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Geoglobal issues as an object of study in higher education in Bulgaria

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Abstract: *The main objective is to study the presence of geo-global issues as a subject of study in the curricula of the higher education institutions in Bulgaria that have geography majors - University of Sofia, University of Veliko Tarnovo, Southwest University in Blagoevgrad and University of Shumen. In order to achieve the set goal, a comparative analysis of the curricula is being implemented as a basic part of the study documentation. The presence of compulsory, elective and optional courses, which are meaningfully related to the geo-global issues, is established.*

On the basis of the content analysis, conclusions are drawn about the need to strengthen the presence of geo-global issues in the curricula and to seek opportunities for their expansion in the curricula of geography majors.

Keywords: geoglobal issues, geography education in higher education

Introduction

The time in which we all live is transitional - between two centuries, between the old and the new, between European, Balkan and national values and mores and those of our own inner world. And as Tennessee Williams said, „Time is the longest distance between two places“. Besides time, space is also transient. As we have emerged from the pandemic, we have expanded the geographical boundaries of our conceptions of our own world, and of course of the real one. This has given us a number of advantages to see how different it is and how small we ourselves are in it. But at the same time, it has also pointed out many disadvantages that we can overcome.

All of these reflections have pointed us to issues that are both ours and the world's. Problems, some of which humanity is only deepening, and others which it is trying to partially solve. We have called these

problems **geoglobal** in order to reveal their importance and comprehensiveness, as well as the geographical point of view that is decisive for their holistic and horological character and specific manifestations.

The exacerbation and complex interweaving of these issues can be considered as one of the most important features of our contemporary times. They have a diverse character - cultural-political, socio-economic, demographic, natural resource, environmental, military-political, legal, etc [7].

A specific feature of geoglobal problems is their territorial dimension. The problems are geographically worldwide, but at the same time they manifest themselves regionally, with local manifestations in individual countries. This proves the relationship between the categories „general“ (global) – „particular“ (regional) – „single“ (local) [22].

Apart from their different territorial dimension at the global, regional and local levels, the problems defined as geoglobal should be related to the interests of the whole mankind, be characterized by dynamics, be topical and influence the development of modern civilization, be a reflection of the complex processes of nature, society and economy and be able to be partially or completely solved through the efforts of all countries and peoples of the world.

The geoglobal problems are closely related and stem from the modern process of globalization, which is proved by a number of authors [1, 4, 5, 6]. Their study at the modern stage of development of human civilization occupies an increasingly important place in the educational systems of many countries of the world.

Due to their comprehensive nature and important significance, they could be placed at the basis in the development of the content framework of geography education in both secondary and higher schools [23].

Material and Methods

The main objective of this study is related to the investigation of the presence of geoglobal issues as a subject of study in the curricula of undergraduate geography majors in the higher education institutions in Bulgaria - University of Sofia “St. Kliment Ohridski”, University of Veliko Tarnovo, University of Blagoevgrad and Konstantin Preslavsky University of Shumen.

In order to achieve the set goal, a comparative analysis of the curricula is implemented as a basic part of the educational documentation. The presence of compulsory, elective and optional courses that are meaningfully related to geoglobal issues is identified. On the basis of the content analysis, conclusions are drawn about the need to strengthen the presence of geo-global issues in the curricula and to seek opportunities for their expansion in the curricula of geography majors.

Results and Discussion

Geographical education in the context of globalization

Contemporary geography education in higher education institutions is changing and evolving in line with ongoing global societal processes. Increasing attention is being paid to placing the human being at the centre of research, which marks the humanitarian stage in the development of geographical science. It is linked to the development of *cognitive geography*, in which the various spatial structures and their development are refracted through the individual's point of view via his or her personal experiences and attitudes. In this way, the acquired geographical knowledge and competences become an integrator of human logic through the mental representations of the individual.

Contemporary societal processes that influence the characteristics of geographical education in the context of globalisation are characterised by a transformation of spiritual values, which necessitates the establishment of *new relevant and sustainable substantive foundations* that ensure their functioning and can be used to build the moral image of future generations.

Undoubtedly, geographical education in its globalisation period of development is characterised by increasing *mobility*, through which certain borders and distances are overcome. This can be described as a positive trend, because it expands professional contacts within the geographical community at local, regional and global levels. Good European and global educational practices are becoming objectives in national educational strategies and support the process of forming a set of competences of university teachers, enriching them and creating conditions for their greater adaptability and flexibility.

Another traditional feature of geography education is its *interactivity*, which has proved its effectiveness in previous periods of educational development but continues to be relevant in the context of globalisation. This is associated with its focus on the applied side of learning to adapt students to modern socio-economic conditions and the labour market as well as enhancing the motivational side of learning.

A characteristic feature of geography education in higher education in the context of globalisation is its increased *digitalisation*, which is in line with increasing digitalisation in all areas of life. The so-called „digital revolution“ is having its impact on teaching and learning in all educational institutions through the incorporation of various digital tools that contribute to improved communication, increased flexibility and individualization in the learning process [21].

