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Contemporary aspects of geographical education in Bulgaria in the context of globalisation

Abstract: The topicality of the researched subject is related to the intensified process of globalization in the beginning of the 21st century, which affects all spheres of life. This not only affects the policies pursued in them, but also leads to the formation of new sustainable moral values. The educational sphere is one of those that directly reflects the occurring changes in social attitudes and transforms them in the form of educational goals. In this way, globalisation processes implicitly influence the present and future generations of all countries in the world. The object of the research is related to the process of globalisation and the changes it causes in the geographical education in Bulgaria. The aim of the present study is related to the identification of the main directions of the process of globalisation of education and their impact on the contemporary geographical education in Bulgaria. In order to realise the aim, the methods of comparative analysis and content analysis are applied. To clarify the theoretical premises of globalisation of education we refer to the studies of F. Cornali, S. Tirocchi, M. Astiz, A. Wisemand, D. Baker; O. Stacey, G. De Lazzari, H. Grayson, H. Griffin, E. Jones, A. Taylor, D. Thomas, I. Mullis, M. Martin, Goh, T. Loveless.

Keywords: globalization, globalization of education, geographical education, Bulgarian education.

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Съвременни аспекти на географското образование в България в контекста на глобализацията

Резюме: Актуалността на изследваната тема е свързана със засиления процес на глобализация в началото на XXI век, който засяга всички сфери на живота. Това се отразява не само на провежданите в тях политики, но и води до формирането на нови устойчиви морални ценности. Образователната сфера е една от тези, които пряко отразяват настъпилите промени в обществените нагласи и ги трансформират под формата на образователни цели. По този начин процесите на глобализация оказват косвено влияние върху настоящите и бъдещите поколения на всички страни в света. Обектът на изследването е свързан с процеса на глобализация и промените, които той предизвиква в географското образование в България. Целта на настоящото изследване е свързана с идентифицирането на основните направления на процеса на глобализация на образованието и тяхното влияние върху съвременното географско образование в България. За реализиране на целта са приложени методите на сравнителния анализ и контент-анализа. За изясняване на теоретичните предпоставки на глобализацията на образованието се позоваваме на изследванията на: B. Singh, S. Chaddha, J. Spring; S. Sellar, B. Lingard, F. Cornali, S. Tirocchi, M. Astiz, A. Wisemand, D. Baker, O. Stacey, G. De Lazzari, H. Grayson, H. Griffin, E. Jones, A. Taylor, D. Thomas, I. Mullis, M. Martin, Goh, T. Loveless.

Ключови думи: глобализация, глобализация на образованието, географско образование, българско образование.

Introduction

The topicality of the researched subject is related to the intensified processes of globalisation of all spheres of economy, culture, education, which are taking place in the beginning of the 21st century. This not only affects the policies pursued in them, but also leads to the formation of new sustainable moral values. The educational sphere is one of those that directly reflects the occurring changes in social attitudes and transforms them in the form of educational goals. In this way, globalisation processes implicitly influence the present and future generations of all countries in the world.

The object of the study is related to globalisation as a process and the changes it causes in geography education in Bulgaria. The aim of the present study is related to the identification of the main directions of the process of globalisation of education and their impact on contemporary geography education in Bulgaria. In order to realise the aim, the methods of comparative analysis and content analysis are applied.

To elucidate the theoretical frameworks of globalisation of education, we refer to the studies of B. Singh, S. Chaddha, J. Spring, S. Sellar, V. Lingard, F. Cornali, S. Tirocchi, M. Astiz, A. Wisemand, D. Baker, O. Stacey, G. De Lazzari, H. Grayson, H. Griffin, E. Jones, A. Taylor, D. Thomas, I. Mullis, M. Martin, Goh, T. Loveless.

Globalization of Education

In the field of education, the process of globalisation has a wide range of impacts on national education policies and manifests itself as the globalisation of education. It can also be defined as the commercialisation, privatisation and capitalisation of education at the international level

(*Singh & Chaddha, 2018:144*). The process of globalisation of education can be manifested in the following ways:

- focus on education as a mechanism for economic growth;
- collaborative activities of intergovernmental, governmental and international non-governmental organisations in the field of education;
- the impact of information technology and the global information network;
- international evaluation in education;
- influence of multinational corporations on global and regional education policies (*Spring, 2008:340*).

