DEVELOPMENT OF INFORMATION- COMPETENCE OF GEOGRAPHY TEACHERS ON THE BASIS OF AN INNOVATIVE APPROACH

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ABSTRACT

In this article, the development of information and communication competence of teachers, competences that make up competence, communicative ability, professional qualifications and skills, culture of information use, use of information and communication tools in geography lessons, innovative electronic programs, geoinformation system, "human + computer" relations, the integration of geography+ informatics sciences, the possibilities of using modern computer technologies in their professional activities are discussed.

INTRODUCTION

At the international level, mass implementation of teaching through information and communication technologies in the educational process, that is, education that is not limited by age or the distance between the teacher and the student, is becoming a reality. At the same time, information and communication technologies provide users with the opportunity to use a large number of information sources, create opportunities to acquire the most modern knowledge and skills, taking into account individual characteristics and needs. International scientific research centers are conducting scientific research on improving the methodology of harmonizing educational content with scientific achievements, improving the model of developing the competence of students in working with information, diagnosing the formation of competencies, orienting students to algorithmic information exchange activities.

Effective work is being carried out on the introduction of information and communication technologies in education at a time when technologies are rapidly developing. For example, the Council of Europe developed several recommendations called "Teachers' ICT Competencies" in order to develop their countries by 2030. The main purpose of this is to ensure professional mobility and learning throughout life, to ensure global educational priorities, to achieve equality, to contribute to the formation of social cohesion and effective citizenship position, creativity and creativity at all levels of education and professional training. Was determined to encourage innovation. At the same time, it is worth noting that concepts such as "computer literacy" and "computer competence" serve to highlight the ability and ability of a person to work with computer technology, not the characteristics of information-communicative competence.

O.V.Ursova defined the information and communication competence of a science teacher as "readiness and ability to independently use modern information and communication technologies in pedagogical activities to solve large-scale educational tasks" and "information and communication of the individual's educational, household and professional tasks refers to the ability to solve with the help of technology" [7, p. 24].

According to N.K. Nasirova, information competence has the following elements:

- motivation, need and interest in acquiring knowledge, skills and qualifications in the field of technical, software and information;

- a set of social, natural and technical knowledge representing the system of modern information society;

- methods and actions that determine the information basis of research activity;

- research experience in the field of software and technical resources;

- experience of "human+computer" relations [5, p. 17].

According to Sh. Begimkulov, on the basis of information-communicative competence, the teacher can independently search for information, sort and analyze important information, form educational materials based on them, enrich them with content, present them, transfer them to students, object and process modeling, design, project implementation, in particular, skills related to social and professional activities [1]. From this point of view, it is known that the concept of "competence" refers to the specific specialization of a person's knowledge, skills, qualifications, experience, their direct and effective application in activities.

The use of information and communication technologies in the educational process of natural sciences, including geography, is effective compared to other sciences [8; p. 43]. Because the science of geography is a science that teaches the acquisition of knowledge, skills and abilities related to the geographic location of geographical objects, the structure of the Earth, climates, its natural resources, seas, rivers, islands and lakes, as well as environmental problems. [9; p. 176]. If these processes and events are presented with the help of information communication technologies, including electronic educational resources (video clips, animation effects, slide shows of presentations), it is possible to eliminate certain problems of students in science, to make them interested in it, to acquire planned knowledge. It serves as an important pedagogical tool in mastering and forming imaginations [8; p. 12].

The main goal of increasing the information-communicative competence of future geography teachers is to familiarize them with the possibilities of using modern computer technologies in their professional activities, to use innovative educational and technical tools, and to improve their skills in solving issues related to their specialty. implementation using ready-made software, work in stationary and mobile operating systems, modern tools for preparing educational animations, mathematical models of geographical processes and computational and statistical methods in their analysis, familiarization with elements of distance education, algorithms and is to ensure that they have basic knowledge such as model concepts.

In this case, the information and communication competence of pedagogues means the mastering of skills, qualifications, experiences in effectively organizing the pedagogue's professional activities, full awareness of the functional possibilities of information and communication technology, and effective use of them in order to implement pedagogical goals. the ability to receive, create a product of creativity. Today, innovative technologies and their opportunities are used worldwide and contribute to the solution of some existing problems, this process directly expands the opportunities for educators to use and work on information and communication technologies (ICT). is giving

In geography education, Geoinformatics courses are established based on the integration of geography and computer sciences, in which students are formed knowledge and skills in the geoinformation system and its scientific application, as well as geodesy, cartography, land resource management and other fields. . Geoinformatics, which is a different form of geoinformation system, means a complex of scientific, technical and applied sciences related to the development of geoinformation system. This complex results from the connection between geography, informatics and information technology theory, cartography and new approaches to computing [6. p. 4]. A geographic information system (GIS) is a computer system designed to collect, manage, and describe geospatial data, in which these data can be displayed in images, tables, along with the details of events, events, activities, or where they exist.

Currently, as a result of the rapid growth of this section of the information system, it is used not only in technical fields, but also in various social areas of our life. GIS is an interdisciplinary field that is used worldwide and is widely used in cartography, remote sensing, natural resource management, photogrammetry, geography, urban planning, spatial video, and local search systems. It is an internally positioned spatial information system designed for data management, cartographic images and analysis. In our country, the fields of application of GIS are also expanding, it is used in various situations, including in health care, in the process of placing new clinics and hospitals geographically suitable and convenient for the population, in the creation and determination of road routes and schedules for companies engaged in cargo transportation, in the construction of new highways for companies building highways and It is very useful when choosing the most optimal option when designing roads, as well as correctly and rationally calculating the land in the state fund, developing new land for farmers, determining the condition of the land and getting sufficient information about it. [6. p. 5].