Another specific process that has an impact on geography education in higher education and partly counteracts the opportunities offered by mobility is the process of *unification*. It is aimed at the unification and standardisation of educational objectives, of didactic technologies recommended for their effective use, of national assessment criteria, within the limits of what is possible. The materials and documents of the International Geographical Union, the Association of Geographical Societies in Europe, the EU guidelines for

educational activities in the European Education Area, etc. can be used as a recommended framework. The degree of uniformity should not be absolutized, but applied creatively, taking into account the diversity of national stereotypes and peculiarities of national psychology of individual countries and their reflection in national educational strategies.

Another feature relates to the recognition of the *increased dynamics of change in geographical education*, compared to the changes in the twentieth century, which are a reflection of the rapid transformations in the modern world. The dynamics can be attributed to the curricular content of the geographical disciplines studied, to pedagogical technologies and didactic tools. This poses a certain challenge to teachers in higher education institutions to know and apply the new developments in world and national geography and the current trends in contemporary geography education.

Geoglobal Issues as Content Constructs of Geography Education in Higher Education in the Context of Globalization

In order to realize the main objective of the research we focused on geoglobal issues, which we adopted as meaningful constructs in the curricula of undergraduate geography majors in higher education institutions in Bulgaria, outlining contemporary problems in the world that need to be solved and building on certain educational values.

To concretize the existing heterogeneous opinions on the classification of the problems of modernity, we apply the geographical classification of geo-global problems [22]. According to it, the total number of generalized geo-global problems is 14 and they can be grouped into three groups (Fig. 1).

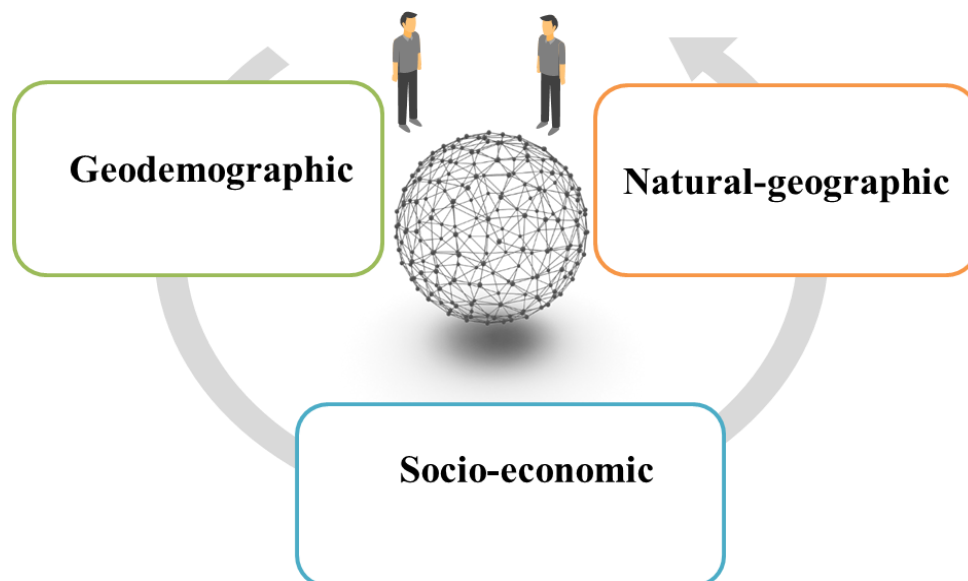


Figure 1. Major groups of geoglobal issues [24]

To the first group belongs a single problem, the demographic problem, which is directly or indirectly related to all the other problems of the other groups because it affects the demographic potential and the consequences of human activity.

The second group of natural-geographical problems includes global catastrophes and natural disasters, global warming and the water problem.

The third group of socio-economic geoglobal problems includes the socio-economic contradiction between poor and rich countries, social inequality and the spiritual and moral crisis of human society.

The remaining geoglobal problems are complex in nature and lie at the boundaries of interaction between the major groups. At the boundary between the group of natural-geographical and socio-economic problems, a complex geoglobal problem is identified, which is related to the depletion of natural resources. At the interface between the socio-economic and geo-demographic groups, three complex geoglobal problems are identified, which relate to international security, health and education.

The most complex are the food, environmental and world peace issues. They occupy the contact zone between the three major groups of problems - geodemographic, natural-geographical and socio-economic.

Analysis of geoglobal issues as a subject of study in the curricula of undergraduate geography majors in Bulgarian universities

Geographical education in higher education in Bulgaria is linked to studies at four universities. The University of Sofia „St. Kliment Ohridski“, which marked the beginning of academic geography in Bulgaria. It offers undergraduate studies in Geography, Regional Development and Politics, Geospatial Systems and Technologies, History and Geography, Geography and Biology, Geography and English. The newest degree programme to be taught in English is Climate Change and Governance, which is being offered for admission from the academic year 2023-2024. Due to the specific features of its foreign language teaching and the lack of parity with other undergraduate majors, its curriculum does not participate in the implemented analysis.

