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## Preface

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# Improving the teaching of social geography in pedagogical universities for sustainable development

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**Abstract.** In the field of sustainable development, which is supported by the United Nations, this article addresses the key factors of strengthening the teaching of socio-geographical sciences for the students of the "Geography" department of pedagogical universities. The study of the "World Economic and Social Geography" course is used as an illustration. Modern trends in the selection of educational content, structuring of the educational process, and assessing student achievement were identified through the analysis of documents governing the educational process, scientific-pedagogical literature, and summarizing the experience of teaching the course. Focusing on sustainable development issues while teaching all subjects, taking a thorough approach to the study of networks and regions, stimulating students' cognitive activity in all types of lessons, using technology effectively, including distance learning techniques, and ensuring that teaching assessments are transparent and account for students' educational accomplishments all serve to advance society's goals for sustainable development.

**Key words:** teaching, sustainable development, pedagogy

## 1 Introduction

According to the perspective of ensuring the sustainable development of society, it is essential to improve the quality of all education and the applications of it, to raise students' awareness of sustainable development through educational content, to foster critical and methodical thinking, and to develop a comprehensive understanding of the field of education. will be completed. interpersonal, problem-solving, and world outside[1].

The United Nations launched the "Sustainable Development Goals" in the twenty-first century as a global initiative aimed at enhancing humankind's standard of living and well-being and creating a just and stable society by systematically enhancing the global economic, social, and environmental situation. Special programs were created in accordance with 17 primary directions. One of them is "Quality education," in which the quality and programs of education must be reviewed in challenges and the difficulties of the twenty-first century[2].

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Social geography plays a crucial role in understanding the complex interactions between society and the environment. As we strive towards sustainable development, it becomes imperative to enhance the teaching of social geography in pedagogical universities. This literature review aims to explore existing research and scholarly works that focus on improving the teaching of social geography for sustainable development[3]. By examining the current literature, we can identify key approaches, methodologies, and pedagogical strategies employed in this field.

**Importance of Social Geography in Sustainable Development.** Numerous studies emphasize the significance of incorporating social geography into the curriculum of pedagogical universities. Social geography provides a holistic understanding of the social, cultural, economic, and political factors influencing sustainable development. It enables students to comprehend the complex spatial patterns and dynamics of human-environment interactions, thereby facilitating the formulation of informed decisions and policies[4].

**Integrating Interdisciplinary Approaches.** The literature highlights the need to adopt interdisciplinary approaches in teaching social geography for sustainable development. Incorporating knowledge from various disciplines such as sociology, anthropology, economics, and environmental studies fosters a comprehensive understanding of the interconnectedness between social systems and the environment. Integrating interdisciplinary perspectives helps students recognize the multidimensional nature of sustainability challenges and develop effective solutions[3].

**Experiential Learning and Fieldwork.** Experiential learning, including fieldwork and practical activities, is emphasized as a valuable pedagogical approach in social geography education. Fieldwork provides students with firsthand experiences and opportunities to engage with local communities, observe socio-environmental processes, and analyze real-world issues. Such experiential learning enhances students' critical thinking, research skills, and empathy, fostering a deeper understanding of social geography and sustainable development.

**Technology Integration.** The integration of technology, particularly Geographic Information Systems (GIS) and remote sensing, is gaining prominence in teaching social geography for sustainable development. GIS enables students to analyze spatial data, map social phenomena, and visualize environmental challenges. Remote sensing techniques aid in monitoring land cover changes, urbanization, and environmental degradation. Integrating these technologies into the curriculum equips students with essential geospatial skills and enhances their capacity to address sustainability issues effectively.

**Community Engagement and Participatory Approaches.** Engaging local communities and stakeholders in the learning process is crucial for teaching social geography for sustainable development. Participatory approaches, such as community-based research, collaborative projects, and service-learning initiatives, empower students to work directly with communities, identify their needs, and co-create solutions. These approaches foster active citizenship, social responsibility, and a deeper appreciation for local perspectives, enhancing the transformative potential of social geography education[5].