From this point of view, the competence of geography teachers in using information communication technologies (ICT) is of great importance. It is necessary for science teachers to have the qualities of professional competence, in particular, information-communicative competence, in directing the organization of educational-project and educational-research activities using information and communication technologies.

Information-communicative competence consists of directly and indirectly ensuring the development of the teacher's thinking, optimal decision-making skills, communicative ability, aesthetic education, professional qualifications and skills, and the development of information culture. Information-communicative competence consists of a set of the following competencies: independent search for necessary information, information literacy, information processing, information presentation, motivational orientation to information, necessary information sorting, information-demanding culture, media culture, object and process system with the help of ICT.

On the basis of information-communicative competence, pedagogues show the following three aspects:

- having sufficient functional knowledge in the field of digital resources;

- reasonable, effective use of ICT in pedagogical activities to solve the tasks of professional, social and personal development;

- applying information and communication technology to the educational system, educating and developing teachers as subjects who can control the "flow of information" in order to obtain intellectual or practical results that create new knowledge in the information society.

Yu.A. Gorokhova's research shows the need to develop the following qualities of information-communication competence in teachers:

- assimilation of knowledge regarding the current state and prospects of the development of the use of ICT in the pedagogical activity in solving professional qualifications;

- search and selection of professionally important information, acquisition of Internet search and information system tools; to have the skills to organize work in a computer and network environment and to provide systems and work programs to ensure security;

- universal and professional ICT tools, communication tools, network communication, which help to build models, analyze data, perform calculations, process general data, analyze calculation results, issue reports and make decisions , mastering the means of teamwork in the network, as well as the organization of the educational process and ICT tools that help independent learning;

- to have the ability to learn new software [3].

International experience promotes a two-level model in the development of information-communication competence in pedagogues:

- level of knowledge (preparation for activity; practical literacy);
- level of activity (practical activity).

The teacher's level of knowledge in ICT is reflected in the following:
- mastering computer programs that process text, numbers, graphics, voice data;
- ability to work on the Internet, its services;
- know how to use forums, e-mail, sites;
- being able to use devices such as scanners and printers.

The level of activity is reflected in the following:
- level of implementation - introduction of special media resources prepared in accordance with the requirements of the content and methodology of one or another educational subject into the educational activity;
- creation of independent (personal) electronic tools for the educational subject.

Therefore, the use of information technology tools in geography lessons depends on the level of ICT knowledge of teachers. Instructional manuals are of great importance in geography classes, because they are tools used to create clear (mainly electronic vision) ideas about studied geographic objects, events and phenomena, and natural-geographical processes.

In geography education, we can do practical work with the help of the following electronic programs:
- The "Google" system destroys the concept of distance and space in education. The reason is that its programs make it possible for students and teachers to work at the same time, wherever they are in the world. For this, it is enough to open an e-mail from "gmail". The programs "Google classroom", "Google doc", "Google drive" will help in this.
- With the help of the "Google Earth" program, we can see the landscape and relief of our planet in its original form.
- "Pinnacle studio" is a video production program, it helps to prepare documentaries related to the topic.
- Using the "Bandicam" program, electronic lessons are prepared in the form of videos.
- With the help of the "ISpring Suite" program, you can create tests related to science, the convenience of this program is that it has the ability to prepare 14-15 different types of tests and present them to students.
- "Web-quest" portal refers to educational sites on the Internet where students can work on the basis of partial or complete information located on various websites.

Also, the following YouTube channels with useful and scientific content for geographers can be mentioned:
- Geography Now: a channel that provides detailed information about each country;
- National Geographic: Documentaries about natural geography and ecology;
- RealLifeLore: Videos explaining the world and its geographical features through interesting facts;
- Wendover Productions: Videos about the intersection of transportation, economics and geography;
- CGP Gray: Short and informative videos exploring various geographic and political topics. These channels help students gain in-depth knowledge of geography, and post science-related videos and documentaries for science teachers. In order to work in the programs listed above, both the science teacher and the students must have a sufficient level of using information and communication tools. The use of modern information and communication technologies in the course of the lesson, as well as in extracurricular situations, requires the teacher to use unique methods, to increase the interests and activities of students.

Today, International Alliance for Information Literacy (International Alliance for Information Literacy; 2006) has been established to develop the information and communication competence of specialists at the international level. Its purpose is to enable social subjects to carry out effective activities in the information society, which is created on the basis of the right to education throughout their lives, to organize mutual information exchange between them, and to popularize the experience of achieving information literacy in different regions and countries of the world. is to show the effect [2].

Since 2003, the "European Conference on Information Literacy" (ECIL) dedicated to the issue of increasing information literacy of the population has been organized every year within the framework of UNESCO. In 2015-2017, at the initiative of the representative office of UNESCO in Uzbekistan and the National Library of Uzbekistan named after A. Navoi, the project "Formation of information culture and media literacy of information-resource institutions of Uzbekistan in the period of deepening reforms in the information-library sector" was implemented.

The UN project "Education for All" (2015) is one of the activities aimed at organizing the process of active involvement of ICT in educational processes in educational institutions [4].

In conclusion, it should be mentioned that the technical, technological, and functional capabilities of information technologies help to develop the information and communication competence of teachers with the help of information technologies in the educational system in modern conditions. Information-communicative competence is manifested in the form of certain competencies, certain qualities. The teacher's mastery of the skills, qualifications, and experience of effectively organizing professional activities (motivational level), full awareness of the functional capabilities of information and communication technology (cognitive level), the ability to use them effectively to achieve professional goals, creation of a creative product (active-reflexive level) is evaluated both as a component of information-communicative competence and as a component of personal information culture.

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