The second geographical university centre in the country is Veliko Tarnovo, where the Bachelor's degree in Geography, Regional Development and Geo-economics, Pedagogy of Education in History and Geography, Pedagogy of Education in Bulgarian Language and Geography, Pedagogy of Education in Geography and Physical Education and Pedagogy of Education in Geography and Information Technologies is implemented.

At the University of Blagoevgrad there are two accredited majors that make up the academic image of geography in Blagoevgrad. These are the Bachelor's degree programmes - Pedagogy of Geography and History Education and Geography and Regional Politics.

The fourth university geographical centre is Shumen. This year at the University of Shumen marks the 60th anniversary of the beginning of geography education and the 33rd anniversary of the restoration of the

Department of Geography. Today, geography education at the University of Shumen is represented by three undergraduate majors. One of them - Geography and Regional Politics is from the Professional field of Earth Sciences, and two - Geography and Biology and History and Geography are from the Professional field of Pedagogy of Education at....

The main criterion for the implementation of the applied content-analysis is the number of compulsory, elective and optional courses in the curricula of undergraduate majors, which are meaningfully related to geoglobal issues.

There are six bachelor's degree programmes at the **University of Sofia**, all related to geography. Three of them are in the Professional Field of Earth Sciences and three are in the Professional Field of Pedagogy of Education Of these, four majors study required courses related to contemporary geoglobal issues. The most widespread is the ecological problem, which is the subject of study in four bachelor degree programmes. Problems of education are analyzed in one major, as is the problem of natural resource depletion (Fig. 2). In the curricula of the oldest *Geography* major and the *Pedagogy of Education in Geography and Biology* major no compulsory courses related to geoglobal problems are found [9].

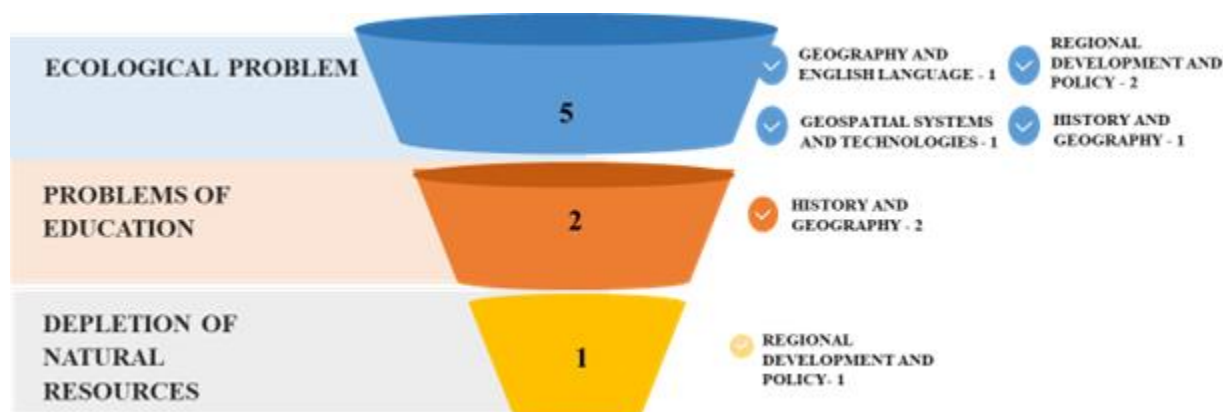


Figure 2. Number of compulsory subjects studied at the University of Sofia related to geoglobal issues

In the curriculum of *Regional Development and Politics*, there are three compulsory courses: the Fundamentals of Environmental Management and Sustainable Development, which address the environmental problem, and Environment and Natural Resources Part I and II, which can be meaningfully linked to the problem of natural resource depletion [10].

The discipline of Biodiversity, Landscape Ecology and Ecosystem Services, which is part of the compulsory courses of the curriculum of the Bachelor's degree in *Geospatial Systems and Technologies*, can be meaningfully linked to the environmental problem from the geoglobal problems [11].

Among the compulsory courses in the curriculum of the *History and Geography* major, two can be mentioned that relate to the problems of education - Interactive Methods in Education and History and Civic Education, and one - to the ecological problem: Landscape Ecology [12].

In the last curriculum, which gives pedagogical competence in Geography at the University of Sofia at the *Geography and English* major, one compulsory subject is found that can be related to geoglobal problems - Landscape Ecology, which refers to the ecological problem [13].

The picture with the elective subjects included in the curricula of the University of Sofia is considerably more varied. Logically, the largest number of disciplines is related to the problems of education - a total of seven in three bachelor's degree programmes in the Professional Field of Pedagogy of Education in..., followed by the environmental problem, which is present in six disciplines in three-degree programmes. Global catastrophes and natural disasters as a geo-global problem are covered in four disciplines of three majors. Demographic issues, the depletion of natural resources and global warming follow, and are studied in two undergraduate courses each (Fig. 3).