Economic and geographical courses are traditionally part of the basic training of specialists in geography and have a significant potential for improving the level of students' competencies in sustainable development. Their content and teaching methods do not

remain unchanged. As a pedagogically processed reflection of the relevant scientific courses, the academic courses respond to changes occurring in the economic and geographical science and in pedagogy[6]. In addition, changes in social life are also reflected in the content and methodology of economic geography study. On the one hand, this happens indirectly, through the connection to the branch of science, because science, as it develops, responds in turn to the challenges of society. On the other hand, society directly affects the entire system of higher education through the social order for a specialist with certain competencies. At the same time, pedagogical research does not pay enough attention to the changes taking place in the methodology of teaching geography at the higher education level. So, at the level of dissertations, the history of higher geographical education [2], the issues of training teachers of geography [3-7] are studied. The issues of teaching methodology for non-pedagogical geographers in the system of higher education are not presented in the topics of dissertation research for 2012-2022. Some aspects of geographers' training, such as the role of individual courses and information technologies in the educational process, the formation of a number of personal qualities and professional competencies, including those in the field of sustainable development, are discussed in scientific articles and conference materials [8 – 14]. Thus, there is a contradiction between the need to improve the practice of teaching disciplines of professional training of students geographers in accordance with modern requirements and interests of sustainable development and insufficient scientific and methodological development of this problem. The goal of our work is to summarize the experience of teaching economic geography for students studying in the field “Geography”, to identify current trends in the selection of content and methods of educational process organization in the interests of sustainable development on the example of mastering the course “Social Geography of World”[7].

## 2 Materials and methods

Analysis of normative documents regulating the learning process, lesson plans, work programs and their annotations, which are in the public domain (the sample included Chirchik State Pedagogical University, Tashkent State Pedagogical University named after Nizomiy) analysis of scientific and pedagogical literature, conference materials, generalization of pedagogical experience in teaching the course[8].

## 3 Results

Course content. One of the requirements for the student course content is its compliance with the current level of development of the relevant science, an adequate reflection of its content [15]. The economic geography content is changing dynamically enough, primarily due to the inclusion in the field of analysis of new fields of economy and social life: management, credit and financial, political, environmental, etc. The possibilities of IT technologies in research and presenting their results are also being increasingly used. This leads not only to the emergence of new sections in existing economic and geographical courses, but also to the emergence of independent, highly specialized courses in new research areas. Therefore, when selecting the content of the “Economic and Social Geography of World” itself, it is necessary to consider the educational profile, the whole range of socio-economic and geographical courses included in lesson plan, to optimize the content through the active use of interdisciplinary connections, or integration of narrow

courses into a complex one. The thematic course structure, as a rule, includes the following main sections: theoretical frameworks of the socio-economic geography of World; position of World in the modern world; general characteristics of natural conditions and resources, population and economy of World, including the development and location of the main sectoral and intersectoral complexes; characteristics of economic and geographical regions. Some programs do not have a regional section. In general, while maintaining a comprehensive approach to characterizing the territorial organization of World's population and economy, the depth and detail of consideration of these or other sections varies. Informing in the field of sustainable development is provided through attention to the environmental problems of industries and territories, the issues of economic growth and its consequences, the environmental spectres for transforming the territorial and sectoral structure of the economy, examples of "green" technologies in production, the study of socio-economic, demographic problems of regions, constant monitoring of relationships in socio-economic systems of different ranks. In this aspect, it seems important to preserve the regional section, as it contributes to the formation of an integrated approach to the study, assessment and planning of socio-economic development of regions of different scales.

