

Review Paper

Mechanisms for Improving the Teaching of Economic and Social Geography

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ABSTRACT

Improvement of mechanisms for providing students with quality knowledge is one of the priority areas in our time. The research aims to analyse the effectiveness of the use of methods of teaching the subject "economic and social geography" and their improvement. The research aims to provide recommendations to eliminate errors in the functioning of this mechanism and to disclose the problems of development of teaching economic and social geography. Among the used methods analytical method, functional method, method of system analysis, method of deduction, method of comparison, and method of synthesis were applied. In the process of conducting the study, the features of pedagogy in the process of teaching the subject of economic and social geography, as well as their comparison with other generally accepted methodologies were pointed out. Ineffective mechanisms that need improvement for use in modern teaching practices were found. Assessment of economic and social geography teaching tools was also considered. It was determined that in the system of higher education geographical disciplines, as well as other subjects, need to improve quality, by changing the existing methodological system, as well as modernization of processes and optimization of methods and technologies of the educational process organization. The practical value lies in the use of the identified results, solving the problems associated with improving the effectiveness of training for the teaching of the subject, to bring this process to a new level.

HIGHLIGHTS

- The research relevance of the teaching of economic and social geography is predefined by the fact that the education system is an important driving force of world development and the main factor of its stability.

Keywords: Educational process, learning technology, crossbow algorithm, methodological system, features of pedagogy

Education around the world these days is considered a major factor in sustainable development. Teachers of higher education institutions constantly need to use effective teaching methods and for this purpose are involved in the process of developing

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ways to develop constructive and technological competencies. Over time, a conditional scientific environment has been created, which exists to support the right conditions of quality education, which in turn allows students to fully realize their abilities. But there is also a need to improve the content of education and the introduction of modern methods and ways of learning because of the problem of constant innovation and change in the rapidly developing science and technology. The research aims to perform an objective analysis to identify effective mechanisms in teaching, as well as their improvement, in the subject of “economic and social geography”. The research will provide an opportunity to develop a comprehensive and perfect teaching process for the above-mentioned subject and minimize errors in this process. To cope with the issue of improving the educational process, it is necessary to introduce modern methods into the conventional system of teaching.

Following N.K. Komilova *et al.* (2019), the development of science and scientific infrastructure is important in the implementation of program tasks for the advanced development of the country, and the development of science depends on the territorial organization of this sphere, the proper placement of research institutions in the cities of the country. According to A. Rasulov and D. Dusnazarov (2022) and M.M. Juraevna and Q.M. Nurmatjonovna (2021), in modern conditions significantly increases the importance of methodology, providing for the rationalization of activities in the system of geographical education. Its rapid development concerning practice is determined by comprehension and systematization of knowledge about the science itself, its structure, sources, and directions of further development.

O.U. Abdimuratov (2020) offers teachers of the geography of higher education institutions, the following modern requirements, the methodology of lessons in the form of practical work with the use of new learning technologies, and the use of local material. Students at practical lessons need to learn to find means independently and create conditions for more effective learning while ensuring the process of cognitive activity, developing skills of working with literary, statistical, and other sources of information; systematically paying attention to the performance of independent assignments and the quality of work.

R.F. Turakulovich (2022) says that an important role in the pedagogical skill of the teacher plays the design of the educational process. Based on methodological approaches and principles developed a theoretical model of the process of training future teachers to use statistical methods, which consists of interconnected different blocks, where among the applied research methods the determining ones were theoretical analysis of psychological and pedagogical research sources, description, synthesis, systematization, data analysis, their comparison and generalization, methods of prediction and pedagogical modeling.

It is worth noting that the issue of shaping an effective learning process that would keep up with current realities is of value, so there is a need to explore ways to overcome this problem and develop a certain list of recommendations.