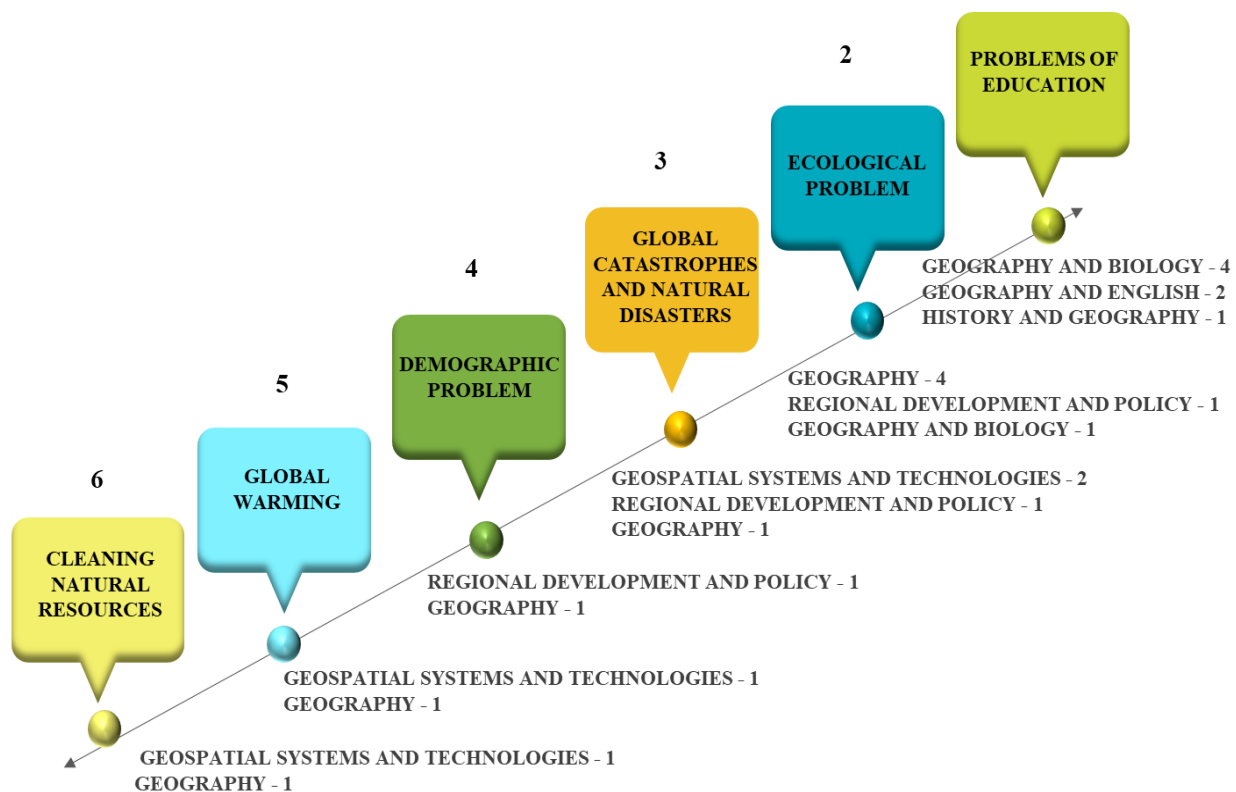


Figure 3. Number of elective courses at the University of Sofia related to geoglobal issues

In the curriculum of the *Geography* major, in the list of 59 proposed elective courses, one of them summarizes contemporary global and regional issues of humanity. There is a preponderance of electives that relate to environmental issues: Air Pollution and Air Protection, Regional Environmental Policy Management, Geoenvironmental Issues and Protected Areas of the World, and Global Ecology [8].

Of the electives in the *Regional Development and Policy* major, three can be linked to geoglobal issues. The discipline Ethno-political Conflicts in the EU is associated with the demographic problem, the discipline Natural and Geological Risks with the problem of global catastrophes and natural disasters, and the discipline Geoecological Monitoring and Environmental Expertise with the ecological problem [10].

In the *Geospatial Systems and Technologies* major, of the 29 proposed elective courses, the number of courses related to geoglobal issues is five, with one of them unifying them - Contemporary Global and Regional Problems of Humanity. The rest can be attributed to the following problems: to Global catastrophes and natural disasters - the disciplines Natural hazards and catastrophes and Assessment and mapping of flood threat and risk; to Global warming - the discipline Climate models and climate change research; to Natural resource depletion - the discipline Application of GIS in natural resource management [11].