Methods and forms of training organization. The effectiveness of competencies formation in sustainable development depends on the applied educational technologies, their diversity and innovation, the presence of cooperation and dialogue in educational process. It is also worth noting the need for reasonable and appropriate use of electronic learning technologies, distance online courses, which allow to increase the mobility of students and the availability of education, which also meets the interests of sustainable development. The lesson plan provides for lectures, practical classes and independent work of students in economic geography. In modern conditions of increasing quantity and availability of information and reduction of hours for classroom work, as well as based on the above provisions, the use of only traditional informational lectures seems ineffective. At the same time, refusal from lectures can lead to a loss of consistency and uniformity of semester work of students, a decrease in the scientific level of education. There are a number of methods for conducting a lecture class, that are beneficial in increase the cognitive activity of students. Thus, the higher school uses problem lectures, binary lectures, "flipped learning" model, visualization lecture, web lecture, slide lecture, electronic lecture system, lecture-conversation, lecture-discussion, case study lecture, pressconference lecture are used in higher education. Since the pedagogical community has not developed a generally accepted understanding of all these types of lectures, we consider it necessary to give an explanation of the used terms.

#### **4 Discussion**

Problem-based and binary lectures have been used in higher education pedagogy for quite a long time. Their methodological and didactic foundations were laid in the works of many scientist. in the second half of the twentieth century. In the course of a problem lecture, a problem situation, which is resolved in the process of dialogue between lecturer and audience [13], or when teacher himself shows the progress of solving the problem is modeled [14]. This method is especially effective when studying some theoretical approaches to the analysis of economic territorial organization, problems of development of individual industries and regions. A binary lecture can be seen as a variant of problem-based learning, implemented by two teachers. A live discussion of a debatable issue is modeled before the students, and various points of view are presented. The co-presenter of the binary lecture can also be a student who has the necessary level of training.

During the lecture-conversation, the teacher engages students in a dialogue on the topic under consideration. In our opinion, the most productive use of a heuristic conversation is when the teacher's questions lead students to solve the problem and thus gain new knowledge.

The lecture press conference is based on students' questions to teacher. The questions are collected, systematized, and then a lecture is given that contains systematized answers to the raised questions. Another option for this type of lecture is for students to report on the questions raised by the teacher [15]. This approach seems effective in discussing problems of economic restructuring in the country, regional development, environmental and demographic problems.

A lecture with case studies involves students analyzing problem situations related to the material being studied and making a decision about them [15]. The material for case problems tasks can be environmental problems of a particular territory, deciding on the advisability of building an enterprise in a particular locality, the development of a particular industry in the region, planning the development of social infrastructure, etc. Such a task is presented in the form of a text or video clip, with questions on the problem requiring the application of knowledge obtained at the lecture or in independent work. The problem is solved together, by whole student group, the teacher comments on answers, directs the discussion towards the best solution.

The "flipped learning" model assumes that students study new theoretical material independently, and in class they perform practical tasks on the topic, discuss the most important and difficult issues, and work in groups [10-13, 16]. Students receive theoretical material for independent study in the form of an electronic resource, a video lecture, a text document, a textbook paragraph. Also immediately may be offered and tasks for selfchecking or preparing materials for classroom work (questions to the teacher, the problems for discussion in the group, the task for peer control, etc.). When using electronic lecture complexes, elements of online courses in distance learning systems (for example, the element "Lecture" in LMS Moodle), training tasks, questions for automated control are built into them. Lecture-visualization supposes a visual presentation of information with the help of a visual series: graphs, charts, videos, illustrations, etc. Today most often visual materials are collected in a presentation. The visuals are accompanied by the teacher's comments [9, 5, 7, 8]. In the course "Economic and Social Geography of World", this type of lecture is in demand when studying the location of natural resources, industry centers; the level, dynamics, and territorial differences of socio-economic indicators. As a specific geographical method of visualizing the material, we will distinguish the use of maps of different content, cartograms and cartodiagrams, allowing to visualize certain natural and socio-economic characteristics of the territory. Students can also be involved in the creation of cartographic material, which will not only contribute to the formation and consolidation of theoretical knowledge, but also to the development of practical skills of transforming information into a visual cartographic form.

A slide lecture is understood as a presentation containing drawings, diagrams, tables, and other materials, accompanied by a voice-over narration. Such a lecture is an independent learning unit and can be used in the organization of students' independent work, distance learning. Sometimes a slide-lecture is understood as an ordinary lecture read by a teacher and accompanied by a slide show. In this interpretation, it is close to a lecturevisualization.

