuses on the concepts of "communication technology" and "communication technology", as well as attempts to distinguish between the means through which they are expressed. For example, a researcher

A.A. Lenshina [7, pp. 35-37] explains the difference between the two concepts as follows:

1) communicative technologies are often used in the field of sociology and management, and ensure the interaction of social actors, the exchange of information with each other; the main objects are social subjects; any personal contact, public speeches, media materials serve as a network of information sales;

2) communication technologies serve to represent computer, communication and telecommunication systems and ensure high quality and security of information transmission, transmission through various communication networks; material objects that serve to search, process and transmit information appear as the main objects; computers, communications (mobile and home phones, fax), as well as telecommunications networks allow the sale of information.

It should be noted that the information transmitted through communication technologies "creates their interaction with the target audience, target groups, the media, the public and public opinion" [1].

Information and communication technology is a set of methods and tools used to collect, process, transmit and store information, which allows you to organize the process of working with information using a computer device and communication tools.

The processes using these technologies are called "information and communication processes" and in this process the exchange of information takes place [3].

Communication technologies, which serve to represent computer, communication and

telecommunication systems, are referred to in language as "information and communication technologies". This concept is also theoretically interpreted and has the following content: information and communication technologies - a system of objects, actions and rules used in the preparation and transmission of information necessary for personal, public or industrial relations [3]. Using this system, "data, texts, graphs, knowledge and information about the objects of material existence are collected, sorted, processed, stored and disseminated" [9, p. 31].

If traditional information technologies are written sources, printed literature, telephone, telegraph, radio and television, which serve to record, reproduce and disseminate information, modern information and communication technologies of software, software-hardware, technical nature, along with providing information processing, influences the creation of knowledge that is the basis of activity. For example, software helps to create new software products, new technologies [5].

3. Results

Today, the most popular types of information and communication technologies with multimedia applications are computer and mobile technologies, the Internet is an international communication network. The functionality of computer technology allows it to be used effectively for didactic purposes in the educational process. "Mobile technology and the Internet remain the driving force in the development of information and communication technologies" [4].

Computer technology Power Point, Excel, "My test", "HotPotatoes 6", as well as iSpring: iSpring Suite, iSpring Free, iSpring Space, Thinklink service, Flash technology, Adobe Flash "multimedia platform, SVG (Scalable Vector Graphics - Scalable Vector Graphics), etc., facilitates the implementation of educational goals for every educator.

Enrichment of educational materials with electronic literature, information provided on the websites of the field through the use of ICT in the teaching of geography; organization of virtual tours to any region of the world, the world's most famous ethnographic, geological and nature museums, depending on the topic under study; work with interactive geographic maps; organization of an online gallery of flora, fauna and landscape of different regions; "Rational organization of training sessions; establishment of individual and differentiated education; increase the amount of work done by students during classes; preparation of electronic photo collages and electronic scrapbooking of geographical nature with the involvement of students in independent creative activity; to develop students' critical thinking

and research skills; saving time spent on monitoring the learning activities of students; Improving the process of assessing students' knowledge and skills "[2].

Russian researcher MV Kopochinskaya points out that the use of ICT in the teaching of geography has the following advantages: universality; be able to influence the memory of learners in different ways; be equally effective at all stages of the learning process; practical significance [6, p. 61].

N.N.Chalap notes that the Internet alone will create a wide range of opportunities for geography teachers. According to the author, teachers of geography through the Internet use visual aids (photos, videos, webcams), statistics, reference information, Web-atlases, knowledge of teaching methods, author's work, textbooks, educational regulations, periodical pedagogical publications, didactic games, distance learning-based training, network projects (competitions, Olympiads, research).

4. Discussions

Based on the above ideas and practical experience, it can be said that the technical and functional status of ICT confirms that they can be effectively used for educational purposes at all stages of the system of continuing education, where geography is taught. Including:

1. Using Internet browsers such as Mozilla Firefox, Google Chrome, Opera, Safari, Yandex, students will be able to work independently and efficiently by searching for additional information on the natural geography of Central Asia. In addition, teachers of "Natural Geography of Central Asia" will enrich the educational information with the help of Internet materials, video materials provided by the video hosting site Youtube.

2. Using the Moodle educational platform, students will be able to learn about the specifics of different geographical regions, geological and tectonic processes, global climate change, in particular, the impact of flora and fauna, the importance of waste management in maintaining the geocological environment. online classes will be organized.

3. Using Excel, all of the "General Geographical Description of Central Asia" section: "Geographical location, boundaries and area", "History of the geographical study of the nature of Central Asia", "Earth's surface structure", "History of geological development", "Earthquakes", "Climate", "Inland Waters and Water Resources", "Modern Glaciers", "Soils", "Plants", "Fauna", "Natural Resources and Their Protection", "Reserves, National Parks, Orders"

The data on the topics are studied comparatively on the basis of tables.

4. Using Microsoft Office Publisher, e-topics on "General natural and geographical characteristics of Central Asia", "Soils", "Plants", "Fauna", "Natural resources and their protection", "Reserves, national parks, orders" photo collages and electronic scrapbooks are created.

5. Using the Power Point program, slide presentations and visual aids will be prepared for lessons on all topics covered in the Central Asian Natural Geography Curriculum.

6. Based on the use of programs such as Easypano Studio, Java Applet, Image Assembler, Spherical Panorama, virtual museums and galleries on relevant topics in the field of "Natural Geography of Central Asia" will be created.

7. The program HotPotatoes 6 allows you to create didactic games on specific topics in the subject "Natural Geography of Central Asia": crossword puzzles, anagram, rebus, etc. By involving students in solving crossword puzzles, anagrams, rebuses, firstly, their level of knowledge is determined, and secondly, their knowledge is strengthened.

8. Using iSpring Suite it is possible to create non-standard tests on all subjects in the subject "Natural Geography of Central Asia". Non-standard tests teach students to think, to draw conclusions, to justify conclusions.

Thus, from the didactic potential of ICT in the educational process use provides students with visualized knowledge. Many applications, browsers and applications of ICT serve to visually express any theoretical knowledge. The didactic nature of geography also provides ample opportunities for the effective use of ICT in the educational process. Giving students knowledge based on the use of ICT in the teaching of the subject "Natural Geography of Central Asia" increases their relative interest in the learning process, increases learning activity. Therefore, teachers of geography should pay special attention to the organization of training with the help of ICT.

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