In the curriculum of the *Geography and Biology* major there are logically present elective courses that are linked to the problems of education: Management of Relationships in Educational Environment, Civic Education, Inclusive Education for Children with Special Educational Needs and Contemporary Models of Geographical Education [9]. The *History and Geography* curriculum includes one elective that can be considered in the context of geoglobal issues in education: the Strategy of Geography Education in Secondary Education [12]. In the curriculum of *Geography and English*, there are two electives, Civic Education and Inclusive Education for Children and Students with SEN, which can also address certain geoglobal issues of education [13].

The least number of elective courses in the curricula of the Bachelor's degree programmes in geography at the University of Sofia are those that can be meaningfully related to geoglobal issues. Examples of the presence of such subjects are the curricula of *Geography and Biology*, which includes the elective Disaster Protection and First Aid, which can be attributed to the problem of global catastrophes and natural disasters; *History and Geography* with the elective Civic Education in the System of Bulgarian Education (1878-1944), which addresses the problems of education; and *Geography and English* with the course Strategy of Geographical Education, which can also be attributed to the problems of education.

Around two geoglobal issues are united the compulsory academic disciplines with the study of geography at the **University of Veliko Tarnovo** - ecological and social inequality. They are present in the curricula of the four Bachelor's degree programmes in the Professional Field of Pedagogy of Education in ... and absent in the curricula of the degree programmes in the Professional Field of Earth Sciences (Fig. 4).

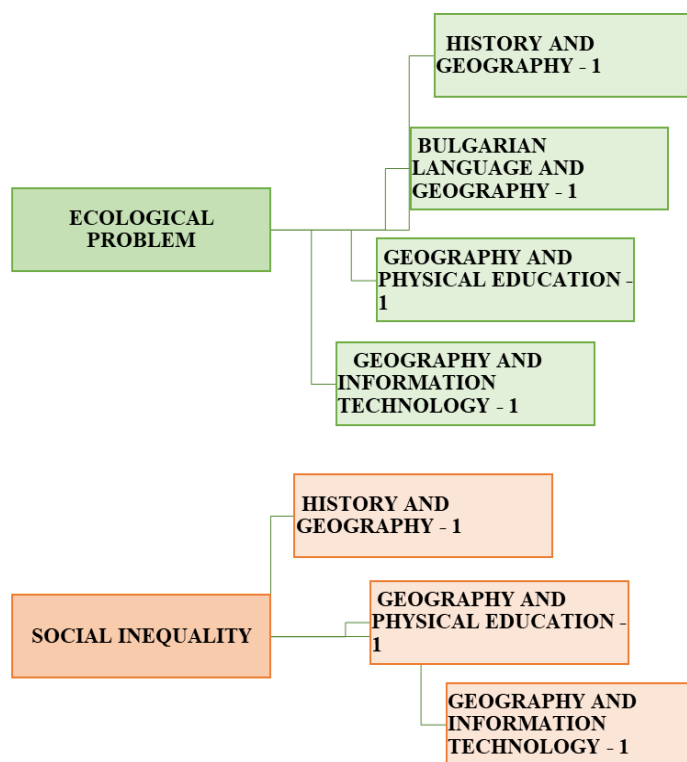


Figure 4. Number of compulsory subjects studied at the University of Veliko Tarnovo related to geoglobal issues

Two compulsory courses may be established in the curricula of the courses *Pedagogy of Education in History and Geography*, *Pedagogy of Education in Geography and Physical Education* and *Pedagogy of Education in Geography and Information Technology*, to be connected with the geoglobal problems – Landscape and Environmental Studies, which can be referred to the complex ecological problem, and Social Geography, which can be included in the group of socio-economic geo-global problems, and more precisely in social inequality [14, 15, 16]. In the curriculum of the *Pedagogy of Education in Bulgarian Language and Geography* major one can single out one compulsory discipline closely related to geoglobal problems – Landscape and Environmental Studies [17].

Slightly more diversity is reported in the elective courses, similar to the University of Sofia, where there are six, and in the geography courses of the University of Veliko Tarnovo there are three. These are the problems of education that are widely covered in the curricula of pedagogical bachelor's degree programmes with geography. Next is the problem of the socio-economic contradiction between poor and rich countries and the environmental problem, which are observed in the curricula of *Geography* and *Regional Development and Geo-economics* majors (Fig. 5).



Figure 5. Number of elective courses studied at the University of Veliko Tarnovo related to geoglobal issues

The distribution of electives that can be linked to geoglobal issues by majors is as follows:

- One elective course is found in the *Geography* major – Sociology of Geography, which links the impact of the problem of social inequality and the socio-economic contradiction between poor and rich countries from the group of socio-economic geo-global problems [18].

- The *Regional Development and Geo-economics* major includes three electives. Of a summative nature is the discipline that deals with the general problems of globalization and regionalization. To the group of natural-geographical geoglobal problems can be attributed the discipline: Natural Geosystems and Environmental Protection, and to the group of socio-economic problems – the discipline Regional Conflict Studies [19].

- In the *Pedagogy of History and Geography Education* major students can choose from five disciplines that are logically linked to the problems of education: Civic Education, Global Education and Active Learning, Geoecological Education, Practical and Applied Aspects of Problem-Based Geography Education and Didactic Problems of Geography [14].