MATERIALS AND METHODS

The research on current problems of teaching economic and social geography was carried out with the help of methods that reveal the theoretical and practical content of the object. The research used analysis of scientific and pedagogical literature, materials of dissertations, as well as generalization of pedagogical experience of the subject of geography. The analytical method highlighted the problems in the learning process in scientific institutions, namely the development and implementation in the educational process of new pedagogical technologies with the need to use non-traditional methods and forms of organization of training. The functional method helped to analyse the role and essence of the educational process at different stages of its implementation, specifically the subject of economic and social geography, and its features in teaching. Thanks to the method of system analysis, it was possible to comprehensively study the problem, the structure of activities, their interaction, and based on which conclusions were made. This method of analysis is based on the principle of stage-by-stage study of individual components and includes goals, objectives, and features of the development of the learning process.

Using the method of deduction managed to reveal the concept of “geography teaching” through the prism of highlighting its characteristic features

for a full analysis of the work and problems of this process, in consequence of which the logical conclusions on the organization of teaching activities were indicated. The method of comparison helped to consider the analysed methods and techniques by comparing them with each other, highlighting the advantages and disadvantages of each of them for the creation and application by a teacher of integrated teaching of the subject “economic and social geography”. Applying the method of synthesis, the obtained results of theoretical and practical nature were indicated to identify recommendations that contribute to solving problems, as well as improving the course of teaching and the prospects for reducing errors in the application of modern methods of the process.

Next, the practical component was studied. It consisted in studying special methods aimed at solving specific tasks of economic geography, their peculiarities of application, as well as noting their importance for the study of this subject. In addition, various techniques for improving the conduct of the learning process, their structural components, advantages, and disadvantages were analysed. And the final part is, based on the results obtained, to consider the necessary recommendations in highlighting specific problems and in the development of course teaching in higher education institutions, namely the subject “economic and social geography”, which will contribute to the solution of issues and the development of pedagogical skills of the teacher. As a result, the purpose of this sequence was to assess the feasibility of implementing an effective system of teaching the subject as an indicator of modern education.

RESULTS

Currently, innovative teaching can be compared to the development of science, the methodology of education, and the ability to adapt to social demands based on education following the standards imposed by the world. Geography education in developed countries focuses on building students’ skills and competencies. Also, geographic education emphasizes the study of scientific subjects, many theories, laws, and categories. Relying on identified problems in student learning outcomes, taking action to address them, and creating an excellent pedagogical environment is the main task of the

teacher. This is caused by a teacher’s success in conducting the educational process is largely determined by the work.

The educational process of the course “Economic and social geography” is built with the requirements for the formation of geographical competence of students, economic indicators, statistics of the countries of the world, their potential, the study of international relations, knowledge, abilities, skills, qualifications, and abilities of students. As a result of goal-setting new innovative methods in the teaching of natural sciences were developed. Created methods are aimed at educating and instilling interest in students in the individual elements combined in geographic education, increasing the geographic culture of students and demonstrating the practical relevance of the studied geographic material, obtaining evidence of students’ knowledge. At the same time, the observation and analysis of economic and social processes in the world allow students to express themselves and increase their sense of participation in the learning process (Wood, 2020; Komiljonovna, 2022; Felix, 2021).

The following is a mechanism for teaching students about economic and social geography (Table 1).

To develop competencies in economic and social geography, various experiences in teaching science are first studied. The teaching process should be based on these experiences. When teaching science, the first choice is the form of teaching. Teaching methods should be adapted to the subject matter. Handouts are prepared and used based on visibility and teaching methods. Principles of learning are usually defined based on the development of theory and practical experience of the educational institution. The methodology of geographical education considers several main groups of principles of the educational process organization. The general principles include the scientific principle, the principle of existence, the principle of unity of learning, the principle of consistency and consistency, the principle of validity, the principle of integration, differentiation, and variability (Roehl *et al.* 2013; Yeung, 2019).