Thus, the globalisation of the world economy challenges young people to actively participate in the increasing globalisation of education (*Sellar & Lingard, 2014:918*). It shifts the focus away from local and regional educational research and places it at a higher level by directing it towards macro- or meso- level research. This broadens both the spatial scope and the substantive scope of education research and focuses it on a larger number of existing problems.

At the same time, in the modern world, countries are striving to develop a knowledge-based economy and this has a direct effect on education policies and the university and school curricula through which they are implemented. This provides an opportunity to assess the role of education in promoting economic growth by paying increasing attention to learning institutions that form specific practical competencies to develop the potential to facilitate future economic growth. The processes lead to a convergence of existing curricula and their adaptation on specific scientific aspects with the potential to influence economic growth.

Globalizing sectors of the economy that have a technological or scientific basis requiring specific scientific knowledge and skills include computing and mobile technologies, pharmaceuticals and biotechnology, among others. They are particularly important in a globalising world economy and the associated national economies of individual countries.

Countries developing or considering investing in the development of these technologies should be aware of new developments in science and their implications for curricula and programmes as a medium or long-term strategy for successful participation in these sectors. Investing more closely in new educational fields and demonstrating the close link between science and practice help to make education a *mechanism for future economic growth*.

Another strand of the impact of globalization on education relates to the *increasing role of information and communication technologies* (ICTs) and the World Wide Web on science and education. The potential impact of this resource on science and education technology boils down to the rapid sharing of scientific information and ideas widely by universities and educational institutions that provide educational services and resources to schools and educational institutions around the world.

ICT helps to increase the quantity and accessibility of learning resources. They provide opportunities for rapid information sharing and interaction between learners regardless of their location. Their correct and targeted use improves the conditions for the realisation of personalised learning tailored to the needs of the individual learner. The impact of ICTs on the globalisation of education is expected to continue to increase as traditional fact-based science

curricula are replaced by more flexible curricula focused on the acquisition of specific skills (*Cornali & Tirocchi, 2012:2062*).

Another important area of globalisation of education is the drive towards unification and validation of students' educational achievements based on the development of large-scale *international assessment* projects. By taking into account the results in the international assessments being conducted, a global trend is emerging to place greater emphasis on standardisation of education in the areas being studied and convergence of curriculum goals across countries (*Astiz et al., 2002:71*). In addition, information is provided to each participating country to compare national educational requirements with those in other European countries. This, in turn, can act as a catalyst for change and convergence with countries to make changes to their education systems to address weaknesses or deficiencies identified as a result of their participation in international assessments (*Stacey et al., 2018:12*).

Recurrent international student assessment studies include the Grade 4 International Mathematics and Science Study (TIMSS), the Programme for International Student Assessment (PISA) and the Grade 4 Progress in International Reading Literacy Study (PIRLS).

The International Mathematics and Science Study of Grade 4 Students (TIMSS) is supported by the International Association for the Evaluation of Educational Achievement (IEA). TIMSS reports on trends in student achievement and explores differences between national education systems in more than 60 countries to help improve the teaching and learning of mathematics and science.

The focus on learning content in the areas listed and the emphasis on policies and practices make TIMSS a source of rich information through which participating countries can assess the effectiveness of their education practices and national education standards targets in an international context.

In addition to the survey reports, a TIMSS encyclopaedia has been published that presents information on curriculum, educational standards and practices, and teacher training for each participating country (*Mullis et al., 2016*). Its use contributes to the depth of pedagogical research at the national level and to its methodological depth.

The Programme for International Student Assessment (PISA) was developed by the Organisation for Economic Co-operation and Development (OECD) in the 1990s as a periodic international standardised assessment of 15-year-old students. It arose in response to the need to develop indicators to compare the quality of education across countries. It began in 2000 and involved 43 countries. PISA is conducted over three-year periods and the assessment covers three cognitive domains: reading, mathematics and science.

The Progress in International Reading Literacy Study (PIRLS) reports on trends in student achievement and explores the differences between national education systems in participating countries to help improve teaching and learning around the world. PIRLS is implemented by the TIMSS & PIRLS International Study Centre, Boston College, USA, together with the International Association for the Evaluation of Educational Achievement (IEA). PIRLS measures Grade 4 students' abilities to understand the content of a variety of texts using a range of cognitive processes. The study focuses on the two main goals of students' reading in and out of school.