- In the *Pedagogy of Education in Bulgarian Language and Geography* major, the studied electives are four and are associated with the study of problems of education, which focus on health and environmental education, civic education, applied aspects of problem-based geography education and geoecological education [17].

- In the *Pedagogy of Geography and Physical Education* major and *Pedagogy of Geography and Information Technologies* major, five elective courses are highlighted, which are related to the problems of education and partially overlap with the disciplines in the other pedagogical majors: Civic Education, Health and Environmental Education, Interactive Methods in Education, Geoecological Education, Practical and Applied Aspects of Problem-Based Geography Education, Didactic Problems of Geography [15, 16].

Optional subjects in the curricula of the majors studying geography at the University of Veliko Tarnovo, which are meaningfully related to geoglobal problems, can be listed in three majors: *Geography*, *Pedagogy of Geography and Physical Education* and *Pedagogy of Geography and Information Technology Education*. The problems are of education, environmental and global catastrophes and natural disasters [18, 15, 16].

The geography undergraduate majors at **Southwestern University** lack required and elective courses on the issues under study.

According to the curriculum of the *Geography and Regional Policy* major, nine elective geography courses can be listed that are relevant to geoglobal issues (Fig. 6). The predominant number of them is related to the ecological problem and geo-global problems from the group of natural geography - Geoecological Monitoring, Biodiversity Conservation, Protected Areas of Bulgaria, Air Pollution, Water Pollution, Environmental Policy in Bulgaria, Regional Geoecological Problems of Bulgaria, Global Climate Change. Only the discipline: Social Problems and Social Policy of Bulgaria could be referred to the group of socio-economic problems, and more precisely to the problem of social inequality [2].

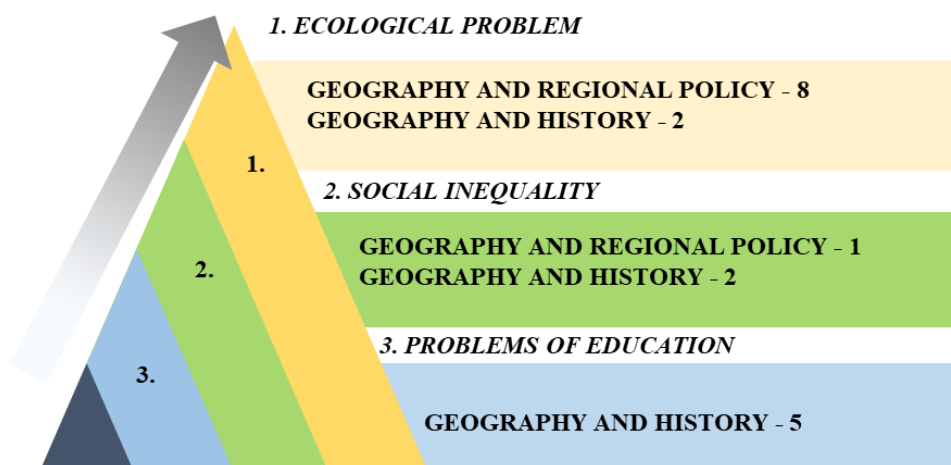


Figure 6. Number of elective courses studied at Southwestern University and related to geoglobal issues

The established significant predominance of natural-geographical disciplines that are related to geoglobal issues is explained by the profiled specialization of the lecturers of the Department of Geography, Ecology and Environmental Protection, which administers the training.

The other Bachelor's degree in *Pedagogy of Geography and History Education* major offers three elective courses that can serve as a substantive basis for the study of the geoglobal problems of our time: Protected Areas in Bulgaria; Landscape-Ecological Problems of Bulgaria and Social Geography and

Geography of Culture. They also give priority to the complex ecological problem and the geo-global problems of the group of natural-geographical and socio-economic [3].

Electives can also be identified that address the problems of education such as - Civic Education, Inclusive Education for Children and Students with Special Educational Needs, Pedagogical Interaction in Multicultural Environments, Environmental Education, Interactive Methods in Geography Education.

Of the elective disciplines, the greatest similarity can be reported with the University of Veliko Tarnovo, where two of the problems are common - environmental and educational problems. A different problem with partial commonality is that of social inequality, which is advocated at the University of the South-West, while at the University of Veliko Tarnovo it is related to the socio-economic contradiction between poor and rich countries.

The analysis of the curricula of the *Geography and Regional Politics* major of the **University of Shumen** reveals the presence of one compulsory discipline, which comprehensively studies geo-global issues. Such a complex discipline is also studied as an elective in the curricula of undergraduate majors of the University of Sofia – *Geography* major and *Geospatial Systems and Technologies* major.