Web-lecture – a relatively new method of conducting classes and involves the use of distance technology. Following L.Yu. Shchipitsina, by web-lecture we will understand "a predominantly monological synchronous form of organization of academic interaction,

allowing a systematic presentation of theoretical ideas on one of the scientific problems to a group of listeners, who can be located in different places, using various computer technologies and services”. [9, 8]. An asynchronous form of web lecture – a recording of synchronous lecture or portions thereof. It is also possible to create special video lectures [10]. In the course “Economic and social geography of World”, this format can be applied in the “flipped learning” model, when the lecture recording is offered as homework. It also seems appropriate and interesting to include synchronous web lectures (or recordings thereof) given by leading scholars in economic geography. Unfortunately, to date, the latter option is not widespread.

Also at lectures are used such methods of activation of cognitive activity, as making a mental map by students independently, in groups, together with the teacher; maintaining an electronic glossary; making a supporting outline, including hypermedia, analytical tables [9]. The compilation of “business cards” for industries or economic areas can be used. To do this, the teacher previously creates a template form, which students fill out during the lecture. For example, a business card for an industry may contain the following questions elements: industry name; sub -industry; characteristics of raw materials and finished products; location factors; major centers; intra- and inter -industry connections; problems and prospects. The introduction of elements of automated knowledge control at lectures with tests, interactive tasks, crossword puzzles, rapid response systems will help to control the assimilation of knowledge by students, correct the learning process in a timely manner [9, 11]. The lectures intensification with the help of electronic technology requires good equipment of educational buildings with computers and communication channels. The problem of providing each student with an electronic workplace in the classroom can be solved using the concept of BYOD (Bring Your Own Device) [9]. When preparing electronic materials, the teacher should pay attention to the possibility and correctness of their work on tablets and smartphones.

It should be noted that the most effective is the use of various types of lectures and methods of enhancing the cognitive activity of students on them. The choice of forms and methods for a particular lesson is made taking into account its topic, goals, level of preparedness and interest of students, technical equipment, and teacher's capabilities. Thus, we consider it advisable to maintain lectures as one of the main forms of classes in the discipline “Economic and social geography of of the world” and other economic and geographical courses, while revising their methodology towards activation of students' activity, wide use of electronic learning tools, increased integration of students' independent and classroom work.

## 4 Conclusions

The study identified the following current trends in improving the teaching of economic geography. Economic and geographic disciplines remain an important component of the basic training of geography students. Changes in the content of economic and geographic courses correspond to the changes taking place in scientific disciplines: new areas of research in science and, accordingly, new sections of academic courses appear. While maintaining the overall structure of the course “Economic and social geography of World”, an integrated approach to the study of the territorial organization of population and economy, we can talk about the variability in terms of coverage depth and breadth of certain issues in programs of different universities. Informing students in the field of sustainable development of territories is carried out through attention to the

interrelationships in socio-economic systems, environmental, socio-economic problems in the study of all course topics. The methods and forms of learning organization within the defined plan types of classes are varied and tend to create conditions for the active involvement of students in systematic learning activities, the use of information technology, strengthening the independent component, which is in the interests of sustainable development. It seems advisable to maintain lectures as one of the main forms of classes, with the widespread use of electronic learning tools, the use of techniques aimed at enhancing students' activities, increasing the integration of their independent and classroom work. When conducting practical lessons, the attention is also paid to creating conditions for increasing the students' activity, independence. Independent work of students includes the study of new material in the "flipped learning" model with the help of information and traditional technologies, preparation for seminars, creating reports, presentations, compiling characteristics of regions and industries, work in distance learning systems. The introduction of distance learning technologies is important for student mobility and educational availability. We consider PRS to be the most rational way of assessing achievements in the course, since it helps to organize regular work in the semester, provides objectivity and transparency in assessing the results of students' educational activities throughout the entire study period. These trends improve the quality of education and serve the interests of sustainable development.

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