In spite of the discussed directions that drive the globalization of education, there are other factors that counteract this process. These include national educational traditions and different interpretations of centralised curricula based on local culture. This cannot be ignored, as specific features of national psychology influence social educational requirements and reflect on national educational policies.

As one of the negative effects of globalization of education, one can point to the emigration of highly qualified personnel ("brain drain"), which is becoming a dominant pattern of international migration and a major aspect of globalization. According to published data from the 2021 Census, a "brain drain" of over 2 million people is reported based on the previous census. The same process can be observed in a number of countries in Eastern and Southern Europe, which are having difficulty retaining their young, highly qualified staff.

Increased emigration of highly skilled workers and young people can be linked to the Global Competitiveness Index (GCI) and reinforce the drive of young people to emigrate to countries with high GCI values. It is researched by the International Institute for Management Development (IMD), an independent academic institution with Swiss roots and global reach. In calculating the IMD index, countries are analysed and ranked according to their capacity to create and sustain a competitive environment. Four main factors are considered – economic performance, government effectiveness, business effectiveness and infrastructure. In turn, each of the factors listed is divided into 5 categories that highlight each aspect of the areas analysed. The main pillars of competitiveness emerge as – institutional framework, legislative framework, infrastructure and education.

For 2022, the IMD index analyses the economies of 63 countries. The top 5 countries with the highest competitiveness are Denmark (index – 100.00), Switzerland (index – 98.92), Singapore (index – 98.11), Sweden (index – 97.71) and Hong Kong (index – 97.71). Bulgaria ranks 53rd with an index of – 51.36 (*IMD World Competitiveness Booklet, 2022:33*). In the period 2017-2019, the index for our country ranged from 62.32 to 64.9, after which it dropped sharply and retreated from the 48th place.

The reasons are related to the following challenges Bulgaria needs to address:

- Geopolitical turmoil and rising inflation caused by increasing electricity costs;
- Inconsistent energy and climate policies;
- Confrontation between the executive and the judiciary;
- Lack of credible enforcement of anti-corruption measures;
- Limited investment in R&D and innovation (*IMD World Competitiveness Booklet 2022:59*).

For 2022, three trends can be distinguished that are capable of influencing the competitiveness of countries in the long term and the process associated with the "brain drain", as well as affecting educational processes regionally and globally.

The first trend is related to the resolution of acute geopolitical issues that may have regional implications for the continent of Europe and global implications for the whole world. These issues are related to the war between Russia and Ukraine and the subsequent economic restrictions, refugee flows and threats to peace locally and regionally. This can lead to destabilisation of political systems, which in turn are a key element of effective governance.

The second trend concerns the existing regional differences in terms of ignoring possible global risks that would cause serious consequences on a global scale. This includes natural disasters such as floods, earthquakes, droughts, as well as man-made fires, attacks and others.

The third trend is but a manifestation of the new "globalisation", in which governments need to be more adaptive to changing global conditions and in readiness to meet unexpected threats such as a combination of several crises operating simultaneously – health, economic, geopolitical, etc. (*IMD World Competitiveness Booklet, 2022:26*).

The negative effects of the process of globalisation of education give rise to the need for counteraction by society through the development of strategies and workable mechanisms to integrate and coordinate efforts to curb and stop the brain drain. In this respect, work can be done to improve the quality of life in order to attract and retain an educated workforce; to promote policies and instruments to develop local entrepreneurship, stimulate self-employment and implement alternative business models; and to enhance the role of universities and vocational education, which are linked to the "knowledge economy".

Globalization of Education in Bulgaria

All of these aspects of the globalisation of education have their impact on education in Bulgaria. Those educational directions are stimulated which can be a working mechanism and guarantee for future economic growth. In school education, emphasis is placed on strengthening the practical orientation, focusing on dual training. The development of students' media literacy and the accelerated acquisition of knowledge and skills for working in the digital society are increasingly promoted.

