

UDK [378.147:62]:004

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## **GEOINFORMATION TECHNOLOGIES AS THE MEANS OF EDUCATIONAL INTERESTS FORMATION AMONG ENGINEERING DEPARTMENT STUDENTS**

*This article investigates geoinformation technologies as the means of educational interests formation among engineering department students*

*The problem and its connection with the scientific and practical tasks.* Education must serve for the society needs. Processes reflecting current trends in society provide information technologies development and implementing. At present the ICT usage in education can be a catalyst in solving important social problems connected with increasing the educational resources and services availability and quality, real and equal opportunities in getting education for citizens despite their residence, social status and income [1, 10]. Currently, high technologies cover almost all areas of our life. Professionals having common practical and theoretical skills of work with different information types are highly wanted.

*Analysis of research.* One of the most important education tasks is to develop students' active cognitive attitude to knowledge. Cognitive activity in universities is a necessary stage in preparing for further professional life. Teacher's task is to seek and find the best methods and means of improving the educational process and leading to the cognitive interest development.

In recent years both in Ukraine and abroad problems of information technology implementation in the educational process are actively explored by V. Yu. Bykov, L. I. Doliner, M. I. Zhaldak, M. P. Leshchenko, A. F. Manako, D. Sh. Matros, E. I. Mashbyts, N. V. Morze, P. I. Obratsov, I. V. Robert, Yu. V. Trius and others.

The great impact in geographic information system (GIS) investigating was made by S. S. Zamay, I. V. Zhurkin, Ye. G. Kapralov, A. V. Koshkarev, I. V. Prolyetkin, O. S. Samardak, S. V. Shaytura and others.

*The material and results.* Education modernization in today's society can be hardly imagined without education innovation developing especially such as GIS technologies.

GIS is an integrated set of hardware, software and media means, providing input, storing, processing, manipulating, image analyzing and space-coordinated data representation. [2, 17].

GIS using in education allows to perform independent analyzing, interrelations search, analogy detecting and developing abilities to explain the differences. The last statement is true to engineering professionals. This implementation in the engineering profession also has allowed to reduce waste of time during the session, to create specific pedagogical conditions for developing future professionals skills, increase cognitive interest, to set subjective position in learning activities, to build cognitive autonomy, students' information and communication competence, motivational readiness for cognitive activity.

*Conclusions and directions for further researches.* Teaching geoinformation technologies taking into account regional situation, provides personality formation in the natural social and cultural environment. Thus, regional residence differences influence the content of their activities and interests. The education system based on regional characteristics supports interest. That is why teaching should be organized according to actual needs of students. Educational problems should be solved due to initiation and growth of activity, because real environmental situations exist within the students' surrounding.

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