The fact that the elements of science are directly related to economic and social processes, phenomena, geopolitics, and the environment

Table 1: Formation of skills about economic and social geography in students

No.	Skills	Value
1	Experiments	Observation of economic, social, and political processes in the world, studying theories and hypotheses created in science
2	Forms	Dialogues, question-answer, meetings, seminars
3	Effective techniques	Explanation, narration, map method, question and answer, discussion, test
4	Effective instruments	Internet data, additional literature, multimedia, images of different countries, national symbols
5	Technology	Interactive organizers, discussion, testing
6	Knowledge and skills	Independent study, preparation of essays, work with contour maps, Internet data, monitoring and analysis of world political processes
7	Qualification factors	Experiments, economic and social processes in the world
8	Practical and methodological recommendations	Popularization of local and foreign experience, Organization of “geographical trainings”, Organization of “Modern Geographers” exhibition, Organization of “My favourite country” contest

Source: M. Henderson and R. Geoff (2015).

has led to the development of different types of teaching methods depending on how students learn the subject. As a result, specific methodological and geographical principles for organizing the educational process were identified, such as the principle of historicism, the principle of unity of the natural-geographical complex, the principle of visualization, and the principle of accessibility to nature. The principle of historicism is that natural processes and phenomena in historical geography explain the continuity and constancy of processes of change, emphasize the socio-economic component of geographical education, determine the continuity of the development of science at different stages and highlight the place of individual scientists in the formation and development of science. The principle of integration of natural geographic complexes and geographic environments serves as a guide for explaining the diversity of geographic envelopes, exchange, relativity, and interaction of matter and energy, and the development of individual groups and entire kingdoms. The principle of visibility is used to bridge the gap between concrete and abstract knowledge in the information provided, it is the physical, economic, and social perspectives that have the greatest impact on learning. The principle of access to nature determines the obligation of direct acquaintance with living beings in the natural environment (Day and Spronken-Smith, 2016; Yli-Panula *et al.* 2019).

As it was already mentioned economic and social geography studies objective regularities and

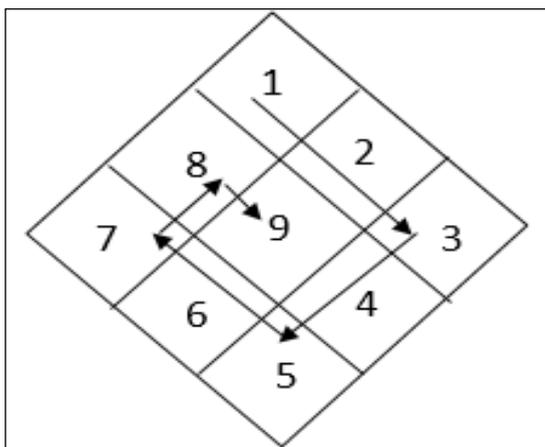
peculiarities of position and regional organization of all factors of productive forces in connection with general and regional natural, economic, and social conditions. The methods of study of economic geography include general scientific methods, that is, universal methods of identifying the object of study used in various fields. General scientific methods include methods based on the collection, systematization, and analysis of literature, maps and statistical data, constructive technical and economic calculations, forecasts, and modeling (Lanyi, 2012; Andresen and van den Brink, 2013). Special scientific methods aimed at solving specific problems in economic and social geography include the method of system analysis, the economic-statistical method, the method of comparative description, the historical-comparative method, and the method of economic-mathematical analysis (Castree *et al.* 2022).

The system analysis method is a comprehensive study of problems, economic structures, and internal interrelationships, supplemented by the study of their interaction, based on which conclusions can be drawn. It requires a comprehensive study of the problems, economic structure, conditions, and features of nature and the economy. System analysis covers all aspects of socio-economic development and is the basis for making assumptions about the optimal development and distribution of productive forces and the regional organization of the economy. The economic-statistical method is one of the most common methods in economic and

social geography. It is based on primary (general-scientific) and secondary (economic-geographical) methods, which process statistical data arrays of material and non-material production networks to obtain new information. In economic geography, statistical data sets from the economy serve as the basis for the construction of mathematical models. The methods of economic statistics can show the dynamics of economic sectors and the complexity of territories.

To improve the process of teaching economic and social geography, a “crossbow algorithm” can be used, which consists of six sequential points: definitions of the topic, the general idea; image search and selection to display the topic; allocation of 9 elements-images related to the idea, the topic; finding the connection between the elements, and determining the sequence; the summation of the value in one element; highlighting the specific features, and characteristics of each element.