Of the elective subjects thematically related to geo-global problems and studied in the Bachelor's degree programmes, 14 subjects can be listed, which are divided into four groups. The first group is clustered around problems of education, which are studied in seven disciplines in the following majors:

- Geography and Regional Politics – Education and Cultural Differences and Education for Sustainable Development [20];
- Geography and Biology – Education and Cultural Differences and Civic Education [21];
- History and Geography – Pedagogy of Relationships in Educational Environments, Citizenship Education and E-Learning in Geography and Economics [22].

This can be explained by the pedagogical specialization and traditions of the university in the field of teacher education in the country.

The second group focuses on global catastrophes and natural disasters and includes three courses, while the other two groups of electives are related to the environmental problem (two courses) and global warming, also with two electives [20, 21, 22].

Conclusions

From the content analysis of geography education in universities, based on the number of undergraduate programmes and the subjects studied in them, we can summarize:

- With the exception of the University of Shumen, in the field of geographic higher education in the bachelor's degree, three other universities are accredited - University of Sofia, University of Veliko Tarnovo and Southwest University. They are in the professional field Earth Sciences and Pedagogy of Education....

- In all degree programmes of the two professional fields of study, the curricula are found to have a substantive connection with geo-global issues and are in the form of differently formulated compulsory, elective and optional courses, but with insufficient numbers.

- Among the subjects related to geoglobal issues, electives are the most numerous, followed by compulsory subjects. Elective subjects are the least numerous and are absent in the curricula of the University of the South-West and the University of Shumen.

- In all higher education institutions, the disciplines that are linked to geoglobal issues are complex in nature and, according to the geographical classification, are located in the contact zones of the three distinct groups of issues.

- Priority is given to studying subjects that address environmental and educational issues.

- All of the above leads to the conclusion of the underestimated inclusion of the geoglobal issues of our time in the curricula of the geographic majors in the higher education institutions in the country, as the most important document of the normative framework, and to the underutilization of their educational potential.

- This calls for a rethinking of the concept of updating and structuring the courses that form the „backbone“ of undergraduate geography education.

- The changes should not only concern an increase in the number of courses that are linked to geoglobal issues, but also reflect on the other elements of the curriculum documentation of undergraduate programmes.

- The most transformations to broaden the main issues addressed and to link them more closely to the geoglobal issues of our time should be sought not only in the curricula, but also in the syllabi in terms of their annotation with the expected outcomes included, updating and expanding the curricular content and the literature proposed.

- As a culminating element, the syllabus for the state examination can also be updated in terms of the proposed topics and core literature and linking the knowledge, skills and competences of the graduating Bachelors to the theoretical foundations and challenges of the anticipated solutions to real-life geoglobal problems.

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References

- [1]. Chase-Dunn, Ch., Globalization: A World-System perspective. *Journal of World-Systems Research*, **1999**, 2, 186-215.
- [2]. Information package for the Geography and Regional Policy major, Southwestern University, https://www.swu.bg/images/educational_programs/bachelor/earth_science/geography_and_regional_policy_bg_2022.pdf [Accessed 17 July 2024] (in Bulgarian).
- [3]. Information package for the Pedagogy of Teaching Geography and History major, Southwestern University, http://www-old.swu.bg/media/715443/pogi_bg_new.pdf [Accessed 12 July 2024] (in Bulgarian).
- [4]. Kazakov, A., Human capital in the context of globalization. *Ikonomicheski alternativi*, **2009**, 4, 53-65 (in Bulgarian).
- [5]. King, A.; Shnaider, B., The first global revolution. Report of the Council of the Club of Rome. Military Publishing House, Sofia, **1992** (in Bulgarian).
- [6]. Maksakovskiy, V., Geographical map of the world, Part III. Global problems of humanity. Verxne-Bolzhskoe knizhnoe izdatelystvo, Yaroslavl, **1996** (in Russian).
- [7]. Rusev, M., Global problems of the contemporary civilization – traditional and geoecological interpretation, *Yearbook of Sofia University „St. Kliment Ohridski“*, GGF, Book 2. *Geografiya*, **2001**, 92, 17-35 (in Bulgarian).
- [8]. Curriculum of the Geography major, University of Sofia, https://www.uni-sofia.bg/index.php/bul/content/download/276192/1806936/version/1/file/%D0%A3%D1%87%D0%B5%D0%B1%D0%B5%D0%BD_%D0%9F%D0%BB%D0%B0%D0%BD_%D0%93%D0%B5%D0%BE%D0%B3%D1%80%D0%B0%D1%84%D0%B8%D1%8F_%D0%A0%D0%9E-2022.pdf [Accessed 3 July 2024] (in Bulgarian).
- [9]. Curriculum of the Geography and Biology major, University of Sofia, https://www.uni-sofia.bg/index.php/bul/content/download/263285/1729794/version/2/file/1-3-PLAN-GB_2021.xls [Accessed 5 July 2024] (in Bulgarian).
- [10]. Curriculum of the Regional Development and Policy major, University of Sofia, <https://www.uni-sofia.bg/index.php/bul/content/download/276176/1806850/version/1/file/%D0%A3%D1%87%D0%B5>