In 2020 in Bulgaria the establishment of school STEM (Science – Technology – Engineering – Mathematics) centres for learning through the methods of the respective scientific fields is initiated. They are a set of purpose-built and equipped learning spaces focusing on the learning and application of competences in science, technology, engineering, and mathematics (*Strategicheska ramka…, 2021-2030:9*). It is expected to continue to stimulate activities to improve the educational environment through the establishment of school and after-school centres with STEM environments, which involves changing the concept of the organisation of the educational environment, learning content, teaching, and management of school processes, through the application of experimental and research activities.

In addition to building STEM environments in Europe and Bulgaria, the development of STEM (Science – Technology – Engineering – Art – Mathematics) environments in classroom and extracurricular settings that bring together activities related to science, technology, engineering, art and mathematics is also stimulated.

Over the past three years, the Ministry of Education has been trying to increase interest in teaching courses in universities and those in the natural sciences through financial incentives for students. There has also been a sustained increase in interest in IT-related professions over time due to their competitiveness in the labour market and good financial backing.

Increasing attention is being paid to the results of international assessments and ways are being sought to improve student achievement against European and global standards. Bulgaria's participation in TIMSS 2023 is coordinated by the Centre for Assessment in Pre-School and School Education at the Ministry of Education and Science. The country will participate in the

4th grade survey for the third time in a row, together with nearly 60 countries from around the world. The TIMSS 2023 main survey is set to be conducted with around 5,000 fourth graders from over 150 schools in the country.

Bulgaria also participates in the international survey TALIS of the Organisation for Economic Co-operation and Development (OECD), which is the first survey worldwide with the main object of study – teachers and their working conditions. Participation in the survey enables teachers and school principals to contribute to the study of the learning environment and to the development of educational strategies by collecting data. Their analysis is used to develop international indicators of teacher and teaching practices to assist countries in developing policies to create conditions for effective learning.

Bulgaria participated in all three phases of its implementation in 2008, 2013 and 2018. TALIS creates a basis for comparative analyses across countries, to identify similar challenges and different approaches to overcome them and to reveal trends in education policies around the world (OECD, 2020). One of the findings of the study in the last year is related to the low prestige of the teaching profession, which hinders the participation of young, quality and motivating staff in the education system. This applies mainly to Bulgaria, but can also be reported as a trend in a number of European countries.

Bulgaria participates in the PIRLS survey for the fifth time, together with about 60 countries from around the world. Given the situation with the COVID-19 pandemic, the pilot study has been postponed and will take place in September-October 2020 with about 500 fifth graders in 11 of the pre-selected schools.

Transformation of geographical education in the context of globalization

Educational globalisation changes in Bulgaria have a complex impact on all educational fields, including *geographical education*. It projects the foundations of geographical science in the sphere of school and university education and has the advantage of reflecting natural and socio-economic processes and phenomena on a global and regional scale. The holistic, horological and chronological nature of geographical knowledge underpins its close connection with contemporary geo-global processes, which determine the main emphases of the curriculum content.

In addition to curricular content, other elements of the geography education system in secondary and tertiary schools are also changing in the context of globalisation processes. These are regulated and concern the implementation of the competency-based approach with an emphasis on the applied side of geography education and its practical application through the key competences.

The transformation of the elements of the geography learning process in relation to the methods, forms and didactic tools applied is also reported. The preferred methods are interactive and exploratory within the framework of the profiled training. The forms are transformed according to the available conditions in the direction of their individualisation, and the didactic tools are increasingly digitalised and the use of information and communication technologies is increasing.

As a consequence of the analysed directions of manifestation of the process of globalization of education and its impact on geography education, certain characteristic features of geography

education can be identified (*Figure 1*). These define its contemporary profile and significantly distinguish it from its characteristics in past periods and in the context of globalisation

The authors do not claim to be completely exhaustive, but they hope that the outlined characteristics will highlight certain features of geography education that are relatively new and should take into account in the process of its implementation in school and university geography education.

Increasing *digitalization* in all areas of life is a perfectly natural process that also affects geography education. Its advantages and disadvantages have confronted teachers, lecturers, pupils and students in a pandemic environment over the last two years. This has led to certain issues to be addressed – the need to improve the competencies of geography teachers to work in a digital environment; to increase the quality of digital geography resources and to provide technical tools for their use; to find mechanisms to obtain adequate feedback from students on the extent of their autonomy in completing set tasks, etc.