The goal of the technique is to explain integration to students through the interconnection of images on the topic, creating a story-associative chain. The nine pictures are arranged in such a way that each picture is inseparably connected with the previous and the following one, with the central picture having to combine several meanings simultaneously (Fig. 1).



Source: D. Cockayne et al. (2018).

Fig. 1. Cross-scheme

For example, the topic of the course is “World Economy and Geography of Major Industries”. To begin, it is necessary to define the general concept of the topic, find images related to the topic, and identify the 9 main ones (this can be an image of the

industry, corporations, resources, transportation or transportation network, environmental problems), find connections, determine the sequence of elements and characterize them. Using this type of classroom instruction provides effective opportunities for students to conclude class topics, create problem situations, synthesize and summarize what they have learned, and do creative homework based on positive and critical analysis through the exploration of material on new topics.

DISCUSSION

The quality of research that has been carried out over the process of teaching the subject of economic and social geography to identify effective methods of improving it is an urgent issue of modern education. One of the requirements for the content of the teaching process is to meet the requirements and adequately show the present level of development of the relevant sciences. The content of economic and social geography is changing quite rapidly, mainly because new areas of economic and social life, such as management, finance, politics, and the environment, are included in the analysis. In addition, the potential of information technology in research and the presentation of results is growing. Therefore, the teaching of economic and social geography must take into account the teaching profile, all socio-economic and geographic courses included in the curriculum, and the optimization of content.

A. James *et al.* (2018) and H.W.C. Yeung (2019) point out the expediency of seminars on theoretically controversial issues, and current topics of economic and social geography, i.e., different approaches to the analysis of the regional organization of production, geography of regions, regional policy, sustainable regional development. Assignments should satisfy students’ needs for working with information, such as classification, categorization, selection, and conversion from textual to visual form. A system of assignments divided into several variants depending on the level of complexity will be effective. Individualization of tasks can increase the independence of students. When using map resources, it is advisable to use both electronic versions and printed map books. The results of research on the individualization of the course “economic and social geography” and the

development of tasks, depending on the level of knowledge of the student, indicate the improvement of the effectiveness of the learning process and show promise in the application. But the issue of qualitative assessment of knowledge, skills, and level of student interest remains relevant.

R. Howitt (2022) and Heiman M.K. (1997) considers the use of “critical thinking technology” to be effective in teaching the subject. The goal of the technology is to teach the student to think independently, understand the structure, and convey information in a way that others discover something new. Critical thinking, using exploratory methods in the study of science, asks questions and regularly seeks answers to them. In the process of applying this technology, acting in a group, and communicating with each other, students take part in an active construction of knowledge, obtaining the necessary information to solve the set task. There may be benefits from the use of such technology, specifically an increase in student efficiency, but it is traditional, and no novelty or innovation of this methodology.

CONCLUSION

The research identified various trends in improving the teaching of social and economic geography. The main goals of teaching the subject, which is based on external influencing factors, were highlighted. General pedagogical principles of the organization of the teaching process, as well as principles that directly depend on economic and social processes, phenomena, geopolitics, and the environment were highlighted. Several effective types of teaching the subject, which can be applied by the teacher depending on the scientific environment, were also outlined. Economic geography research methods have been outlined, which include universal methods of identifying the object of study used in various fields. The types and methods of organization of teaching in different types of classes are diverse and are aimed at providing conditions for the effective participation of students in the learning process, the use of innovative technologies, and reinforcing components that are responsive to the interests of sustainable development. The “crossbow algorithm” is proposed.

In conclusion, it can be said that in the professional activity of a teacher, there is always room for pedagogical search and creativity, and not at the level of traditional methodology, but at the next technological level. The development of technology as an integral part of scientific methodology means that the educational results of the teacher’s activity are guaranteed. Students then determine these results in assessing the quality of education in the subject area. Modern education requires a fundamentally new educational system, based on the best traditions and considering the individual characteristics of students. Therefore, it is very important to develop learning techniques, in other words, to organize students’ learning activities with clear goals and planned results.