- 112

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- [16]. Curriculum of the Pedagogy of Teaching Geography and Information Technology major, University of Veliko Tarnovo, <https://www.uni-vt.bg/bul/spec/infopack.aspx?sptype=1&mc=1030261&fmc=10302612&nspec=001264&specname=%D0%9F%D0%B5%D0%B4%D0%B0%D0%B3%D0%BE%D0%B3%D0%B8%D0%BA%D0%B0%20%D0%BD%D0%B0%20%D0%BE%D0%B1%D1%83%D1%87%D0%B5%D0%BD%D0%B8%D0%B5%D1%82%D0%BE%20%D0%BF%D0%BE%20%D0%B3%D0%B5%D0%BE%D0%B3%D1%80%D0%B0%D1%84%D0%B8%D1%8F%20%D0%B8%20%D0%B8%D0%BD%D1%84%D0%BE%D1%80%D0%BC%D0%B0%D1%86%D0%B8%D0%BE%D0%BD%D0%BD%D0%B8%20%D1%82%D0%B5%D1%85%D0%BD%D0%BE%D0%BB%D0%BE%D0%B3%D0%B8%D0%B8&tab=azb> [Accessed 12 May 2024] (in Bulgarian).
- [17]. Curriculum of the Pedagogy of Bulgarian language and Geography major, University of Veliko Tarnovo, <https://www.uni-vt.bg/bul/spec/infopack.aspx?sptype=1&mc=1030056&fmc=10300562&nspec=000354&specname=%D0%9F%D0%B5%D0%B4%D0%B0%D0%B3%D0%BE%D0%B3%D0%B8%D0%BA%D0%B0%20%D0%BD%D0%B0%20%D0%BE%D0%B1%D1%83%D1%87%D0%B5%D0%BD%D0%B8%D0%B5%D1%82%D0%BE%20%D0%BF%D0%BE%20%D0%B1%D1%8A%D0%BB%D0%B3%D0%B0%D1%80%D1%81%D0%BA%D0%B8%20%D0%B5%D0%B7%D0%B8%D0%BA%20%D0%B8%20%D0%B3%D0%B5%D0%BE%D0%B3%D1%80%D0%B0%D1%84%D0%B8%D1%8F&tab=azb> [Accessed 7 May 2024] (in Bulgarian).
- [18]. Curriculum of the Geography, University of Veliko Tarnovo major, <https://www.uni-vt.bg/bul/spec/infopack.aspx?sptype=1&mc=4040002&fmc=40400022&nspec=000004&specname=%D0%93%D0%B5%D0%BE%D0%B3%D1%80%D0%B0%D1%84%D0%B8%D1%8F&tab=azb>, [Accessed 2 May 2024] (in Bulgarian).
- [19]. Curriculum of the Regional Development and Geoeconomics major, University of Veliko Tarnovo, <https://www.uni-vt.bg/bul/spec/infopack.aspx?sptype=1&mc=4040083&fmc=40400832&nspec=000948&specname=%D0%A0%D0%B5%D0%B3%D0%B8%D0%BE%D0%BD%D0%B0%D0%BB%D0%BD%D0%BE%20%D1%80%D0%B0%D0%B7%D0%B2%D0%B8%D1%82%D0%B8%D0%B5%20%D0%B8%20%D0%B3%D0%B5%D0%BE%D0%B8%D0%BA%D0%BE%D0%BD%D0%BE%D0%BC%D0%B8%D0%BA%D0%B0&tab=azb> [Accessed 9 May 2024] (in Bulgarian).

- [20]. Curriculum of the Geography and Regional Policy major, University of Shumen, <https://www.shu.bg/students/razpisi-igrafici/uplanove/?ID=10134> [Accessed 7 August 2024] (in Bulgarian).
- [21]. Curriculum of the Geography and Biology major, University of Shumen, <https://www.shu.bg/students/razpisi-i-grafici/uplanove/?ID=10187> [Accessed 9 August 2024] (in Bulgarian).
- [22]. Curriculum of the History and Geography major, University of Shumen, <https://www.shu.bg/students/razpisi-i-grafici/uplanove/?ID=10306> [Accessed 9 August 2024] (in Bulgarian).
- [23]. Vasileva, M., On digitalization and school geography. *Pedagogika*, **2024**, 96(3s), 72-88 (in Bulgarian).
- [24]. Vladev, I.; Vladeva, R., In the labyrinth of the geoglobal problems of the XXI century – analyses and place in geographical education, Part 1. Konstantin Preslavski University of Shumen Publishing House, Shumen, **2022** (in Bulgarian).
- [25]. Vladeva, R.; Vladev, I., In the labyrinth of the geoglobal problems of the XXI century – analyses and place in geographical education, Part 2. Konstantin Preslavski University of Shumen Publishing House, Shumen, **2023** (in Bulgarian).