## International Conference on Social and Humanitarian Research 17-18<sup>th</sup> September, 2021, Poland

ISBN: 978-83-956810-7-3

# Implementation of Geoinformation Systems for the Formation of Professional Competence of Teachers of Future Geography

**Fazdindin Khikmatovich Khazratov** 

Lecturer of the Department of Applied

Mathematics and Programming Technologies of Bukhara State University

**Keywords:** Geoinformation, technology, geography, model, method, analysis, ICT, knowledge, education, pedagogical process.

Education, upbringing and teaching are the only tasks of pedagogical activity that form the basis for the teacher's readiness for social life. This is done by teaching him and mastering all social experience by the teacher. The social significance of pedagogical activity consists in the processing and transmission of knowledge and skills of society, as well as the organization of a pedagogical process.

In recent years, serious changes have taken place in the content of the professional activity of the geography teacher, since in the new educational information environment, the requirements for professional skills and the qualification of specialists are growing. But there has been rapid development in education to improve the professionalism and quality of teachers.

However, it can be said that the topics have not yet been linked to new information technologies, in particular geospatial technologies. There is a need for serious changes in the direction of vocational training of teachers of the future geography, their methodological relations, with the exception of the issues of introduction of mastered vocational and innovative educational technologies. On the basis of the solution of such issues, it will help to improve the personality, professionalism and skills of future teachers.

The process of teaching Geoinformation technology in the university system is very promising. Currently, Geoinformation technologies are entering almost all directions.

With the help of this technology, we can make inventory, execute and namoiish of various objects and sources.

If so far we are talking about a study that covers almost all modern aspects of Geoinformatics and Geoinformatics technologies in the Buxoro region, they are virtually absent.

The most complete integration training model with the use of current information technologies can be developed for the specialty "geography" on ICT.

In the future, teachers of geography will have to implement the following methods of using information systems based on GAT technologies::

Cartographic data;

Geographic data map;

Electronic maps and atlases;

Remote sensing;

ISBN: 978-83-956810-7-3

Geo-suratlarni processing;

Geographic data sharing systems;

Systematic analysis of the expertemental research for the use of Geoinformation systems;

Geoinformation technologies and its use in the modernization of cartographic subsystems and their access to geographic information;

# RESEARCH Cartography GEODESY GEOGRAPHY TRY SCIENCE SCIENCE AND STATISTICS

1.1-picture. GAT research methods

By offering the above model, it is possible to develop the professional competence of the geography teacher in the future.

Geoinformation systems(GAT) rely on basic science and technology and have close links with the following disciplines, including: geography, cartography, aerospace techniques, Geodesy, photogrammetry, informatics, mathematics, statistics, etc. (Picture 1.1).

The third millennium is the epoch of human development. Therefore, the young people of the present time should be in harmony with the independent-minded and universal form-principle of education that meets the demand of the period.

It is necessary to enrich the educational and cognitive activities of such individuals by activating them with such factors as moral and educational and national values, legal, psychological knowledge, professional, social culture, self-management and evaluation. One of the main factors in the reform of the educational sphere is the introduction of modern Geoinformation technologies into the educational process.

Decree of the Cabinet of Ministers of the Republic of Uzbekistan "on measures for the further development of the government portal of the Republic of Uzbekistan in the Internet network" dated December 17, 2007 № 259 determines the relevance of our opinion. Decree of the president of the Republic of Uzbekistan "on measures for further development of the Higher Education System" No. 2909 dated 07.02.2017, is aimed at applying Geo-Information Technologies in higher education institutions to the educational process and all spheres of the activity of society on the basis of modern educational technical means.

After reviewing, studying and analyzing the world experience and the scientific-research work carried out in all spheres of the educational system of the Republic, it became known that the use

## International Conference on Social and Humanitarian Research 17-18<sup>th</sup> September, 2021, Poland

ISBN: 978-83-956810-7-3

of Geoinformation technologies in the educational process as a new direction of education and a means of increasing the effectiveness of education from it, including the rational use of computers, electronic textbooks, electronic The role of computers in the life of mankind is growing and digital information technology is rising to the first level. Information is understood as a letter in Gat, a special number of information of the Society of geography of Uzbekistan, information in the form of a number or image in 2018. All methods, techniques, actions, tools, systems, theories, directions, etc.k. it focuses on the collection, processing and use of information, together they are called information technology, while GAT is one of those. The simplest way to know the GAT is to work with it, to know its capabilities in the process of work. In fact, GAT is a single technical tool, with the help of which it is possible not only to beautifully equip the map, but also to solve some issues that do not have a solution.

### List of used literature

- 1. E.G.Kapralov, A.V.Koshkarov, B.C.Tikunov, Geoinformatika, Moskva. 2005. 468 bet.
- 2. A.S.Samardak, Geoaxborot tizimlar, Vladivastok. 2005. 124 bet.
- 3. V.D.Shipulin, Geoaxborot tizimlari asosiy prinsiplari, Xarkov. 2010. 336 bet.
- 4. Khazratov F., Juraev Kh. METHODS OF CREATION AND ORGANIZATION OF WORK, TECHNOLOGY FOR CREATING AUTO-NAVIGATION MAPS [Electronic resource]: URL: http://www.jcreview.com/?mno=9704
- 5. Khazratov F. H. Modern problems of integration of geoinformation systems and Internet technologies / / Universum: technical sciences: electron. scientific. journal., 2020. № 9 (78). [Electronic resource]. Access mode: https://7universum.com/ru/tech/archive/item/10735/ (date of request: 11.11.2020).