REFERENCES

- Abdimuratov, O.U. 2020. Possibilities of using interactive methods in independent learning of natural geography lessons. *Acad. Res. in Edu. Sci.*, **3**: 1306-1312.
- Andresen, B.B. and van den Brink, K. 2013. *Multimedia in education*. UNESCO Institute for Information Technologies in Education, Moscow.
- Castree, N., Leszczynski, A., Stallins, J.A., Schwanen, T. and Patel, Z. 2022. Reconstituting geography for the 21st century. *Envir. and Plan., F* **1**(1): 3-6.
- Cockayne, D., Horton, A., Kay, K., Loomis, J. and Rosenman, E. 2018. On economic geography’s “movers” to business and management schools: A response from outside “the project”. *Envir. and Plan. A: Econ. and Space*, **50**(7): 1510-1518.
- Day, T. and Spronken-Smith, R. 2016. Geography education: Fieldwork and contemporary pedagogy. *Inter. Enc. of Geogr.: Peopl., the Earth, Envir. and Tech.* <https://doi.org/10.1002/9781118786352.wbieg0523.pub2>
- Felix, A.A. 2021. *Integrating geography teaching and learning using information and communication technology*. University of the Free State, Bloemfontein.
- Heiman, M. K. 1997. Science by the people: Grassroots environmental monitoring and the debate over scientific expertise. *J. of Plan. Edu. and Res.*, **16**(4): 291-299.
- Henderson, M. and Geoff, R. 2015. *Teaching and digital technologies: Big issues and critical questions*. Cambridge University Press, Cambridge.
- Howitt, R. 2022. Ethics as first method: Reframing geographies at an (other) ending-of-the-world as co-motion. *Envir. and Plan., F* **1**(1): 82-92.
- James, A., Bradshaw, M., Coe, N.M. and Faulconbridge, J. 2018. Sustaining economic geography? Business and management schools and the UK’s great economic geography diaspora. *Envir. and Plan. A: Econ. and Space*, **50**(6): 1355-1366.

- Juraevna, M.M. and Nurmatjonovna, Q.M. 2021. Methods and technology of teaching economic and social geography. *J. NX – A Mult. Peer Rev. J.*, 7(12): 108-111.
- Komiljonovna, D.S. 2022. Methods of using statistical data in the lessons of economic and social geography. *Eur. Res. Bull.*, 4: 60-62.
- Komilova, N.K., Hudayberganova, R.T., Murtazaev, I.B., Nazarova, H.O.A. and Madaminov, Z.H. 2019. Economic and geographic problems of improvement of industrial sectors and local structure of Uzbekistan. *J. of Adv. Res. in Law and Econ.*, 6(44): 1916-1928.
- Lanyi, C.S. 2012. *Virtual reality and environments*. IntechOpen Limited, London.
- Rasulov, A. and Dusnazarov, D. 2022. Use of foreign experiences in ensuring effectiveness of geography education. pp. 175-180. *In: Proceedings of International Congress on "Multidisciplinary Studies in Education and Applied Sciences"*. Conference Zone, Ottawa.
- Roehl, A., Reddy, S.L. and Shannon, G.J. 2013. The flipped classroom: An opportunity to engage millennial students through active learning strategies. *J. of Fam. and Cons. Sci.*, 105(2): 44-49.
- Turakulovich R.F. 2022. Improvement of cognitive mechanisms of continuous professional development of future geography teachers in digital education conditions. *J. of Ped. Inv. and Pract.*, 15: 116-119.
- Wood, A. 2020. Utilizing technology-enhanced learning in geography: Testing student response systems in large lectures. *J. of Geogr. in High. Edu.*, 44(1): 160-170.
- Yeung, H.W.C. 2019. Rethinking mechanism and process in the geographical analysis of uneven development. *Dial. in Human Geogr.*, 9(3): 226-255.
- Yli-Panula, E., Jeronen, E. and Lemmetty, P. 2019. Teaching and learning methods in geography promoting sustainability. *Edu. Sci.*, 10(1): 5.