Mobility as a process is typical of modern society in the context of globalisation. It facilitates the removal of certain borders and the bridging of distances. In the field of geography education, it contributes to the acquisition of experience based on the expansion of contacts in the geographical community at national and international level. Good shared European and global educational practices enrich the arsenal of didactic competences of geography teachers and make them more adaptable and flexible.

Changes in geography education today are occurring at a much greater rate than in the twentieth century. This is caused by the increased dynamics of processes in the modern world and their inevitable impact on education. Relevance as a requirement for geographic educational content causes conditions for rapidly occurring changes both in terms of educational content and in pedagogical technologies and didactic tools. This poses a certain challenge for geography teachers and university lecturers to be aware of and apply current trends in contemporary geography education.

The *process of unification* of geographic education is aimed at unification and standardization of educational objectives, of didactic technologies recommended for use in view of their effectiveness, of national criteria for evaluation. The materials and documents of the International Geographical Union (IGU), the International Geography Olympiad, the Association of Geographical Societies in Europe (EUGEO), the EU guidelines for educational activities in the European Education Area, etc. serve as a common framework.

Contemporary geography education is influenced by the expanding territorial scope of contact of teachers, students and lecturers and the need to improve their language competences. The possibility of realising *multilingual communication* improves the conditions for the exchange of good educational practices in the field of geography education and contributes to the inclusion in European and global educational values.

Interactivity in school and university geography education has proven to be more effective than traditional methods and forms. In the context of globalisation of geography education, it is particularly necessary to increase young people's motivation to actively participate in the learning process and its orientation towards practice.

Conclusion

Globalization is inextricably linked to the contemporary development of society today. It will also affect the specificity of future generations as they receive their education today, which is influenced by globalisation processes, and will realise their contribution to societal development in the near future. The globalization of education is manifested in certain directions that are largely changing the educational environment, educational resources and spiritual values.

The globalisation of education affects the educational system of Bulgaria and all countries in the world and attempts certain transformations in terms of their unification and standardization and neglect of part of the national educational traditions.

Geographical education is an integral part of modern education and is influenced by globalisation and geo-global issues. The attempt made to identify the characteristics of geography education in the context of globalisation can lay the foundation for a discussion on these issues.

Corroboration

This article is the result of work on project No RD-08-95/16.02.2022 on the topic "Research and Promotion of Geoglobal Problems at Regional Level" at the Department of Geography, Regional Development and Tourism of Konstantin Preslavski University in Shumen.

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Appendix

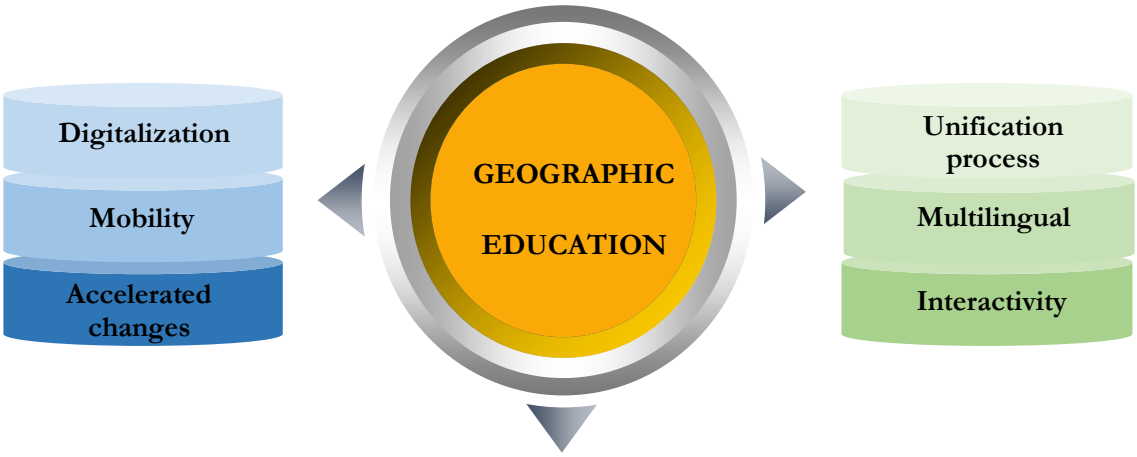

Figure 1. Features of geographical education in the context of globalisation